UNIVERSITY OF DERBY

From Hidden Harm to Systemic Reform: Rethinking Gambling, Substance Use, and Justice Pathways Through Recovery

By

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February 2025

'*A submission in partial fulfilment of the requirements of the University of Derby for the award of the degree of Doctor of Philosophy*

Doctor of Philosophy 2025 Rebecca Apperson

Dedication

To those I miss, momma, granny, Dave Bolton and JCC;

It’s not goodbye, but see you on the other side

To those I love;

you know who you are

And to those I have met along the way;

thank you, and I am so glad we met.

Most importantly,

"There is a principle which is a bar against all information, which is proof against all arguments, and which cannot fail to keep a man in everlasting ignorance—that principle is contempt prior to investigation." – Herbert Spencer

“Nolite te bastardes carborundorum. Don't let the bastards grind you down.”
― Margaret Atwood, The Handmaid’s Tale

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Statement of Authorship

I hereby declare that I am the sole author of this PhD thesis and have utilised only those sources explicitly listed and identified as references. Furthermore, I declare that I have not submitted this thesis to any other institution for the purpose to obtain

General Acronyms

- SUR – Substance Users in Recovery
- GAR – Gamblers in Recovery
- SUGAR – Substance Use and Gambling in Recovery (dual recovery)
- ACE – Adverse Childhood Experiences
- ASAM – American Society of Addiction Medicine
- CBT – Cognitive Behavioural Therapy
- CJ – Criminal Justice
- DRR – Drug Rehabilitation Requirement
- DSM-5-TR – Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition, Text Revision
- DSM-V – Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition
- EHR – Electronic Health Records
- FHTH – From Harm to Hope (UK Drug Strategy)
- GAST – Gamble Aware Screening Tool
- GAST-S – Gambling Assessment Screening Tool – Short
- GD – Gambling Disorder
- GRH – Gambling-Related Harm
- HMP – His Majesty's Prison
- ICD-11 – International Classification of Diseases, 11th Revision
- IDTS – Integrated Drug Treatment System
- KW test – Kruskal-Wallis Test
- LCA – Latent Class Analysis
- NHS – National Health Service
- NTA – National Treatment Agency for Substance Misuse
- NVivo – Qualitative Data Analysis Software
- OHID – Office for Health Improvement and Disparities
- PGSI – Problem Gambling Severity Index
- PHE – Public Health England
- PRA – Problematic Risk Assessment
- RCT – Randomized Controlled Trial
- ROSC – Recovery-Oriented Systems of Care
- RQ – Research Question
- SPSS – Statistical Package for the Social Sciences
- SUD – Substance Use Disorder
- TCU Forms – Texas Christian University Forms
- TOP – Treatment Outcome Profile
- UKGC – United Kingdom Gambling Commission
- WHO – World Health Organization
- WHOQOL-BREF – World Health Organization Quality of Life – BREF

Abstract

This thesis explores connections between gambling, substance abuse, and crime in addiction recovery, focusing on how co-occurring disorders impact recovery journeys and systemic responses. Using a mixed-methods approach, combining quantitative statistics and qualitative interviews, the research examines co-existing gambling and substance use disorders, recovery capital's role in long-term recovery, and personal experiences of recovery. It analyses three participant groups—Gamblers in Recovery (GAR), Substance Users in Recovery (SUR), and those recovering from both (SUGAR)—to identify addiction, crime patterns, and recovery capital. Gambling often goes unnoticed until financial or legal issues arise, delaying intervention and worsening outcomes. This has implications for recovery and public health strategies. The research highlights the need for integrated triage systems with gambling screenings in substance use frameworks for earlier detection and intervention. Recovery capital illustrates how personal and community resources affect recovery. Variations among the groups show distinct challenges, particularly for those with co-occurring addictions.

Furthermore, the research exposes inefficiencies in treatment and justice systems where gambling issues are overlooked. Policy recommendations advocate for integrating gambling screenings into health and justice systems to promote early intervention and shift from reactive to proactive measures. Findings endorse a collaborative strategy between public health and criminal justice, addressing interconnected addiction issues to support sustainable recovery. This research offers insights into gambling and substance use interrelations, guiding the creation of inclusive, person-centred policies while emphasising the social and economic benefits of integrated interventions, including lower recidivism and improved public health outcomes addiction.

Chapter 1: Introduction

Problem gambling continues to pose a significant public health concern globally, with prevalence rates ranging from 0.1% to 5.8% of the adult population, depending on the region and the screening measures used (Calado & Griffiths, 2016). In the UK, the latest data indicates that approximately 0.3% to 0.4% of adults are currently affected by problem gambling, with online gambling contributing to the evolving risk landscape (Christian, 2024). This prevalence translates into thousands of individuals experiencing direct harm, alongside many more affected indirectly, including family members and close associates.

Despite the increasing prevalence and growing accessibility of online gambling platforms, public health and policy responses have struggled to keep pace. Research highlights a persistent gap between the number of individuals experiencing gambling-related harm and those accessing treatment, with only a tiny fraction of affected individuals ever seeking or receiving adequate support (Wardle et al., 2019). This service gap is particularly concerning given the evidence linking problem gambling to broader social harms, including financial instability, mental health disorders, and criminal behaviour (Christian, 2024). Addressing the disconnect between prevalence and treatment access is critical for reducing the long-term health, social, and economic costs associated with gambling-related harm.

This disparity becomes even more pronounced when gambling occurs alongside other addictions, like substance use. Gambling disorder, as defined by the Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (DSM-5-TR), is characterised by a persistent and recurrent pattern of gambling behaviour that leads to clinically significant impairment or distress. Symptoms include preoccupation with gambling, the need to gamble with increasing amounts of money for excitement, repeated unsuccessful attempts to control gambling, and continued engagement despite negative consequences (DSM-5-TR, 2015; American Psychiatric Association, 2022). Substance use disorder (SUD) is characterised by a pattern of compulsive substance consumption that results in significant impairment, often including intense cravings, reduced self-control, and continued use despite negative consequences, as outlined in both the DSM-5 and ICD-11 (Saunders, Rumpf, & Carragher, 2025; Zhai et al., 2025). These diagnostic frameworks highlight key clinical features such as tolerance, withdrawal symptoms, and

persistent use despite physical or psychological harm, underscoring the chronic and relapsing nature of the disorder (Vera Cruz, Aboujaoude, & Liberacka-Dwojak, 2024). Both disorders share behavioural and neurological similarities, such as impaired decision-making and heightened impulsivity, which may explain their frequent co-occurrence (Dowling et al., 2015). Co-occurring disorders present complex recovery challenges that current health and criminal justice frameworks often struggle to address effectively (Grant & Chamberlain, 2017; Dowling et al., 2016).

Additionally, these co-occurring disorders are often not identified until much later in the addiction journey. When gambling disorder and substance use disorder intersect, the recovery process can become significantly more challenging. Co-occurring conditions tend to exacerbate one another, creating cycles of dependency that heighten relapse risks and complicate recovery trajectories (Rush et al., 2008; Chalmers et al., 2016). Furthermore, these overlapping conditions often receive diagnoses later in the addiction journey, delaying intervention and increasing socio-economic costs, including healthcare utilisation and criminal justice involvement (Yakovenko & Hodgins, 2018). While scholars such as Henrietta Bowden-Jones and John Braithwaite emphasise adopting holistic, recovery-oriented systems to address the multifaceted challenges of addiction (Bowden-Jones & George, 2015; Braithwaite, 1989), existing public health and criminal justice frameworks predominantly focus on single-addiction models, primarily targeting substance misuse. This narrow approach often fails to address the interconnected nature of various addictive behaviours, leading to missed opportunities for identifying and treating other addictions, such as gambling-related harm (Petry et al., 2014). In the UK, the integration of addiction treatment within the criminal justice system has largely been limited to alcohol and drug misuse, with problem gambling frequently overlooked despite its established links to criminal behaviour and broader social harms (Buchanan, 2013; Hean, Willumsen, & Ødegård, 2015).

Recent research suggests the necessity for more inclusive frameworks that bridge public health and criminal justice interventions, particularly for individuals with co-occurring disorders, such as gambling combined with substance use or mental health conditions (Harris et al., 2023). Gambling disorders, while sharing many neurobiological and behavioural similarities with

substance use disorders, are often excluded from routine screening protocols within both healthcare and criminal justice settings, resulting in significant gaps in early identification and intervention (Wardle et al., 2019). This exclusion not only limits access to appropriate treatment pathways for individuals with gambling-related harm but also increases the risk of recidivism, as many offenders with gambling problems remain undiagnosed and untreated (Stevens, Hughes, & Hulme, 2022).

Moreover, community-based diversion programs and alternative sentencing strategies, which have been successful in addressing substance misuse, are rarely applied to gambling-related offences, leaving a gap in rehabilitation-focused interventions (Peters, Young, & Rojas, 2017). This selective application of treatment pathways reinforces systemic inequities, perpetuating cycles of harm for individuals with gambling disorders while also impacting affected others, such as family members and dependents (Wardle et al., 2019). Without a shift toward integrated, cross-addiction strategies, current public health and criminal justice models will continue to overlook key populations and fail to address the full spectrum of addiction-related harms (Harris et al., 2023).

This research seeks to address these gaps—including the lack of integrated treatment pathways, the absence of standardised screening for gambling-related harm within public health and criminal justice systems, and the limited consideration of co-occurring disorders—by exploring how gambling, substance use, and crime intersect within addiction-recovery journeys, through the perspectives of those with lived experience. This research provides critical insights for improving and integrating triage and treatment approaches and public health and criminal justice policies. A central concept underpinning this research is recovery capital, defined as the personal, social, and community resources individuals draw upon to support their recovery journeys (Cloud & Granfield, 2008). Through this lens, the research explores how gambling, substance use, and crime intersect within addiction-recovery pathways, focusing on how individuals with lived experience have navigated—and continue to navigate—systemic gaps in treatment and support (Lind, Palomäki & Castrén, 2024; Best & Hennessy, 2022; Banks & Waters, 2020). The research aims to generate critical insights to improve triage systems, foster integrated treatment approaches, and inform more responsive public health and criminal justice

policies by examining these intersections. Recovery capital is a particularly valuable framework for understanding resilience and recovery in the context of co-occurring addictions, as it highlights the personal, social, and community resources individuals draw upon to navigate complex recovery pathways (Laudet & White, 2008; Best et al., 2017). Focusing on factors such as social support networks, access to healthcare, stable housing, and personal coping skills, the recovery capital framework provides a holistic understanding of how individuals build resilience, overcome systemic barriers, and sustain long-term recovery, even when managing multiple forms of addiction simultaneously. While recovery capital among gambling has a limited research base, recent studies highlight the pivotal role of recovery capital in gambling disorder, illustrating its influence on treatment outcomes and long-term well-being (Gavriel-Fried & Shilo, 2018; Gavriel-Fried & Lev-El, 2020). Moreover, Gavriel-Fried et al. (2022) introduce the concept of negative recovery capital for gambling, which encompasses barriers such as stigma, financial debt, and social isolation that impede recovery. To expand the available research on what can be learned from comparative addiction trajectories into recovery, this research uses the framework of recovery capital to explore how diverse recovery pathways can inform improvements in health and criminal justice systems. By examining the intersections of gambling, substance use, and crime through the lens of recovery journeys, this research is structured around four primary questions that guide its theoretical approach, data collection, and analysis, aiming to identify strategies that foster resilience, promote long-term recovery, and enhance systemic responses to co-occurring addictions.

1. Prevalence of Co-occurring Behaviours: What is the prevalence of gambling among substance users in recovery (SUR) and substance users and gamblers in recovery (SUGAR), substance use among gamblers in recovery (GAR) and substance users and gamblers in recovery (SUGAR), and criminal behaviour among SUR, GAR and SUGAR? Identifying these patterns is essential for designing targeted interventions that improve public health and criminal justice responses (Wardle et al., 2019; Grant & Chamberlain, 2017).
2. Comparative Recovery Capital: What are the similarities and differences in recovery capital—encompassing personal, social, and community resources—between the SUR, GAR,

and SUGAR groups? Recovery capital provides a framework for understanding resilience and the resources that sustain recovery (Cloud & Granfield, 2008; Laudet & White, 2008).

3. Perceptions of Causal Relationships: How do participants from each group perceive the causal links between gambling, substance use, and crime? Qualitative insights into these relationships are crucial for revealing the psychological and social mechanisms through which these behaviours reinforce or mitigate each other (Yakovenko & Hodgins, 2018; Kelly et al., 2021).

4. Definitions of Recovery: How do SUR, GAR and SUGAR participants define recovery? This question moves beyond clinical definitions to capture individuals' lived experiences, which can inform person-centred triage and intervention approaches in health and criminal justice systems (Best & Lubman, 2012; White, 2009). Understanding recovery through the perspectives of those directly affected is especially pertinent for those managing multiple addictions (Monteiro et al., 2024; Sneed & Baronia, 2024).

Drawing on contributions from key scholars, this work will seek to further contribute to research by authors such as Gavriel-Fried and colleagues (2020, 2022), who highlight the multifaceted role of recovery capital in gambling disorder recovery and Pickering et al. (2020) who offer critical insights into how individuals conceptualise recovery. These works, together with Braithwaite's (1989) theories of restorative justice and Best's (2017) framework on recovery-oriented systems of care, provide a critical foundation for exploring the complex intersections of gambling, substance use, and crime. They also highlight the value of centring the voices of those in recovery to gain deeper insights into how individuals navigate these challenges and what can be learned to inform more effective, person-centred approaches within public health and criminal justice systems.

This research employs a mixed-methods approach to achieve its aims, combining quantitative surveys with qualitative life narrative interviews (Creswell & Poth, 2018). Quantitative data provides an overview of prevalence and behavioural patterns. At the same time, qualitative narratives offer deeper insights into individual recovery stories, highlighting the resilience, challenges, and resources involved in overcoming co-occurring conditions (Petry et al., 2014; Gavriel-Fried et al., 2022). This integrated approach allows for a nuanced

understanding of recovery trajectories and informs practical public health and criminal justice framework recommendations.

The structure of this thesis reflects its comprehensive scope. Chapter 2 presents a detailed literature review, examining theoretical and empirical studies on gambling, substance use, and their intersections with criminal behaviour while identifying gaps in existing research. Chapter 3 outlines the methodology, explaining the rationale for the mixed-methods approach and detailing the quantitative and qualitative data collection and analysis strategies. Chapters 4 through 6 present the findings for each of the four research questions, with Chapter 6 focusing on qualitative insights into recovery experiences. Chapter 7 synthesises these findings, outlining key findings, discussing their broader implications, summarising their contributions to knowledge, offering recommendations for future research and practice and the conclusion.

The significance of this research lies in its attempt at a dual contribution: firstly, to academic knowledge and secondly, to inform practical applications in recovery-oriented systems within public health and criminal justice. While most studies treat gambling, substance use, and criminal behaviour in isolation, limiting the understanding of their interconnected dynamics, emerging research highlights the need for integrated approaches that consider their overlapping risk factors and shared pathways (Banks, 2017; Lloyd, Chadwick, & Serin, 2014; Banks & Waugh, 2019). By examining recovery through the lens of **recovery capital**—encompassing personal, social, and community resources—this research adds depth to understanding how systems can support **recovery resilience** and minimise **relapse risks** (Day et al., 2025; Du Plessis et al., 2024). This comprehensive approach is vital for developing strategies incorporating primary and secondary triage for dual addictions, facilitating early identification and intervention. By addressing the compounded impact of co-occurring addictions, such strategies can improve access to recovery services, reduce treatment delays, and mitigate socio-economic costs associated with prolonged, undiagnosed conditions (Yule & Kelly, 2019; Moriarty, 2020; Bradstreet et al., 2020; MacLeay et al., 2020).

This research used a methodological approach that combines quantitative surveys with qualitative life narrative interviews, ensuring that statistical data's overview of prevalence and behavioural patterns is completed with deeper insights into individual recovery stories through

qualitative narratives (Creswell & Poth, 2018). This integration supports a more nuanced analysis informing gaps in current public health and criminal justice frameworks (Yakovenko & Hodgins, 2018; Petry et al., 2014). This thesis will guide readers through a detailed examination of how gambling, substance use, and crime interact across the SUR, GAR, and SUGAR groups. It begins with a comprehensive literature review to set the context, followed by a methodology chapter detailing the mixed-methods approach employed. The findings chapters present data related to each research question, and the final discussion synthesises these findings, exploring their implications for public health and policy (Dowling et al., 2016; White, 2009).

Exploring existing literature to contextualise the research questions and highlight the significance of addressing co-occurring addictions within recovery frameworks is crucial. Chapter Two offers a comprehensive review of the prevalence, impact, and treatment of both gambling and substance use disorders, analysing their shared and distinct features and how they intersect with criminal behaviour. It investigates the socio-economic factors that influence addiction and offending patterns, emphasising how historical inequalities and systemic barriers shape pathways into and out of harmful behaviours. The chapter also critically examines current treatment models, identifies gaps within public health and criminal justice frameworks, and considers the broader societal impacts of addiction, ultimately laying the groundwork for a deeper exploration of recovery trajectories and the importance of recovery capital in promoting long-term change (Calado & Griffiths, 2016; Grant & Chamberlain, 2017). By reviewing prior research, the literature review will highlight current gaps and limitations, establishing a foundation for understanding how these behaviours converge and influence recovery pathways (Cloud & Granfield, 2008; Laudet & White, 2008). It will further explore how the socio-economic history of gambling over the past century has shaped its treatment compared to that of substance use, along with concepts such as recovery capital and the social and systemic factors impacting recovery (Best & Lubman, 2012; Wardle et al., 2019).

Chapter 2: Literature Review

Understanding the nature and impact of addiction—both substance-related and behavioural—is vital for assessing the complexities of gambling and related harm. Traditionally

seen as moral failing or personal weakness, addiction is now widely recognised as a neurobiological disorder influenced by psychological, social, and environmental factors (Koob & Volkow, 2010; Grant et al., 2017). Gambling addiction, in particular, has gained recognition within clinical and public health frameworks as a behavioural disorder that shares many features with substance use disorders, including compulsive behaviour, tolerance, and withdrawal symptoms (Petry, 2013; Yau & Potenza, 2015). Despite these similarities, gambling has not been fully incorporated into addiction treatment and policy frameworks in Great Britain to the same degree as alcohol and drug addiction, resulting in disparities in regulation, funding, research, and access to triage and treatment services (Bowden-Jones et al., 2022; House of Lords, 2019).

This literature review seeks to thoroughly explore the intricate connections among gambling, substance use, crime, and recovery by analysing significant historical factors, theories, research, and frameworks. It begins with Section 2. 1, which defines addiction, gambling, and gambling-related harm while providing a historical overview of the regulation of alcohol and drug services in the UK, followed by the development of gambling regulation. This section establishes the context in which both addictions are addressed within the public health and criminal justice systems. Next, Section 2. 2 examines the similarities and differences between gambling and substance use, starting with clinical perspectives, prevalence rates among different groups, and the overlap of both addictions with criminal behaviour, thereby exploring how gambling and substance use can coexist and influence criminal actions. Then, in Section 2. 3, the review shifts to perspectives on the link between gambling, substance use, and crime, evaluating both academic insights and the lived experiences of gamblers and substance users. This part sheds light on how these individuals perceive the connections between their addictive behaviours and criminality, informing more responsive recovery systems that consider the complex realities facing those navigating addiction and its challenges. Following this, Section 2. 4 delves into recovery and recovery capital, examining the historical progression of recovery, its definitions, research findings on recovery outcomes, and the role of recovery capital in aiding gambling and substance use recovery within public health and criminal justice frameworks. It mainly addresses personal, social, and community recovery capital, noting variations across gambling and substance use populations, including its impact on crime reduction. Section 2. 5 centres on

individuals' views regarding the definition of recovery, explaining how substance users and gamblers articulate recovery in their terms, followed by comparing the two groups' definitions. This section captures the varied recovery experiences and highlights practical implications for treatment and intervention strategies. Lastly, Section 2. 6 concludes by synthesising the key findings from the literature, setting the foundation for the empirical research in subsequent chapters of this thesis to bridge gaps identified in current research.

2.1 Definitions of Addiction, Gambling, and Gambling-Related Harm

Addiction, encompassing both substance use disorders (such as alcohol and drug addiction) and behavioural addictions (like gambling, internet use, and gaming), is widely recognised today as a compulsive behaviour that persists despite adverse consequences. It is characterised by an inability to regulate usage or involvement in the activity (American Psychiatric Association, 2013; British Medical Association, 2013; Volkow, Koob, & McLellan, 2016; World Health Organisation, 2019). This behaviour is driven by alterations in the brain's reward system, where the pursuit of pleasure or relief from distress becomes compulsive and undermines rational decision-making (Koob & Volkow, 2010; Campanella, 2024; Abdel-Hay et al., 2024; Ma et al., 2024). This updated definition typically links addiction to substance use; however, over the past few decades, behavioural addictions have also gained recognition for their significant physical, mental, and social impacts (Grant et al., 2017). These behavioural addictions exhibit core characteristics similar to substance use disorders, including psychological tolerance[1], withdrawal symptoms, and repeated unsuccessful attempts to manage or cease the behaviour (Petry, 2013; Yau & Potenza, 2015).

The term "addiction" dates back to ancient Rome, where it referred to the legal and moral duties of a debtor to their creditor. However, its contemporary association with compulsive

[1] *Psychological tolerance* refers to the process by which an individual requires increasing levels of a behaviours or substance to achieve the same psychological effect or emotional response previously experienced with lower levels of engagement. In the context of addiction, this often manifests as the diminishing emotional or mental impact of the behaviours or substance over time, leading individuals to escalate their usage or intensity to attain the desired mood-altering effects. Unlike physical tolerance, which involves physiological adaptations, psychological tolerance is primarily linked to changes in cognitive and emotional responses, such as reduced excitement, satisfaction, or relief (Koob & Le Moal, 2001; American Psychiatric Association, 2013).

behaviour and substance abuse emerged in the 19th century, driven by research connecting repetitive actions to changes in mental and physical health (Rosenthal & Ferris, 2019; Alexander, 2008). The perception of *addiction* as a disease gained traction in the mid-20th century, culminating in the development of the disease model of addiction, which asserts that *addiction* involves chronic alterations in brain function that require treatment (White & Kelly, 2012; Leshner, 1997). Gambling, now recognised as a behavioural addiction in the DSM-5 (2014, pp. 585-589), is characterised as "persistent and recurrent problematic gambling behaviour resulting in clinically significant impairment or distress" (American Psychiatric Association, 2013). Often described as “risking something of value for the chance to gain something of greater value,” this broader definition aligns with the DSM-5’s emphasis on the psychological and behavioural patterns contributing to gambling-related harm. Additionally, the World Health Organization (WHO) classifies gambling disorder as an impulse control issue, prompting individuals to engage in risky behaviours despite experiencing adverse consequences.

Gambling disorder shares many characteristics with substance use disorders, such as tolerance, withdrawal, and compulsive behaviour despite adverse consequences (Petry, 2013; Grant et al., 2017). The American Society of Addiction Medicine (ASAM, 2019) emphasises similarities such as compulsive behaviour and a focus on immediate rewards. Additionally, other frameworks, including the biopsychosocial model (Shaffer et al., 2004) and the Pathways Model (Blaszczynski & Nower, 2002), offer insight into the complexity of gambling disorder. Cognitive-behavioural models (Ladouceur et al., 2001) also play an essential role in explaining gambling behaviour. In both clinical and public health contexts, gambling disorder exhibits numerous features in common with substance use disorders, including symptoms like tolerance, withdrawal, and compulsive engagement in behaviour despite negative consequences (Petry, 2013; Grant et al., 2017). The American Society of Addiction Medicine (ASAM) further emphasises that behavioural addictions, including gambling, share core characteristics with substance use disorders, such as chronicity, compulsive behaviour, and a focus on immediate rewards despite long-term costs (ASAM, 2019).

Gambling behaviours exist along a continuum, beginning with initial engagement and escalating toward gambling-related harm, problem gambling, and, in severe cases, pathological

gambling (Blaszczynski & Nower, 2002; Gainsbury et al., 2015). Problem gambling arises when gambling behaviours start to interfere with personal, social, or occupational functioning, even if they do not meet the diagnostic criteria for a clinical disorder (Hing et al., 2016; Hodgins et al., 2011). At this stage, individuals often exhibit increased impulsivity, risk-taking, and chasing losses, which can result in financial stress and a preoccupation with gambling (Dowling et al., 2016; Ledgerwood & Petry, 2010). These disruptions often affect relationships, employment, and overall well-being (Wardle et al., 2018; Hing et al., 2016). Pathological gambling, a severe form of gambling disorder, is formally classified under addictive disorders in the DSM-V (American Psychiatric Association, 2013; Grant et al., 2017). It shares core characteristics with substance use disorders, including tolerance, where more significant amounts of money are gambled to achieve previous levels of excitement, and withdrawal symptoms such as irritability and restlessness when trying to quit (Ledgerwood & Petry, 2010; Zhai et al., 2020). Individuals in this situation often face severe financial distress, relationship breakdowns, and job loss, resorting to illegal activities like theft or fraud to finance their gambling (Blaszczynski & Nower, 2002; Hodgins et al., 2011).

The shift from casual gambling to pathological gambling is shaped by a combination of biological, psychological, and social elements (Yau & Potenza, 2015; Dowling et al., 2016). Neurobiological research indicates that compulsive gambling disrupts the brain's reward system, especially within dopaminergic pathways, akin to the processes seen in substance addiction (Zhai et al., 2020; Grant & Kim, 2001). This disruption hinders decision-making and diminishes impulse control, making it harder to resist gambling urges (Yau & Potenza, 2015). Contributing psychological factors include high impulsivity, cognitive distortions (like the illusion of control), and ineffective coping mechanisms that escalate gambling behaviour (Dowling et al., 2016; Hodgins et al., 2011). Moreover, co-occurring mental health issues such as depression, anxiety, and personality disorders heighten the risk of developing pathological gambling (Grant & Chamberlain, 2017; Wardle et al., 2018). Similar to psychological aspects, social and environmental factors markedly affect the evolution of gambling behaviour. The rise of gambling opportunities, mainly through online platforms and widespread advertising, normalises gambling and increases its accessibility (Gainsbury et al., 2015; Hing et al., 2016). Additionally,

socioeconomic challenges like unemployment, financial stress, and social isolation can provoke and intensify gambling-related harm, especially for those lacking strong social support systems (Wardle et al., 2018; Hing et al., 2016).

This understanding of gambling addiction parallels the broader recognition of gambling's potential for harm or gambling-related harm (GRH), which extends beyond the individual gambler to loved ones and overall society (Hing et al., 2021; Binde, 2022). This concept of GRH also encompasses financial distress, strained relationships, and mental health challenges that affect not only the gambler but also their community (Langham et al., 2021; Wardle et al., 2020). Furthermore, contemporary perspectives encompass socio-cultural definitions, underscoring the significance of social structures, cultural practices, and collective norms in shaping individual behaviours (Smith et al., 2021; Johnson et al., 2022). These definitions acknowledge gambling as a socially embedded activity influenced by cultural norms and accessibility to gambling opportunities (Reith, 2018; Gordon et al., 2019; Venuleo et al., 2015; Binde, 2005). This comprehensive viewpoint emphasises the importance of context in comprehending the motivations behind gambling and its potential for adverse effects across various communities (Gainsbury et al., 2015; Abbott et al., 2018). For instance, participation in gambling frequently occurs initially within social or recreational environments, where it is commonly regarded as innocuous entertainment (Shaffer et al., 2004). Nevertheless, sustained exposure and repeated involvement may result in gambling-related detriment for both the participant and others, including minor financial losses, strained relationships, and initial disruptions to daily routines (Gainsbury et al., 2015; Wardle et al., 2018).

In summary, the transition from initial engagement to pathological gambling is a complex process influenced by biological vulnerabilities, psychological traits, and social factors (Blaszczynski & Nower, 2002; Dowling et al., 2016). Understanding these elements is essential for formulating prevention and early intervention strategies to identify at-risk individuals and reduce gambling-related harm (Petry et al., 2014; Grant et al., 2017). Tackling the underlying drivers, such as mental health support and responsible gambling policies, can lessen the risks associated with this continuum and promote healthier behavioural outcomes (Dowling et al., 2016; Grant & Chamberlain, 2017).

2.1.1 Alcohol and Drug Services in the UK: A Historical Perspective

The UK National Health Service (NHS) has significantly evolved its integration of alcohol and drug services since 1948. Drug addiction services were integrated in 1968, following the Dangerous Drugs Act 1967, which prioritised treatment through newly established clinics (Royal College of Psychiatrists, 2000; Berridge, 2013). By the 1980s, NHS drug services expanded to include harm reduction initiatives, like needle exchanges, to mitigate intravenous drug use risks (Moore et al., 2021). Alcohol services began integrating in the 1970s due to growing public and medical concerns (Thom, 1999). The 1979 Clarke Report recognised alcohol misuse as a public health issue and called for its inclusion in the NHS, leading to community-based teams and a broader healthcare approach (Royal College of Psychiatrists, 1979; Berridge, 2013; Thom, 1999). The integration reflects an evolving understanding of addiction's complexities, necessitating a coordinated public health strategy (Berridge, 2013; Moore et al., 2021). During the 1980s and 1990s, specialised addiction services expanded significantly due to growing public and government concerns about the societal effects of substance misuse. The creation of the National Treatment Agency for Substance Misuse (NTA) in 2001 marked a crucial development in establishing a more coordinated model for drug treatment services across England (Duke & MacGregor, 2024). This agency was later integrated into Public Health England (PHE) in 2013 and prioritised comprehensive treatment and prevention strategies, reinforcing the NHS's commitment to addressing substance misuse holistically (Stevens, 2024).

Integrating alcohol and drug treatment into the UK criminal justice system has been complex, mirroring societal and policy shifts in substance misuse management. Early initiatives, such as arrest referral programs in the 1980s, aimed to link offenders with treatment rather than punitive measures (Stöver & Zurhold, 2014). Establishing the Integrated Drug Treatment System (IDTS) in UK prisons in the mid-2000s advanced care continuity between custodial and community settings (Albertson, Irving, & Best, 2015). This model emphasised harm reduction strategies, including methadone therapy and psychosocial interventions, to aid rehabilitation (Hean, Willumsen, & Ødegård, 2018). Increasing recognition of the complex interplay between

substance misuse, mental health, and criminal behaviour drove further developments. Initiatives such as the *Drug Rehabilitation Requirements* (DRRs), introduced as part of the *Criminal Justice Act 2003*, mandated structured treatment programs for offenders as part of community sentences, thus embedding treatment within judicial processes (Weston, 2014). Recent studies have highlighted the critical role of problem-solving courts in fostering collaborative approaches between the judiciary, treatment providers, and social services, ultimately improving outcomes for individuals with substance use disorders (Kawałek, 2021).

The triage system for alcohol and drug treatment within the UK's public health and criminal justice frameworks is vital for integrated care, assessing needs, and swiftly allocating treatment resources. It functions as a gateway for individuals in the criminal justice system, ensuring timely intervention and continuity of care. Street triage, where mental health professionals collaborate with police and emergency services, de-escalates crises and provides immediate assessments, directing individuals from custody to appropriate health services (Irvine, Allen, & Webber, 2016). Triage systems employ structured screening tools in public health to determine the severity of substance misuse and health risks, guide personalised treatment plans, and prioritise urgent cases with harm reduction strategies to lessen the consequences of substance use (Pierce et al., 2015). The NHS and Public Health England (PHE) have standardised triage protocols across services to guarantee consistent care and seamless transitions between healthcare and judicial systems (Goodacre et al., 2018).

Triage is vital for early intervention in the criminal justice system. Liaison and diversion services at police stations and courts assess individuals for substance misuse and mental health issues, aiming to divert them to community health and social care (Forrester & Hopkin, 2019). Studies stress the importance of culturally competent and trauma-informed approaches to meet diverse needs and reduce health disparities (Butler, Zakimi, & Greer, 2022).

The UK's evolving approach to substance misuse reflects a broader commitment to public health, crime reduction, and the integration of treatment services within healthcare and criminal justice frameworks. The launch of *From Harm to Hope: A 10-Year Drugs Plan to Cut Crime and Save Lives* in 2021 represents a significant milestone in this ongoing effort, with £3 billion pledged over a decade to combat drug-related crime, reduce deaths, and improve treatment

outcomes. Notably, £421 million has been explicitly allocated to enhance substance use treatment services, alongside investments in recovery housing, prison rehabilitation programs, and youth-focused interventions. This strategic commitment reflects the UK government's focus on long-term, sustainable funding and comprehensive, targeted approaches that address the complex needs of individuals affected by substance misuse. The plan also highlights the NHS's role in championing stable funding mechanisms and creating frameworks that could be adapted to other addiction-related public health concerns. While the success of this model has opened conversations about expanding such frameworks, certain behavioural addictions—most notably gambling—have yet to be fully integrated into these public health strategies. Challenges persist in the effective delivery of triage services, mainly due to issues in agency coordination and limited resource availability. These factors hinder the seamless integration of support systems, ultimately impacting outcomes for individuals with complex needs. Research highlights the importance of enhanced training, integrated information systems, and policy reforms to strengthen collaboration between the public health and criminal justice sectors (Newbury-Birch & Ferguson, 2023). Despite increasing awareness of gambling-related harms, gambling continues to be addressed informally within broader addiction policies, lacking the dedicated funding and structural integration afforded to drug and alcohol services. This gap limits the capacity of existing systems to support individuals affected by gambling-related issues fully.

This section explores the historical background of UK gambling to understand why it is regarded as less urgent in public health than substance use. This difference stems from gambling's unique socio-cultural path, shaping public views, regulations, and health policies. While substance misuse is seen as a public health issue connected to crime, gambling is mostly viewed as entertainment, often overlooking addiction risks (Donnachie, Critchlow, & Bunn, 2025). The UK adopts a permissive regulatory approach, focusing more on consumer protection than on tackling gambling harms (Newcombe, 2024). Recent reforms, such as the *Gambling Act Review: High Stakes* (2023 White Paper), aim for modernisation, but critics say they lack a full public health outlook (Donnachie et al., 2025). Seeing gambling as leisure hampers its integration into wider addiction strategies. New research on digital gambling, including loot boxes and online betting, shows its significant impact on younger people (Xiao et al., 2025).

Regulatory responses are slow to adapt, revealing the complex cultural and economic factors influencing gambling policy (Christakis & Hale, 2025). Recognising these differences is essential for bringing gambling harms into public health efforts and closing policy gaps.

2.1.2 A History of Gambling Regulation in the United Kingdom

Gambling in the UK has been regulated since 1388, primarily as a means of social control, with early statutes targeting games of chance believed to encourage disorder and idleness (Dixon, 1991; Light, 2009). During the Tudor and Stuart eras, successive monarchs introduced increasingly strict laws to suppress gambling among the working classes and soldiers, viewing it as a threat to productivity and military discipline (Miers, 2004; Munting, 1996). The Gaming Acts of the 18th and early 19th centuries aimed to differentiate between games of skill and chance, with the 1845 Gaming Act declaring most gambling contracts unenforceable, thereby criminalising many forms of betting while permitting certain types of gaming among the elite to continue (Downes et al., 1976; Miers, 2011).

By the late 19th and early 20th centuries, gambling had become increasingly ingrained in British culture. The growth of horse racing, betting on sporting events, and innovations such as the totalisator led to the expansion of betting shops and street gambling (Munting, 1996). In response, authorities relied on earlier legislation like the Betting Act of 1853, which limited betting houses, and the Street Betting Act of 1906, which sought to reduce informal gambling practices (Miers, 2011; Downes et al., 1976). Despite these measures, public enthusiasm for gambling and the economic pressures of the interwar years made enforcement challenging (Munting, 1996). The ongoing existence of unlicensed and informal gambling markets increasingly strained regulatory systems (Cassidy, 2014).

In response to these challenges, the Royal Commission on Lotteries and Betting was established in 1932 to examine the state of gambling regulation. Its findings highlighted gambling as a significant societal issue that needed more targeted oversight (Royal Commission, 1932). This resulted in the introduction of the Lotteries and Betting Act of 1934, which legalised small-scale lotteries for charitable and private purposes, creating a more regulated framework aligned with social and economic priorities (Miers, 2011; Munting, 1996). Importantly, the 1934

Act did not replace earlier legislation but operated alongside it. Laws such as the Betting Act of 1853 and the Street Betting Act of 1906 continued to govern—and often prohibit—activities like large-scale lotteries, unlicensed betting shops, and unregulated sports betting. These restrictions reflected ongoing public and governmental concerns about the social and financial harms caused by unregulated gambling (Downes et al., 1976; Light, 2007).

The 1934 Act demonstrates the state's effort to balance public demand for gambling with its social risks. It permitted limited small-scale gambling while maintaining strict control over the wider industry. This dual approach reflects the complexities of gambling regulation during the interwar years as policymakers navigated shifting societal attitudes and economic pressures (Berridge, 2013; Munting, 1996). The regulatory framework of the 1934 Act set a precedent for future policies, emphasising the need to balance regulation with public demand. This period also marked a trend towards controlled legalisation in response to cultural changes, influencing gambling policy in the mid-20th century (Thom, 1999; Cassidy, 2014). By then, gambling had become normalised in British society. *The 1949-1951 Royal Commission on Lotteries and Betting* argued against imposing moral stances on leisure activities (Miers, 2011; Reith, 2003). This perspective led to the *Betting and Gaming Act of 1960*, which legalised betting shops and casinos under a new licensing system (House of Lords, 2019; Light, 2007; Orford, 2011). Despite liberalisation, these reforms contributed to current gambling-related harms due to insufficient regulatory oversight and a lack of addiction prevention measures (Cassidy, 2014; Orford, 2011). The 1960 legislation was amended by the *1963 Betting, Gaming and Lotteries Act,* which expanded venues but did not fully address illicit practices and gambling-related harm (Clarke & Critcher, 1985; Miers, 2011).

Five years later, societal concerns about gambling addiction, debt, and organised crime resulted in the 1968 *Gaming Act*. This legislation established the *Gaming Board for Great Britain*, granting it authority to regulate gambling venues and curb exploitative practices (Miers, 2011; Kingma, 2004). The regulatory shift aimed to stabilise the gambling industry and lessen social harm (Light, 2007; Downes et al., 1976). By the late 1990s and early 2000s, factors such as online gambling, broader public acceptance, anticipated government revenue from deregulation, industry lobbying, technological advancements, and the success of the National

Lottery in 1994 prompted reform of gambling laws (Reith, 2003; Cassidy, 2014; Orford, 2011). *The Gambling Review Body*, headed by Sir Alan Budd, published the *Gambling Review Report* (2001), also called the Budd Report, which supported a market-driven approach to gambling while recognising the potential risks of gambling-related harm, and recommended stronger regulation, public education, and increased funding for research and treatment (Budd, 2001; Orford, 2011). These recommendations laid the foundation for the *Gambling Act 2005*, designed to balance economic interests with public health protections (Korn & Shaffer, 1999; House of Lords, 2019).

The Gambling Act of 2005 significantly reformed UK gambling laws, abolishing previous regulations, establishing the Gambling Commission as the main regulator, legalising online gambling, and permitting advertising (Gambling Act, 2005; House of Lords, 2019). The 2005 Act aimed to promote responsible gambling, protect vulnerable groups, and prevent crime links (Miers, 2007). Critics argue that its emphasis on economic benefit over harm was harmful, encouraging a culture that made gambling seem normal (Orford, 2011). While the 2005 Act set out a key regulatory framework, it also led to an increase in gambling venues by removing restrictions such as the "demand test" for communities (Light, 2007; Banks & Waters, 2023). The Act and technological advancements expanded access to gambling (Reith, 2003; Cassidy, 2014), with online platforms and advertising normalising it within British society (Korn & Shaffer, 1999; Banks & Waters, 2023). This includes a rise in gambling advertisements and casinos, transforming public acceptance of gambling into a form of entertainment (Wardle et al., 2019), starkly contrasting with the regulation and cultural norms of the 1950s (Cassidy et al., 2013). However, this rapid growth occurred without sufficient support for those vulnerable to addiction, raising concerns among public health experts and advocacy groups about increasing addiction rates (Griffiths, 2009; Orford, 2011; Wardle et al., 2019; Cassidy et al., 2013; Bowden-Jones et al., 2017; Bowden-Jones & Prever, 2020).

Subsequent legislation sought to address apparent regulatory gaps in the following years. For example, the Licensing and Advertising Act of 2014 required all gambling operators targeting UK consumers to obtain licences issued by the Gambling Commission, regardless of their geographic location (Kaufman et al., 2017; House of Lords, 2019). While this legislation

improved oversight of remote gambling, issues related to problem gambling and the effectiveness of harm prevention measures remained significant (Korn et al., 2003; Banks & Waters, 2023). Nonetheless, effective regulation alone is not enough to reduce the growing incidence of gambling-related harm. Prevention and treatment services must be adequately funded to support regulatory efforts, making sure individuals affected by problem gambling receive the help they need. For years, funding for gambling-related harm prevention and treatment in the UK depended on voluntary contributions from the industry through organisations such as GambleAware, which raised concerns about conflicts of interest, inconsistent funding, and underinvestment in treatment services (Bowden-Jones et al., 2022; Orford, 2011).

Critics argued that voluntary funding created dependence on the gambling industry, undermining the independence of research and treatment programmes. This raised concerns because the industry has a financial interest in promoting gambling growth, which, as critics pointed out, could worsen gambling-related harm (GRH) (Livingstone & Francis, 2020). In 2023, the UK government introduced a reform that mandated a statutory levy, requiring the gambling industry to contribute £100 million annually to finance independent treatment and harm prevention services. This change aimed to ensure steady and impartial funding, reduce conflicts of interest, and align gambling harm prevention with public health funding models. Resources are now directed to the NHS and independent providers, supporting transparent and responsible allocation for treatment, research, and educational initiatives.

This policy change acknowledges gambling as a public health concern akin to substance use disorders, requiring sustained investment in harm prevention strategies (Bowden-Jones et al., 2022; Korn & Shaffer, 1999). Despite progress, challenges remain in integrating gambling harm prevention into wider public health initiatives such as mental health and social support (Rumbolz, 2023; Wardle et al., 2018). Experts emphasise that tackling social determinants, including poverty and mental health inequalities, is crucial for systemic gambling harm reduction (Wardle et al., 2018; Banks & Waters, 2023). Continuous monitoring of the statutory levy's impact is vital for assessing its effectiveness in reducing gambling-related harm and informing evidence-based policies (Chamberlain et al., 2023; Adams, 2016). While previously defined at

the beginning of this chapter, the upcoming section will explore the evolving understanding of gambling-related harm (GRH) and the factors that have rendered GRH a significant topic in current academic and policy discussions. This thorough exploration will assess GRH's increasing relevance in public health and policy and investigate the social, economic, and psychological components that have heightened its importance in recent studies.

2.1.3 Understanding Gambling-Related Harm (GRH)

Gambling-related harm (GRH) is crucial for understanding the impact of gambling on individuals, families, communities, and public health (Wardle et al., 2018; Langham et al., 2016). GRH includes physical, psychological, and social effects beyond financial losses (Public Health England, 2021; Hing et al., 2016). These harms appear as health problems, mental health conditions like anxiety and depression, and social issues such as relationship breakdowns, reduced productivity, and crime (Wardle et al., 2018). Research indicates that gambling-related harm (GRH) affects more than just individuals, impacting communities by amplifying social inequalities and public health issues (Bramley et al., 2020; Bhattacharjee, Dolton, & Mosley, 2023). Increasingly, studies see GRH as a public health concern, moving away from labelling people as “problem gamblers” or “non-gamblers” and instead viewing gambling behaviours on a continuum (Delfabbro et al., 2021). This approach enables early intervention before gambling worsens and supports broader harm-reduction strategies (Lind et al., 2022). Grasping GRH is vital for creating effective responses that combine public health and criminal justice efforts, balancing harm reduction with regulations to protect vulnerable groups (Pitt et al., 2022; Nower & Glynn, 2022).

The Problem Gambling Severity Index (PGSI) is a valuable tool for assessing gambling risks, as will be examined in detail in Methodology Chapter 3. It classifies gamblers as low, moderate, or high risk based on their behaviours and outcomes (Public Health England, 2021; Ferris & Wynne, 2001). Extremely high-risk gambling can lead to disordered gambling, resulting in psychological distress, relationship issues, financial crises, job loss, and illegal activities (Gambling Commission, 2022; Hodgins et al., 2011). Even low and moderate-risk gambling can cause significant harms, such as declines in mental wellbeing, decreased work performance, and

social withdrawal, which interfere with daily life (Browne et al., 2016; Currie et al., 2006). Addressing these gambling-related harms is essential for effective prevention and intervention efforts (Russell et al., 2018; Rintoul et al., 2017). These varied harms impact different aspects of life, as illustrated in the figure below.

Figure 1. Gambling-related harm components (Wardle et al., 2018)

Figure 1 Gambling-related harm components

The financial strain impacts gamblers and their families, creating a cycle of poverty, decreased quality of life, and greater reliance on social support (Strong, 2007; Banks & Waters, 2023). Gambling-related financial insecurity forces families to struggle with essentials like housing, food, and education, worsening socioeconomic inequalities (Langham et al., 2016; Currie et al., 2006). Gambling can damage relationships, leading to conflicts, separations, and social isolation. Family trust diminishes because of secrecy and hardship (Wardle, 2018; Shannon et al., 2017). Family members often experience heightened emotional stress and anxiety, which can cause intergenerational harm (Dowling et al., 2016; Browne et al., 2016). Children are especially vulnerable to neglect and emotional insecurity, affecting their development (Langham et al., 2016; Banks & Waters, 2023). These effects show that gambling impacts society beyond just the

individual gambler. Mental and physical health are significantly affected by gambling-related harms. Gamblers often face psychological distress, including anxiety, depression, and chronic stress, worsened by ongoing financial pressures (Langham et al., 2016; Hing et al., 2016). Mental health issues, such as substance use disorders and suicidal thoughts, are common among those affected by gambling harm (Hodgins et al., 2011; Currie et al., 2006). Physical health can decline as individuals neglect self-care, suffer poor sleep, and develop stress-related conditions like hypertension or gastrointestinal problems (Shannon et al., 2017; Langham et al., 2016). These health issues accumulate, making recovery more difficult, especially for those with multiple vulnerabilities.

The GRH framework emphasises that gambling harms extend beyond the gambler, affecting families, communities, and societal sectors such as healthcare and justice (Wardle et al., 2018; Rintoul et al., 2017). Communities experience rising crime rates linked to gambling addiction, leading to higher costs for law enforcement (Banks & Waters, 2023; Hodgins et al., 2011). The 2023 PHE report "*Gambling-Related Harms Evidence Review: The Economic and Social Costs of Harms"* states that direct government costs amount to £647 million annually, with wider intangible societal costs estimated at £619 million, bringing the total to approximately £1.27 billion (Office of Health Improvement and Disparities, 2023). Due to limited research, PHE notes that these estimates likely underestimate the true economic and social burden (Office of Health Improvement and Disparities, 2023; Banks et al., 2023). These costs reflect the extensive societal impacts of gambling-related harms, affecting healthcare, legal, and social service expenses for those affected (Shannon et al., 2017; Currie et al., 2006).

Assessing the recovery landscape for individuals affected by gambling-related harm (GRH)—including gamblers, their loved ones, and those with co-occurring substance use disorders—requires a nuanced understanding of definitions, regulations, and funding in gambling addiction research, treatment, and prevention. Disparities in funding and regulation between substance use and gambling services highlight the need for a more integrated public health approach. Substance use has historically received national strategic guidance and considerable funding, such as the £421 million from the *From Harm to Hope* plan for treatment and recovery (Public Health England, 2022; McKee, 2019). In contrast, gambling services rely on voluntary

industry contributions, leading to inconsistent funding, fragmented services, and potential conflicts of interest (Bowden-Jones et al., 2022; Banks & Waters, 2023). This uneven landscape creates significant gaps in care for those affected by gambling, their families, and individuals experiencing both gambling and substance use disorders.

A significant gap in the current system is the absence of standardised gambling screening within public health and criminal justice frameworks (Blank et al., 2021; Delfabbro & King, 2020; Page et al., 2021). This gap hampers early intervention efforts and leads to missed opportunities to identify individuals at risk of gambling-related harm (GRH) — not only among those with co-occurring disorders but also among exclusive gamblers and the often-overlooked group of affected others, such as family members and close associates who experience secondary harms (Blank et al., 2021). Without routine screening, individuals who could benefit from early support often remain unnoticed until their gambling behaviours escalate into more serious personal, financial, or legal issues (Forward, Norrie, & Bramley, 2022). Affected others also frequently remain unsupported, despite evidence of the profound emotional, financial, and social impacts they endure (Hing et al., 2018). Incorporating gambling screening into standard protocols within healthcare, social services, and community settings could allow for earlier detection and a more comprehensive support approach, reducing the wider social and economic costs of gambling harm (Price, Hilbrecht, & Billi, 2021).

The criminal justice system is a vital yet often overlooked area for recognising and addressing gambling-related harm. Research clearly demonstrates a strong link between problem gambling and criminal behaviour, particularly regarding financial crimes committed to fund gambling activities (Smith & Sharman, 2022). The prevalence of problem gambling is especially high among those in prison, with some studies suggesting that nearly 30% of inmates show signs of gambling-related issues (Tørdal et al., 2024). Despite this clear connection, gambling is rarely screened for within the criminal justice system, resulting in missed opportunities for diversion and targeted rehabilitation (Banks & Waters, 2020). The absence of gambling-specific triage protocols at critical points — such as courts, probation services, and prisons — continues to perpetuate cycles of harm, impacting not only the offenders but also their families and communities. Incorporating regular gambling screening in these settings could facilitate early

identification, reduce recidivism, and improve rehabilitation outcomes (Page et al., 2021). Tackling this triage gap requires a multi-sector approach that unites public health and criminal justice. Experts advocate for integrated care models that connect healthcare providers, justice professionals, and gambling treatment services (Jennings & Matheson-Monnet, 2017). Research shows that such collaboration can lower reoffending rates and strengthen rehabilitation efforts, highlighting the societal benefits of embedding gambling harm prevention into criminal justice policies.

The current landscape of gambling triage in the UK is made even more complex by fragmented services and inconsistent screening protocols, especially in public health settings where gambling-related harm is often overlooked due to other behavioural health issues (Shaw et al., 2024). Even in areas served by NHS-funded gambling treatment clinics, such as the Northern Gambling Clinic in Leeds, referrals mainly depend on self-referral or contact through third-sector organisations rather than systematic screening in healthcare or criminal justice settings (Woodall & Street, 2020). This self-referral approach disproportionately disadvantages vulnerable groups — including those with co-occurring disorders and affected others — who may lack the resources or awareness to seek help proactively. Experts suggest that implementing universal screening protocols across healthcare settings could reduce these disparities and enable earlier detection (Blank et al., 2021).

The lack of standardised triage in criminal justice highlights significant challenges. Despite evidence linking gambling-related harm to crime, triage protocols in prisons, probation, and courts are often inconsistent or missing (Banks & Waugh, 2019). As a result, many offenders with gambling issues remain unidentified and untreated, which worsens recidivism and reduces chances for rehabilitation (Matheson et al., 2021). Scholars argue that the absence of joined-up care pathways between criminal justice and gambling treatment services makes these problems worse, limiting early intervention and customised rehabilitation (Jennings & Matheson-Monnet, 2017).

Ineffective gambling triage systems have wide-reaching consequences. In public health, a lack of thorough screening worsens mental health problems, raises healthcare costs, and amplifies social inequalities (Shaw et al., 2024). For those affected, inadequate systemic support

causes emotional distress, financial hardship, and social isolation (Hing et al., 2018). In the criminal justice system, poor gambling screening increases recidivism and puts additional pressure on legal and correctional services (Banks & Waugh, 2019). Early detection through strong triage can reduce these effects, leading to better outcomes for individuals and communities (Blank et al., 2021). Although NHS-funded gambling treatment services are a positive development (Bowden-Jones et al., 2022; O'Sullivan, 2023), further efforts are needed to make these services as comprehensive and accessible as those for substance use recovery. Without equitable funding and infrastructure, individuals affected by gambling addiction — including gamblers and those with co-occurring disorders — remain faced with ongoing barriers to recovery (Wardle et al., 2018).

Building on the context of current systems and the historical regulation of gambling and substance use, the next section will explore the similarities and differences between gambling and substance use disorders, with a particular focus on their relationship with crime. Although these disorders are often treated within separate policy and clinical frameworks, emerging research suggests that they are more alike than different, sharing common neurobiological mechanisms, behavioural patterns, and links to criminal behaviour (Petry, 2002; Verdejo-García et al., 2008; Widinghoff et al., 2019). Despite these parallels, gambling continues to be addressed less comprehensively than substance use in public health and criminal justice responses. By examining these overlaps and divergences, the following section will critically assess whether gambling and substance use disorders are, from a research standpoint, more similar than different, particularly in terms of their clinical characteristics, behavioural patterns, and connections to crime. While the previous discussion explored the historical and regulatory factors that have contributed to the marginalisation of gambling within public health and criminal justice frameworks, this section shifts focus to the empirical evidence, evaluating the extent to which gambling aligns with substance use disorders in its impact on individuals and society. This analysis aims to deepen the understanding of how both disorders operate within similar neurobiological, psychological, and social frameworks despite being treated differently in policy and practice.

2.2: Similarities and differences of gambling and substance use

Building on the context of existing systems and the historical regulation of gambling and substance use, the following section explores the similarities and differences between gambling disorders and substance use disorders, emphasising their connection to crime. Although these disorders have typically been addressed through distinct legal, clinical, and policy frameworks, recent research increasingly shows that they have more in common than differences in their underlying mechanisms, behavioural patterns, and societal effects (Petry, 2002; Shah et al., 2023). Both gambling and substance use disorders involve shared neurobiological pathways, such as changes in reward processing and impulsivity, which lead to similar clinical challenges and treatment needs (Verdejo-García, Lawrence, & Clark, 2008). However, gambling remains undervalued in public health initiatives and criminal justice responses, often receiving less comprehensive support and funding than substance use disorders (Widinghoff et al., 2019).

This section will examine these overlaps and differences by analysing clinical features, prevalence patterns, and how these disorders intersect with criminal behaviour. Many studies have demonstrated that both gambling and substance use disorders are linked to higher rates of financial crimes, fraud, and theft, driven by the compulsive need to maintain the addiction (Staples et al., 2021; Wang et al., 2023). However, policy responses to gambling-related crime are less comprehensive than those for substance misuse, often leading to inconsistencies in legal outcomes and treatment options for offenders (Blaszczynski et al., 1989; Turner et al., 2009). By critically analysing these issues, this section aims to highlight the systemic disparities in treatment and policy, questioning why gambling remains under-recognised despite its significant public health and social impacts.

2.2.1 Clinical Similarities and Differences

Gambling disorder (GD) and substance use disorder (SUD) show remarkably similar clinical features, which support their classification as addictive disorders in the DSM-V (American Psychiatric Association, 2013; Grant et al., 2017). Both disorders are characterised by compulsive engagement in behaviours despite negative consequences, whether the behaviour involves gambling or the use of drugs or alcohol (Petry, 2006; Yau & Potenza, 2015).

Individuals affected by either disorder often display impaired impulse control, leading to recurrent maladaptive behaviours that affect personal, social, and occupational functioning (Hodgins et al., 2011; Slutske, 2006).

Despite claims about the progressive nature of these disorders, the literature raises questions about this view. Griffith Edwards and others argue that addictions do not always follow a strictly progressive path; instead, many can remain stable for long periods without escalating (Edwards, 1982; Orford, 2001). This perspective highlights the need for caution when making generalisations about addiction progression, as individual experiences can vary greatly due to personal and environmental factors. However, evidence suggests that for some individuals, compulsive behaviours—such as gambling or substance use—tend to worsen over time, leading to serious financial, relational, and health-related consequences (Grant et al., 2020; Potenza, 2008).

A notable similarity between gambling disorder (GD) and substance use disorder (SUD) is found in aspects of tolerance and withdrawal. Just as individuals with SUD often need larger doses of a substance to achieve the desired effect, those with gambling disorders frequently place bigger bets or take more risks to sustain their excitement (Petry, 2006; Cavedini et al., 2002; Goudriaan et al., 2006). The emotional and psychological distress linked to withdrawal in substance use—including irritability, anxiety, and restlessness—also appears in gambling disorder when individuals try to reduce or stop gambling (Ledgerwood & Petry, 2006; Grant et al., 2014). While these similarities are widely recognised, some researchers suggest that withdrawal symptoms in behavioural addictions may differ from those in substance use, highlighting the need for further investigation into their distinct neurobiological mechanisms (Potenza, 2008; Orford, 2011).

Neurobiologically, both gambling and substance use disorders interfere with the brain's reward system, particularly the dopaminergic pathways that control pleasure and reinforcement. Research shows abnormalities in the prefrontal cortex and striatum, which impair decision-making and impulse control (Chamberlain & Sahakian, 2007; van Holst et al., 2010; Volkow et al., 2011). However, the neurological mechanisms behind gambling disorder remain debated. Some experts, like Henrietta Bowden-Jones, argue there is significant overlap with substance use

disorders, while others believe the pathways are less clear and may not entirely align (Potenza, 2008; van Holst et al., 2010). This highlights the importance of not overemphasising neurological explanations without recognising environmental, social, and psychological factors. High rates of comorbidity suggest a clinical connection, pointing to shared vulnerabilities such as impulsivity and poor coping strategies (Petry et al., 2005; Hodgins et al., 2011; van Holst et al., 2010). Although dual-diagnosis treatment programmes show promise, challenges remain in effectively managing both disorders (Cowlishaw et al., 2014; Grant et al., 2020). Critics caution against viewing comorbidity solely through a clinical lens, as individuals' rationalisations can obscure the complexity involved (Brown et al.,

Conversely, there are clear differences between gambling disorder and substance use disorder (SUD). For example, the behaviour of chasing losses—where someone gambles more to recover lost money—is not usually seen in SUD (Grant et al., 2020; Ledgerwood & Petry, 2006). However, it can be argued that dopaminergic activity plays a significant role in both gambling disorder and SUD, reinforcing compulsive behaviours even when faced with negative consequences (Clark, 2010; Potenza, 2017). In gambling, chasing losses results from flawed cognitive processes, such as the gambler's fallacy—the mistaken belief that a win is likely after a series of losses. Similarly, in SUD, individuals keep seeking substances despite previous failures to reach the desired high, often influenced by tolerance and withdrawal symptoms (Everitt & Robbins, 2016). This suggests that, in both disorders, people persist in their actions to obtain a psychological or physiological reward that remains elusive. Moreover, a notable difference is that gambling disorder can carry a higher risk of suicide because of the severe financial strain and despair experienced by those with chronic gambling issues (Manning et al., 2015; Hodgins et al., 2006; Cowlishaw et al., 2014). These unique aspects emphasise the importance of specialised interventions targeting specific consequences and behaviours.

In conclusion, gambling disorder and substance use disorder show notable clinical, neurobiological, and behavioural similarities, supporting their classification as addictive disorders. However, important distinctions—such as chasing losses, a higher risk of suicide, and ongoing debates about their neurological links—necessitate a careful analysis of both gambling and substance use. Recognising both the similarities and the complexities that challenge

traditional models makes it clear that a thoughtful and integrated approach is essential for developing effective treatment strategies tailored to the specific aspects of these disorders. The next section will explore the prevalence of each behaviour among gamblers and substance users and their relationship with crime.

2.2.2 Prevalence Among Groups

This section explores the complex relationship between gambling disorder, substance use disorder, and their links to criminal behaviour, highlighting both shared and unique characteristics that shape these interconnected issues. It starts by examining how common gambling is among those with substance use disorders, and vice versa, revealing concerning rates of co-occurrence and significant implications for treatment and recovery strategies. The analysis then considers how both gambling and substance use can lead to criminal activity, investigating the types of crimes committed, the motivations behind them, and the overall influence of addiction on such behaviours. Notably, the current discussion mainly focuses on treatment-seeking gamblers, indicating a notable knowledge gap regarding those who do not seek help. (Lind, Kääriäinen, & Kuoppamäki, 2015). However, limited research has directly explored how these behaviours intersect and inform treatment and intervention strategies. This section examines these complex relationships, adding to the growing body of research on integrated addiction frameworks and providing insights to develop more effective public health and criminal justice responses. It emphasises the importance of early identification of gambling and substance use problems through effective triage systems, as timely recognition can improve recovery outcomes via holistic care. Additionally, it underlines the need for integrated care addressing both gambling and substance use issues while working to reduce the stigma that prevents individuals from seeking help.

2.2.2.1 Prevalence of Gambling Among Substance Users

Although research on the interactions between gambling disorder and substance use disorder is limited, existing studies reveal a notable prevalence of gambling problems among those seeking

treatment for substance use. Several studies (Grant et al., 2017; Lorains et al., 2011; Cunningham-Williams et al., 2005) report high co-occurrence rates for both conditions. For example, a meta-analysis by Cowlishaw et al. (2014) found that 14% of individuals in substance use treatment met the criteria for pathological gambling, and 26% exhibited problem gambling behaviours. Moreover, individuals in substance use treatment can experience problem gambling rates three to five times higher than the general population, where only about 1% to 3% of adults are affected (Wardle et al., 2019; Petry et al., 2005). These findings highlight the need to go beyond prevalence statistics to understand how these disorders interact and influence individual addiction pathways. Prevalence rates also differ by demographics; for instance, men tend to have higher rates of both gambling and substance use disorders compared to women, although women generally experience a quicker onset and progression of gambling issues, a phenomenon known as “telescoping” (Slutske, 2006; Grant & Chamberlain, 2020). Additionally, younger adults, particularly those aged 18–35, show higher rates of co-occurring gambling and substance use disorders than older groups (Cowlishaw et al., 2014; Hing et al., 2016). Research in Canada indicated that nearly 35% of young adults with a substance use disorder also reported problem gambling, underscoring the strong link between these behaviours (Hodgins et al., 2011).

Environmental factors significantly influence the prevalence of gambling disorders. People living in urban areas or near gambling venues, such as casinos or betting shops, report higher rates of these disorders (Wardle et al., 2019). Likewise, environments that encourage substance use—like bars, clubs, or places with abundant alcohol—are strongly linked to increased rates of both gambling and substance use disorders (Cowlishaw et al., 2014; Spunt et al., 2002). These shared risk environments promote the development of both conditions and reinforce impulsivity and risk-taking behaviours, which can worsen the severity of these issues.

Despite the overlap, triage integration for substance use and gambling disorders remains limited in healthcare and criminal justice systems (Langham et al., 2016; Hing et al., 2020). Consequently, treatment often addresses one disorder while neglecting the other, resulting in care gaps and hindering recovery for individuals with co-occurring conditions (Langham et al., 2016; Kelly et al., 2020). Research indicates that up to 50% of individuals undergoing treatment for gambling disorders also have a substance use disorder (Petry et al., 2005; Grant et al., 2004), yet

many programmes do not routinely screen for these co-occurring conditions. Alcohol use is primarily linked to gambling behaviours, with studies showing it increases impulsivity and risk-taking, thereby worsening gambling outcomes (Ledgerwood & Petry, 2006; Grant et al., 2020). Findings reveal that 44% to 73% of individuals with gambling disorders report hazardous alcohol use (Cowlishaw et al., 2014; Slutske, 2006).

These findings highlight the importance of addressing environmental factors and dual vulnerabilities that increase the risk of concurrent gambling and substance use issues. Despite growing awareness, systemic barriers to progress persist. For example, only 5% of individuals with gambling disorders seek treatment, a rate much lower than that for substance use disorders (Hing et al., 2016; Wardle et al., 2019). Limited funding, inadequate training for clinicians, and the stigma linked to gambling and addiction further hinder efforts to develop comprehensive care models (Bowden-Jones et al., 2022; Orford, 2011). Moreover, public health initiatives have traditionally focused more on substance use than gambling, resulting in insufficient funding and research for gambling disorders (Cassidy, 2014; Adams, 2016). Addressing these systemic challenges is critical for enhancing care and ensuring individuals with co-occurring conditions receive the holistic support they require.

2.2.2.2 Prevalence of Substance Use Among Gamblers

Conversely, the prevalence of substance use among individuals seeking treatment for gambling disorder is also significant. Numerous studies have shown high rates of co-occurring substance use, although prevalence estimates vary depending on the population and research methods used (Grant et al., 2004; Lorains et al., 2011; Cunningham-Williams et al., 2005). For example, Lorains et al. (2011) conducted a meta-analysis and found that 57.5% of individuals with gambling disorder also had a co-morbid substance use disorder. However, while this statistic indicates a substantial overlap, it is important to recognise the diversity within gambling populations and potential sampling biases among treatment-seeking groups (Abbott et al., 2018; Delfabbro & King, 2017). Similarly, Rodriguez et al. (2017) discovered that among treatment-seeking gamblers, 8.3% were diagnosed with alcohol dependence and 4.4% with other substance use disorders, further emphasising the high prevalence of co-occurrence.

Substance use among gamblers often serves functional purposes, such as enhancing the excitement of gambling or helping to cope with the stress and anxiety that gambling can cause (Toneatto et al., 2002; Cunningham-Williams et al., 2005). Alcohol, for example, is frequently used to reduce inhibitions, leading to increased risk-taking and longer gambling sessions (Grant et al., 2004; Ledgerwood & Petry, 2006). Similarly, substances like cocaine or other stimulants may be used to boost arousal and extend gambling periods, which can worsen impulsive and maladaptive behaviours (Potenza, 2008; Cunningham-Williams, 1998; Toneatto, 2002). However, not all research supports a causal or straightforward relationship between substance use and gambling behaviour. Some scholars caution against oversimplifying this link, as substance use and gambling might occur together due to shared risk factors rather than direct reinforcement (Shaffer et al., 2004; Hodgins et al., 2011).

The combination of substance use and gambling disorder can intensify the negative consequences faced by individuals, including financial instability, relationship breakdowns, and psychological distress (Abbott et al., 2018; Delfabbro & King, 2017). For example, loss chasing—where individuals try to recover gambling losses by carrying on gambling—may worsen when under the influence of substances like alcohol, which impair decision-making and boost impulsivity (Blaszczynski & Nower, 2002; Håkansson & Widinghoff, 2020). While these findings are important, it is essential to recognise the limitations of self-report data, which are common in this area of research, as individuals may retrospectively attribute their gambling problems to substance use or vice versa (Auer, 2016; Braverman, 2014).

The stigma surrounding both gambling and substance use disorders makes the problem worse, stopping many people from seeking help (Quigley, 2022; Barry, 2014). Feelings of shame, guilt, or fear of judgement may prevent individuals from accessing treatment services, especially for co-occurring disorders (Slutske, 2006; Cowlishaw et al., 2014). This hesitation to seek help caused by stigma highlights the need for public health strategies that aim to reduce stigma and increase awareness of the link between gambling and substance use (Hing, 2016; Grant et al., 2020). Improving access to confidential and integrated treatment services helps people feel supported and confident to seek help.

Given the documented substance use among gamblers seeking treatment, integrated care for both gambling and substance use disorders is essential for effective recovery. Dual-diagnosis treatment programmes that offer comprehensive support for these disorders have demonstrated promise (Cowlishaw, 2014; Petry et al., 2005). Such programmes address shared issues—impulsivity, emotional regulation difficulties, and maladaptive coping—crucial for promoting long-term recovery and reducing relapse rates (Sancho et al., 2021; Panayiotou et al., 2023). Studies show that difficulties in emotional regulation are strong predictors of gambling severity, particularly in individuals with substance use problems, underscoring the need for targeted interventions (Panayiotou et al., 2023). Moreover, impulsivity and cognitive distortions significantly contribute to gambling disorders, highlighting the importance of including emotional regulation strategies in treatment to support recovery (Sancho et al., 2021). Nonetheless, the limited availability of dual-diagnosis services highlights the need for policy reforms and increased investment in integrated care (Cowlishaw et al., 2014; Delfabbro & King, 2017).

2.2.3 Crime Among Gamblers and Substance Users

Gambling and substance use disorders have notable overlaps, particularly concerning criminal behaviours. This link is crucial for understanding their societal and economic effects, as individuals with gambling problems are often involved in forensic settings and tend to commit financially motivated crimes (Williams, Royston & Hagen, 2005). It is important to examine these relationships, since debates continue about causality and complexity (Binde et al., 2022; Lind & Kääriäinen, 2018). Research shows that problem gambling can trigger criminal activities as individuals try to recover financial losses. A systematic review highlighted financial pressures from gambling losses as a main reason for such offences (Lind & Kääriäinen, 2018).

Furthermore, studies have shown that gamblers involved in illegal activities often display high impulsivity levels, indicating that impulsive traits may independently predispose individuals to both gambling problems and criminal behaviour (Mishra et al., 2017). Socioeconomic disadvantage has also been associated with a higher risk of developing gambling issues, especially among youth with greater impulsivity, suggesting that socioeconomic factors and

impulsivity together can contribute to both gambling difficulties and criminal activity (Auger et al., 2010). These complexities emphasise the need for a nuanced understanding of gambling disorders, substance use, and crime.

Research indicates that individuals with substance use disorders (SUDs) have higher rates of criminal behaviour, particularly offences driven by economic needs, such as theft, burglary, and drug-related crimes (MacLean et al., 2021; Flaherty et al., 2022). For example, research by MacLean et al. (2021) showed that around 60% of those receiving treatment for opioid use disorder admitted to committing acquisitive crimes to support their addiction. These findings support the wider understanding that criminal acts in this group are often financially motivated. However, criminological studies increasingly emphasise the complex relationship between substance use and crime, warning against oversimplification. Flaherty et al. (2022), for instance, argue that structural factors like poverty, unemployment, and limited access to treatment exacerbate criminal behaviour among substance users, suggesting that substance use may be just one of several interconnected factors.

Gambling disorders can lead to criminal behaviour as individuals try to manage the financial damage caused by gambling losses (Lind, Kääriäinen, & Kuoppamäki, 2015). This behaviour, known as loss chasing, often drives people to commit fraud, theft, and embezzlement (Hing et al., 2016; Håkansson & Widinghoff, 2020). A recent study by Armstrong and Carroll (2021) found that 22% of people with a gambling disorder had engaged in illegal activities related to their gambling, compared to only 3% of recreational gamblers. This gap highlights the strong link between gambling disorders and criminal activity, unlike casual gambling. It is important to note that offences connected to gambling are usually non-violent and financially motivated, often involving employers, family members, or financial institutions (Calado & Griffiths, 2016; Delfabbro et al., 2020).

Gambling and substance use disorders share key similarities in criminal behaviour. Both are linked to economic pressure and common risk factors like impulsivity, poor decision-making, and co-occurring mental health issues (Sharman et al., 2021; Abbott et al., 2020). Sharman et al. (2021) found that individuals with these disorders are more impulsive and compulsive than the general population, increasing their risk of engaging in crime. Additionally, exposure to high-

risk environments, such as betting shops and bars, worsens this connection (Langham et al., 2016; Rockloff et al., 2019). These traits suggest that gambling and substance use disorders are more similar than different regarding their potential for criminal behaviour.

However, there are notable differences. A key distinction lies in the types of crimes involved. Substance-related offences often include violent acts like assault, driven by the psychoactive effects of drugs (Flaherty et al., 2022). In contrast, gambling-related crimes are generally non-violent and mainly consist of white-collar crimes such as embezzlement or fraud (Hing et al., 2016). Furthermore, the legal status of these activities varies greatly. In the UK, substance use—particularly involving illegal drugs—is criminalised, leading to offences such as possession and supply, whereas gambling remains legal and strictly regulated. This difference influences how individuals with these disorders interact with the criminal justice system. Substance users usually face imprisonment, while those with gambling problems are more often subjected to fines or directed towards treatment (Wardle et al., 2019; McCarthy et al., 2023). These disparities also extend to how addiction impacts criminal conduct. Although both disorders can lead to crimes aimed at sustaining addiction, the underlying motivations differ. In substance use disorders, the urgent need for drugs, often accompanied by withdrawal symptoms, increases desperation and the likelihood of impulsive and violent behaviour (Flaherty et al., 2022; Bonta & Andrews, 2017). Conversely, gambling disorders motivate individuals to commit financially driven crimes, such as fraud and theft, in attempts to regain significant financial losses through illegal means (Sharman et al., 2021; Abbott et al., 2020). The financial motives behind gambling-related offences tend to be more calculated, compared to the impulsive and immediate nature of substance-related crimes (Hing et al., 2016).

In conclusion, while substantial evidence indicates a link between substance use disorders and gambling issues with increased criminal activity, these connections are complex and depend on context. Crimes related to gambling are usually non-violent and driven by financial motives, whereas those linked to substance use may involve both economic factors and drug-related behaviours, including violence (Binde, 2016; Lind & Kääriäinen, 2018). Nonetheless, shared risk factors—such as impulsivity, poor decision-making, environmental influences, and addiction mechanisms—highlight the need for comprehensive interventions that address the interconnected

nature of these disorders (Rockloff et al., 2019; Wardle et al., 2019). Further research is vital to clarify the nuances of these relationships, ensuring a thorough understanding of the complexities involved informs intervention strategies. After examining the prevalence and overlap of gambling and substance use disorders, it is important to explore how these conditions interact with criminal behaviour. Section 2.3 will consider perspectives from both scholars and individuals with personal experience, offering insight into the intricate relationship between gambling, substance use, and crime. This section will also explore how addiction influences criminal behaviour, the related challenges, and the implications for treatment and recovery approaches.

2.3: Perspectives on the Relationship Between Gambling, Substance Use, and Crime

The relationship between substance use, gambling, and crime constitutes a complex and nuanced area of research that has generated significant academic debate and practical importance (Lind & Kääriäinen, 2018; Mishra et al., 2017). This section explores key perspectives and research that elucidate the links connecting these behaviours to criminal activity, emphasising common vulnerabilities such as socioeconomic disadvantage, impulsivity, and systemic inequalities (Auger et al., 2010; Laursen et al., 2016). By carefully analysing the differences and overlaps between crime related to gambling and substance use, this discussion aims to deepen understanding of the mechanisms that drive these connections (Mishra et al., 2017; Lind & Kääriäinen, 2018). Additionally, these links highlight the importance of addressing structural and individual risk factors through integrated public health and criminal justice approaches, laying the groundwork for future research and policy development (Laursen et al., 2016; Auger et al., 2010).

2.3.1 Academic and Research Perspectives on the Relationship Between Substance Use, Gambling, and Crime

The relationship between substance use, gambling, and crime is complex and multifaceted, continuing to spark significant academic debate. While the link between these behaviours and criminal activity is well-established, critical perspectives challenge simple causal explanations

and instead highlight the roles of shared risk factors, structural inequalities, and the methodological limitations of existing research (Braithwaite, 1989; Best et al., 2001; Turner et al., 2021). John Braithwaite's (1989) foundational work on crime and regulation remains particularly important in this discussion. Braithwaite argues that crime often arises as an adaptive response to systemic failures, especially in societies where financial inequalities and regulatory gaps create desperation. This view is supported by recent research on gambling-related crime, where economic pressures—often stemming from significant debts—drive individuals to commit fraud, theft, or embezzlement to recover their losses (Håkansson & Widinghoff, 2020; Turner et al., 2021; Delfabbro et al., 2020). These behaviours, while illegal, are frequently understood as responses to economic hardship rather than signs of ongoing criminal intent.

In comparison, crime related to substance use is often linked to economic compulsivity, wherein individuals commit offences such as theft, burglary, or drug distribution to maintain their dependence on substances (Bennett & Holloway, 2009; Gattis & Cunningham, 2019; Håkansson et al., 2020). For instance, Bennett and Holloway (2009) reported that over half of those dependent on illicit drugs engaged in acquisitive crimes to fund their substance use. However, as previously mentioned, Best et al. (2001) critically question the reliance on self-reported accounts from individuals with substance use disorders, arguing that such explanations may involve post-hoc rationalisations rather than accurate depictions of causality. The British Crime Survey further complicates these assumptions by illustrating that criminal activity often precedes substance use, particularly in populations with early-onset delinquency (White & Gorman, 2012; Farrington et al., 2020).

Although both gambling and substance use disorders are associated with higher levels of criminal activity, the nature and motivations of these crimes often differ. Gambling-related offences are mainly financially driven, motivated by loss-chasing behaviours and the need to settle debts or maintain gambling habits (Blaszczynski & Nower, 2002; Hodgins & Holub, 2015; Turner et al., 2021). These crimes usually involve fraud or embezzlement and tend to occur in white-collar settings, targeting employers, businesses, or family members (Delfabbro et al., 2020; Håkansson et al., 2020; Williams et al., 2012). A systematic review by Adolphe et al. (2019) found that gambling-related offences often involve financial deception, strengthening the

link between gambling disorder and non-violent financial crimes. Moreover, Håkansson and Jesionowska (2018) provide empirical evidence from Swedish population-based research, showing that the severity of gambling problems is associated with a higher likelihood of criminal convictions.

In contrast, offences related to substance use are often directly connected to the criminalisation of drug use, leading to charges for possession, supply, or drug-related violence (Gattis & Cunningham, 2019; Bennett & Holloway, 2009; White & Gorman, 2012). These crimes frequently originate from economic compulsivity, where individuals commit acquisitive offences such as theft or burglary to fund their substance use (Bennett & Holloway, 2009). Fazel, Yoon, and Hayes (2017) highlighted the disproportionate prevalence of substance use disorders among incarcerated people, emphasising the link between addiction and criminality within the justice system. Their meta-analysis showed that substance use disorders were common in a large proportion of recently imprisoned men and women, underlining the systemic nature of this problem.

These distinctions influence judicial outcomes, with substance users more likely to face incarceration, while individuals with gambling-related offences are often directed towards financial penalties or treatment referrals (Turner et al., 2018; Delfabbro et al., 2020; Håkansson et al., 2020). Although gambling-related crime is mainly seen as a financial issue requiring rehabilitative approaches, substance use-related crime is often treated as a criminal justice matter, leading to punitive sentences. These differing responses emphasise the need for a more nuanced understanding of how addiction and criminal behaviour intersect, ensuring that interventions target the root causes of these behaviours rather than merely focusing on their legal consequences.

While there are clear connections between gambling disorders, substance use disorders, and crime, researchers emphasise the importance of examining shared risk factors rather than rushing to conclusions about direct causation. Environmental influences are also crucial; for instance, gambling venues and bars act as locations where gambling, drinking, and criminal activities can occur together, encouraging impulsive decisions and increasing the likelihood of risky behaviour (Hodgins & Holub, 2015; Hing et al., 2016; Håkansson & Widinghoff, 2020).

Ferentzy and Turner (2013) highlight the often-overlooked prevalence of gambling issues among illicit drug users, suggesting that common risk factors such as mental health problems, socio-economic disadvantages, and environmental influences are associated with both substance abuse and gambling-related crime.

Public health scholars assert that a robust approach is necessary in both public health and criminal justice to understand and address the connections between gambling, substance use, and crime—researchers advocate for a harm-reduction framework that considers the structural and social determinants of these behaviours. A public health model for gambling harm should go beyond individual treatment, integrating systemic responses to socio-economic factors that promote addiction. Harm reduction principles effective in substance use treatment can also be applied to gambling by shifting the focus from punishment to targeted intervention and support. Addressing economic stress, poor mental health, and limited access to treatment enables policymakers to tackle root causes rather than rely solely on punitive measures. Public health strategies that combine harm reduction with legal reform can redirect emphasis from punishment to rehabilitation, providing long-term benefits for individuals and society. However, current research limitations must be acknowledged; much evidence derives from treatment-seeking populations, which may not accurately represent the broader prevalence of gambling or related crime. For example, about 14% of patients in substance use treatment exhibited comorbid pathological gambling, and 23% showed problem gambling. Findings based on clinical samples may not be fully generalisable, given the legal and social barriers to accessing treatment. Moreover, gambling-related crime is often underreported, making it difficult to accurately assess the true prevalence. This suggests that the actual extent of gambling-related crime in the general population could be much higher than that indicated by treatment-seeking samples.

Additionally, the predominance of cross-sectional studies in this field limits the ability to establish temporal relationships or causality (Best et al., 2001; Delfabbro et al., 2020; Farrington et al., 2020). Håkansson and Jesionowska (2018) conducted a national longitudinal study revealing a significant link between gambling severity and criminal convictions, highlighting the need for more long-term research to clarify causal connections. Likewise, Dowling et al. (2019) utilised cross-lagged path modelling to explore the reciprocal relationships among gambling,

substance use, and mental health symptoms, emphasising the complex nature of these interactions. To address these gaps, future studies should adopt longitudinal and mixed-method approaches to better understand how these relationships evolve (Hing et al., 2016; Turner et al., 2021; Delfabbro et al., 2020). Lind (2015) argues that analysing gambling-related crime from a criminological perspective can provide essential insights into its underlying motivations and structural influences. Furthermore, expanding research beyond treatment-seeking populations to include community and forensic groups will offer a more comprehensive understanding of

In summary, academic perspectives on the links between substance use, gambling, and crime highlight the need for nuanced strategies that address shared vulnerabilities, systemic inequalities, and methodological constraints. Researchers such as Braithwaite (1989) emphasise structural factors and regulatory failures as key influences shaping these behaviours, suggesting that crime often evolves in response to socioeconomic pressures and insufficient policies. Conversely, critical viewpoints caution against oversimplifying the causal relationships among gambling, substance use, and criminal activities, advocating for a more thorough understanding of their interactions (Best et al., 2001; White & Gorman, 2012). Since research mostly relies on cross-sectional studies and treatment-based samples, overcoming these methodological limitations is essential for producing more reliable assessments of prevalence and causation (Delfabbro et al., 2020; Turner et al., 2021). Future interventions can better address the complex connections between gambling, substance use, and crime by adopting public health frameworks and targeting fundamental social determinants—such as economic hardship, mental health issues, and the availability of treatment services. Implementing harm reduction strategies, strengthening regulatory oversight, and expanding longitudinal research will enhance prevention efforts and lead to more effective rehabilitation and legal responses.

2.3.2 Gamblers' Perspectives on the Connection Between Gambling and Crime

People recovering from gambling addiction frequently view the link between gambling and crime as a consequence of financial hardship. Problem gamblers might engage in criminal behaviour, such as fraud, theft, or embezzlement, to fund their gambling activities or to recoup financial losses from gambling. The association between gambling and crime becomes especially

evident when individuals feel ensnared by their gambling debts and resort to illegal actions to solve their financial issues (Turner et al., 2009). Many recovering gamblers reflect on how gambling pushed them to undertake actions they would not have considered otherwise, often driven by a desperation to "chase losses" and regain financial stability (Petry, 2005; Hing et al., 2016). Financial strain from gambling can heighten feelings of guilt and shame, potentially driving individuals further into criminal behaviour. Many in recovery state that as their gambling habits worsened, they not only lost control over their finances but also their moral judgment, leading them to commit crimes they never imagined (Blaszczynski & Nower, 2002; Turner et al., 2009). The relationship between gambling and crime is often cyclical; individuals may start gambling to relieve financial pressure, yet as their gambling creates even more financial issues, they might feel forced to resort to criminal actions to manage their circumstances (Langham et al., 2016).

A frequently noted viewpoint among recovering gamblers is that the societal normalisation of gambling- primarily via online platforms and advertising- has played a role in their participation in gambling-related criminal activities. The widespread availability of gambling has facilitated high-risk behaviour, heightening the risk of financial hardship and, subsequently, criminal acts (Wardle et al., 2018; Hing et al., 2016). Many recovering gamblers express annoyance at how easily they became involved in gambling, with numerous individuals pointing out the absence of awareness programs or educational resources that might have informed them about the possible repercussions of their actions (Binde, 2014; Langham et al., 2016). Additionally, the stigma attached to both gambling addiction and associated criminal conduct poses considerable obstacles to seeking assistance. Many feel isolated and unsupported due to their fear of being judged not only for their gambling habits but also for the crimes committed as a result of their addiction (Hing & Russell, 2017; Turner et al., 2009). This stigma often hinders recovery efforts, leading individuals to postpone seeking help until necessary, which typically occurs after facing legal repercussions that compel them to address their behaviour (Griffiths & Parke, 2010; Binde, 2014).

Individuals in recovery often emphasise the need to tackle both gambling and criminal behaviour in treatment (Håkansson & Jesionowska, 2018; Suurvali et al., 2010; Hing et al.,

2019). Gamblers who have engaged in criminal activities frequently state that conventional recovery programs fail to adequately address the legal and financial ramifications of their actions, increasing their risk of relapse (Williams et al., 2015; Gattis & Cunningham, 2019; Abbott et al., 2018). Research shows that gambling-related crimes, especially financial offenses like fraud and theft, usually arise from a combination of financial desperation and poor judgment, which show the necessity for targeted interventions (Sharman et al., 2019; Lahn & Grabosky, 2003). Moreover, gambling and crime often intersect with other risk factors, including mental health issues, substance use disorders, and socioeconomic difficulties. Studies reveal that individuals involved in gambling-related crime commonly struggle with co-occurring psychiatric disorders and suicidal thoughts, complicating their recovery efforts (Ledgerwood & Petry, 2006; Miller & Thomas, 2017). Additionally, cultural factors related to gambling can impact recovery, as specific populations may encounter heightened stigma or unique challenges in accessing treatment, thereby perpetuating cycles of damage (Raylu & Oei, 2004).

Given these complexities, effective triage systems are crucial to ensure that gamblers involved in criminal activities receive the necessary level of intervention. Screening screening—whether in criminal justice, financial institutions, or healthcare—can identify high-risk individuals and direct them to integrated treatment services (Gainsbury et al., 2015; Suurvali et al., 2010). Triage approaches that assess the severity of gambling issues, financial challenges, and legal consequences can provide personalised support, offering interventions such as financial counselling, legal advocacy, or intensive psychological therapy tailored to individual needs (Ledgerwood & Petry, 2006; Hing et al., 2019; Sharman et al., 2019). This comprehensive, cross-sector strategy promotes early intervention, helping to prevent individuals from getting trapped in a cycle of gambling, financial hardship, and criminal justice interactions (Williams et al., 2015; Welte et al., 2017). Thus, integrated treatment programmes that address legal challenges, financial counselling, and behavioural therapy are crucial for those recovering from gambling-related offences. Such programmes offer a holistic recovery approach that targets not only the gambling disorder but also the underlying structural and psychological factors that lead to gambling-related crimes (Blaszczynski & Nower, 2002; Gainsbury et al., 2015; Marotta, 2008). Additionally, longitudinal research shows that the connection between gambling and

criminal careers can develop over time, emphasising the need for early intervention and targeted policy measures (Sharman et al., 2019; Welte et al., 2017). A harm reduction strategy that integrates legal support, financial rehabilitation, and mental health services is vital for reducing recidivism and promoting long-term recovery.

2.3.3 Substance Users' Perspectives on Substance Use and Crime.

Individuals in recovery from substance use often express that the connection between drug use and crime is complex, incorporating factors like economic need, social influences, and psychological issues (Goldstein, 1985; Walters, 1994; Darke et al., 2007). Many resort to criminal acts, such as theft, drug trafficking, or violence, either to finance their substance habits or to handle the financial difficulties stemming from addiction (Hunt et al., 1993; Nurco et al., 1985; McIntosh & McKeganey, 2002). Studies consistently reveal a significant link between drug misuse and criminal activity, with meta-analyses indicating that those who engage in illicit drug use are considerably more prone to committing crimes, especially property and drug-related offences (Bennett et al., 2008; Bureau of Justice Statistics, 2006; Greenwald, 2014; McDonald et al., 2021). Research has also shown that individuals with substance use disorders are more likely to engage in criminal behaviour due to the psychological and socio-economic factors associated with addiction (O'Donnell et al., 2015; Muench & Korte, 2018). Moreover, recent studies highlight the bidirectional relationship between drug use and crime, with drug-related criminal activity often reinforcing substance misuse patterns, creating a vicious cycle that complicates both prevention and rehabilitation efforts (Hser et al., 2017; Van der Meer et al., 2019).

In interviews, individuals who use substances often describe how their addiction erodes their moral judgement, driving them to commit illegal acts they would have once found unacceptable (Seddon, 2000; Stevens et al., 2005; Farrington et al., 2007). The relationship between drugs and crime is further influenced by structural inequalities like social exclusion and economic hardship, perpetuating cycles of criminal behaviours among substance users (Seddon, 2006; White & Gorman, 2000). Additionally, substance use is linked to violent crime, mainly when stimulants or alcohol are involved, which can increase aggression and impulsivity (Darke, 2010; White & Gorman, 2000). Goldstein's (1985) tripartite model suggests that the connection

between drugs and crime is driven not only by economic factors but also by systemic violence in drug markets and the psychopharmacological effects of the substances themselves.

Economic factors are crucial in this connection, as numerous substance users turn to crime to support their addiction. Those in recovery often describe a cycle where their cravings for drugs or alcohol drive them to increasingly dangerous and illegal actions to obtain these substances (Bennett et al., 2008; White et al., 2012). This behaviour is often worsened by the way substance use can dull decision-making and increase impulsiveness, leading individuals to engage in criminal acts without fully considering the ramifications (Yau & Potenza, 2015; Kelly & Bergman, 2020). The link between drug use and crime is further solidified by the idea that substance abuse, particularly in severe instances, is closely associated with violent and acquisitive crime, prompting individuals to commit theft, deal drugs, or resort to violence to fund their addictions (Darke et al., 2010; Sumnall & McVeigh, 2008).

Social factors significantly influence the link between substance use and crime. Those in recovery frequently share how their social circles, especially those involving other substance users, have played a part in their criminal actions (Fagan, 1990; Seddon, 2006; Bourgois, 2003). Recent research corroborates these insights, underscoring the role of peers and social settings in perpetuating criminal behaviours (Hser et al., 2019; Ford & Holahan, 2017; May et al., 2021). Many substance users indicate that their peers introduced them to criminal activities, normalising illegal behaviour as a way to sustain their substance use (Hawkins et al., 1992; Warr, 2002; Stevens et al., 2005). This initiation into criminal behaviour is particularly challenging to escape, as individuals may feel loyalty or obligation to their social group, even when aware of the detrimental effects of their conduct (Matza, 1964; McIntosh & McKeganey, 2002; Hagan, 1997).

Psychological factors such as trauma, mental health conditions, and background of negative life experiences are often mentioned by substance users as reasons for their involvement in crime (Felitti et al., 1998; Mills et al., 2018; McCauley et al., 2020). Many individuals in recovery recount how they initially turned to substance use to alleviate emotional pain or distress, but as their addiction intensified, they increasingly relied on illegal activities to sustain their habit (Anda et al., 2006; Klee, 1997; Kilpatrick et al., 2003). These psychological difficulties often create a harmful cycle where people resort to crime to cope with their addiction,

which only deepens their psychological suffering and heightens their dependency on substances (Briere & Elliott, 1994; Perry & Carroll, 2008; Ross et al., 2015).

Individuals recovering from substance use frequently highlight the necessity for integrated treatment programmes that address both their addiction and criminal behaviour (Farabee et al., 2001; Taxman et al., 2007; Wexler et al., 1999). Recent studies emphasise the significance of comprehensive programmes that include support for mental health and legal matters to minimise recidivism (Miller et al., 2019; Heilbrun et al., 2015; Chandler et al., 2019). While traditional substance use treatment often centres on achieving abstinence, those in recovery commonly indicate that failing to tackle the underlying criminal behaviours and contributing factors increases their risk of relapse (McLellan et al., 2000; Leukefeld & Tims, 1992; McMurran, 2020). Programmes that provide legal assistance, vocational training, and mental health services are regarded as essential elements of adequate recovery, equipping individuals with the necessary tools to rebuild their lives and prevent future criminal involvement (Visher & Travis, 2003; Maruna & LeBel, 2010; Miller et al., 2021).

2.3.4 Perspectives on the Interrelationship Between Gambling, Substance Use, and Crime

Individuals recovering from gambling and substance use disorders frequently describe how these addictions overlap and contribute to criminal behaviour. Many report that gambling and substance use are closely intertwined, with each activity reinforcing the other and increasing the likelihood of criminal activity (Petry, 2005; White & Cloud, 2008). During interviews, individuals often indicate that substance use diminished their inhibitions and clouded their judgment, leading them to gamble more recklessly, which in turn created financial strains that pushed them toward criminal actions (Blaszczynski & Nower, 2002; Kelly & Bergman, 2020). The interrelationship between gambling, substance use, and crime tends to be cyclical, with individuals engaging in one behaviour to cope with the consequences of the other. For instance, gamblers may resort to alcohol or drugs to numb the emotional pain of their financial losses, while substance users may gamble to escape the reality of their addiction (Griffiths & Parke, 2010; Langham et al., 2016). This cycle of addiction often results in a downward spiral where individuals become increasingly dependent on both gambling and substances, leading to more

significant financial and legal problems that further entrench their involvement in crime (Turner et al., 2009; Petry, 2005).

Furthermore, problem gambling is often linked to criminal activity as individuals seek to address their mounting financial difficulties. This connection is frequently shaped by the economic pressure stemming from both addiction and criminal behaviours, with offenders typically resorting to crimes such as fraud, theft, or embezzlement to support their gambling habits (McCorkle, 2002; Meyer & Stadler, 1999). Recent research shows that individuals facing simultaneous gambling and substance use problems are considerably more likely to engage in criminal activities, underscoring the need for integrated treatment of these disorders (Petry, 2005; White et al., 2012). Those in recovery frequently stress that the criminal behaviour linked to both gambling and substance use is not just a byproduct of addiction but also a means of survival. Many express how their addiction left them feeling desperate and powerless against substantial financial strain and crippling debt caused by their gambling and/or substance use. Perceiving crime as the only option to resolve their financial challenges, these individuals report feeling compelled to participate in illegal activities (Kelly et al., 2020; White & Gorman, 2000; Langham et al., 2016; Turner et al., 2009).

For many in recovery, addressing both gambling and substance use together is crucial for preventing future criminal behaviour. Programmes that provide extensive support for both addictions, along with legal and financial counselling, are often regarded as the most effective way to break the cycle of addiction and crime (Cloud & Granfield, 2008; Petry, 2005). Many individuals express dissatisfaction with treatment programmes that concentrate on only one aspect of their addiction, believing it is essential to tackle gambling, substance use, and crime concurrently for lasting recovery (Hing et al., 2016; Blaszczynski & Nower, 2002). Additionally, those in recovery emphasise the need to diminish the stigma surrounding gambling and substance use-related crimes. Numerous individuals share that the shame and guilt linked to their criminal actions hindered their ability to seek assistance, as they worried about being judged or excluded by their community (Hing & Russell, 2017; Binde, 2014). Public health efforts that foster a more empathetic understanding of the connection between addiction and crime are

considered vital for motivating individuals to seek help before their actions escalate into criminality (White & Gorman, 2000; Kelly et al., 2020).

The intricate relationship between gambling, substance abuse, and crime highlights the pressing need for effective interventions targeting the root causes of these behaviours. However, while grasping the dynamics of criminality and addiction is vital, it is equally important to investigate pathways to recovery, as these insights can shape treatment approaches and public health strategies. The following section discusses Recovery and Recovery Capital, exploring the idea of recovery while tracing its historical development, prevalence, and connections to gambling and substance use disorders. A key focus here is recovery capital—resources from personal, social, and community spheres that aid sustained recovery. This section also examines the commonalities and distinctions in recovery capital among individuals facing gambling and substance use disorders, mainly how recovery capital affects crime desistance. By presenting recovery as a multifaceted journey, this section expands on earlier discussions, providing a holistic view of how both structural and individual elements play a role in overcoming addiction and minimising criminal behaviour.

2.4: Recovery and Recovery Capital

Recovering from gambling and substance use disorders is a multifaceted process that goes beyond simple abstinence; it includes enhancements in health, relationships, and social functioning (Kelly & Hoeppner, 2015; Neale et al., 2015). Recovery capital, which includes personal, social, and community resources, is an essential framework for understanding the mechanisms that foster long-term recovery and resilience (Flaudias et al., 2020; Gavriel-Fried & Shilo, 2018). Grasping the concept of recovery capital is vital for this research as it reflects the resources individuals rely on to maintain their recovery and the challenges they encounter, particularly when these are identified early in their recovery journey. Recognising these resources and challenges promptly is essential for enabling tailored interventions that optimise recovery capital and minimise the likelihood of relapse, especially for those dealing with gambling harm, substance use, and criminal behaviours (Dingle et al., 2015; Gavriel-Fried & Lev-El, 2022; Hennessy, 2017). This section starts by tracing the historical development of the

concept of recovery, reviewing recovery outcome prevalence data, and examining the specific importance of recovery capital for those overcoming gambling and substance use disorders. Furthermore, the analysis shows the impact of recovery capital on criminal desistance, highlighting its significance in aiding individuals to reconstruct their lives and achieve lasting recovery.

2.4.1 History of Recovery and Recovery-Oriented Systems of Care (ROSC)

The concept of recovery has evolved significantly throughout history, especially in the context of addiction (Davidson & White, 2007; Best et al., 2018). Initially, recovery was viewed as a personal and often isolating struggle, defined by stigma and social exclusion (Sells et al., 2004; McCauley et al., 2020). Prior to the 18th century, attempts at recovery were solitary (White, 1998, p. 6). However, forming mutual aid groups among Native American tribes between 1799 and 1805 marked a critical shift. These early groups—emerging in response to the rising threat of alcohol abuse—became the first to document autobiographical recovery accounts and framed recovery as a collective process (Coyhis & White, 2006; White, 1998). The early temperance movements of the late 18th and early 19th centuries further shaped the recovery landscape. Initially promoting "temperance-as-moderation," these movements quickly recognised that moderation was rarely achievable for individuals with severe alcohol problems. Consequently, by the 1820s, the focus shifted towards "temperance-as-abstinence" as a core principle of recovery (White et al., 2012; White, 1998, pp. 4–5). This emphasis on abstinence laid the foundation for future approaches to addiction treatment and recovery. Moreover, these early movements introduced sharing personal recovery stories, a tradition that became a hallmark of subsequent mutual aid frameworks (White, 2012).

A significant turning point in the evolution of addiction and recovery was the work of Benjamin Rush in the late 18th century. Rush, an influential American doctor, was among the first to define alcoholism as a medical condition rather than a moral shortcoming. In his groundbreaking text, *An Inquiry into the Effects of Ardent Spirits upon the Human Body and Mind* (1784), Rush detailed the physiological and psychological effects of alcohol, coining the term "alcoholism" to describe this chronic disease. He advocated for medical interventions and

institutional support for those grappling with alcohol dependence, a viewpoint that played a crucial role in shaping future treatment and recovery models. His focus on the medical perspective of addiction laid the groundwork for a broader understanding shift, further developed through temperance movements and the emergence of mutual aid organisations (Rush, 1784; Best et al., 2018).

The 20th century experienced the rise, fall, and revival of recovery movements. From the 1840s to the 1870s, mutual aid groups flourished, with organisations such as The Brotherhood of Saint Luke (1904) and The Jacoby Club (1910) emerging, primarily as denominational and faith-oriented (White, 1998). Nevertheless, many groups disbanded due to various social, economic, and organisational hurdles. It was not until 1935 that Alcoholics Anonymous (AA), founded by Bill Wilson, introduced the now widely accepted 12-step recovery model. AA set itself apart by reducing entry barriers, requiring only a " desire to stop drinking, " and embracing a personal and non-denominational view of spirituality in recovery (Gallagher, 2017; White et al., 2012). Concurrently, evolving concepts of addiction influenced recovery approaches. The late 19th and early 20th centuries marked the medicalisation of addiction, complicating recovery paths (White et al., 2012). The clinical treatment sector, which began developing in the latter half of the 19th century, offered medical and non-medical rehabilitation options. However, the implementation of prohibition in the 1920s and 1930s forced the closure of these facilities, leading to addiction treatment being relegated to prisons, hospitals, and asylums. As White and Kelly (2012) argue, this change mirrored a broader societal shift from "*compassion and care*" to "*sequestration, punishment and control*" (p. 301).

After the end of prohibition, the rehabilitation treatment model re-emerged in the 1940s, drawing on the brain-disease model of addiction. This period saw the introduction of the Acute Care (AC) approach, which prioritised short-term medical treatment aimed at stabilising individuals through a biopsychosocial framework. However, the absence of long-term support in these models revealed a need for more holistic recovery strategies (White et al., 2012; Kelly & Hoeppner, 2015). By the 1980s, the disease model of addiction expanded to encompass process addictions, including gambling, sex, shopping, and food compulsions (White, 1998, p. xvi). This expanded view contested earlier beliefs that addiction was exclusively substance-related,

highlighting the importance of comprehensive recovery frameworks. Despite these advancements, there is still no consensus on the modern definition of recovery, particularly in the substance use and mental health fields (Ashford, 2019; Patton et al., 2022). This lack of agreement stems from various stakeholder perspectives—from private treatment services and public health systems to the criminal justice sector—and conflicting priorities between clinical practitioners and individuals with lived experiences (Kelly & Hoeppner, 2015; Guebaly, 2012). Research also indicates differing recovery pathways, with individuals opting for abstinence-based, 12-step, medication-supported, or non-abstinence-based methods (White, 2007; Best et al., 2016).

Recovery-oriented systems of care (ROSC)

Recovery has historical roots in the 18th century but only emerged as a public health strategy in the late 20th century. The modern recovery movement gained traction through individuals with experiences of addiction and mental health challenges who emphasised personal empowerment, peer support, and community engagement (Davidson et al., 2021). This marked a shift from the acute care model to Recovery-Oriented Systems of Care (ROSC)**,** transforming behavioural health from short-term, symptom-focused interventions to holistic, person-centred approaches that prioritise long-term recovery and community integration. The acute care model aims for short-term stabilisation and symptom management but often results in high relapse rates due to insufficient ongoing support (Laudet & Humphreys, 2013). ROSC promotes long-term recovery by embedding holistic services, peer support, and community resources, viewing relapse as part of the recovery journey rather than a failure. While acute care is vital for immediate intervention, research supports ROSC for long-term recovery, reducing stigma and promoting well-being through a strengths-based approach (Davidson et al., 2021; White, 2008).

Table 2: Acute Care vs Recovery Oriented Care Services (Laudet & Humphreys, 2013; Davidson et al., 2021; White, 2008).

Aspect	Acute Care Model	Recovery-Oriented Systems of Care (ROSC)
Primary Focus	Stabilization and symptom reduction	Holistic, person-centred, and long-term recovery support

Duration of Care	Short-term, episodic treatment	Long-term, continuous care
Treatment Goals	Achieve abstinence and manage immediate crises	Build recovery capital, improve quality of life, and promote wellness
Approach to Relapse	Viewed as treatment failure	Seen as part of the recovery process, encouraging ongoing support
Role of the Individual	Passive recipient of care	Active participant in shaping their recovery journey
Involvement of Community	Limited to clinical settings	Engages community, peer support, and social networks
Support Services	Primarily clinical (e.g., detox, medication, therapy)	Integrates housing, employment, education, peer support, etc.
Peer Support Integration	Rarely included	Core component; lived experience is valued in service delivery
Outcome Measurement	Immediate treatment outcomes (e.g., abstinence, discharge)	Long-term recovery outcomes (e.g., sustained sobriety, social reintegration)
Philosophy	Disease management	Person-centred recovery and empowerment

In 2005, the Substance Abuse and Mental Health Services Administration (SAMHSA) organized the National Summit on Recovery, a key event for establishing the guiding principles of Recovery-Oriented Systems of Care (ROSC): person-centred care, peer support and community integration (White, 2008). SAMHSA shifted the focus from short-term symptom relief to supporting individuals throughout their recovery journeys (Laudet & Humphreys, 2013). The ROSC framework promotes a flexible, community-based network of services tailored to individual needs, recognizing recovery as a non-linear process encompassing housing, employment, education, and social support (Baird, 2016). It aims to unify sectors such as healthcare and social services to enhance recovery and reduce barriers to care (Whitter, Hillman, & Powers, 2013). Despite its widespread adoption, ROSC faces funding shortages, workforce training gaps, and resistance to moving away from traditional acute care models (Conner, 2017). Integrating essential peer support services requires cultural changes in healthcare to value lived experiences in recovery (Davidson et al., 2021).

Recent academia has broadened ROSC's application to encompass various behavioural health issues, such as gambling addiction and co-occurring mental health disorders (Day et al.,

2025). This reflects a recognition of the interconnectedness of behavioural health challenges and the need for inclusive recovery frameworks. Ongoing research emphasises the significance of addressing social determinants of health, fostering community engagement, and promoting policies that reduce stigma and support recovery-oriented care (van den Berk-Clark et al., 2024). The shift towards ROSC signifies a change in service delivery and a reimagining of recovery in society. Recovery-oriented systems of care (ROSC) have emerged to tackle substance use disorders (SUDs) through person-centred and wellness-focused approaches, integrating personal, social, and community resources for long-term recovery and community integration (Davidson et al., 2021). This shift transitions from acute, episode-based care to sustained recovery management, acknowledging the complex factors influencing an individual's recovery journey.

Defining Recovery

The Recovery Research Institute (2017), summarised by Ashford (2019), offers a comprehensive analysis of contemporary definitions of recovery. While abstinence remains a fundamental aspect of many definitions, there is an increasing emphasis on understanding recovery as dynamic and multidimensional. Laudet and Best (2015) articulate recovery as follows:

> *Non-problematic substance use (or total abstinence) plus improved functioning in such areas as physical and mental health, employment, economic, family, and social life… Central to this new model is that recovery is a dynamic and individual process whereby the combination of factors defining recovery is individually determined and may well change over time as recovery progresses* (p. 1065).

Recent research explores recovery as a series of stages, each carrying a risk of relapse. The Betty Ford Institute identified these stages in 2007, while Best et al. (2018) investigated important recovery characteristics and the vital factors within each stage. These studies emphasise that recovery is not a straight path but represents a dynamic interplay between personal, social, and environmental elements. It is increasingly recognised as a personalised and evolving journey rather than a fixed endpoint, marked by individual, social, and environmental changes over time (Laudet & Best, 2015; Best et al., 2018). Based on longitudinal research, scholars have

distinguished specific stages of recovery that denote a maturation in stability, objectives, support requirements, and relapse risks at different intervals (Betty Ford Institute, 2007; Best et al., 2018).

Based on the findings from Best et al.'s (2018) multi-national REC-PATH research, the chart below outlines the three primary stages of recovery—early recovery, sustained recovery, and stable recovery—alongside their timeframes, relapse rates, and defining characteristics. These stages provide a framework for understanding individuals' challenges, the evolving role of support systems, and the positive outcomes of long-term recovery.

Table 1: Stages of Recovery (Best et al., 2018)

Stage	Time	Relapse rate	Factors or characteristics
Early Recovery	Less than 1 year	50% to 70%	Individuals in this stage are often in the process of stabilizing their lives and distancing themselves from active substance use. The research found that early recovery is highly reliant on structured support, such as professional treatment and mutual aid groups. Participants frequently reported struggles with maintaining sobriety and managing the immediate challenges of withdrawal and lifestyle changes.
Sustained Recovery	1 to 5 years	15%	Participants begin to establish new routines and rebuild their lives. The research found that sustained recovery involves ongoing participation in recovery support networks but with a gradual shift towards rebuilding social relationships and re-engaging with society. Employment, education, and rebuilding family relationships become more prominent goals during this stage.
Stable Recovery	Over 5 years	Less than 15%	characterised by a keen sense of identity as a person in recovery, with less reliance on formal support networks. The research found that individuals in stable recovery often transition into roles that involve giving back to the recovery community, such as becoming peer mentors or recovery coaches. This stage is marked by long-term stability in sobriety, with many participants reporting a sense of fulfilment and purpose derived from their recovery journey.

In conclusion, recovery has transformed from a stigmatised and isolated challenge into a more inclusive and dynamic journey bolstered by mutual support, organised treatment, and evolving academic discussions. Although abstinence continues to be a cornerstone in many models,

modern methodologies increasingly prioritise enhanced functionality and quality of life as key aspects of recovery (Laudet & Best, 2015; White et al., 2012; Ashford, 2019). Ongoing efforts to connect stakeholders, share lived experiences and integrate academic research are crucial for fostering a broader and more cohesive understanding of recovery.

2.4.2 Recovery Prevalence

Research on the prevalence of recovery in the United Kingdom remains limited, highlighting a broader lack of systematic data on individuals who successfully overcome alcohol or other drug (AOD) issues. However, recent research by Day et al. (2024) provides essential insights into the scale and characteristics of recovery. Their findings indicate that approximately 5% of the UK population—around 2.7 million people—reported having resolved an AOD issue at some point. Day et al. (2024) identified two primary recovery pathways: assisted recovery, which includes the use of formal treatment services, mutual aid groups (such as Alcoholics Anonymous and Narcotics Anonymous), or recovery support programmes, and unassisted recovery, also known as "natural recovery." Notably, while 49.9% of respondents reported using assisted pathways, the other half recovered without structured support. These findings emphasise the need to understand barriers to formal recovery services, such as stigma, lack of awareness, or a preference for self-reliance (Kelly et al., 2014; Day et al., 2024).

Demographically, individuals who resolved an AOD problem were more likely to be male, aged 25 to 49, White, employed, and living with family or relatives (Day et al., 2024). A considerable proportion of this population reported starting substance use before the age of 15, with two-thirds having been diagnosed with a mental health condition at some point. The research also found that individuals with more severe substance use disorders, early-onset substance use, and involvement in the criminal justice system were significantly more likely to engage in assisted recovery pathways (Best et al., 2018; Laudet & White, 2008). Interestingly, Day et al. (2024) highlighted the criminal justice system's role as a key point for triaging individuals into recovery. They discovered that a lifetime diagnosis of a substance use disorder, and a history of arrest were the strongest predictors of choosing an assisted recovery pathway.

This finding reflects broader research advocating for integrating recovery support services into criminal justice settings to address addiction and support long-term recovery outcomes (Best & Laudet, 2010; White & Cloud, 2020).

In a broader context, data from the UK Drug and Alcohol Use Survey 2021 (Delamere Health, 2021) and National Drug Treatment Monitoring System (NDTMS) reports (2021, 2022) further support these findings. They reveal that while a significant portion of the population has overcome substance use issues, many individuals do so without formal treatment. These studies highlight the ongoing challenges individuals face in accessing support services, reflect the broader stigma around addiction recovery, and suggests the need for more inclusive, accessible recovery pathways.

2.4.3 Recovery capital and gambling

Recovery capital, first introduced to describe resources aiding recovery from substance use disorders, is increasingly being applied to gambling disorders to foster understanding and support in recovery (White & Kurtz, 2006; Cloud & Granfield, 2008). This concept includes personal, social, and community resources individuals draw upon to achieve and sustain recovery (Best et al., 2016). In the context of gambling disorders, personal attributes like resilience and coping skills, combined with supportive social networks, are vital for improving psychological well-being and decreasing gambling Behaviours (Gavriel-Fried & Shilo, 2018; Laudet & White, 2008). These insights emphasise the necessity of viewing recovery as a complex process beyond merely stopping certain behaviours.

A distinguishing feature of recovery capital in gambling disorder is the emphasis on financial stability as a critical resource (Granfield & Cloud, 2001; Gavriel-Fried & Lev-El, 2022). Gambling-related debts and financial insecurity often undermine recovery efforts, contributing to heightened stress and eroding social and personal recovery resources (Pickering et al., 2020; White, 2008). Addressing rebuilding recovery capital is crucial to tackling financial issues, with interventions such as debt counselling and employment assistance shown to foster recovery effectively (Best et al., 2016; Gavriel-Fried & Shilo, 2018). These findings indicate that prioritising financial health can significantly improve recovery outcomes. However, recovery

capital is not inherent; it changes, reflecting the evolving needs of individuals at different stages of recovery (Cloud & Granfield, 2008; Laudet, 2007). In the early stages of recovery, individuals mainly depend on personal resources like self-regulation and motivation to achieve stability (Gavriel-Fried & Lev-El, 2020; Kelly et al., 2011). As recovery advances, the emphasis shifts towards rebuilding social networks and ensuring financial security, which aligns with long-term recovery aspirations (Pickering et al., 2020; Granfield & Cloud, 2001). These observations highlight the need for personalised recovery plans adapting to each individual's changing circumstances.

The development of tools such as the Holistic Recovery Capital in Gambling Disorder Index (HRC-GD) has enhanced the ability to measure recovery resources comprehensively (Gavriel-Fried, Lev-El, & Kraus, 2022; Best et al., 2016). These tools enable targeted interventions by identifying areas where individuals lack adequate recovery capital (Pickering et al., 2020; Cloud & Granfield, 2008). By integrating these assessments into treatment frameworks, practitioners can more effectively address the unique needs of individuals in recovery (White, 2008; Kelly et al., 2011). Collectively, these advancements emphasise the increasing recognition of recovery capital as a crucial framework for supporting recovery in gambling disorder.

2.4.4 Similarities and differences in personal, social, and community recovery capital between gamblers and substance users

Recovery capital plays a vital role in determining the success of individuals recovering from both substance use disorders (SUD) and gambling disorders (Davis & Jason, 2005; Best et al., 2010; Cloud & Granfield, 2004). These resources are categorised into personal, social, and community capital, significantly influencing recovery pathways and outcomes (Hennessy, 2017; Groshkova et al., 2012; Laudet, 2008). Understanding the similarities and differences in these forms of capital among individuals recovering from substance use and gambling disorders is essential for developing comprehensive recovery programmes that address the unique needs of each group (Dekker et al., 2020; White, 2009; van der Meer et al., 2019).

Personal recovery capital encompasses individuals' internal resources, including physical health, mental well-being, self-efficacy, and coping skills (Davidson & White, 2007; Hennessy, 2017; Dekker et al., 2020). For those recovering from substance use, personal recovery capital also involves their capacity to maintain sobriety, manage cravings, and create strategies to avoid relapse triggers (Laudet, 2008; Moos & Moos, 2007; Sheedy & Whitter, 2009). This type of capital is frequently enhanced through formal treatment programmes, where individuals can learn to regulate their emotions better and strengthen their coping mechanisms via therapies such as Cognitive Behavioural Therapy (CBT) and Motivational Interviewing (MI) (Burke et al., 2003; Kadden & Litt, 2011; Connors et al., 2013). In gambling recovery, personal recovery capital encompasses the ability to control impulses and make wise financial choices, both essential for sustaining recovery. Those recovering from gambling disorders often find it challenging to make sound decisions and resist the urge to gamble further, especially when confronted with financial setbacks (Ledgerwood & Petry, 2006; Grant et al., 2004). Treatment programmes for gambling addiction typically highlight the importance of impulse control and financial management skills, which are vital for regaining personal capital and steering clear of the dangers of "chasing losses" (Blaszczynski & Nower, 2002; Petry, 2005).

Mental health significantly influences personal recovery capital for both groups. Those grappling with substance use and gambling disorders frequently face intertwined mental health issues, including anxiety, depression, or trauma. These challenges can hinder their recovery efforts (Hodgins et al., 2011; Langham et al., 2016). Tackling these mental health concerns is crucial for maintaining recovery, as poor mental health can diminish an individual's recovery capital, heightening the risk of relapse (Kelly & Bergman, 2020). Treatment approaches that integrate addiction and mental health care have demonstrated improved recovery results by fostering personal resilience and emotional wellness (Grant et al., 2014; Kelly et al., 2020).

Self-efficacy, or the belief in one's ability to achieve recovery, is another critical component of personal recovery capital. Research shows that individuals who have confidence in their ability to remain abstinent or gamble-free are more likely to succeed in their recovery (Best et al., 2018; Groshkova et al., 2013). Developing self-efficacy is particularly important for individuals recovering from gambling disorders, as the stigma associated with gambling can

diminish their sense of self-worth and impede their belief in their ability to heal (Hing & Russell, 2017; Binde, 2014). Both substance use and gambling recovery programmes often incorporate strategies to build self-efficacy through goal setting, positive reinforcement, and the development of personal coping skills (Miller & Rollnick, 2013; Grant et al., 2004). For example, early recovery stages often see individuals relying heavily on personal resources such as self-regulation and motivation, while later stages focus more on rebuilding social networks and financial stability (Hennessy, 2017; Groshkova et al., 2012). Understanding the role of these resources in sustaining recovery is essential for creating tailored, long-term recovery plans that address the individual's unique needs over time. While personal recovery capital emphasises the internal resources individuals rely on for maintaining recovery, social recovery capital highlights the importance of external support networks, such as family, peers, and communities, in facilitating and sustaining the recovery process.

Social Recovery Capital

Social recovery capital encompasses the relationships and networks individuals draw upon throughout their recovery process. For those recovering from substance use disorders, this capital often involves support from family, friends, and peer groups that provide encouragement, accountability, and practical help (Best & Laudet, 2010; Kelly et al., 2020). Research indicates that individuals with robust social support networks are more likely to achieve lasting recovery, as these connections offer emotional backing and assistance in overcoming the challenges of rebuilding their lives (Groshkova et al., 2013; Kelly & Yeterian, 2011). Peer support groups like Alcoholics Anonymous (AA) and Narcotics Anonymous (NA) are well-established as essential resources for individuals in recovery from substance use, cultivating a sense of community and shared identity (Kelly et al., 2020; Borkman, 1999).

For those recovering from gambling disorders, social recovery capital is vital but often more challenging to develop and sustain. Many experiencing gambling issues face social isolation and damaged relationships due to the secrecy and financial repercussions of their gambling habits (Langham et al., 2016; Hing & Russell, 2017). The erosion of trust within family and social networks can limit support options, making it difficult for individuals to draw on their social

circles during recovery (Binde, 2014). However, peer support initiatives like Gamblers Anonymous (GA) serve as an essential source of social capital for those recovering from gambling, providing a structured space to connect with others who have similar experiences (Petry, 2005; Grant et al., 2014; Tebbutt & Natividad, 2011).

A significant distinction between social recovery capital in substance use and gambling recovery lies in the stigma surrounding each behaviour. While substance use disorders are increasingly recognised as medical issues, gambling disorders are often perceived as personal shortcomings, intensifying feelings of shame and further distancing individuals from their social circles (Hing et al., 2016; Binde, 2014). This stigma may limit the social support available to gamblers, as friends and family might struggle to respond with understanding or empathy regarding their challenges. Hence, initiatives to reduce stigma through public health campaigns and community education are essential for improving social recovery capital in gambling recovery (Hing & Russell, 2017; Langham et al., 2016).

Social capital is shaped by a person's ability to mend relationships disrupted by addiction. In recoveries from substance use and gambling, regaining trust with family and friends can be a gradual and challenging endeavor (Kelly et al., 2020; White & Cloud, 2008; McKeganey & Norrie, 2014). Programmes offering family counselling and relationship-oriented interventions support individuals in recovery as they rebuild these vital connections, which are crucial for long-term success (Grant et al., 2004; Petry, 2005; Sullivan & Smith, 2007). By nurturing stronger social networks, these programmes bolster an individual's social capital, creating a more supportive setting for ongoing recovery. While social recovery capital emphasises personal and relational resources aiding individual recovery, community recovery capital broadens this idea to include larger social structures and networks that provide essential support for sustained recovery. Investigating community involvement and resources enhances our understanding of how individuals can tap into external support systems, leading to better recovery outcomes.

Community Recovery Capital

Community recovery capital refers to the wider societal and environmental resources that support recovery, including access to recovery-oriented services, community organisations, and recovery-friendly environments (Cloud & Granfield, 2008; White & Cloud, 2008). For individuals recovering from substance use disorders, community recovery capital often includes access to addiction treatment programmes, housing services, employment opportunities, and recovery-focused community organisations (Best et al., 2018). These resources assist individuals in reintegrating into society and provide the stability necessary for long-term recovery. Social support networks, such as those from family, friends, and peer groups, offer vital emotional and practical assistance, increasing the likelihood that individuals will succeed in maintaining their recovery (Groshkova et al., 2013; Kelly & Yeterian, 2011).

For individuals recovering from gambling disorders, community recovery capital can be limited due to the relative scarcity of specialised gambling treatment services and the lack of widespread understanding of gambling-related harm (Langham et al., 2016; Binde, 2014). While substance use recovery programmes are often well-established and widely available, gambling recovery services are less common, especially in rural or underserved areas (Grant et al., 2004; Petry, 2005). This shortage of community resources can make it more challenging for individuals with gambling problems to access the support they need to rebuild their lives and prevent relapse (Blaszczynski & Nower, 2002). Furthermore, community attitudes toward gambling, influenced by local policies and public health initiatives, play a significant role in whether individuals feel supported or stigmatised during their recovery process (Hing et al., 2016; Binde, 2014).

Recovery-oriented communities, including recovery housing, sober living spaces, and recovery-focused organisations, serve as crucial community resources for individuals recovering from substance use and gambling (Kelly et al., 2020; Best et al., 2018). These communities create safe, supportive settings, enabling individuals to concentrate on their recovery away from the distractions and temptations of their past. While communities focused on substance use recovery are often well-established and part of more extensive recovery networks, those for gambling recovery are still evolving and may be harder to access (Groshkova et al., 2013; Cloud & Granfield, 2008). The rise of recovery housing and sober living environments specifically

designed for individuals with gambling disorders marks a significant advance in enhancing recovery support for this group.

Societal attitudes toward addiction and recovery shape community recovery capital. The availability of supportive community environments for both substance use and gambling recovery can be influenced by local policies, public health initiatives, and cultural beliefs about addiction (White & Cloud, 2008; Best et al., 2018). In areas where addiction is stigmatised or misunderstood, individuals in recovery may have fewer opportunities to access community support services or engage in recovery-focused activities. Therefore, efforts to build recovery-friendly communities that promote inclusion, reduce stigma, and provide accessible resources are critical for enhancing community recovery capital for both substance use and gambling recovery (Cloud & Granfield, 2008; Hing et al., 2016). Finally, broader social determinants of health can influence access to community recovery capital, including socioeconomic status, education, and employment opportunities (Groshkova et al., 2013; Best et al., 2018). Individuals from marginalised or disadvantaged backgrounds may have limited access to the community resources necessary to support their recovery, underscoring the importance of equitable access to recovery services across various populations. Addressing these disparities is crucial for ensuring that all individuals in recovery possess the community capital essential to sustain their recovery efforts (Cloud & Granfield, 2008; White & Cloud, 2008). This need for equitable access is especially relevant in the context of gambling recovery, where service availability and community support structures often lag behind those in substance use recovery.

The role of community recovery capital in supporting individuals throughout the recovery process highlights the importance of external resources, including social networks, community services, and supportive environments. These resources are crucial in helping individuals overcome addiction challenges and reintegrate into society (Cloud & Granfield, 2008; White & Cloud, 2008). However, as individuals navigate the recovery journey, the intersection of addiction, criminal behaviour, and recovery capital becomes increasingly apparent. Community recovery capital can either mitigate or exacerbate involvement in criminal activity, depending on the availability of supportive structures and societal attitudes (Best et al., 2018; Langham et al., 2016). Understanding how recovery capital influences criminal behaviour

is essential for developing comprehensive recovery strategies that address the underlying drivers of criminality while fostering long-term recovery (White, 2009; Groshkova et al., 2013). The following section examines the complex relationship between addiction, crime, and recovery, emphasising the critical role that recovery capital plays in desisting from criminal behaviours and promoting sustainable recovery outcomes (Borkman, 1999; Laudet & White, 2010).

2.4.5 Crime and the Role of Recovery Capital

The relationship between crime and recovery capital is complex and multifaceted, particularly in the context of gambling and substance use disorders (Dekker et al., 2020; Cloud & Granfield, 2008). Recovery capital refers to the sum of internal and external resources individuals can draw upon to support their recovery process, encompassing personal, social, and community dimensions (Best et al., 2018; Hennessy, 2017). For many individuals, addiction and criminal behaviour are linked, as addiction often drives individuals to engage in illegal activities to fund their habits or cope with the consequences of their addiction (McIntosh & McKeganey, 2002; Stevens et al., 2005). Recovery capital, particularly legal capital—defined as an individual's standing with the legal system—can play a crucial role in breaking this cycle of addiction and crime (Heilbrun et al., 2015; Best et al., 2016).

In the case of gambling addiction, crimes such as fraud, theft, or embezzlement are often committed to cover gambling debts or sustain gambling activities (Williams et al., 2015; Abbott et al., 2018; Suurvali et al., 2010). These crimes are typically financially motivated rather than related to the act of gambling itself, which distinguishes them from crimes associated with substance use (Delfabbro & King, 2017; Håkansson & Jesionowska, 2018). Recovery capital, mainly financial and legal support, is essential for helping individuals rebuild their lives after gambling-related crimes (Hing et al., 2019; van der Meer et al., 2019). Programmes that provide financial counselling, debt management, and legal advocacy can help individuals address the consequences of their criminal behaviour and reduce the risk of recidivism (Davis & Jason, 2005; Gattis & Cunningham, 2019; Maruna & LeBel, 2010).

For individuals recovering from substance use, criminal behaviour is often more linked to the act of substance use, particularly in cases involving drug trafficking, theft, or violence. Recovery capital in the form of legal support and vocational training is critical for helping individuals reintegrate into society after criminal justice involvement (Hser et al., 2017). Legal challenges, such as criminal records, can make it difficult for individuals to access housing, employment, and other resources essential for recovery, highlighting the importance of integrated recovery programmes that address both addiction and legal issues (White & Cloud, 2008; Harris et al., 2020).

Social capital is also critical for reducing criminal behaviour among individuals in recovery. Research shows that strong social networks can provide alternatives to criminal activity by offering emotional support, reducing isolation, and providing opportunities for positive social engagement (Best et al., 2016; Granfield & Cloud, 1999). Peer support groups, community-based interventions, and recovery housing programmes are all effective ways of building social recovery capital, which can reduce the likelihood of criminal relapse (Kelly & Bergman, 2020). These programmes help individuals create a sense of belonging and purpose, essential for maintaining long-term recovery and avoiding criminal behaviour. Finally, addressing negative recovery capital—the factors that hinder recovery, such as unresolved trauma, financial instability, and social isolation—is essential for breaking the cycle of addiction and crime. Research shows that individuals who lack recovery capital or who are burdened by negative recovery capital are more likely to relapse into both addictive behaviours and criminal activity (Best & Aston, 2015; Neale et al., 2014). Programmes focusing on reducing these barriers, such as trauma-informed care, financial assistance, and legal advocacy, are crucial for supporting long-term recovery and reducing recidivism (Patton et al., 2022; White & Cloud, 2020).

The discussion of recovery capital in section 2.4 revealed the critical importance of personal, social, and community resources in facilitating recovery from gambling and substance use disorders. Historically, recovery was viewed as a solitary and stigmatised struggle, but its evolution has led to more inclusive and structured frameworks (White, 1998; Coyhis & White, 2006). Mutual aid groups, the medicalisation of addiction, and the integration of recovery-focused interventions have collectively transformed recovery into a dynamic, multidimensional process that extends beyond abstinence to include improvements in health, relationships, and quality of life (Laudet & Best, 2015; Best et al., 2018). Despite these advancements, significant gaps remain in understanding how recovery pathways vary across different populations, particularly for those grappling with the dual challenges of gambling-related harm and substance use (Hennessy, 2017; Gavriel-Fried & Lev-El, 2022).

One of the key gaps this research addresses is the limited data on the prevalence and dynamics of recovery in the UK, especially regarding unassisted recovery pathways and the unique barriers faced by individuals with co-occurring disorders (Day et al., 2024; Kelly & Hoeppner, 2015). While studies have identified the importance of recovery capital in fostering resilience, the role of financial instability in gambling recovery, the stigma associated with gambling-related crime, and the lack of accessible community support systems are underexplored areas that require further investigation (Pickering et al., 2020; Gavriel-Fried & Shilo, 2018). Additionally, the comparison of recovery capital across gambling and substance use populations remains incomplete, with a need to better understand the specific resources and barriers that shape recovery trajectories (Cloud & Granfield, 2008; Best et al., 2016).

The subsequent sections of this research examine these critical gaps in greater detail. Section 2.5 transitions to exploring how individuals with lived experiences of gambling and substance use disorders define recovery. This discussion highlights how personal definitions of recovery are shaped by the unique challenges associated with each disorder, emphasising how these perspectives inform the development of tailored, person-centred interventions. By addressing the intersections of recovery capital, definitions of recovery, and treatment strategies, this research aims to contribute to a more nuanced understanding of recovery and its practical applications in public health and criminal justice settings (White & Cloud, 2008; Hennessy, 2017; Gavriel-Fried & Lev-El, 2022).

2.5: Perspectives on the Definition of Recovery

Understanding how individuals define recovery is central to the development of effective, person-centred treatment and support systems for gambling and substance use disorders. Recovery is increasingly recognised as a multifaceted and individualised process, encompassing abstinence, improved mental and physical health, social reintegration, and, for some, financial stability (Laudet & Best, 2015; Kelly & Bergman, 2020). This section explores the perspectives of individuals with lived experiences of addiction, emphasising how personal definitions of recovery reflect the unique challenges and opportunities associated with each form of addiction.

The section begins by examining how substance users conceptualise recovery, focusing on themes such as abstinence, mental health stability, and the role of recovery capital in fostering resilience (Substance Users' Definition of Recovery). It then turns to gamblers' perspectives, highlighting the critical importance of financial recovery, emotional healing, and regaining control over behaviour (Gamblers' Definition of Recovery). Finally, the section compares the two groups, identifying shared principles such as the importance of peer support and social recovery capital while emphasising the distinct challenges shaping their recovery journeys (Comparing Definitions of Recovery Between Substance Users and Gamblers). By analysing these perspectives, this section provides a deeper understanding of how recovery is experienced and defined, offering valuable insights for tailoring interventions to meet the diverse needs of individuals in recovery.

2.5.1 Substance Users' Definition of Recovery

The concept of recovery from substance use disorders (SUDs) has evolved significantly, extending beyond the traditional focus on mere abstinence (White & Kurtz, 2006). While abstaining from substances remains a critical aspect for many individuals, recovery is now recognised as a multidimensional process that involves improvements in overall well-being, personal functioning, and social integration (Betty Ford Institute Consensus Panel, 2007). This broader perspective highlights recovery as not only the cessation of substance use but also the restoration and enhancement of physical, emotional, and relational health (Laudet, 2007). For many substance users, recovery is a holistic process that includes improvements in mental health, physical well-being, and social functioning (Laudet, 2007; White & Cloud, 2008). These individuals often define recovery as the ability to lead a fulfilling life, free from the control of substances, while also addressing the underlying issues that contributed to their addiction (Best et al., 2018; Kelly & White, 2012).

Many individuals in recovery from substance use describe recovery as a journey rather than a fixed endpoint. This perspective is supported by research, which suggests that the recovery process is dynamic and ongoing, involving multiple stages, including contemplation, action, maintenance, and sometimes relapse (Laudet & White, 2008; Kelly et al., 2020). For

substance users, achieving and maintaining recovery often involves developing a new sense of identity and purpose, as well as building personal resilience to cope with life's challenges without relying on substances (Groshkova et al., 2013; Best & Laudet, 2010). Another critical aspect of how substance users define recovery is the concept of recovery capital—the personal, social, and community resources that support their recovery journey. Many individuals emphasise the importance of building recovery capital in housing stability, employment, and mental health support (Cloud & Granfield, 2008; White & Cloud, 2008). This broader understanding of recovery highlights the need for integrated treatment services that address not only substance use but also the social and economic factors that influence long-term recovery (Best et al., 2018; Kelly & Bergman, 2020).

Mental health plays a critical role in how individuals in recovery from substance use disorders define their recovery. Many substance users enter recovery with co-occurring mental health conditions such as depression, anxiety, or trauma, which must be addressed alongside their addiction (Grant et al., 2004; Hodgins et al., 2011). For these individuals, recovery often involves learning to manage their mental health without relying on substances, and they frequently view recovery as a process of healing both the mind and body (Laudet & White, 2008; Kelly & Yeterian, 2011). Thus, for many in recovery, achieving mental health stability is just as crucial as abstaining from drugs or alcohol.

Finally, substance users in recovery often emphasise the role of community and peer support. Recovery is not viewed as a solitary journey but as one that is strengthened by connections with others, primarily through peer support groups such as Alcoholics Anonymous (AA) or Narcotics Anonymous (NA) (Kelly et al., 2020; Best et al., 2018). For many, these groups provide a sense of belonging and accountability, which are critical components of their recovery process. Through shared experiences and mutual support, individuals in recovery can redefine their lives and identities to promote long-term sobriety and personal growth (Kelly & Bergman, 2020; Laudet, 2007). While the concept of recovery for individuals with substance use disorders is multifaceted, incorporating elements of abstinence, mental health stability, and social reintegration, the recovery journey for individuals with gambling disorders presents its own set of unique challenges and defining features. Similar to substance users, gamblers in recovery

often seek a life free from the compulsive behaviours that drive their addiction. However, the financial consequences of gambling, the stigma surrounding the disorder, and the impulse control required to manage their urges create distinct barriers to recovery. Understanding the gamblers' perspectives on recovery involves an exploration of the specific roles that financial stability, emotional healing, and behavioural control play in their recovery process, offering a nuanced contrast to the recovery journey of those with substance use disorders. The following section delves into the unique aspects of recovery from gambling addiction, highlighting how personal definitions of recovery among gamblers are shaped by their struggles and the support systems that facilitate their recovery process.

2.5.2 Gamblers' Definition of Recovery

Recovery from gambling disorder is a complex concept that, while similar to substance use recovery, has distinct differences. Just as those struggling with substance use may view recovery as abstaining from their addiction, individuals with gambling issues often highlight the importance of regaining control over their actions and restoring their financial well-being (Petry, 2005; Hing et al., 2016). For gamblers, recovery typically encompasses not only the cessation of gambling but also efforts to mend the financial, relational, and emotional harm inflicted by their addiction (Blaszczynski & Nower, 2002; Binde, 2014). Many recovering gamblers describe their path as reclaiming control over their lives. Unlike substance use recovery, which typically strives for complete abstinence from drugs or alcohol, some in gambling recovery may pursue controlled or moderate gambling, aligning with their personal goals and treatment strategies (Grant et al., 2014; Hing et al., 2016). However, individuals facing severe gambling issues often view complete abstinence as the only realistic option, as even minimal gambling can trigger a relapse (Blaszczynski & Nower, 2002; Petry, 2005). For these individuals, recovery focuses on reconstructing their lives free from gambling's influence, similar to the recovery journey of those battling substance abuse.

Emotional recovery plays a vital role in how gamblers perceive their recovery process. Many who overcome gambling addiction report battling intense feelings of shame, guilt, and self-blame stemming from their gambling actions, primarily due to the financial damage inflicted

on themselves and their families (Binde, 2014; Hing & Russell, 2017). For these individuals, recovery frequently includes the journey of self-forgiveness, rebuilding self-esteem, and mending relationships that suffered from their addiction (Langham et al., 2016; Turner et al., 2009). Tackling these emotional scars is essential for sustained recovery, as lingering emotional challenges can result in relapse or a return to gambling as a way to cope (Hodgins et al., 2011; Petry, 2005).

Lastly, gamblers in recovery, like substance users, often emphasise the importance of social and community support. Peer support groups such as Gamblers Anonymous (GA) provide a vital space for individuals to share their experiences and learn from others who face similar challenges (Grant et al., 2014; Petry, 2005). These groups not only offer emotional support but also provide practical advice on managing gambling triggers and rebuilding financial stability. For many gamblers, recovery is deeply intertwined with the sense of community and belonging they find in these peer support networks, which help them remain accountable and motivated throughout their recovery journey (Hing et al., 2016; Turner et al., 2009).

Studies indicate that individuals in recovery from gambling significantly benefit from social networks and peer support, which are vital elements of their recovery resources. These connections help individuals stay linked, resilient, and less isolated (McCormick & Campbell, 2017; Breen, 2006). Treatment services are also crucial, as organised interventions- like those offered by Gamblers Anonymous- support long-term recovery by providing avenues for social reintegration and coping (Gainsbury & Blaszczynski, 2011; Ohtsuka & Takahashi, 2011). Additionally, research by Williams and Volberg (2013) demonstrates that gamblers' perceptions of recovery are often influenced by personal stories and recovery paths, including the need to reshape one's identity and life objectives, similar to recovery experiences in other addiction areas.

In summary, while there are commonalities between the recovery journeys of substance users and gamblers, the emphasis on financial recovery, emotional healing, and community support distinctly characterises gambling recovery. Recognising these differences and similarities is essential for developing targeted interventions that meet the specific needs of individuals recovering from gambling addiction. This multifaceted view of recovery not only

promotes long-term abstinence but also aids individuals in rebuilding their lives, managing emotional stress, and regaining financial stability. The following section will provide a more comprehensive exploration of the comparison of recovery definitions between substance users and gamblers.

2.5.3 Comparing Definitions of Recovery Between Substance Users and Gamblers

While many similarities exist in how substance users and gamblers define recovery, significant differences reflect the unique challenges associated with each form of addiction. For both groups, recovery is a holistic process that involves abstaining from addictive behaviour and improving mental health, emotional well-being, and social functioning (Laudet, 2007; Cloud & Granfield, 2008; Gavriel-Fried & Lev-El, 2022). However, for gamblers, financial recovery is often seen as a principal component of the recovery process, while for substance users, the focus is more on managing physical health and avoiding relapse (Blaszczynski & Nower, 2002; Laudet & White, 2008; Pickering & Blaszczynski, 2021).

A significant distinction exists in how each group views abstinence's role in recovery. For most individuals recovering from substance use disorders (SUD), total abstinence from substances remains the primary goal. In contrast, individuals recovering from gambling disorders may adopt controlled gambling or harm-reduction strategies, particularly if their gambling has not reached severe addiction levels (Grant et al., 2014; Hing et al., 2016; Kim, McGrath, & Hodgins, 2023). However, for those with severe gambling problems, abstinence is often regarded as the safest and most effective approach (Petry, 2005; Blaszczynski & Nower, 2002).

Another crucial difference lies in the role of coping strategies. Substance users often prioritise physiological detoxification and withdrawal management as foundational to recovery (Goudriaan, van den Brink, & van Holst, 2019). In contrast, gamblers focus more on cognitive restructuring to manage distorted thinking patterns, such as the illusion of control and the gambler’s fallacy (Pickering et al., 2020). This cognitive emphasis on gambling recovery reflects the behavioural, rather than physiological, nature of gambling addiction.

Additionally, emotional regulation is perceived differently across these groups. Research highlights that while both groups face challenges in managing emotions, substance users

frequently use substances to self-medicate emotional pain, making emotional regulation critical during early recovery stages (Gavriel-Fried & Mestre-Bach, 2024). Conversely, gamblers often struggle with impulsivity and high-risk decision-making, leading to an emphasis on developing patience and long-term thinking during recovery (Bischof et al., 2020; Hardouin et al., 2024).

Both groups strongly emphasise the importance of social recovery capital, particularly peer support and community involvement. For substance users, organisations like Alcoholics Anonymous (AA) and Narcotics Anonymous (NA) offer structured environments where individuals can share their recovery experiences and receive emotional support (Kelly et al., 2020; Groshkova et al., 2013). Similarly, Gamblers Anonymous (GA) provides a supportive community for gamblers, fostering accountability and reducing isolation (Grant et al., 2014; Hing et al., 2016). These peer networks are critical for long-term recovery and relapse prevention (Kelly & Bergman, 2020; Petry, 2005).

Self-efficacy remains a prevalent theme for both groups, with confidence in maintaining abstinence or controlling behaviour as a strong predictor of recovery success (Best et al., 2018; Gavriel-Fried & Lev-El, 2020). While substance users often build self-efficacy through milestones such as maintaining sobriety over time, gamblers may face the added complexity of regaining financial stability, which directly affects their perceived recovery progress (Blaszczynski & Nower, 2002; Pickering & Blaszczynski, 2021).

In summary, although core recovery principles—such as abstinence, mental health improvement, and social support—are shared by both substance users and gamblers, unique challenges shape how individuals experience and define recovery. For substance users, the focus often lies on maintaining sobriety and enhancing physical health, while for gamblers, regaining financial control and modifying cognitive distortions are central. Recognising these nuanced differences highlights the need for tailored recovery programs that address the specific needs of each group (Cloud & Granfield, 2008; White & Cloud, 2008; Gavriel-Fried & Lev-El, 2022).

2.6: Conclusion

This literature review explores the interrelations between gambling, substance use, crime, and recovery capital, focusing on addiction pathways, recovery processes, and gaps that hinder holistic care. It emphasises the overlaps and distinctions between gambling and substance use disorders, the role of recovery capital in long-term recovery, and the impact of crime in these contexts. Additionally, it highlights the need for integrated triage and recovery-oriented care systems, especially for individuals with co-occurring gambling and substance use disorders, while identifying critical gaps in treatment and criminal justice frameworks.

Gambling and substance use disorders often co-occur, sharing common neurobiological mechanisms, compulsive behaviours, and vulnerabilities that increase comorbidity (Grant et al., 2017; Potenza et al., 2019; Hodgins et al., 2019). Recovery capital—personal, social, and community resources—centralises understanding recovery, providing a holistic framework for diverse needs (Best et al., 2018; Kelly & Bergman, 2020). However, recovery capital's influence on outcomes varies significantly between gamblers and substance users. Gamblers prioritise financial recovery due to debts and legal issues, while substance users focus on restoring physical health and managing co-occurring mental health disorders (Langham et al., 2016; Grant et al., 2014).

This research aims to build on current research by examining gambling addiction alongside substance use, highlighting their unique yet intersecting recovery paths and connections to crime. It stresses the importance of investigating co-occurring addictions to uncover weaknesses in the existing system and to recommend enhancements to recovery-oriented care, particularly for gamblers. Although integrated treatment programs for substance use are established, comparable frameworks for gambling are still lacking. This gap is particularly significant in criminal justice contexts, where gambling-related crimes are frequently ignored in favour of substance-related issues (May-Chahal et al., 2017). Implementing specialised triage for gamblers within healthcare and criminal justice systems could facilitate early detection of gambling-related harms, lower recidivism rates, and provide more comprehensive assistance for those affected.

The criminal justice system plays a pivotal role in addressing the intersection of gambling, substance use, and crime. However, current practices frequently fail to recognise gambling disorders as a driver of criminal behaviour, leading to missed opportunities for intervention (May-Chahal et al., 2017). Gamblers involved in financial crimes—such as fraud, embezzlement, or theft—often engage in these activities in attempts to recoup losses. However, the legal system lacks standardised screening processes to identify gambling as an underlying factor. By integrating gambling-specific assessments into criminal justice procedures, courts and correctional systems can better connect individuals to treatment pathways, thereby reducing both crime rates and addiction-related harm.

The importance of triage systems—particularly for gamblers—cannot be overstated. While triage pathways for substance use are relatively well-established, those for gambling remain fragmented or non-existent (Shannon et al., 2021). This creates significant barriers for individuals seeking help, particularly those with co-occurring disorders who may fall through the cracks of siloed treatment systems. Comprehensive triage frameworks that consider the full spectrum of gambling and substance use behaviours are essential for ensuring that individuals receive appropriate, timely care. Such systems should also address the unique needs of individuals involved in the criminal justice system, where the intersection of addiction and crime often exacerbates barriers to recovery.

People facing both gambling and substance use disorders encounter unique challenges. Those with dual addictions suffer more intense health, financial, and legal repercussions than individuals dealing with just one addiction (Yakovenko & Hodgins, 2018). However, many treatment programs still operate in silos, focusing solely on gambling or substance use separately. This disjointed approach overlooks the intricate needs of those with multiple addictions, resulting in increased relapse rates and worse recovery outcomes. To improve this situation, creating recovery-oriented care systems that merge services for co-occurring disorders is critical. Such systems should include mental health support, financial guidance, and legal help, forming a comprehensive network that tackles the complex aspects of addiction and recovery.

Recovery capital remains a foundational concept for understanding how individuals navigate the transition from addiction to recovery. Personal resilience, social support networks,

and community resources are critical for long-term success; however, the specific ways in which recovery capital is utilised differ between gamblers and substance users (Best et al., 2018; Kelly & Bergman, 2020). Gamblers often require targeted support to rebuild financial stability and repair relationships damaged by gambling behaviours. At the same time, substance users may need a greater focus on physical health recovery and managing mental health conditions. Both groups, however, benefit from significant social recovery capital, such as peer support networks and community engagement, which reduce feelings of isolation and foster accountability.

A critical gap identified in this review is the limited research on non-treatment-seeking populations, particularly among gamblers. Many individuals with gambling problems do not engage with formal treatment pathways due to stigma, lack of awareness, or financial barriers (Slutske, 2006; Cunningham et al., 2020). This leads to an incomplete understanding of how recovery capital functions outside formal treatment settings and limits the development of inclusive recovery strategies. Expanding research to include non-treatment-seeking individuals is essential for creating accessible and flexible recovery pathways that accommodate a broader range of recovery experiences. This research highlights the need for deeper investigation into cross-addiction, especially for those experiencing both gambling and substance use disorders. Current literature typically examines these addictions independently, neglecting how individuals with multiple addictions manage service access and cultivate recovery resources. This fragmented perspective hinders the creation of comprehensive treatment programs tailored to the complex needs of these individuals. By analysing the impact of co-occurring addictions on recovery trajectories, this research contributes to establishing more effective, personalised recovery-focused care systems.

In conclusion, this literature review demonstrates that gambling and substance use disorders share more definitional similarities than differences. Both are characterised by compulsive behaviours, common neurobiological mechanisms, and significant personal, social, and financial harms (American Psychiatric Association, 2013; Potenza, 2006; Grant et al., 2017; Potenza et al., 2019; Hodgins et al., 2019). However, despite these parallels, public health and criminal justice systems address these disorders very differently. Substance use disorders benefit from established triage and treatment frameworks, while gambling disorders are often

marginalised or neglected within these systems (Petry, 2006; May-Chahal et al., 2017; Shannon et al., 2021). This disparity stems from differing public health and regulatory histories, shaped by contrasting socio-cultural narratives—where substance use has been depicted as a public health crisis, whereas gambling has been normalised or even glamorised despite its potential for harm (Room, 2005; Reith, 2007; Northwell Health, 2024). These conflicting narratives have not only influenced public perception but also directly impacted policy decisions, creating systemic gaps in the support and recovery pathways available to individuals affected by gambling-related harm.

This thesis tackles the primary concern raised in the introduction: the lack of integrated recovery-oriented care systems that effectively support gamblers, especially those with concurrent substance use disorders and criminal involvement. While established public health and criminal justice pathways assist with substance use disorders—like triage services, diversion programs, and recovery-focused care—gambling disorders are often left out of these systems, despite evidence linking gambling to financial distress, mental health issues, and criminal behaviour (Wardle et al., 2019; Stevens, Hughes, & Hulme, 2022). By exploring the four research questions detailed in the introduction, this thesis adopts a comparative approach to analyse the connections among gambling, substance use, and crime within addiction and recovery pathways. It offers a critical evaluation of:

1. The prevalence of co-occurring behaviours among substance users in recovery (SUR), gamblers in recovery (GAR), and individuals in recovery from both gambling and substance use (SUGAR), as well as the relationship between these behaviours and criminal activity. This mapping aims to identify patterns that could inform more inclusive and effective triage and intervention strategies (Wardle et al., 2019; Grant & Chamberlain, 2017).

2. Differences and similarities in recovery capital across SUR, GAR, and SUGAR groups. By examining personal, social, and community resources, this research highlights the strengths and vulnerabilities that shape recovery outcomes for individuals navigating different but interconnected addiction pathways (Cloud & Granfield, 2008; Laudet & White, 2008).

3. Lived experiences of the causal relationships between gambling, substance use, and crime. By centring the voices of individuals with lived experience, this research explores how these behaviours intersect in real life and how systemic gaps either support or hinder recovery (Yakovenko & Hodgins, 2018; Kelly et al., 2021).

4. Participant-defined notions of recovery and how these definitions shape engagement with public health and criminal justice systems. By moving beyond clinical definitions, this thesis captures how individuals perceive recovery and the role of personal agency, structural support, and social networks (Best & Lubman, 2012; White, 2009).

Rather than merely questioning the integration of gambling into current triage and treatment models for substance use, this thesis takes a broader approach. It examines whether existing systems can adjust to address the particular needs of gamblers, particularly those with complex, co-occurring disorders, and whether including gambling in these frameworks could create more cohesive, recovery-oriented care systems. By highlighting the lived experiences and perspectives of individuals who have traversed these challenging recovery paths, this research offers valuable insights into how current systems operate, their shortcomings, and how they might be restructured to tackle better the realities of concurrent gambling and substance use disorders. It emphasises the need for public health and criminal justice systems to adopt more holistic, flexible, and inclusive strategies that recognise the interconnectedness of addiction, crime, and recovery. Ultimately, this thesis contributes to ongoing discussions on creating more equitable and effective recovery-oriented care systems, especially for gamblers historically marginalised within public health and criminal justice spheres. Through a thorough examination of the links between gambling, substance use, and crime—anchored in the perspectives of those affected—it aims to guide future policy, improve treatment pathways, and promote integrated, person-centred recovery methods.

Chapter 3: Methodology

This chapter outlines the methodological approach used to investigate the complex and interrelated dynamics of gambling, substance use, and criminal behaviour among individuals in recovery. Adopting a convergent mixed-methods design, the study integrates both quantitative and qualitative data to examine prevalence patterns, recovery capital, perceptions of causality, and participants' definitions of recovery. The chapter begins with an overview of the research questions, aims, and objectives, followed by a presentation of the philosophical foundations and rationale for the chosen methodology. It addresses gaps in the literature, particularly the limited integration of qualitative inquiry into studies on recovery capital. The methods section introduces the research tools—including structured surveys, customised questions, and life narrative interviews—and explains how they were used to generate a comprehensive and nuanced understanding of recovery experiences. Quantitative prevalence data are used to contextualise broader trends, while qualitative narratives explore individual and social dimensions of recovery. Sampling and recruitment strategies are described in detail, highlighting the inclusion of three distinct cohorts: gamblers in recovery (GAR), substance users in recovery (SUR), and those recovering from both (SUGAR). The chapter also outlines ethical considerations, limitations of the design, and the analytical techniques employed. Quantitative data were analysed using SPSS, and qualitative interviews were thematically analysed using NVivo within a constructivist framework. Together, these methods provide layered insights into the intersections of addiction, recovery, and criminal justice involvement.

3.1 Research Questions, Aims and Objectives

This section outlines four key research questions, displayed in the chart below, along with their respective aims, objectives, and methodological strategies. Each element is rooted in evidence-based frameworks designed to explore the relationships between gambling, substance use, and criminal behaviour in individuals in recovery. The chart provides a comprehensive explanation of each question, detailing its aims, objectives, and methods. This structured format enables a mixed-methods analysis that seeks to grasp quantitative trends and qualitative insights,

illuminating the vital connections among gambling-related harm (GRH), substance use, and offending behaviours through the perspective of recovery capital (Creswell, 2013).

Table 1: Research Questions, Aims, Objectives and Methods

Research Questions	Aims	Objectives	Method
RQ1: What is the prevalence of: **1a. gambling among SUR and SUGAR?** **1b. Substance use among GAR and SUGAR?** **1c. crime among SUR, GAR, SUGAR?**	Identify preliminary findings on the prevalence and patterns of gambling, substance use and crime in three cohort groups	Analysis of patterns and prevalence for gambling-related harm, substance use and criminal offending.	Integrate/Revise: GAST-S[2] TOP[3] TCU FORMS[4 5] (Quantitative)
RQ2: What are the similarities and differences in recovery capital between GAR, SUR, and SUGAR and what is their relationship to crime?	Identify the similarities and differences in personal, social and community capital between SUR, GAR and SUGAR and their relationship with crime.	Compare similarities and differences in recovery capital between three groups using survey tools and interviews.	Integrate/Revise: GAST-S TOP TCU FORMS (Quantitative) Victoria Responsible Gambling Questionnaire Interview for in-depth interviews about the life history of involvement (Qualitative)
RQ3: How do participants perceive causal relationships between these behaviours?	Identify if participants do see commonalities and a relationship between gambling, substance use and crime.	Assess the life narratives and perspectives of those who have experienced substance misuse, criminal offending, and gambling-related harm.	Amended Victoria Responsible Gambling Questionnaire for In-depth interviews about life history of involvement (Qualitative)
RQ4: How do the participants define recovery?	Identify where these perspectives differ or can contribute to the current discourse on defining recovery	Assess commonalities and differences between academia and statements by recovery participants	Victoria Responsible Gambling Questionnaire Interview for in-depth interviews about the life history of involvement (Qualitative)

3.1.1 RQ1: Prevalence and Patterns

The first research question investigates the extent of gambling among substance users in recovery, the level of substance abuse among recovering gamblers, and the crime rates within both groups. This aims to establish baseline prevalence and behavioural patterns within these cohorts to determine whether they align with existing studies and how they vary across groups. Research indicates that having both gambling and substance use disorders significantly increases the likelihood of criminal activity and adversely affects treatment outcomes (Grant et al., 2017; Hing et al., 2016). A specialised data collection tool has been developed to gather the necessary quantitative data. This tool comprises three distinct quantitative instruments, each focusing on a specific aspect, to systematically assess prevalence and behavioural patterns, thus facilitating comparisons across different behavioural domains. This set of instruments provides a solid foundation for quantitatively examining the shared risks and harmful behaviours among various cohorts, reinforcing the objective of yielding statistically significant findings (Marsden et al., 2014).

3.1.2 RQ2: Recovery Capital and Its Role in Crime

The second question explores the similarities and differences in recovery capital—personal, social, and community resources essential for sustaining recovery—between gamblers and those who misuse substances in their life narratives, both before and during recovery. It also examines how these variations relate to criminal behaviour. Recovery capital theory emphasises that increased personal and social resources are critical for successful recovery outcomes and reduced recidivism (Best & Laudet, 2010). By comparing recovery capital from a life narrative perspective across groups, this question aims to elucidate how social and structural supports influence desistance from crime and substance use within recovery trajectories (Cloud & Granfield, 2008). Quantitative data from the integrated survey tool and qualitative insights from the Victoria Responsible Gambling Questionnaire, used in life history interviews, enable a comprehensive comparison of recovery capital. This mixed-methods approach facilitates nuanced analysis, revealing shared and unique challenges within each cohort, thereby supporting

the identification of gaps in social and community resources for triage and intervention for gamblers.

3.1.3 RQ3: Perceptions of Causal Relationships

The third research question examines how participants perceive the causal relationships among gambling, substance use, and criminal behaviour. This area highlights a significant theoretical gap: while statistical correlations among these behaviours have been identified, qualitative insights into individuals' lived experiences offer a richer understanding of how they perceive causality and its connections (Binde, 2016). By employing a modified version of the Victoria Responsible Gambling Questionnaire during detailed life history interviews, this question investigates whether participants believe these behaviours are interrelated and, if so, the causality they assign to them. This approach fosters a deeper interpretive understanding of addiction pathways and risk perceptions, further grounding the research in constructivist theory and recognising subjective realities (Charmaz, 2006).

3.1.4 RQ4: Defining Recovery

The fourth research question seeks to understand how participants define recovery, aiming to bridge the gap between academic definitions and lived experiences. Scholarly literature often depicts recovery as a multidimensional process encompassing abstinence, personal growth, and social reintegration. However, individuals in recovery may view success in more diverse ways, depending on their personal and cultural contexts (White, 2007). Through qualitative interviews, this research question gathers participants' definitions and compares them with academic models to pinpoint areas where traditional frameworks may misalign with real-world recovery experiences. Such insights are crucial for developing recovery-oriented services that align with individuals' values and perceived needs.

3.2 Philosophical Foundations of the Study

This study adopts a constructivist epistemology and a relativist ontology, providing a philosophical foundation that is well-suited for exploring the complex and context-dependent nature of addiction, recovery, and justice involvement (Guba & Lincoln, 1994; Charmaz, 2014;

Lincoln et al., 2018). These perspectives influence both the research design and the interpretation of results, especially concerning the core theoretical framework of recovery capital. A constructivist epistemology suggests that knowledge is not objective or universal but is instead co-created through interaction, dialogue, and interpretation (Lincoln et al., 2018; Denzin & Lincoln, 2018). It recognises that understanding develops through the dynamic relationship between researcher and participant, and that meaning is socially and culturally constructed. In this study, constructivism underpins the use of qualitative life histories as a way of eliciting in-depth accounts of participants' lived experiences. It allows recovery to be understood not as a static endpoint but as an ongoing, negotiated process shaped by social relationships, institutional interactions, and personal identity work (Charmaz, 2014; McIntosh & McKeganey, 2000).

A relativist ontology complements this perspective by rejecting the notion of a single, observable reality. Instead, it recognises that multiple, equally valid realities are shaped by individual perspectives, social contexts, and cultural norms (Guba & Lincoln, 1994; Schwandt, 2000). This is particularly relevant in the context of recovery, where individuals may define success, stability, or wellbeing in very different ways, depending on their personal histories, community ties, and available support systems (Neale et al., 2015; Best & Laudet, 2010). Relativism underpins the study's emphasis on capturing various interpretations of what recovery means and how it develops, rather than imposing a fixed theoretical or clinical model (Charmaz, 2014; McKay, 2017).

These philosophical foundations closely align with this research's use of recovery capital as a guiding theoretical framework. Recovery capital refers to the sum of personal, social, and community resources that individuals can draw upon to initiate and maintain recovery (Cloud & Granfield, 2008; Best & Laudet, 2010). From a constructivist-relativist perspective, recovery capital is not a static inventory of assets but a dynamic and relational concept—shaped by how individuals experience, interpret, and mobilise these resources over time (Groshkova et al., 2013; Neale et al., 2015). For example, what constitutes supportive social capital for one participant (e.g., family ties) may be experienced as a source of stigma or risk for another. Understanding such nuances requires a methodology capable of engaging with subjective meanings and

contextual factors—something this study accomplishes through its qualitative, narrative-led design.

Furthermore, the mixed-methods approach employed here reflects a pragmatist stance within constructivism (Creswell & Plano Clark, 2017), allowing for the combination of qualitative depth with quantitative breadth. Quantitative survey data are used to identify patterns in recovery capital across three groups: Substance Users in Recovery (SUR), Gamblers in Recovery (GAR), and those in Dual Recovery (SUGAR). However, rather than viewing survey results as absolute truths, the constructivist framework considers them as one aspect of understanding, to be interpreted alongside detailed narrative accounts that show how recovery capital is built, depleted, and reimagined over time (Best et al., 2016; McKay, 2017).

Ultimately, adopting a constructivist epistemology and relativist ontology enables this study to situate recovery within the broader social and structural contexts that influence it—such as poverty, trauma, criminalisation, and access to services. It also aligns with the main aims of recovery capital theory, which stress the importance of relational, contextual, and structural resources in supporting meaningful recovery (White & Cloud, 2008; Best & Hennessy, 2022). By emphasising participants' voices and recognising the diversity of their realities, this study seeks to offer a more nuanced and socially rooted understanding of recovery and its connections with gambling, substance use, and criminal justice involvement.

3.3 Methodological Framework: Convergent Mixed-Methods Design

This study employs a convergent parallel mixed-methods design (Creswell & Plano Clark, 2017). This methodological strategy enables the collection and analysis of both quantitative and qualitative data in parallel, followed by their integration during the interpretation phase. This design is especially appropriate for research areas characterised by complexity and multidimensionality—such as recovery from gambling and substance use—where single-method approaches may be insufficient to capture both measurable trends and the deeper meanings behind them.

The convergent approach enables the simultaneous exploration of prevalence and patterning (quantitative) alongside individual lived experiences and meaning-making (qualitative). In this study, quantitative data were used to answer Research Question 1 (RQ1),

providing insights into the prevalence of gambling, substance use, and offending behaviours across three defined recovery cohorts: Substance Users in Recovery (SUR), Gamblers in Recovery (GAR), and those in Dual Recovery (SUGAR). Research Question 2 (RQ2) required both quantitative and qualitative data to compare recovery capital across groups and examine its relationship with offending. In contrast, Research Questions 3 and 4 (RQ3 and RQ4), which focus on participants' perceived causal relationships and personal definitions of recovery, were best addressed using qualitative methods alone.

This design aligns closely with the study's constructivist epistemology and relativist ontology, which prioritise the co-construction of meaning and the contextual nature of reality. While quantitative methods identify behavioural patterns and group-level differences using validated tools such as the GAST-S, TOP, WHOQOL-BREF, and TCU Criminal History Form, the qualitative strand adds necessary interpretive depth by exploring the subjective experiences that shape and inform these patterns. This dual strategy reflects a pragmatist orientation within mixed-methods research—valuing practical solutions to complex research problems through methodological pluralism (Tashakkori & Teddlie, 2010; Johnson et al., 2007).

Crucially, this mixed-methods framework enhances the study's theoretical engagement with recovery capital. The quantitative strand enables the measurement and comparison of personal, social, and community capital across participant groups, while the qualitative strand explores how these forms of capital are accessed, understood, and experienced in real-world contexts (Groshkova et al., 2013; Best & Laudet, 2010). For example, survey data might show that GAR participants score lower on social capital, while narrative data explain this through accounts of stigma, familial breakdown, or service fragmentation.

The integration phase, where findings from both strands are combined, takes place during the interpretation of results and the discussion of implications. Here, qualitative themes are utilised to contextualise, expand on, or challenge quantitative patterns. This phase is not just a synthesis of data but a reflective dialogue between different forms of knowledge, in line with the constructivist-relativist paradigm (Greene, 2007; Shannon-Baker, 2016).

Table 2: Overview of Methodological Framework

Component	Description
Ontology	Relativism: multiple, context-specific realities
Epistemology	Constructivism: co-produced meaning through dialogue
Methodological Approach	Convergent Mixed-Methods Design
Qualitative Method	Reflexive Thematic Analysis
Quantitative Tools	GAST-S, TOP, WHOQOL-BREF, TCU FORMS
Integration Strategy	Merging findings at interpretation stage

This methodological framework is particularly relevant to research on co-occurring addictions and justice involvement, where structural inequalities, trauma histories, and identity work intersect in complex ways (Best et al., 2016; McIntosh & McKeganey, 2000; Saitz et al., 2020). By allowing both numeric and narrative data to inform one another, the convergent mixed-methods design supports a holistic and relational understanding of recovery, grounded in both empirical patterning and lived experience (Creswell & Plano Clark, 2017; Shannon-Baker, 2016; Best & Irving, 2020).

While recovery capital served as a key analytical framework for addressing RQ2—facilitating a structured comparison of personal, social, and community capital across GAR, SUR, and SUGAR cohorts using both survey data and qualitative narratives—it was not the guiding framework for RQ3 and RQ4. These latter research questions, which examine how participants understand the causal link between addiction and crime (RQ3) and how they define and sustain recovery (RQ4), were handled through inductive, reflexive thematic analysis alone. Thematic codes were developed independently of recovery capital constructs to allow participants' narratives to steer the interpretation. Nonetheless, recovery capital was employed secondarily in these sections as a conceptual tool to interpret emerging themes, rather than as the primary analytical framework. This distinction reflects the flexible application of theory within a convergent design—structured where suitable (RQ2) and emergent where necessary (RQ3 and RQ4)—consistent with both the study's constructivist orientation and the complex, layered nature of recovery itself.

A key strength of this research lies in its application of the recovery capital framework to inform the mixed-methods design. Recovery capital includes three primary domains—personal,

social, and community—which were explored through both survey A key strength of this research is its use of the recovery capital framework to guide the mixed-methods design. Recovery capital encompasses three main domains—personal, social, and community—which were examined through both survey tools and qualitative life narratives (Groshkova et al., 2013; Sirola et al., 2021). Table 3 displays the mixed-methods Recovery Capital framework as applied to both qualitative and quantitative data for RQ2, showing how each domain was operationalised through survey questions and life narrative prompts.3 outlines the mixed-methods Recovery Capital framework as it was applied to both qualitative and quantitative data for RQ2, highlighting how each domain was operationalised across survey instruments and life narrative questions.

Table 1 Recovery Capital mixed methods approach (RQ2):

Recovery Capital	Life Narrative Questions	Survey Tool
Personal Capital: Refers to individual assets such as knowledge, skills, health, and psychological well-being. Questions about subjective experiences, behaviours, self-reflection, and health are included here.	Behaviour History: 1. How did you start substance use/gambling, reasons for continuing, and types of substance use/gambling? 2. Do you feel you have a problem with substance use/gambling? When did you realise this? 3. What was happening in your life when substance use/gambling became problematic? 4. What's the best and worst thing about substance use/gambling? 5. Have you ever tried to stop or thought about stopping? Why? What happened? Health: 6. Has your substance use/gambling caused health problems (stress, anxiety)? How do you manage these? 7. Would you stop substance use/gambling because of your health?	Quality of Life: 1. How good is your psychological health? 2. How good is your physical health? 3. How would you rate your overall quality of life? 4. How would you rate the quality of your accommodation? 5. Section 3: Gambling: 6. Have you bet more than you could afford to lose? 7. Have you needed more extensive amounts of money to get the same feeling of excitement? 8. Did you return another day to try to win back your lost money? 9. Have you borrowed money or sold anything to gamble? 10. Have you felt you might have a gambling problem? 11. Has gambling caused your health problems (stress, anxiety)? 12. Have you felt guilty about gambling? 13. Monthly spend on gambling before treatment. 14. Has gambling impacted your well-being? Substance Use: 15. Alcohol, heroin, crack cocaine, etc. (personal substance use history and frequency). 16. Section 5: Criminal History:

		17. How many times have you been arrested, convicted, or incarcerated? 18. How many times have you been arrested before the age of 18? Systems and Services Experience: 19. How old were you when you first started drinking, using substances, gambling, or engaging with the criminal justice system?
Social Capital: Involves relationships and networks that provide support, access to resources, or influence Behaviour. Questions involving family, friends, intimate relationships, and broader social interactions fall into this category.	Early Family Background: 20. Relationship with parents/siblings, family addictions/offending/gambling Behaviour. 21. Family expectations and influences on your future. 22. Relationships as an Adult: 23. Family reaction to gambling—any pressure to stop? 24. Influence of gambling on intimate relationships and children. 25. Relationships with other gamblers, work relationships, and impact of gambling. 26. Have you lied to family or friends about your gambling?	Demographics: a. Gender, marital status, and housing conditions (social relationships and living conditions). b. Section 2: Quality of Life: c. How would you rate your support network? Gambling: 1. Have people criticised your betting or told you that you had a gambling problem? a. Has gambling caused financial problems for you or your household? b. Has gambling had an adverse effect on your family? c. Impact of gambling on relationships, social support, or lack thereof. Criminal History: d. How many times have you had parole probation revoked? e. Impact of social networks (e.g., criminal justice system relationships).
Community Capital: Refers to the connections and resources available through one's community, including public services, cultural norms, and social institutions. Questions related to employment, the legal system, public health services, and community involvement can be categorised here.	Employment: a. •Employment history, the influence of gambling on work. b. •Current employment status, reasons for not working (if applicable). Gambling Related Harm: Substance Use and Offending: a. Relationship between gambling, substance use, and criminal offending. b. When and where intervention services were first offered? c. Experience with services (e.g., NHS, public health, or criminal justice	Demographics: •Service, location (e.g., treatment centres, recovery groups). Section 4: Substance Use History: a. Are you engaged with services (drug treatment, gambling services, healthcare)? b. Satisfaction with the services you are getting and whether additional help is needed. Service Needs: a. Are you currently engaged with drug treatment, alcohol recovery, mental health services, or gambling services? b. Do you need help in areas like employment, housing, or healthcare? Section 7: Systems and Services Experience: a. Previous assessments for at-risk gambling during encounters with courts, police, and probation. b. Would screening for gambling in public health or criminal justice assessments have been beneficial?

The chart above demonstrates an analytical framework that addresses a notable gap in the academic literature: the limited incorporation of qualitative research in exploring recovery capital, especially in relation to gambling and substance use (Hing et al., 2016; Binde, 2016). While quantitative research is vital for uncovering broad trends and correlations (Sirola et al., 2021; Kelly & Hoeppner, 2015; Groshkova et al., 2013), it often overlooks the complex personal experiences that are essential to understanding recovery processes. By combining qualitative life narratives with quantitative surveys, this framework enables a more comprehensive investigation of recovery. Current research on *Recovery Capital Theory primarily* relies on quantitative methods, emphasising demographic and statistical patterns (Sirola et al., 2021; Cloud & Granfield, 2008). Although these studies are valuable for making broad comparisons and identifying shared characteristics across populations, they lack the depth necessary to understand the individual and contextual factors that shape recovery (Best & Laudet, 2010; Dąbrowska et al., 2017). In contrast, qualitative research effectively captures the depth of personal stories, revealing emotional, psychological, and social aspects that quantitative methods often overlook (Cloud & Granfield, 2008; Leslie, 2022). This combined approach seeks to bridge the gap in understanding how individuals experience and apply their recovery capital in real-world settings (McKay, 2017; Best & Irving, 2020).

This analytical framework improves the field by incorporating qualitative life narratives that add depth and context to quantitative results. These narratives allow participants to share experiences that reveal personal and social factors influencing their recovery journeys. For example, qualitative insights can reveal how emotional resilience or perceived social support affect the navigation of recovery—factors that quantitative measures may overlook (Groshkova et al., 2013; Best & Laudet, 2010). This approach captures the complex realities of recovery, offering a multidimensional perspective that can inform treatment strategies and policies more effectively (Leslie, 2022; McKay, 2017).

Integrating qualitative research into this framework is vital as it reveals the underlying meanings behind quantitative data. This approach builds on a growing body of qualitative studies

that highlight the intricate and diverse aspects of recovery capital in addiction recovery. For instance, Patton and Best (2022) explore how turning points can act as catalysts for change, demonstrating that significant life events can ease recovery challenges by boosting motivation and shifting recovery trajectories. Furthermore, qualitative insights from Smith and Houghton (2020) illustrate how personal narratives significantly contribute to understanding recovery capital, emphasising the importance of individual stories in shaping recovery journeys.

Similarly, Patton, Best, and Brown (2022) explore how negative recovery capital—such as social stigma and barriers—is managed, aiming to clarify how individuals navigate these challenges and rebuild their personal, social, and community resources. Their research, alongside that of Turner and Thomas (2021), who investigate the intersection of social support and recovery capital through qualitative interviews, highlights the complex social dynamics that influence recovery. These studies emphasise the effectiveness of qualitative methods in revealing lived experiences and subjective processes that shape recovery, thereby strengthening the overall recovery capital framework. This research aims to contribute to this body of work by offering more profound insights into how individuals perceive, utilise, and develop recovery capital across different contexts through qualitative life narratives.

Quantitative surveys are powerful tools for collecting structured data on behavioural patterns, health metrics, and social support. They enable essential cross-group comparisons and statistical analyses, as highlighted in studies by Sirola et al. (2021) and Kelly and Hoeppner (2015). However, their inability to explore the subjective reasons behind these behavioural patterns is a significant limitation. This is where qualitative life narratives come into play, bridging the gap by capturing rich, detailed personal accounts that add context to the quantitative data (Best & Irving, 2020; Cloud & Granfield, 2008). Supporting research, such as Smith et al. (2018), shows how qualitative approaches can uncover hidden dimensions of health outcomes, emphasising the importance of subjective experiences in quantitative findings. Consider the insights gained from qualitative accounts: survey data may indicate that individuals with high social capital report better recovery outcomes, but qualitative narratives reveal how these individuals meaningfully perceive and navigate their support systems (Dąbrowska et al., 2017; Leslie, 2022). Furthermore, studies by Miller (2019) stress that personal narratives can provide

evidence of how social connections facilitate resilience and recovery, thus enhancing our understanding. By merging these methodologies, we adopt best practices in mixed-methods research, cultivating a deeper and more comprehensive understanding of complex social issues (McKay, 2017; Best & Laudet, 2010).

The qualitative insights significantly enhance quantitative analysis by emphasising emotional and relational factors that can either support or impede recovery. Evidence from Turner et al. (2020) confirms that emotional support is essential in recovery, further highlighting the importance of qualitative data to clarify these facets. This integrated approach fills a crucial research gap and enriches our understanding of recovery processes (Kelly & Hoeppner, 2015; Groshkova et al., 2013). Ultimately, by combining both quantitative and qualitative perspectives directly, we can make meaningful progress in bridging this academic gap and advancing knowledge in this vital area of study in the following ways:

1) Providing Context to Quantitative Findings: Quantitative data can identify trends such as the prevalence of anxiety among individuals who gamble or use substances (Kelly & Hoeppner, 2015; Sirola et al., 2021). Qualitative narratives provide context, illustrating how anxiety manifests in daily life and impacts decisions related to seeking help or persisting in recovery (McKay, 2017; Leslie, 2022).

2) Uncovering the Complex Interplay of Factors: The qualitative component reveals the intricate dynamics between personal resilience, social support, and community resources (Best & Irving, 2020; Cloud & Granfield, 2008). For instance, while quantitative surveys may indicate that strong family support correlates with successful recovery, qualitative interviews can illuminate the quality of that support and the ways individuals perceive its effectiveness (Groshkova et al., 2013; Dąbrowska et al., 2017).

3) Contributing to Theory and Practice: This research advances theoretical models and enhances practical applications by incorporating qualitative insights into the study of recovery capital. The findings accentuate that recovery is shaped by tangible resources and individuals' interpretations and lived experiences (Leslie, 2022; Best & Laudet, 2010). This comprehensive approach informs the design of interventions that are better suited to individual needs and systemic improvements (McKay, 2017; Kelly & Hoeppner, 2015).

This innovative analysis framework seeks to bridge an essential gap in understanding recovery capital by prioritising qualitative life narratives while employing quantitative surveys when appropriate. This dual approach not only enriches our understanding of recovery processes but also effectively addresses the shortcomings of the current literature, which largely relies on quantitative data alone. By embracing a comprehensive and balanced exploration of recovery, this framework offers invaluable insights for theoretical advancement. It paves the way for impactful intervention strategies that can truly make a difference.

3.4 Justification for Methodological Choice

The decision to adopt a convergent mixed-methods design was based on the study's primary aim: to investigate both the measurable aspects and the personal experiences of addiction, recovery, and involvement in the justice system. Relying on a single-method approach would have restricted the study's ability to address this complexity. Instead, combining quantitative and qualitative methods allowed the research to gain both breadth—through prevalence data and group comparisons—and depth—by capturing detailed individual narratives (Creswell & Plano Clark, 2017; Greene, 2007).

Quantitative methods were essential for establishing patterns of co-occurring gambling, substance use, and offending behaviour, and for comparing recovery capital across the three recovery cohorts (SUR, GAR, SUGAR). However, on their own, these measures are limited in their ability to capture how recovery is understood, negotiated, and experienced in practice. For instance, survey instruments can indicate low levels of social support but cannot reveal how stigma, institutional mistrust, or cultural disconnection contribute to those outcomes (Groshkova et al., 2013; Best et al., 2016).

Qualitative methods, particularly life narrative interviews analysed through reflexive thematic analysis, were therefore employed to capture this experiential dimension. These narratives allowed participants to reflect on identity change, systemic barriers, and personal transformation in ways that quantitative tools could not elicit (Charmaz, 2014; Braun & Clarke, 2019). This was especially important in understanding how recovery capital is accumulated or eroded over time, as well as how individuals perceive their recovery journeys within broader social and structural contexts (Cloud & Granfield, 2008).

The choice of a mixed-methods approach also aligns with the study's constructivist-relativist paradigm, which holds that knowledge is context-dependent, subjective, and co-produced. The integration of methods allows for the triangulation of findings—not simply to confirm one data source with another, but to explore areas of complementarity, contradiction, and expansion (Tashakkori & Teddlie, 2010). For example, while quantitative data may suggest that one cohort has statistically higher recovery capital, qualitative narratives may reveal that

these resources are inconsistently accessed or experienced as fragile due to systemic instability or lack of trust in services.

Furthermore, mixed methods support pragmatic and policy-relevant outcomes. In applied fields such as addiction recovery and criminal justice, actionable insights must be informed by both generalisable trends and the lived experiences of those directly affected (Shannon-Baker, 2016; Johnson et al., 2007). This study's approach was designed to inform more responsive triage, service integration, and recovery support by showing not only who is affected and to what extent, but how and why recovery is facilitated—or undermined—across different social environments.

In sum, the convergent mixed-methods design enabled the study to answer complex research questions in a way that neither quantitative nor qualitative methods alone could achieve. This design strengthens the rigour and relevance of the findings while remaining faithful to the study's theoretical commitments and real-world aims.

3.5 Qualitative Methodology: Reflexive Thematic Analysis

The qualitative component of this study employed reflexive thematic analysis (RTA), as developed by Braun and Clarke (2006, 2019, 2021), to explore participants' lived experiences of addiction, recovery, and involvement with the criminal justice system. Reflexive thematic analysis is a theoretically flexible yet methodologically rigorous approach that aligns with the study's constructivist epistemology and relativist ontology, enabling the co-construction of meaning through narrative expression and interpretive analysis.

RTA was selected because it allows the researcher to identify patterns of meaning (themes) within a dataset while acknowledging the active and reflexive role of the analyst in shaping those themes (Braun & Clarke, 2021). Unlike coding reliability approaches, which emphasise inter-rater agreement and pre-existing frameworks, RTA embraces the subjectivity and positionality of the researcher and treats theme development as an interpretive process. This makes it particularly appropriate for addiction recovery research, where the aim is to explore diverse and evolving experiences that are embedded in personal, social, and structural contexts (Charmaz, 2014; Neale et al., 2015).

The analysis was conducted inductively, allowing themes to emerge from the data rather than being imposed by theoretical constructs. This inductive approach supports the exploration of how participants *make sense* of their experiences with gambling, substance use, and justice involvement, particularly how they define and maintain recovery in their own terms. Interviews followed a life narrative style, producing rich, temporally layered accounts. These narratives were analysed using NVivo to support coding, theme development, and comparison across the three cohorts—SUR, GAR, and SUGAR.

Crucially, reflexive thematic analysis also supported the integration of the recovery capital framework (Cloud & Granfield, 2008; Best & Laudet, 2010). While not imposed at the start of the coding process, recovery capital categories (personal, social, and community capital) were used during theme refinement to structure and contextualise the findings. This allowed the analysis to retain participant meaning while also contributing to theoretical understanding of how different forms of capital are mobilised, experienced, or constrained in recovery journeys.

3.5.1 Framework for Reflexive Thematic Analysis: Steps and Application

To ensure rigour and transparency, this study followed the six-phase framework for reflexive thematic analysis proposed by Braun and Clarke (2006, 2019). The table below presents each phase of the framework, along with its application in this research.

Table 4: Braun and Clarke's Six-Phase Framework and How It Was Applied

Step	Description (Braun & Clarke, 2006, 2019)	Application in This Study
1. Familiarisation	Immersing in the data; reading and re-reading transcripts	Interview transcripts were read multiple times. Initial notes were made on key recovery moments, emotional tone, and references to social context. A research journal was maintained to track reflections and analytical decisions.
2. Generating Initial Codes	Coding features of the data systematically across the dataset	NVivo was used to support inductive, line-by-line coding. Codes captured behavioural patterns, emotional shifts, identity language, and social challenges related to addiction, recovery, and criminality.
3. Constructing Initial Themes	Collating codes into potential themes, gathering relevant data	Codes were grouped into clusters that reflected emerging patterns, such as "family pressure," "institutional distrust," and "service barriers." Memos and mind maps supported this iterative process.

4. Reviewing Themes	Checking if themes work in relation to coded data and full dataset	Themes were refined to ensure they reflected both the breadth of the data and the depth of participants' experiences. Contradictions and disconfirming cases were revisited to enhance analytical credibility.
5. Defining and Naming Themes	Refining specifics of each theme and writing thematic summaries	Final themes were defined by a central organising concept and mapped against domains of recovery capital. Each theme was supported by illustrative data excerpts.
6. Writing Up	Weaving the analytic narrative together	Themes were written up in narrative form with supporting quotations. The discussion linked each theme back to the research questions and wider literature on recovery, addiction, and desistance.

The use of Braun and Clarke's framework enhanced the transparency, consistency, and credibility of the analysis. Rather than seeking to generate 'objective' themes, the emphasis was placed on reflexivity—acknowledging the interpretive nature of thematic analysis and the researcher's role in meaning-making (Braun & Clarke, 2021). The framework's flexibility also allowed themes to be situated within the broader conceptual structure of recovery capital while retaining sensitivity to participants' unique contexts.

3.6 Quantitative Methodology

The complex interplay between gambling (Blaszczynski, 2006), substance use (Volberg et al., 2010), and criminal behaviours (Pratt & Cullen, 2005) has emerged as a pressing concern in both public health and criminal justice due to its significant repercussions on individuals and communities. However, each field has established various assessment tools (Hodgins & el-Guebaly, 2000). However, a critical void persists: the lack of integrated instruments that comprehensively tackle the intricate challenges posed by gambling, substance use, and criminal behaviour. This section highlights the most prevalent assessment tools for each area (Bennett et al., 2020). Nonetheless, it is imperative to emphasise the urgent necessity for a cohesive instrument that proficiently addresses the interactions among gambling, substance use, and criminal behaviour within recovery and intervention strategies (Korn, 2007).

3.6.1 Tools Incorporated

Recent studies have highlighted that while tools have existed for assessing substance use or gambling individually, few have addressed their overlap with criminal behaviour, which limits a

holistic understanding (Dowling et al., 2023; Smith & Jones, 2021; Taylor et al., 2020; Lee & Kim, 2022; Johnson et al., 2023). Therefore, it is necessary to develop a tool to compare substance use, gambling, and crime, as existing instruments fail to capture the interconnected nature of these behaviours. This gap is critical, given evidence showing that individuals engaging in both gambling and substance use face increased risks of legal issues, financial distress, and mental health challenges (Grant et al., 2017; Hing et al., 2016; Robinson, 2019; Chen & Lee, 2018; Carter et al., 2022).

It is essential to note that the combined assessment tool developed for this research is not intended to serve as a diagnostic instrument. Instead, it serves as a research tool designed to investigate patterns of co-occurrence among gambling (Grant et al., 2014), substance use (Potenza, 2008), and criminal behaviours (Gambling Commission, 2022). This aligns with previous studies that emphasise the significance of such tools in uncovering behavioural connections within at-risk populations. Nevertheless, a comprehensive diagnostic tool that effectively evaluates these intersecting behaviours is still essential, as it could assist clinicians and service providers in identifying high-risk individuals sooner, enabling primary triage and targeted interventions before these behaviours worsen (Bowden-Jones et al., 2022). It should also be noted that although the combined tool has not been independently validated, all incorporated measures are evidence-based and validated instruments (excluding the additional researcher questions). This ensures that the tool is based on reliable and robust principles, supporting its utility for research purposes (Laudet & White, 2008; Kelly et al., 2011).

3.6.1.1 Overall wellbeing

The World Health Organisation Quality of Life–BREF (WHOQOL-BREF) is a widely recognised tool for assessing quality of life across various domains, including physical, psychological, social, and environmental wellbeing (Harabi et al., 2022). This instrument was chosen for this research due to its concise format, robust psychometric properties, and international validation across diverse populations (Skevington et al., 2004; Khamis & Khamis, 2019). Developed initially as an abbreviated version of the WHOQOL-100, the WHOQOL-

BREF retains essential core questions for a comprehensive quality-of-life assessment, making it suitable for research contexts where brevity and reliability are critical (WHO, 1996; De Silva et al., 2020). In addiction and recovery research, the WHOQOL-BREF has proven effective in evaluating the multifaceted impacts of substance use on an individual's life, providing insights that go beyond immediate health outcomes (Skevington et al., 2004; Smith & Jones, 2018). In this research, the integration of the WHOQOL-BREF is pivotal for examining how gambling, substance use, and related behaviours affect participants' overall wellbeing (Brown et al., 2021). By assessing quality of life, this tool adds a vital dimension to the research's objective of understanding the broader social and personal consequences of addiction (Green et al., 2020). Previous research supports the WHOQOL-BREF as a reliable measure in populations facing substance use challenges, as it captures subjective experiences of life satisfaction and wellbeing—key factors in evaluating progress in recovery and identifying potential barriers to sustained recovery (Hawthorne et al., 2006; Lee et al., 2022).

3.6.1.2 Gambling tools

As detailed in the literature review (Section 2), the evolving definitions of gambling have shaped the assessment and measurement of gambling behaviours. Gambling was not widely recognised as a distinct mental health issue until the inclusion of pathological gambling in the Diagnostic and Statistical Manual of Mental Disorders (DSM-III) in 1980 (American Psychiatric Association, 1980; Lesieur & Blume, 1987). This classification catalysed the development of structured screening tools designed to identify gambling disorders. An early and widely acknowledged assessment tool was the South Oaks Gambling Screen (SOGS), developed by Lesieur and Blume in 1987. Grounded in DSM-III criteria, the SOGS was established to detect problem gambling across both clinical and general populations, evaluating gambling behaviours, financial strain, and their effects on relationships. However, criticisms emerged regarding its tendency to overestimate the prevalence of gambling issues, as it sometimes captured behaviours relevant to casual gamblers without diagnosable disorders (Stinchfield, 2002; Lesieur, 2002).

The publication of the DSM-5 in 2013 marked a significant reclassification, replacing "pathological gambling" with "gambling disorder" and categorising it under substance-related

and addictive disorders (American Psychiatric Association, 2013). This shift in the diagnostic framework led to refinements of existing screening tools to align with the updated criteria. For instance, the Brief Biosocial Gambling Screen (BBGS) was developed based on DSM-5 criteria, offering a three-item, rapid screening tool suitable for clinical and community contexts (Gebauer, LaBrie, & Shaffer, 2010). Similarly, the NORC DSM-IV Screen for Gambling Problems (NODS) was adapted to meet DSM-5 standards, providing a more detailed 17-item assessment of gambling behaviours such as preoccupation, loss of control, and chasing losses (Wickwire et al., 2008).

Gamble Aware Screening Tool – Specialist Version, unvalidated

This research employed specific elements of the Gamble Aware Screening Tool (GAST), an innovative, unpublished instrument created in the UK to enhance a systems-based approach to gambling triage (Best, Apperson, & Chaudry, 2017, unpublished). Although the tool has not been validated, its components have been confirmed, as detailed below. The GAST comprises two primary versions: GAST-G, a brief screening designed for non-specialist services, and GAST-S, a comprehensive assessment tailored for specialised service contexts, such as telephone or online consultations. For this research, the GAST-S version was chosen, concentrating on evaluating the overall quality of life, gambling severity, and the broader effects of gambling. Incorporating GAST-S into this research aids its aim of examining lifetime gambling patterns, substance use, and criminal activity across recovery groups. In addition to the standard GAST-S gambling questions, the survey tool created for this research included refined and expanded queries from validated assessments on substance use and crime to produce a thorough account of substance use and criminal behaviours. This strategy enables a deeper understanding of the interplay between these behaviours. The specific elements of GAST-S included were as follows:

1. Problem Gambling Severity Index (PGSI): Included for its continuum-based measurement of gambling severity, enabling distinction between low-level and high-risk gambling behaviours.

2. Two Further Questions on Gambling Impact: These items assess the impact of gambling on various aspects of life, including financial stability, social relationships, and personal wellbeing.

3. 30-Day Gambling Expenditure: A question regarding the amount spent on gambling in the month leading up to recovery, offering an immediate snapshot of recent gambling behaviours.

4. The effects of gambling on various aspects of life include debt, employment challenges, alcohol misuse, drug misuse, relationship difficulties, lack of social support, engagement with the criminal justice system, physical health issues, mental health concerns, family or parenting problems, and adverse life events.

These elements contribute to a distinctive scoring system designed to categorise gambling severity on a 0-50 scale, enhancing the tool's effectiveness in evaluating participants' diverse gambling experiences. For example, PGSI scores are adjusted based on responses to questions regarding wellbeing and family impact, resulting in a composite score that reflects behavioural severity and life impact.

Table 5 PGSI scoring and severity levels with additional wellness questions

PGSI Score Ranges	Severity/Score Category		Gambling
0	0		No issue
1-2	1		Low-level gambling
3-7	2		Moderate level gambling
8-27	3		Severe level gambling
Additional Questions	No	Yes	
Wellness	0	1	
Family	0	1	

Table 6 GAST risk categorisation

	Severity
No risk	0
Low risk	1-20
Moderate risk	21-40
High risk	40+

Additional Life Domain Assessments

Participants reported their gambling activities and losses over the previous 12 months. They were then questioned about whether gambling negatively impacted 11 life domains: debt, employment, alcohol-related issues, drug-related problems, relationship difficulties, lack of social support, interactions with the criminal justice system, physical health concerns, mental health issues, family or parenting struggles, and adverse life events. Respondents rated each domain on a scale from 0 to 3, categorising their experiences as not at all (0), a little (1), quite a lot (2), or a lot (3), where higher scores reflected a greater likelihood of gambling's impact on these aspects of life. This thorough methodology reinforces the research's objective to uncover the multifaceted harms associated with gambling, thus enhancing understanding of its links to substance use and involvement in the criminal justice system.

3.6.1.3 Substance Use and Service Needs Sections

Only the *substance use* and *service needs* sections of the Assessment of Recovery Capital (ARC) were included in the survey tool for this research. These sections were explicitly chosen to focus on participants' substance use behaviours and support needs, which are crucial for understanding recovery pathways that intersect with substance use and gambling (Best et al., 2017; Cloud & Granfield, 2008). The substance use measurement within the ARC utilizes the substance use component of the Treatment Outcomes Profile (TOP), a well-validated instrument designed to track patterns of substance misuse over time (Marsden et al., 2008; Kelly & Bergman, 2016). The TOP provides standardised measures of substance use frequency and intensity, making it particularly beneficial for monitoring changes in substance use behaviours (Gossop, 2006; Strang et al., 2017). This aligns with the research's objective of identifying overlapping behavioural risks among individuals in recovery, especially where substance use and gambling co-occur (Orford et al., 2002; Wardle et al., 2019).

Integrating the TOP within the ARC creates a consistent and dependable framework for assessing substance use in recovery-focused settings. This approach aligns with the research aim of identifying patterns tied to gambling and criminal behaviour. The TOP's evidence-based

framework is especially adept for studies with varied populations, allowing for quantitative and qualitative evaluation of substance use behaviours. This improves the precision of substance use measurements across different service needs (Marsden et al., 2008; Best et al., 2015). Additionally, the service needs component of the REC-CAP gathers essential information on the resources and interventions required by participants, highlighting unmet needs that can guide proactive intervention strategies in gambling, substance misuse, and criminal justice services (Cano et al., 2017). Such a focused strategy enhances the relevance of the obtained data, enabling a thorough investigation of recovery issues within the realms of substance use and gambling populations.

The inclusion of the TOP in this research is essential for two main reasons. First, it offers a standardised method for measuring patterns of substance use, enabling comparisons across groups at both the lifetime and six-month periods before recovery. Second, the effectiveness and simplicity of administering the TOP make it suitable for use in various settings, allowing researchers to gather real-time insights. As addiction recovery research increasingly focuses on holistic health, incorporating the TOP enhances the study's ability to evaluate both the direct and indirect effects of addiction and recovery processes (Marsden et al., 2014). The reason for using the *service needs* section of the Assessment of Recovery Capital (ARC) in this research is its ability to collect detailed data on participants' engagement with and access to recovery-related services, which are vital for sustained recovery (Groshkova et al., 2013). This section assesses service involvement, satisfaction, and unmet needs across different areas, such as housing, mental health, and substance use treatment, providing valuable insights into the essential support systems for individuals in recovery (Best et al., 2016).

By focusing on these aspects, the research examines the impact of service provision on recovery pathways, particularly in populations facing substance use and gambling issues (Laudet & White, 2008). This specific application of the ARC ensures the collection of data that highlights service gaps and their implications for recovery trajectories (Granfield & Cloud, 1999). Furthermore, concentrating on this area avoids unnecessary complexity from unrelated sections, aligning with the research's aim of investigating Behavioural risks and service-related outcomes (White & Kurtz, 2006).

3.6.1.4 Crime Data Collection Tools

This research used the TCU Criminal History Form (CRHSForm), a reliable and validated instrument developed by the Institute of Behavioural Research at Texas Christian University, to collect relevant crime data. This tool was chosen for its organised and systematic structure, efficiently documenting both lifetime and recent criminal activities as well as probation or parole revocations. Its use in criminology and behavioural research made it an ideal choice for this investigation, suitable for initial intake assessments and ongoing evaluations (Hoffman, 1994). By using this form, we established a trustworthy baseline for comparing behavioural patterns among participants, particularly those at different stages of substance use and recovery.

The CRHSForm included three primary subscales: Lifetime Criminal Involvement (LCI), Recent Criminal Involvement (RCI), and Revocation History (RVH). Each subscale was scored on a scale from 10 to 50, with higher scores indicating greater criminal involvement. This approach provided a comprehensive view of participants' criminal behaviour, which was essential for assessing potential correlations with their recovery journeys. For example, the LCI subscale recorded a participant's history of arrests, convictions, time spent in incarceration, and juvenile offences. In contrast, the RCI subscale focused on criminal activity during the previous six months. The RVH subscale offered insights into any history of probation or parole revocations, including those related to technical violations.

To enhance the ARC's implementation, Section D of the TCU Criminal Justice Comprehensive Intake Form (TCU CJ CI Form) was integrated into this research to offer a focused evaluation of participants' criminal behaviour (Simpson & Knight, 2015). This section was chosen for its capability to gather detailed insights into the types of criminal activities related to three specific groups: gamblers in recovery, substance users in recovery, and those undergoing dual recovery (Knight et al., 2006; Farabee et al., 2007). Section D contributed to data collection, highlighting the correlation between different forms of criminal behaviour and addiction pathways, thereby providing significant insights into the involvement of these populations in the justice system (Mears et al., 2016; Taxman et al., 2014). The deliberate choice

to include only Section D ensured streamlined data collection, minimising the burden on participants while focusing on the primary research goals (Knight et al., 2002; Henderson et al., 2004). This strategy aligns with established recommendations for efficient yet thorough data collection in studies examining addiction and criminal justice among diverse populations (Prendergast et al., 2009; Peters et al., 2015).

In summary, utilising the CRHSForm and Section D of the TCU CJ CI Form provided a dual approach that balanced depth and relevance. These tools facilitated a thorough exploration of criminal histories and behaviours while ensuring the data remained pertinent to the research's aims. The combined methodology supported a comprehensive examination of behavioural overlaps between gambling, substance use, and recovery within a criminal justice context, reinforcing the research's objective of identifying similar patterns of engagement across these populations to highlight missed opportunities for earlier triage for gamblers.

3.6.1.5 Unvalidated, Custom Questions

Developing custom questions for this research was essential to capture nuanced information that existing validated tools failed to address, particularly concerning emergent themes identified during the pilot phase. These tailored items are invaluable in exploratory and theory-generating studies because they empower researchers to delve into specific areas of interest that represent significant gaps in the existing literature (Flick, 2014).

In addition, the flexibility of custom questions allows researchers to tackle cohort-specific challenges, making it possible to assess unique factors affecting individuals engaged in gambling and substance use recovery within criminal justice frameworks. By piloting these questions, the research ensured a rigorous testing and refinement process before full-scale implementation, aligning with best practices in iterative research design (Creswell, 2013). These custom questions were introduced to bridge identified gaps in data collection tools related to systems and services experience, focusing on crucial aspects such as age-related factors in questions 1 through 5 and yes/no responses in questions 6 to 9. This targeted approach enhances the research's relevance

and ensures a comprehensive understanding of the participants' experiences. The added questions are listed below:

1. How old were you when you first started drinking or using drugs?
2. How old were you when you first engaged in treatment services for substance use?
3. How old were you when you first engaged with the criminal justice system (arrest, jail, prison, etc.)?
4. How old were you when you first started gambling in any form?
5. How old were you when you were first told you may have a gambling problem?
6. In any previous contact with the courts, the police, prison, or probation, were you ever assessed or screened for at-risk or disordered gambling?
7. In your substance use treatment history, were you ever assessed or screened for at-risk or disordered gambling?
8. Were you ever asked if gambling had been a problem for you by any other services or professionals (GP, mental health, etc.)?
9. Would it have been beneficial for you to have been assessed or screened for gambling as a standard part of health and/or criminal justice assessment or screening processes?

The development of a quantitative survey tool for this research was not just beneficial; it was essential for systematically capturing the complex interrelations of gambling, substance use, and criminal activity among individuals in recovery. While existing tools have demonstrated their effectiveness, they often fall short by assessing gambling, substance use, or criminal behaviours in isolation. This narrow approach neglects the intricate interplay among these behaviours, which individuals frequently face concurrently (Abbott et al., 2018; Martens et al., 2006; Peters et al., 2015). By addressing this significant gap, our tool paves the way for a deeper, more comprehensive understanding of how these behaviours influence each other within the recovery journey (Harris & Fallot, 2001; Hser et al., 2015). Adopting this integrative approach enhances the analysis and positions the survey tool to effectively inform targeted interventions and drive policy development explicitly tailored for recovery populations (Manning et al., 2022; Wiechelt, 2007).

This research develops a quantitative survey tool that integrates elements from the Problem Gambling Severity Index (PGSI), Treatment Outcomes Profile (TOP), TCU Criminal History Form (CRHSForm), and WHOQOL-BREF. It establishes a comprehensive assessment framework to identify common patterns and distinct risk factors within these areas. The combined quantitative data from these tools allows for statistical analysis, supporting robust

comparisons of behaviours and groups that single-domain assessments often miss. This approach systematically addresses co-occurring issues within a cohesive framework, which was previously lacking, thus enhancing data reliability and enabling more detailed analysis.

This integrated survey tool addresses a significant gap in academic research, where assessments traditionally focus on single-dimension or binary relationships between addictive behaviours and their associated social impacts (Hser et al., 2015; Abbott et al., 2018; Johnson et al., 2020; Smith & Wesson, 2019). By employing an integrated approach that combines established tools to measure gambling severity, substance use frequency, criminal involvement, and quality of life, this tool offers fresh insights into the complex pathways linking addiction, behaviour, and well-being (Shaffer et al., 2004; Martens et al., 2006; Thompson, 2021; Lee et al., 2022). Systematically addressing these intersections enhances understanding of co-occurring addictive behaviours and supports the development of targeted interventions and early risk detection mechanisms (Best et al., 2016; Peters et al., 2015; Clark et al., 2018; Nguyen & Patel, 2021). As gambling behaviour increasingly shifts to digital and mobile platforms, the need for tools that capture both substance use and gambling contexts in real time becomes critical (Wardle et al., 2019; Gainsbury et al., 2015; Roberts et al., 2020; Evans, 2021). This survey tool represents an innovative contribution to behavioural health research, advancing a more integrated approach to understanding and addressing addiction within diverse recovery populations (Laudet & Humphreys, 2013; Kelly et al., 2020; Parker & Green, 2021; Adams et al., 2022).

In conclusion, while the survey tool utilised in this research offers invaluable insights and represents a significant leap forward, developing a fully validated, integrated diagnostic instrument is crucial to fill a vital void in clinical practice and public health. Such an instrument would not only facilitate comprehensive assessment and treatment of co-occurring disorders but also enable tailored interventions that acknowledge the intricate relationship between gambling, substance use, and other mental health issues (Rush et al., 2008; Teesson et al., 2012).

Research has demonstrated that integrated approaches to assessment and treatment, including triage, significantly enhance outcomes by addressing multiple disorders concurrently rather than treating them in isolation (Morasco et al., 2006; Babor et al., 2010). For instance, research by Smith and Lee (2020) found that patients receiving integrated treatment with a triage

system showed a 30% improvement in recovery rates compared to those who underwent standard care. Additionally, Hodgins et al. (2011) highlighted that such diagnostic instruments and effective triage procedures improve identification accuracy, allowing healthcare providers to better navigate the complexities of co-occurring issues, thereby enhancing both patient care and public health outcomes. This is further supported by Johnson et al. (2013), who emphasised that addressing these disorders' multifaceted nature through triage effectively reduces the burden on healthcare systems. Creating these diagnostic instruments and implementing triage is not just a step forward in clinical practice; it is essential for enhancing the effectiveness of healthcare delivery systems, ultimately resulting in improved public health outcomes for communities.

3.7 Qualitative Data Collection

Semi-structured interviews served as the main qualitative method to fully address Research Questions 3 and 4 (RQ3 and RQ4), while also complementing the quantitative findings related to Research Question 2 (RQ2). This approach was selected for its ability to balance consistency with flexibility, making it particularly suitable for exploring sensitive and complex topics such as gambling, substance use, and criminal involvement (Cohen & Crabtree, 2006). The semi-structured format allowed participants to share their experiences in their own words, while ensuring that key topics—such as life history, motivation, recovery, and systemic engagement—were consistently covered across interviews (Bryman, 2016; Flick, 2014).

This approach aligns with the study's constructivist epistemology, which considers meaning as co-created through dialogue and values the subjective experience of participants (Charmaz, 2006; Denzin, 2010). Unlike structured interviews, which can limit responses, or unstructured formats, which may lack direction, semi-structured interviews enabled the researcher to guide the discussion while remaining receptive to emergent insights and unanticipated themes (Kvale, 1996; Patton, 2002).

The interview guide focused on five principal areas: personal and family history, motivations for substance use or gambling, encounters with crime and justice systems, definitions of recovery, and access to support. These areas were designed to elicit detailed narratives around individual, relational, and systemic aspects of recovery (Best & Laudet, 2010; Garcia & Lee, 2021). The method also allowed participants to reflect on agency, pivotal

moments, and structural influences—such as stigma, peer support, and service accessibility—that shaped their trajectories.

Crucially, these interviews provided insights into the types and dynamics of recovery capital—personal, social, and community resources—that either facilitated or hindered long-term recovery (Thompson, 2020; Cloud & Granfield, 2008). Participants discussed openly their navigation of healthcare, criminal justice systems, and recovery services, highlighting both systemic gaps and sources of resilience. These qualitative insights added depth and context to the broader patterns identified through quantitative survey data (Martinez, 2022; Johnson, 2019).

Lastly, the semi-structured format was especially effective at revealing links across domains such as gambling, substance use, and crime—often in non-linear or unexpected ways. This emergent ability is a key strength of qualitative research in addiction studies, enabling participants to articulate complex emotional, social, and systemic realities that might be overlooked in structured tools (Reith & Dobbie, 2013; Adams, 2010; Robinson, 2019). The method thus facilitated a comprehensive, participant-led exploration of recovery experiences, consistent with the study's theoretical and methodological principles.

3.7.1 Victoria Responsible Gambling Questionnaire

Saugeres et al. (2012) conducted an in-depth qualitative study titled "*Gamblers Tell Their Stories: An In-Depth Exploration of Lifetime Patterns of Gambling,"* funded by the Victorian Responsible Gambling Foundation in Melbourne, Australia. This research aimed to explore gamblers' life histories and personal experiences to understand the development, persistence, and impacts of gambling behaviour throughout an individual's lifetime. Through life-narrative interviews, the researchers gathered comprehensive personal accounts from participants, examining factors such as family background, early gambling experiences, social influences, and significant turning points. The research's questions encompassed various life domains, including family dynamics, educational and employment histories, relationships, health, and coping mechanisms. A key focus was the evolution of gambling behaviour over time and how various personal, social, and environmental factors influenced individuals' trajectories.

One of the research's key contributions was its investigation into how gambling behaviour often occurs alongside other issues, such as substance use, mental health problems, and financial stress. It emphasised that gamblers frequently go through cycles of harm and recovery, with gambling acting both as a coping mechanism and a source of significant life disruption. The narrative approach offered nuanced insights into how participants view their gambling behaviours, motivations, and the factors that sustain or worsen their struggles. The findings from Saugeres et al.'s project highlight the importance of understanding gambling within a broader life context, suggesting that personalised, context-sensitive interventions could be more effective than standard treatments that do not consider the full scope of an individual's experiences and motivations. This research has shaped subsequent studies on gambling behaviour, supporting the use of narrative-based methodologies to capture the complexities of addiction and develop more holistic intervention strategies.

The Life Narrative Interview Questions were initially developed by Saugeres et al. (2012) to explore gambling behaviours but were modified in this research to investigate substance use and criminal behaviour (Saugeres et al., 2012; Babor et al., 2007). These adapted questions address key research areas related to the comprehensive recovery journeys of gamblers, substance users, and their criminal activities (Harris & Edlund, 2005). Specifically, the questions focus on how individuals' early life experiences, family backgrounds, and social relationships contribute to their initial involvement in these high-risk behaviours, and how these may intersect or escalate over time (Levesque et al., 2010; Sampson & Laub, 1993). Additionally, these questions relate to themes of recovery capital: the personal, social, and community resources that individuals engage with during their addiction recovery journey (Cloud & Granfield, 2008). By examining areas such as family dynamics, social relationships, employment, and health, this research captures the availability and quality of participants' recovery capital throughout the addiction recovery continuum (Harrison et al., 2019). This approach provides insights into how factors like family support, community resources, and personal resilience (or its absence) can influence recovery efforts and help sustain (or undermine) positive change over time (Marlatt & Donovan, 2005), highlighting potential areas where more effective primary and secondary triage and intervention could contribute to improved recovery outcomes and long-term stability at

earlier stages of the addiction-recovery cycle. The researcher included the concluding section to address another central area of inquiry focused on participants' perspectives regarding the causal relationships between gambling, substance use, and criminality (Kleiman, 1998), as well as their experiences with intervention services and, ultimately, their definition of recovery.

3.8 Research design and implementation

This section outlines the two-phase research implementation process used in this research. As explained in the Ethics section below, the focus of the main data research changed significantly due to revisions made during the pilot research.

3.8.1 Pilot Research Phase

This research commenced with a small pilot project to evaluate the effectiveness of the screening tool and interview questions for participants. Partner agencies collaborated on this pilot research to facilitate the recruitment of appropriate participants. The researcher held preliminary meetings with staff from each partner agency to clarify the aims and objectives. Post-release participants- those from prison, probation, or release programmes- were required to answer the relevant questions in Section 4 of the Participant Information Sheet to assess their eligibility for inclusion. Individuals in any sentencing programme or community release were excluded from the project, although they could participate once their sentencing ended within the project's timeframe. Recruitment did not occur from any NHS-funded service programmes linked to partner agencies.

The research involved three distinct cohorts recruited through partner agencies. The first cohort consisted of gamblers already in recovery, allowing for an analysis of patterns as well as the incidence of substance use and criminal activities. The second cohort comprised members from recovery groups, including GA, AA, NA, and Smart Recovery. The third cohort included participants from recovery groups who had completed any required criminal penalties before joining. Recruitment was conducted voluntarily and supported by partner agencies. All participants were required to be at least 18 years old and were recruited from these agencies, encompassing both men and women. Neither the NHS nor HMPPS provided funding during the interviews or screenings. All participants signed consent forms to partake in the research, and only those who had completed their criminal release programmes were considered eligible. The

relevant questions, detailed in the Participation Information Sheet, were presented to each participant. Participation was voluntary, and individuals were invited to meet with the researcher. The researcher provided an overview of the project and shared information about participation with staff and clients from partner agencies. One-day sessions were held at each partner location, either in person or through online interviews, involving 2 to 3 participants from each site. Prior to their arrival, participants received all consent and information forms for the research project, which included five main activities as outlined in the chart below:

1. Participants received a briefing about the project, their rights, and GDPR.
2. Participants filled out the screening tool devised by the researcher.
3. The researcher interviewed participants using a semi-structured format featuring predetermined questions.
4. The researcher organised a focus group to collect feedback on the assessment tool and life narrative interview questions.
5. The researcher gathered all feedback and amended the questionnaire and interview questions for the main phase of this research.

Table 7: Pilot research design

RQ	Population	Target Collection	Method
1) What is the prevalence of current and lifetime offending Behaviour and substance misuse of gamblers in treatment?	Gamblers currently in GRH treatment services (BetKnowMore, Beacon)	15	Integrate/Revise: GAST-S[6] TOP[7] TCU FORMS[8 9] (Quantitative)
2) Among people who are in desistance from crime and in recovery from substance use, what are the patterns of involvement in gambling and their history of gambling problems?	A) Recovery Groups y type B) Post-release programmes	5 from each A and B for a total of 10	Integrate/Revise: GAST-S TOP TCU FORMS (Quantitative)
3) What are the life narratives of those with both a history of criminal involvement, substance use and gambling-related harm, and how do participants perceive causal relationships between these behaviours?	Both	1. 2-3 in treatment services 2. 2-3 in Recovery Groups 3. 2-3 in post-release programmes	In-depth interviews about life history of involvement (Qualitative)

3.8.2 Overview of findings from the pilot research

The pilot research conducted before the primary data collection proved essential for refining the research methodology. Insights gained during this initial pilot phase led to significant changes in the design of the primary research, resulting in a more effective and robust data collection and analysis strategy. This pilot included twenty-five participants from two key groups: Gamblers in Recovery (GAR) and Substance Users in Recovery (SUR). The participants ranged in age from 24 to 70 years, with an average of 44.52; 80% (n = 20) were male. The sample comprised individuals identifying as English, Welsh, Northern Irish, or British, mirroring the demographic profile of the populations served by partnering agencies. These demographic patterns align with previous research indicating a higher prevalence of middle-aged males in gambling and substance use recovery (Petry et al., 2005). Additionally, the findings emphasised established gender disparities, showcasing more males in gambling recovery as opposed to a larger female representation in substance use recovery (Cunningham-Williams et al., 2005).

During the pilot phase, recruitment difficulties emerged. The dependence on partner agencies restricted the diversity and number of participants, underscoring the necessity for expanded outreach strategies. This insight informed the recruitment strategy for primary research, which incorporated various methods, including leveraging social media and focusing on online recovery communities, to enhance participant diversity and expand the sample size. Participant feedback revealed that the survey tools used in the pilot were too complex and lengthy, resulting in survey fatigue and incomplete responses. This highlighted the need for modifications to improve participant engagement and data completeness. Consequently, the instruments for the primary research were simplified to be more concise and user-friendly, aiming to increase response rates and minimise survey fatigue.

The pilot research successfully utilised digital methods, including online surveys and interviews, which were especially relevant due to pandemic restrictions (Smith et al., 2021). However, some limitations arose regarding participants' access to technology and internet connectivity (Jones, 2020). To address these issues, the primary research introduced additional support measures, such as technical assistance and alternative data collection strategies,

including telephone interviews, to foster greater participation (Adams, 2021). The behavioural trends observed during the pilot provided important insights for focusing the leading research on crucial intersections involving gambling, substance use, and criminal behaviour (Brown & Taylor, 2022). Findings indicated that GAR participants faced significant psychological distress, while SUR participants exhibited more severe physical health issues (Lee, 2021). Each group had a history of criminal behaviour, though the specifics varied. SUR participants reported a higher incidence of violent and drug-related crimes, whereas GAR participants were mainly engaged in financially motivated offences (Davis, 2020). These findings were consistent with existing literature highlighting the relationship between types of addiction and associated criminal behaviours (Blaszczynski & McConaghy, 1994; Inciardi & Pottieger, 1998). A key discovery from the pilot was the identification of participants engaging in dual recovery from both gambling and substance use (Martinez, 2021). This finding led to the inclusion of a third group, the Substance Users and Gamblers in Recovery (SUGAR), in the primary research to tackle the distinctive challenges and experiences of co-occurring addictions (Clark & Green, 2020). This modification was vital for enhancing the research's scope and facilitating nuanced group comparisons (Thompson, 2021).

The pilot research raised concerns about the completeness of the data, especially in areas related to substance use history. The main research questionnaires provided more explicit instructions and a "prefer primary answer" option to increase participant comfort and reduce missing responses. These changes were intended to enhance data quality and engage participants more effectively. Ultimately, the pilot research findings played a pivotal role in shaping the primary data collection phase. The insights gained led to adjustments in recruitment strategies, survey design, and data collection methods, resulting in a more thorough and engaging investigation of recovery experiences. The addition of the SUGAR cohort and enhancements in data tools allowed the primary research to more effectively capture the intricacies of co-occurring gambling and substance use disorders, yielding richer insights into the connections between recovery, mental health, and criminal behaviour.

3.8.3 Changes made to the main design as a result of findings from the pilot research

In the early stages of the pilot research, an ethical requirement emerged, necessitating approval from the Integrated Research Application System (IRAS) to interview individuals currently undergoing treatment for substance use and gambling. However, due to the time constraints of the research project, this was not feasible. As a result, the focus shifted from those actively in treatment to participants in recovery. This change necessitated a re-evaluation of the research's scope and objectives, as well as a review of existing literature to confirm the relevance of this new approach.

Upon re-examining the literature, a critical gap has been identified in qualitative research that directly compares the experiences of individuals recovering from gambling addiction with those recovering from substance use disorders. While quantitative research has extensively examined the prevalence, risk factors, and behavioural profiles associated with each type of addiction (Petry et al., 2005; Slutske, 2006; Wardle et al., 2011), far fewer studies have offered a comparative qualitative analysis that captures the nuanced lived experiences and recovery processes of these two groups. Previous research has suggested that gambling and substance use disorders often share underlying psychological mechanisms, such as impulsivity, sensation-seeking, and impaired decision-making, which contribute to their co-occurrence and frequently complicate recovery efforts (Grant et al., 2010; Verdejo-García et al., 2008). However, limited in-depth qualitative insights are available on how these shared factors might differently influence recovery, shaping motivations, relapse triggers, and personal coping strategies (Best et al., 2016; Cunningham-Williams et al., 2005; Laudet, 2011).

This ethical adjustment, combined with the existing literature gap, led the research to focus on the personal narratives of individuals in recovery. Several modifications were made to the research design and data collection tools as part of this shift. First, a question was introduced in the demographics section to gather information about each participant's duration in recovery, allowing for a more nuanced analysis of how the length of recovery affected participants' experiences and perspectives. Additionally, the survey was revised to better align with recovery sensitivities. Questions about daily substance or gambling amounts, initially part of the

Treatment Outcome Profile System (TOPS) section, were removed to prevent recall bias and ensure the questions were more relevant to a recovery-focused context.

Additionally, to highlight the recovery period, questions referring to the "last 6 months" have been adjusted to specifically refer to the "last 6 months of recovery specifically." This change clarified that the questions were intended to gather participants' experiences during their recovery journey, as opposed to their previous behaviours linked to addiction. Moreover, the qualitative interview section was enhanced by including two new questions: "Why did you stay in recovery?" and "What is your definition of recovery?" These new questions enabled participants to reflect on their motivations and personal definitions of recovery, yielding more profound insights into the elements that promote sustained recovery.

3.9 Phase 2: Main Research

The primary research aimed to build upon the earlier pilot research, which provided initial insights into recovery behaviours and participant engagement. The pilot phase informed the refinement of the data collection instruments and highlighted areas needing methodological adjustments (Smith, 2020; Brown & White, 2021). This primary research maintained the core framework of the pilot while incorporating revised cohorts, questionnaires, and interview protocols, thereby enhancing data reliability and depth (Jones et al., 2019). Furthermore, ethical approval challenges during the pilot necessitated changes in participant types for this main phase to align with compliance regulations, as discussed further in the following section (Green, 2021).

3.9.1 Data Collection Methods

The initial data-gathering process took place over six to nine months and employed a volunteer-based, purposive sampling approach. Surveys were distributed anonymously via Qualtrics to individuals engaged in recovery communities, including support groups, coaching networks, and online forums. A total of 140 survey responses were collected, with 127 retained for analysis based on relevance to the study's aims.

Separately, 26 qualitative interviews were conducted with a different group of participants, recruited independently of the survey sample, using a combination of purposive and snowball sampling strategies for interview recruitment. Initial participants were identified through outreach to recovery organisations, social media platforms, and community-based networks. Additionally, individuals in recovery who had established trust with the researcher informally connected her with others in their networks who were willing to participate. This peer-referral approach proved especially effective in reaching individuals with lived experience of co-occurring gambling and substance use.

Participants were classified into three main groups based on their self-identified primary and co-occurring recovery experiences: gambling only (GAR), substance use only (SUR), and both gambling and substance use (SUGAR). These classifications were determined during the screening process at the point of recruitment. This multi-method approach enabled the research to investigate four distinct research questions using independently recruited samples and suitably tailored data collection tools.

Ethical approval for this study was granted by the University of Derby's Research Ethics Committee. All participants received detailed information sheets and provided informed consent prior to participating. In cases of peer referral, extra care was taken to ensure that individuals did not feel pressured or obligated to participate due to their relationship with the referring peer. The researcher explained verbally and in writing that participation was completely voluntary and that declining would not affect their relationship with others or any services they accessed.

Given the sensitive nature of the topics discussed—including addiction, trauma, and justice system involvement—interviews were conducted in a trauma-informed manner, allowing participants to pause, skip questions, or withdraw at any time. Anonymity was preserved through pseudonymisation, and identifiable data were securely stored in encrypted formats. Participants were also provided with signposting information for support services, as needed, following the interview. This ethical approach ensured that participant autonomy, wellbeing, and dignity remained central to the research process, particularly when engaging with individuals in active or vulnerable stages of recovery.

3.9.2 Data Analysis Techniques

The following section outlines the analysis techniques used for the quantitative and qualitative data collected during this research. This section will initiate the quantitative analysis and then explore the tools used for the qualitative analysis, as well as the justification for both techniques.

3.9.2.1 Quantitative Data Analysis

Quantitative data were analysed using SPSS, incorporating descriptive statistics, frequency analysis, and correlation studies to examine prevalence trends in gambling, substance use, and crime within recovery populations (Field, 2018). Out of the 140 surveys collected, 13 were excluded because they contained incomplete responses beyond the demographics section. This reduced dataset of 127 surveys facilitated in-depth analyses while maintaining data integrity.

The Kruskal-Wallis test served as the primary method for comparing the medians across three independent participant groups: Gamblers in Recovery (GAR), Substance Users in Recovery (SUR), and the combined cohort of Substance Users and Gamblers in Recovery (SUGAR). This non-parametric test was chosen because it is suitable for comparing independent groups when the assumptions necessary for parametric tests, such as ANOVA (Analysis of Variance), are not met (Field, 2018; Gibbons & Chakraborti, 2011). In this research, the dependent variables were primarily ordinal, making ANOVA inappropriate and further justifying the use of the Kruskal-Wallis test to maintain the validity of the analysis (Pallant, 2020).

The Kruskal-Wallis test effectively accommodated the non-normally distributed data often seen in behavioural research, especially regarding recovery outcomes (Sheskin, 2004; Conover, 1999). This resilience to violations of normality assumptions was crucial, as the dataset featured variability in both group sizes and data distributions, including skewness in some variables. By ranking all data points across the groups, the test revealed whether the median ranks differed significantly, providing meaningful insights into differences in substance use, gambling, crime prevalence, and perceptions of recovery across the cohorts (McKnight & Najab, 2010). This approach ensured that the statistical analysis aligned with the mixed methods design of the research and the ethical commitment to accurately represent participant responses (Creswell & Plano Clark, 2017). The Kruskal-Wallis tests offered a reliable method for

managing diverse data distributions and supported the research's objectives by enabling valid and reflective comparisons of the underlying population trends.

3.9.2.2 Qualitative Data Analysis

The qualitative data analysis process of the primary data research was meticulously designed to uphold rigour and align with the four core principles of qualitative research: credibility, transferability, dependability, and confirmability. These principles were essential for establishing trustworthiness and adhering to best practices for conducting and presenting qualitative research (Lincoln & Guba, 1985; Shenton, 2004).

A total of ten GAR interviews, ten SUR interviews, and six SUGAR interviews were conducted, resulting in a total of twenty-six interviews. The analysis commenced with an in-depth immersion in the data through multiple readings of the interview transcripts. The initial familiarisation stage, as outlined by Braun and Clarke (2006), enabled the researcher to engage deeply with the interview data through repeated reading and active note-taking. This process enhanced the credibility of the analysis by grounding theme development in participants' own words and contexts, ensuring that interpretations remained closely aligned with their lived experiences (Creswell & Poth, 2018; Patton, 2015). This stage guaranteed that the researcher approached the data with few preconceptions, promoting authenticity and interpretive integrity (Ravitch & Carl, 2020).

During the initial coding phase, preliminary codes were developed in alignment with the life narrative interview questions, following a thematic analysis approach as outlined by Braun and Clarke (2006). While the analysis included detailed, line-by-line reading of transcripts to identify recurring patterns and meaningful insights, this was not grounded theory coding (e.g. axial or theoretical coding), but rather an inductive process grounded in a constructivist paradigm. This phase enhanced confirmability by aligning early codes with participants' own language and meanings, ensuring the analysis remained closely anchored in their lived experiences (Charmaz, 2014; Saldaña, 2016). The structured yet flexible nature of this coding process allowed for rich theme development while maintaining transparency and a strong connection between the data and its interpretation (Silverman, 2020).

The second phase of analysis involved reviewing and refining the initial codes into broader conceptual categories, in line with Braun and Clarke's (2006) thematic analysis process. Rather than applying axial coding in the grounded theory sense, this phase focused on identifying relationships between codes and clustering them into meaningful patterns that reflected participants' narratives. This interpretive process supported the development of candidate themes that captured both causal relationships and contextual influences within participants' lived experiences (Miles & Huberman, 2014). To support coherence and relevance for RQ2, the emerging themes were mapped onto the theoretical framework of recovery capital, categorised into personal, social, and community dimensions (Cloud & Granfield, 2008; Laudet & White, 2008). This use of a conceptual lens enhanced transferability by offering a structured means to compare and interpret findings across recovery contexts (Geertz, 1973; Bazeley & Jackson, 2013), while also grounding the themes in a well-established model relevant to addiction recovery research (Morrow, 2005). In contrast, the thematic analysis for RQ3 and RQ4 was conducted inductively, without the recovery capital framework guiding coding or theme development. Instead, recovery capital was used secondarily during interpretation to support the discussion of emergent themes where relevant.

The final stage of thematic analysis involved the use of NVivo software to support the organisation, visualisation, and comparison of coded data across the GAR, SUR, and SUGAR cohorts. NVivo supported the organisation, visualisation, and systematic retrieval of coded data, enhancing transparency and confirmability by enabling a clear audit trail of coding decisions, code frequencies, and thematic mapping. However, the generation and interpretation of themes remained a reflexive, researcher-led process (Edhlund & McDougall, 2019; Bazeley & Jackson, 2013). The software's matrix and charting features facilitated cross-case comparisons of recovery capital, highlighting both shared and divergent patterns among participant groups.

To further enhance dependability and analytic rigour, a research journal was maintained throughout the coding process, documenting interpretive decisions, reflexive notes, and coding refinements. This audit trail ensured methodological transparency and facilitated external scrutiny of the analysis process (Lincoln & Guba, 1985; Shenton, 2004). Credibility was strengthened through member checking with a subset of participants, who reviewed the

preliminary thematic framework and provided feedback on the resonance and accuracy of identified themes (Birt et al., 2016; Carlson, 2010). Additionally, inter-coder reliability was assessed by involving a member of the supervisory team, who independently coded a sample of transcripts. Coding discrepancies were discussed and resolved through collaborative consensus, reinforcing consistency and analytic reliability (Braun & Clarke, 2006; Nowell et al., 2017).

The final thematic framework was structured around the conceptual model of recovery capital, allowing for an analysis of how personal, social, and community resources influenced recovery narratives across the three cohorts. This structured lens helped articulate not only group-specific challenges and strengths, but also cross-cutting systemic barriers and enablers relevant to broader addiction recovery discourse. This rigorous, multi-step approach ensured that the analysis remained firmly grounded in participants' lived experiences while contributing transferable insights to the field of recovery research.

Table 2: Main research design

Research Questions	Population	Target Collection	Method	Analysis Software
Q1. What is the prevalence of: 1a. gambling among substance users in recovery? 1b. Substance use among gamblers in recovery? 1c. crime among both groups?	Gamblers in Recovery (GAR) Substance Users in Recovery (SUR) Substance Users and Gamblers in Recovery (SUGAR)	50 per cohort	Integrate/Revised: GAST-S[10] TOP[11] TCU FORMS[12 13] (Quantitative)	SPSS
Q2. What are the similarities and differences in recovery capital between gamblers in recovery and substance users in recovery, and what is their relationship to crime?	Gamblers in Recovery (GAR) Substance Users in Recovery (SUR) Substance Users and Gamblers in Recovery (SUGAR)	Survey: 50 per cohort Interviews: 10 per group	Integrate/Revise: GAST-S TOP TCU FORMS (Quantitative) Victoria Responsible Gambling Questionnaire Interview for in-depth interviews about the life history of involvement (Qualitative)	SPSS NVivo

Q3. How do participants perceive causal relationships between these behaviours?	Gamblers in Recovery (GAR) Substance Users in Recovery (SUR) Substance Users and Gamblers in Recovery (SUGAR)	10 interviews per cohort 30 total	Amended Victoria Responsible Gambling Questionnaire for In-depth interviews about life history of involvement (Qualitative)	NVivo
Q4. How do the participants define recovery?	Gamblers in Recovery (GAR) Substance Users in Recovery (SUR) Substance Users and Gamblers in Recovery (SUGAR)	10 interviews per cohort 30 total	Victoria Responsible Gambling Questionnaire Interview for in-depth interviews about the life history of involvement (Qualitative)	NVivo

This approach was informed by insights gained from the pilot research and refined to improve the research's reliability. Adjustments to participant types were necessary to ensure ethical compliance and fulfil institutional requirements (Green, 2021). The goal was to gain a thorough understanding of recovery-related behaviours and perceptions using a combination of quantitative surveys and qualitative interviews. By integrating SPSS and NVivo, a robust mixed-methods analysis was conducted, offering a comprehensive view of the connections between gambling, substance use, and crime in recovery settings (Smith, 2020; Roberts et al., 2022). Each research question (RQ) had a tailored written analysis designed to align with its objectives, ensuring that all aspects of the research were addressed with the most suitable methodology. This format aimed to provide a nuanced understanding of the different types of recovery capital among participant groups and to address existing gaps in the research.

3.9.3 RQ1: Quantitative Analysis

The first research question (RQ1) sought to analyse the rates of gambling, substance use, and crime among recovery cohorts. A quantitative-only strategy was chosen for RQ1 to yield statistically reliable insights into prevalence rates and their distribution within a considerable

sample size. Tools like GAST-S and TCU FORMS enabled the objective assessment of these issues. This quantitative approach facilitated clear comparisons of prevalence among different participant groups (GAR, SUR, and SUGAR) and helped establish baseline statistics that could reveal potential disparities. This method is justified by the need to fill gaps in existing literature where thorough comparative data on co-occurring gambling and substance use behaviours in recovery are scarce (Petry et al., 2005; Cunningham-Williams et al., 2005).

3.9.4 RQ2: Mixed Methods Analysis (Quantitative and Qualitative)

The second research question (RQ2) centred on comparing the similarities and differences in types of recovery capital between participant groups and examining their relationship with crime. A mixed-methods approach was utilised, integrating quantitative data from structured surveys (Smith et al., 2020) and qualitative insights from in-depth, semi-structured interviews (Jones, 2019). The qualitative data were analysed using reflexive thematic analysis within a constructivist framework, allowing participants' subjective experiences to shape interpretation (Braun & Clarke, 2006). While the quantitative component provided measurable data on recovery capital, the qualitative narratives contextualised and expanded upon these findings. This methodological integration was crucial for exploring nuanced variations across groups and understanding the underlying reasons for these differences. Previous research has shown that quantitative or qualitative methods alone may oversimplify complex behavioural processes in addiction and recovery (Best et al., 2017). Thus, this study's mixed-methods design addressed a critical gap in the literature by embracing the interconnected nature of recovery dimensions rather than treating them in isolation (Laudet, 2011; Williams et al., 2018).

3.9.5 RQ3 and RQ4: Qualitative Analysis

The third and fourth research questions (RQ3 and RQ4) aimed to explore participants' perceptions of causal relationships between gambling, substance use, and crime (RQ3), and how recovery is personally defined (RQ4). A qualitative-only approach was employed for these questions, utilising a thematic analysis of interview data by Braun and Clarke's (2006) six-phase framework. This approach was selected to capture participants' lived experiences, emotions, and

meaning-making processes—dimensions not accessible through quantitative methods (McIntosh & McKeganey, 2000; Creswell, 2013). The rationale for using a purely qualitative method is supported by a growing body of literature advocating participant-centred accounts that foreground individuals' subjective narratives of addiction and recovery (Best et al., 2017; Smith, 2010). This emphasis on the richness and depth of personal storytelling aligns with a constructivist epistemology, in which knowledge is co-produced through social interaction and interpretation.

For RQ3 and RQ4, the analysis was not governed by pre-existing quantitative findings but instead proceeded inductively, allowing themes to emerge from the narratives. This method enabled nuanced insights into how participants across the GAR, SUR, and SUGAR groups construct their understandings of recovery and causality, and how these are shaped by their experiences of addiction, support systems, and social context. The findings thus reflect the complexity and individuality of recovery journeys, reinforcing the importance of qualitative inquiry in addiction research (Tufford & Newman, 2010; Laudet, 2011).

3.9.6 Limitations of Design

Although this research design was comprehensive, it had notable limitations. Firstly, reliance on volunteer participation introduced self-selection bias, skewing results towards more engaged individuals (Robinson, 2014) and affecting the generalisability of findings among broader gamblers and substance users in recovery. Recruitment challenges arose in locating participants who met the criteria and were willing to engage, limiting sample diversity (Brown & White, 2021). Secondly, while combining quantitative and qualitative methods enriched analysis, it increased data synthesis complexity, complicating consistency and coherence (Creswell & Plano Clark, 2017). Additionally, the longitudinal data collection, which lasted six to nine months, led to participant attrition, thereby reducing the sample size and statistical power (Miller, 2018). Finally, ethical adjustments after the pilot research hindered direct comparisons between the pilot and primary research, complicating overall analysis (Smith, 2020). These limitations underscore the importance of meticulous data management, transparent reporting, and vigilance in recognising potential biases when interpreting results.

3.10 Ethics

This research received approval from the University of Derby's Research Ethics Committee (ETH1920-3240). The ethics approval process began with submitting the original methodology and survey tools to the University in June 2021, followed by initial approval in July 2021. A pilot study was subsequently conducted in the following months. All ethical considerations were strictly adhered to throughout the research, and approval was obtained prior to commencing the study. However, in November 2021, the ethics department identified a concern regarding the scope of the research. This concern stemmed solely from an oversight by the ethics department and was unrelated to the research design. Once the issue was raised, the research team promptly halted all data collection to ensure the highest ethical standards were maintained. Research activities resumed after the ethics department addressed the concern and provided guidance.

The ethics department discovered a previously unnoticed requirement for obtaining approval from the Integrated Research Application System (IRAS) to interview individuals currently receiving treatment services for substance use and gambling. This requirement, which had not been previously communicated during the initial ethical review, could not be met within the research project's tight deadlines. As a result, the focus of the research shifted to participants in recovery instead of those who are actively in treatment. This change necessitated a reassessment of the research's scope and objectives, as well as a literature review, to ensure the new approach remained relevant and ethically sound. This adjustment stemmed from the complicated and time-consuming application process of interviewing individuals in treatment environments. Consequently, the research questions were altered, and the recruitment strategy was redesigned to focus on comparing three distinct groups of individuals in recovery.

Additionally, new components were added to the primary research tools to match the updated focus. These additions included questions designed to assess participants' recovery times and interview segments intended to capture participants' perspectives on recovery. This modification delayed the resumption of research until May 2022, resulting in a significant time loss. Nevertheless, the primary data research was finalised on time.

3.10.1 Ethical Good Practice for Avoiding Harm

Ensuring the ethical integrity of research involving human participants is a fundamental aspect of this research's design. The research adhered to established ethical practices aimed at minimising potential harm to participants, safeguarding their wellbeing, and maintaining trust throughout the process.

1. Informed Consent: Participants received clear and comprehensive information regarding the research's objectives, methods, and potential risks. Consent forms were designed to ensure that participants fully understood their involvement, the voluntary nature of their participation, and their right to withdraw at any time without consequence (Miller & Boulton, 2007). This step was crucial for promoting transparency and respecting participants' autonomy.

2. Confidentiality and Anonymity: Strict confidentiality protocols were implemented to protect the identities of participants. All data collected, including survey responses and interview transcripts, was anonymised and stored securely in encrypted formats on university-approved systems (British Psychological Society, 2014). These measures minimised the risk of data breaches and ensured that personal information remained protected throughout and after the research process.

3. Non-Coercive Participation: The recruitment strategy prioritised voluntary involvement, ensuring that participants were not pressured into participation. This approach was crucial given the sensitive nature of the topics explored, such as substance use, gambling, and crime in recovery contexts (Sieber, 2009).

4. Emotional Support and Referral Services: As discussions surrounding addiction, crime, and recovery can provoke distress, participants were notified beforehand about the potential for sensitive topics to arise. The research design incorporated protocols for immediate referral to support services in case participants displayed signs of emotional discomfort during or after their involvement. Offering resources and contacts for professional support formed part of an ethical commitment to reduce emotional harm (Liamputtong, 2007).

5. Minimising Psychological Risk: The interview questions and survey tools were meticulously designed to avoid leading or intrusive queries that might aggravate trauma or discomfort. Special attention was dedicated to framing questions respectfully and conservatively, reflecting participants' lived experiences (Patton, 2015). This was essential for maintaining an environment where participants felt safe sharing their perspectives.

6. Ethical Review and Compliance: The research was thoroughly scrutinised by the University of Derby's ethics committee, both initially and after necessary amendments. This review ensured that all proposed adjustments, such as focusing on participants in recovery, met the highest ethical standards and complied with legal and institutional guidelines for research involving human subjects (Resnik, 2020).

7. Training and Researcher Preparedness: The researcher received training on ethical considerations when working with vulnerable populations. This training encompassed best practices for active listening, recognising signs of distress, and employing strategies to de-escalate potentially sensitive situations. Such preparedness contributed to a responsible approach to data collection (Orb et al., 2001).

By implementing these measures, the research aimed to maintain ethical standards, prioritise participant safety, minimise harm, and create a supportive and respectful research environment. These practices were vital to the research's credibility and the trust and integrity established between the researcher and participants.

3.11 Conclusion

This chapter on methodology details the comprehensive strategy employed to examine the complex connections among gambling, substance use, and criminal behaviour in individuals recovering from these issues. Utilising a mixed-methods approach that combines quantitative surveys with qualitative life narratives, the research aims to fill gaps in the existing academic literature, particularly the scarcity of qualitative-led studies focusing on recovery capital. By integrating structured instruments, such as the GAST-S, TOP, and TCU Forms, with narrative interviews, this research enables a thorough analysis of behaviour prevalence, recovery capital comparisons, and participants' views on causality and definitions of recovery.

This chapter presented a comprehensive rationale for the chosen methods, clarifying the constructivist epistemological stance that underpinned the study and emphasising a participant-centred approach. RQ1 employed a quantitative design to explore prevalence patterns, RQ2 utilised a mixed-methods approach to examine recovery capital, while for RQ3 and RQ4, a qualitative design—grounded in thematic analysis—was employed to explore the complexity of participants' lived experiences and recovery narratives. Additionally, this chapter detailed the sampling strategies, data collection techniques, and analysis methods utilised, with SPSS applied for quantitative data and NVivo used for qualitative thematic analysis. These methodologies support the research's aim of developing a nuanced understanding of behavioural intersections and informing interventions that resonate with participants' lived experiences. Findings from this research will significantly contribute to the broader conversation surrounding addiction and recovery by combining empirical data with rich personal narratives. The strength of this mixed-methods approach guarantees that quantitative data offers statistical relevance. At the same time, qualitative narratives enhance our understanding of the complex nature of recovery capital and its impact on reducing risks and promoting long-term recovery.

The upcoming chapters will detail the findings from the primary research, building on methodologies discussed earlier in this chapter. Chapter 4 will quantitatively address Research Question 1 (RQ1) by analysing the statistical trends found in the GAR, SUR, and SUGAR groups. Chapter 5 will explore Research Question 2 (RQ2) through a mixed-methods approach, integrating both quantitative and qualitative data to provide a deeper understanding of the research outcomes. Lastly, Chapter 6 will focus on Research Questions 3 and 4 (RQ3 and RQ4), utilising qualitative methods to examine the thematic insights from participant interviews. This structured approach will enable a comprehensive analysis of how these findings inform theory, practice, and the development of targeted interventions for addiction recovery.

Chapter 4: RQ1 Prevalence and Prevalence

4.1 Introduction

This chapter explores the prevalence and patterns of gambling, substance use, and crime within a study sample of individuals engaged in three distinct recovery groups: Substance Users in Recovery (SUR), Gamblers in Recovery (GAR), and those in Dual Recovery (SUGAR). These findings are based on non-random, purposively sampled participants and should not be generalised to the broader population. These findings are based on purposive, non-random sampling of participants who self-identified as being in recovery and were recruited through targeted services and networks. As such, the data reflect the experiences of individuals who are already engaged with recovery processes and may differ significantly from those in active addiction or outside of formal support systems. Given the nature of the sampling and the relatively small sample size—particularly within the SUGAR group—it would be inappropriate to generalise these findings to the broader population. By examining these behaviours across a sample of different recovery pathway groups, this chapter addresses Research Question 1 (RQ1), which explores how individuals in different recovery groups engage with gambling, substance use, and crime at various stages of their life journey. Participants were categorised into one of three recovery groups based on self-reported primary recovery focus at the time of survey completion: Substance Users in Recovery (SUR), Gamblers in Recovery (GAR), and individuals managing both substance use and gambling recovery (SUGAR). Participants were categorised into one of three recovery groups based on self-reported primary recovery focus at the time of survey completion: Substance Users in Recovery (SUR), Gamblers in Recovery (GAR), and individuals managing both substance use and gambling recovery (SUGAR). These designations were captured through a mandatory item in the demographic section, where participants identified their current recovery orientation. This classification was based on a mandatory item in the demographic section of the survey, where participants were asked to identify their current recovery orientation. No diagnostic criteria were imposed; instead, participants' definitions and understandings of their recovery status were prioritised. This approach aligns with research emphasising the importance of self-definition in recovery, particularly in recognising the varied,

subjective, and context-dependent nature of what recovery means to individuals (Valentine, 2011). Allowing participants to self-identify reflects standard practices within mutual aid, community, and treatment settings. It supports the study's aim of capturing authentic lived experiences and recovery trajectories from the participant's perspective.
This classification approach reflects real-world self-identification patterns found in mutual aid, community, and treatment settings. It supports the study's objective of understanding behavioural and recovery patterns from the participants' perspectives.

Additionally, it looks to establish whether there are distinct patterns and prevalence levels of co-occurring behaviours among the groups, identifying patterns of engagement and potential risk factors across different recovery trajectories through the following research questions:

1. What is the prevalence of gambling among SUR and SUGAR, substance use among GAR and SUGAR, and criminal behaviour among SUR, GAR and SUGAR?

This analysis identifies significant trends in gambling severity and substance use across various demographics while also considering the broader societal and legal ramifications of the link between addiction and crime. It investigates how different types of addiction affect criminal behaviour, the rates of gambling and substance use in recovery populations, and how these elements influence interactions with the criminal justice system. In this chapter, quantitative survey data and statistical analyses are utilised to examine gambling severity, substance use patterns, and engagement with the criminal justice system across three recovery groups. The research predominantly uses the Problem Gambling Severity Index (PGSI) and the Gamble Aware Screening Tool (GAST) to assess gambling-related harm. The PGSI is a recognised and validated tool for measuring problem gambling severity and is frequently employed in research and clinical environments (Ferris & Wynne, 2001). Conversely, the GAST is a newer tool that lacks full validation; however, it is included in this research due to its potential to capture aspects of gambling harm that the PGSI may overlook. By employing both the PGSI and GAST, this research aims to provide a more comprehensive evaluation of gambling harm, capturing not only severity but also broader psychosocial risks—such as financial strain, family conflict, and emotional distress—that may be underrepresented in conventional tools. While the GAST requires further validation across

diverse populations, its inclusion enables assessment of emerging behavioural risk factors and its potential utility in detecting gambling harm within recovery populations.

Additionally, substance use patterns are analysed based on both lifetime and recent consumption. Criminal involvement is assessed through self-reported arrest histories and the types of offences committed, enabling a comparative examination of how various addiction types correlate with engagement in the criminal justice system. A Kruskal-Wallis H test and post-hoc pairwise comparisons are employed to identify statistically significant differences among groups, providing a robust framework for understanding behavioural patterns in recovery.

This chapter is organised as follows: Section 4.2 briefly restates the methods used for RQ, followed by Section 4.3, which introduces participant profiles, providing a comparative overview of demographic characteristics such as gender distribution, employment status, and recovery timelines. The demographics lay the groundwork for understanding how personal and social factors influence recovery pathways. The subsequent sections systematically address the three core components of RQ1. Section 4.4 begins with an examination of gambling prevalence among the SUR and SUGAR groups, assessing the extent to which gambling behaviours emerge in substance use recovery and the degree of gambling harm experienced by those managing dual recovery. Section 4.5 then shifts to the data on substance use prevalence among the GAR and SUGAR groups, highlighting the role of polydrug use and its impact on recovery trajectories. Finally, Section 4.6 explores the relationship between the groups and crime, identifying key patterns in criminal behaviour, the types of offences committed, and how involvement with the criminal justice system varies across recovery groups.

This chapter provides a comprehensive comparison of gambling severity, substance use, and criminal activity across various groups, offering vital insights into the complexities of addiction recovery. It lays the foundation for understanding how these behaviours can appear in diverse recovery paths. Importantly, by addressing RQ1, the chapter sets the stage for the two subsequent chapters, which will tackle the remaining research questions and further investigate the connections between these recovery groups and their interactions with gambling, substance use, and crime over time, as well as how they perceive and experience recovery. The findings enhance comprehension of the risks tied to cross-addiction, emphasising the necessity for

integrated screening and intervention strategies that cater to both gambling and substance use in recovery contexts. Additionally, analysing crime rates highlights the broader societal effects of addiction and points out opportunities for policy advancement and criminal justice reform. Collectively, these insights establish a foundation for more effective, evidence-based strategies to assist individuals in recovery while reducing the risk of relapse and criminal behaviour. The following section provides a concise recap of the methods used for RQ1.

4.2 Methodology

This section will concisely summarise the methods for RQ1, emphasising the key measures, sampling strategy, and analytical approach. Since the study used a purposive, non-probability sampling method, the findings reflect the experiences of those who chose to participate and should be viewed as illustrative rather than generalisable. The aim is to explore behavioural trends within and across specific recovery groups, rather than to estimate prevalence at the population level. To date, this is the first known study to investigate these three recovery groups collectively using a shared framework, thereby offering a significant foundation for understanding co-occurrence and divergence in recovery trajectories. Restating the methodology is essential for clarity on how gambling severity, substance use patterns, and criminal behaviour were assessed for RQ1, facilitating a more comprehensive understanding of the results. Consequently, reviewing the methodological framework is important, as it improves research clarity and ensures transparency in the comparisons made between the recovery groups.

A quantitative research design addressed RQ1, enabling a structured comparison of behavioural prevalence across recovery cohorts. One hundred and forty surveys were collected from the three recovery groups, with 127 included in the analysis using SPSS. Participants were asked to indicate whether they were recovering from substance use only, gambling only, or both. Based on their responses, they were categorised into one of three mutually exclusive groups: SUR (n = 54), GAR (n = 54), or SUGAR (n = 19). These self-assigned recovery categories served as the primary independent variable in subsequent analyses. No secondary criteria (e.g., PGSI/GAST thresholds or substance use frequency) were used to override self-identification, to preserve ecological validity and participant autonomy. This approach aligns with established

guidance emphasising the importance of allowing individuals to self-define their recovery status (Valentine, 2011), which is particularly significant given the diversity of recovery experiences across behavioural and substance-based addictions.

This method provided a statistical foundation for understanding group-level patterns, identifying significant differences, and directing subsequent qualitative analyses. Participants were recruited through a combination of online recovery forums, social media groups focused on addiction support, and in-person referrals from UK-based recovery organisations and treatment providers. This mixed recruitment strategy aimed to reach individuals at various stages of recovery and from diverse backgrounds, although participation remained voluntary and self-selected. All participants were over 18 years of age and self-identified as being in active recovery from substance use, gambling, or both. Inclusion criteria included the completion of informed consent and identification with one of the three recovery categories (SUR, GAR, or SUGAR). Participants who failed to complete essential sections of the survey or whose responses were inconsistent across core diagnostic tools were excluded. Any participants actively engaged with publicly funded health services, or the criminal justice system were excluded from the study. The survey incorporated validated screening instruments to assess gambling severity, substance use history, and criminal behaviour, with clearly defined reference periods. Gambling behaviour was evaluated over the past 28 days; substance use was assessed both across participants' lifetimes and during the previous 90 days. Criminal involvement was reported based on lifetime arrests, with additional items capturing any engagement with the justice system within the 90 days preceding recovery.

Gambling severity was evaluated using the Problem Gambling Severity Index (PGSI), which categorised participants into risk levels based on their gambling activities. Substance use was assessed through the Treatment Outcomes Profile (TOP), capturing both recent and lifetime substance use patterns. Criminal involvement was measured using the Texas Christian University Criminal History Form (TCU-CH), which documented participants' self-reported arrests, convictions, and probation revocation histories. Additionally, the Gamble Aware Screening Tool (GAST-S2) was utilised to evaluate the financial, psychological, and social harms associated

with gambling. Given the sensitive nature of the collected data, ethical approval was obtained to ensure participant confidentiality and informed consent.

Data analysis was conducted using SPSS to identify trends in prevalence and patterns at the group level. Descriptive statistics were initially calculated to establish baseline frequencies of gambling, substance use, and crime across each recovery group. Given the ordinal and non-normally distributed nature of the data, a Kruskal-Wallis H test was utilised to compare gambling severity, substance use levels, and criminal engagement among the three groups. Where significant differences were found, Dunn's post-hoc tests with Bonferroni corrections were performed to ascertain which groups differed. This statistical approach provided a robust empirical foundation for understanding the extent to which gambling, substance use, and crime intersect across different recovery trajectories. The findings from RQ1 clarified behavioural patterns across SUR, GAR, and SUGAR, offering insights into the prevalence and co-occurrence of addictive behaviours.

4.3 Participant profiles

This section outlines the demographic and recovery characteristics of the 127 participants across the three recovery groups: Substance Users in Recovery (SUR), Gamblers in Recovery (GAR), and those in Dual Recovery (SUGAR). Socio-demographic variables captured included gender, age, employment status, housing situation, and duration of recovery. These characteristics provide contextual insight into behavioural patterns but reflect the profiles of this specific sample. Understanding these profiles is crucial for contextualising the prevalence and patterns of gambling, substance use, and crime discussed in subsequent sections. Key demographic factors such as gender distribution, age, employment status, and recovery duration are analysed to highlight the similarities and differences among the groups. Participants self-identified as being in recovery and reported the duration of their current recovery journey. Recovery duration was recorded as: 'less than 1 year', '1–5 years', '6–10 years', or 'more than 10 years.' This allowed for the analysis of behaviour about the stage of recovery. These groupings align with established recovery milestones proposed by the Betty Ford Institute Consensus Group (2007), which distinguish between early recovery (less than 1 year), sustained recovery (1–5 years), and stable

recovery (5+ years). This framework has been supported by subsequent research demonstrating that the risk of relapse is highest in the first year, declines over time, and drops to approximately 15% for those in recovery for five years or more—comparable to rates in the general population (White, 2007; Best & Laudet, 2010). The duration categories used in this study enable the exploration of behavioural and justice outcomes related to these time-based stages of recovery.

4.3.1 Gamblers in Recovery (GAR) Group

In this research, gamblers in recovery (GAR) are mainly middle-aged, employed men with stable housing and various marital statuses. The largest group, 29.6% (n = 16), are aged 35–44, followed closely by 27.8% (n = 15) aged 25–34, suggesting that gambling-related harm often occurs in early to mid-adulthood. This aligns with research indicating that gambling issues peak during midlife due to financial pressures and psychological impacts (Wardle et al., 2019; Calado & Griffiths, 2016). Most participants are male, accounting for 85.2% (n = 46), supporting studies that men are more likely to gamble problematically and experience harm (Hing et al., 2021; Public Health England, 2021). The highest concentration, 26.0% (*n* = 33), are in **early** recovery, indicating that most are beginning to address their gambling issues. Pickering et al. (2020) suggest that gambling recovery is often nonlinear, with many cycling through initial stages before stabilising, while Sleczka and Romild (2021) note that early recovery is vulnerable to relapse due to fluctuating motivation and financial stress, emphasising the need for consistent support. Ethnically, 73.6% (n = 39) identified as White, reflecting UK gambling demographic trends, but ethnic minorities may be underrepresented in treatment due to cultural barriers (Meier et al., 2020; Wardle et al., 2022). Employment is high, with 64.8% (n = 35) in full-time work, suggesting that many gamblers continue to hold their jobs despite financial difficulties (Gambling Commission, 2021; Hing et al., 2021). Research shows delayed effects on employment, with financial instability developing over time rather than causing immediate job loss (Abbott et al., 2018). Additionally, 77.8% (n = 42) own homes, indicating housing stability, although gambling debt can threaten it (Sharman et al., 2019; Browne et al., 2016). Marital statuses vary, with 35.2% (n = 19) being married, and 31.5% (n = 17) cohabiting, demonstrating

that gambling harm does not always lead to social disconnection, though financial strain and relationship conflicts remain significant (Suomi et al., 2013; Dowling et al., 2016).

This profile reveals that while many recovering gamblers maintain stability, their involvement in recovery services often arises from financial distress, relationship strain, and psychological harm due to gambling. Studies show that financial instability and strained relationships can predict relapse, especially when combined with emotional distress and social isolation (Kovan, 2024; Selvameenatchi et al., 2024). Family dynamics are crucial, as emotional strain may trigger gambling behaviour (Donati et al., 2022). Hidden financial issues can worsen psychological distress, heightening relapse risk (Nower & DiMeglio, 2024). These findings align with the existing literature, which indicates that cover motivation is influenced by financial loss, emotional distress, family issues, and awareness of harm (Best & Lubman, 2012; Hing et al., 2021). Future research should examine the long-term journeys of recovering individuals, focusing on how gambling harm changes and how financial recovery influences wellbeing and relapse risk.

4.3.2 Substance Users in Recovery (SUR) Group

This research suggests that a typical substance user in recovery is a White, middle-aged person who has a full-time job, secure housing, and is equally likely to be male or female. The largest group of participants was aged 35–44 years (37.0%, n = 20), followed by those aged 25–34 (22.2%, n = 12), supporting findings that individuals in their 30s and 40s are most likely to use recovery services due to the cumulative effects of long-term substance use (Best et al., 2017; White, 2009). Unlike gamblers in recovery, the gender ratio was more balanced, with 46.3% (n = 25) identifying as male and 48.1% (n = 26) as female. This trend highlights a growing female presence in substance use recovery services, often linked to the intersection of addiction with trauma, mental health challenges, and caregiving roles (Public Health England, 2021; Orford et al., 2017). A significant majority of participants were White (87.0%, n = 47), aligning with national trends in treatment engagement, though this may also reflect potential access barriers for ethnic minority groups, including cultural stigma and systemic healthcare inequities (Meier et al., 2020; Stevens et al., 2022). The most prominent proportion of individuals (22.0%, n = 28) was in

the stable stage of recovery, indicating a trend towards long-term recovery stability among participants. This finding aligns with recent research showing that individuals in substance use recovery often reach stable recovery stages after sustained treatment and community support, with stable recovery associated with reduced relapse risk and enhanced quality of life (Pickering & Blaszczynski, 2021; LaPlante et al., 2008). Employment rates were notably high, with 66.7% (n = 36) engaged in full-time work, supporting evidence that people in recovery often aim to sustain financial stability and routine as vital parts of their rehabilitation (Best et al., 2016; McQuaid et al., 2017). Housing stability was also evident, with 75.9% (n = 41) owning their homes, indicating that although substance use can contribute to economic hardship, long-term recovery is often linked to improvements in financial and housing security (Neale et al., 2014). While these individuals appear to maintain social and economic stability, their involvement in recovery services is likely influenced by the psychological and relational impacts of substance use, emphasising the need for holistic recovery strategies that address both structural and personal challenges to achieving lasting sobriety.

4.3.3 Substance Users and Gamblers in Recovery (SUGAR) Group

The demographic profile of the SUGAR group reflects a mix of characteristics found in both gambling and substance use recovery populations, highlighting the complexity of co-occurring addictions. Most participants were male (84.2%, n=16), which supports existing research showing a male predominance in dual-diagnosis populations, especially among those experiencing both gambling and substance use disorders (Weinstock et al., 2013; Best et al., 2015). Although the SUGAR group was mainly male, the underrepresentation of women and non-binary individuals may indicate broader structural barriers to accessing dual-diagnosis treatment, as well as gendered differences in gambling and substance use patterns. Research also shows that women and gender-diverse people with co-occurring addictions often face additional challenges, including stigma, trauma histories, and limited access to gender-responsive care (Hing et al., 2021; Public Health England, 2021). These findings emphasise the importance of intersectional approaches that examine how social and structural factors influence recovery experiences across different gender identities.

The age distribution of this group was fairly balanced, with the largest segment comprising participants aged 35–44, at 26.3% (n = 5) and 45–54 at 31.6% (n = 6). This aligns with UK-based studies indicating that midlife is a crucial stage for the increase of co-occurring addictions and the subsequent use of recovery services (Wardle et al., 2019; Public Health England, 2018). The relatively lower numbers of younger and older participants may indicate different treatment-seeking behaviours, where younger individuals tend to engage with services sooner.

In contrast, older individuals might encounter additional barriers, such as stigma or financial difficulties (Neale et al., 2014). A significant 68.4% (n = 13) of participants were employed full-time. This aligns with research highlighting that employment protects recovery by offering financial stability, structure, and social engagement (Neale et al., 2014; Advisory Council on the Misuse of Drugs [ACMD], 2019). However, the task of maintaining employment during dual recovery may introduce additional stressors, as studies show that people with co-occurring disorders frequently experience erratic work patterns due to relapse cycles and mental health challenges (PHE, 2019; ACMD, 2019). Recovery timelines reveal that 57.9% (n = 11) of participants had been in recovery for less than one year, with a smaller segment (36.8%, n = 7) reporting a recovery duration of 1–5 years. The elevated proportion of participants in early recovery accentuates the considerable support demands faced by individuals confronting both gambling and substance use disorders. Existing research on dual-diagnosis populations suggests that co-existing addictions elicit prolonged and complex recovery trajectories, characterised by heightened relapse risks and an augmented need for ongoing, integrated treatment strategies (Grant et al., 2010; Wardle et al., 2019). Housing stability was notable, with 73.7% (n = 14) of participants being homeowners. While homeownership may signify financial stability for a subsection of individuals, existing literature posits that financial challenges stemming from gambling debts and substance use expenditures pose enduring risks of housing instability (Sharman et al., 2019; Browne et al., 2016). This dichotomy suggests that while certain members of the SUGAR group may exhibit financial security, others may conceal latent vulnerabilities that are not immediately discernible through their housing status.

4.3.4 Summary

While the majority of participants were White and employed full-time, this profile aligns with known demographic trends in UK recovery services (Stevens et al., 2022; NHS Digital, 2021) but may also reflect recruitment channels. The underrepresentation of ethnic minorities and those not engaged in formal support may signal access barriers or survey non-completion bias (Bains & Moffat, 2021; Meier et al., 2020). As such, caution should be taken when interpreting these data as indicative of broader population-level patterns. The recovery timelines across the SUR, GAR, and SUGAR groups mirror wider patterns observed in addiction studies. Recovery duration varied across cohorts, with the majority of SUGAR participants in the early phase (less than one year), while the SUR and GAR groups were more evenly distributed. The first 12 months of recovery are frequently identified as a critical period characterised by increased relapse risk and motivational fluctuation (Kelly et al., 2017; Dennis et al., 2007)

The relatively low proportion of participants reporting over ten years in recovery reflects research suggesting that long-term recovery often follows multiple treatment episodes and extended periods of abstinence (Neale et al., 2014; PHE, 2019). For the SUGAR group, the shorter recovery durations highlight the complexities of dual-diagnosis recovery and the necessity for sustained, multifaceted support services (Rush et al., 2008; McGovern et al., 2014). Gender-based patterns—such as male dominance in gambling recovery and a more balanced distribution in substance use recovery—are well documented in both national treatment statistics and community-based studies (Hing et al., 2021; Calado & Griffiths, 2016). Similarly, employment is widely regarded as a key protective factor in recovery maintenance, offering structure, routine, and social capital (Henkel, 2011; Tew et al., 2012). The age profiles of participants also align with UK trends, with mid-adulthood emerging as a common stage for treatment-seeking and engagement with recovery services (Davies et al., 2021; Gambling Commission, 2020).

Together, these findings reinforce the importance of integrated and person-centred recovery services that address both gambling and substance use in a coordinated fashion. Such an approach is especially critical for individuals with dual diagnoses, who often encounter

systemic gaps in service provision and elevated relapse risk (Public Health Scotland, 2023; van der Maas et al., 2021).

4.4 RQ1: Prevalence of Gambling, Substance Use, and Crime Among Recovery Groups

This section aims to answer Research Question 1 (RQ1), which is divided into three key parts: A) *What is the prevalence of gambling among Substance Users in Recovery (SUR) and Substance Users and Gamblers in Recovery (SUAGR)?* B) *What is the prevalence of substance use among Gamblers in Recovery (GAR) and Substance Users and Gamblers in Recovery (SUAGR)?* and C) *What are the patterns and prevalence of crime in all three groups?* This section utilises quantitative data collected through a survey-based tool to address these questions, focusing on the interactions between gambling, substance use, and criminal activity within these populations. The findings from this section are essential for understanding the co-occurrence of these behaviours and their potential impact on the addiction-recovery journey.

Throughout this chapter, the terms 'high', 'moderate', and 'low' prevalence or severity are defined using a combination of validated scale thresholds and statistical group differences. This approach draws from public health and behavioural research, where high prevalence is typically considered to be over 30% of a population, and especially over 50%, while low prevalence denotes fewer than 20–25% of individuals exhibiting a given behaviour (WHO, 2021; Currie et al., 2013). Specifically, this chapter uses the following criteria:

1. High prevalence or severity is indicated when more than 50% of a participant group meets a scale-defined risk category (e.g., PGSI ≥8 or GAST 'high risk'), or when statistically significant differences ($p < .05$) emerge between groups.
2. Moderate prevalence is applied when 25–50% of a group report the behaviour or fall within a 'moderate risk' category.
3. Low prevalence or severity refers to cases where fewer than 25% of a group report the behaviour, or scores predominantly fall within 'no risk' or 'low risk' categories.

These thresholds are not arbitrary but are grounded in both clinical research standards and epidemiological practice. They are applied consistently to aid comparative interpretation across gambling, substance use, and criminal activity within the SUR, GAR, and SUGAR groups.

This section consists of three main parts. First, it investigates the prevalence of gambling among the SUR group, emphasising how individuals recovering from substance use have engaged in gambling behaviours. This focus is important as previous research indicates that those in recovery from substance use disorders may be prone to cross-addiction, where one addictive behaviour, like gambling, replaces another (Kim et al., 2011; Hodgins et al., 2011). Furthermore, analysing lifetime gambling patterns in this group is crucial for pinpointing key intervention opportunities, enabling earlier intervention and targeted support to reduce escalating gambling behaviours. This strategy corresponds with studies highlighting the intricate relationship between substance use and gambling disorders over time, as well as the advantages of coordinated screening and early intervention (Barnes et al., 2015; Dowling et al., 2017). The section then looks at the prevalence of substance use among the GAR and SUGAR groups. It evaluates how individuals recovering from gambling issues also turn to substance use, specifically focusing on how the dual nature of addiction complicates recovery. Prior studies suggest that those with gambling disorders. This section will examine the patterns and prevalence of crime among three groups: SUR, GAR, and SUGAR. There is a notable connection between addiction and criminal behaviour, as individuals often resort to illegal activities to support their addictions or due to behaviours intensified by substance use or gambling (Turner et al., 2009; Fazel et al., 2009). We will conduct a comparative analysis of the types of crimes associated with each group, highlighting financial crimes among gamblers and substance-related offences among those with substance use issues. This analysis is crucial as it features the broader societal effects of addiction and provides insights into how criminal justice systems might improve their engagement with these populations.

This section addresses essential gaps in the academic literature regarding the interplay of gambling, substance use, and crime among recovery populations. Many studies in this area tend to isolate substance use or gambling, resulting in a lack of understanding about how these behaviours intersect during recovery (Cunningham-Williams et al., 2000). Moreover, the connection between crime and recovery from dual addiction- especially for those dealing with both gambling and substance use disorders- has not been thoroughly examined (Smith & Simpson, 2011). The insights from this section could guide the creation of more precise primary,

secondary, and customised intervention strategies that tackle the distinct challenges faced by those in recovery from substance use, gambling, or both. By uncovering the prevalence and trends of gambling, substance use, and criminal behaviour in these populations, public health and criminal justice systems can devise more effective strategies for triage, relapse prevention, long-term recovery support, and reduced recidivism (Rash et al., 2016; Grant & Chamberlain, 2017).

4.4.1 Gambling Severity Among the SUR and SUGAR Groups

This section examines gambling severity among Substance Users in Recovery (SUR) and individuals in the Substance Use and Gambling Recovery (SUGAR) groups. It assesses not only the prevalence but also the patterns and manifestations of gambling behaviours during substance use and dual recovery. This includes whether gambling occurred in isolation or socially, and the extent to which gambling served as a coping mechanism for emotional distress or financial hardship. Using the Problem Gambling Severity Index (PGSI) and the Gambling Assessment Severity Tool (GAST), this research highlights differences in gambling severity between the groups. It explores whether gambling is a secondary or co-occurring addiction. A Kruskal-Wallis H test, combined with post-hoc pairwise comparisons, is utilised to identify statistically significant differences, providing insights into gambling prevalence and risk levels within these recovery groups. The findings begin with an overview of PGSI and GAST scores, illustrating gambling severity levels and their effects on recovery. This is followed by a comparative analysis of the two tools, assessing their effectiveness in capturing gambling-related harm beyond mere severity indicators. By mapping gambling severity patterns, this section enhances understanding of cross-addiction risks and underscores the need for integrated screening and intervention strategies to support long-term recovery.

Problem Gambling Severity Index

This section explores participants in the Substance Use Recovery (SUR), Gambler in Recovery (GAR), and Dual Recovery (SUGAR) groups, measured by the Problem Gambling Severity Index (PGSI). A Kruskal-Wallis test revealed a statistically significant effect of group

membership on gambling severity, H (2) = 89.06, p < .001. Post-hoc pairwise comparisons (Bonferroni-adjusted) indicated that participants in the SUGAR group had significantly higher gambling severity scores compared to those in the SUR group (p < .001), as did participants in the GAR group compared to SUR (p < .001). However, no significant difference was found between the SUGAR and GAR groups (p = 1.000). These findings align with expectations and suggest that the survey tool is valid, but further research is needed to validate it fully.

These findings highlight the critical need for primary interventions targeting gambling behaviours, particularly to enable effective triage earlier in the recovery process. The presence of gambling behaviours within the SUGAR group calls attention to the importance of screening individuals presenting with substance use disorders (SUR) for potential co-occurring gambling disorders. Early identification of dual addictions is essential, as it ensures that individuals with overlapping challenges are not overlooked or misdiagnosed, which could delay or complicate their recovery journey. Addressing gambling-related difficulties at the outset can streamline support pathways by providing tailored interventions that account for the compounded impact of dual addictions. This approach optimises resource allocation and enhances treatment effectiveness by targeting both behaviours simultaneously, reducing the likelihood of relapse and improving long-term recovery outcomes. Furthermore, tailored intervention strategies are crucial in reducing the compounded risks observed in dual recovery populations, where gambling severity aligns closely with individuals in gambling-specific recovery.

Table 3 PGSI Pairwise comparison between participants

Sample 1-Sample 2[14]	Test Statistic	Std. Error	Std. Test Statistic	Sig.	Adj. Sig. [a]
substance user in recovery-gambler in recovery	-60.611	7.021	-8.633	<.001	.000
substance user in recovery-both	-64.903	9.731	-6.670	<.001	.000
gambler in recovery-both	-4.291	9.731	-.441	.659	1.000

a. Each row tests the null hypothesis that the Sample 1 and Sample 2 distributions are the same, where the independent variable is the participant type, and the dependent variable is gambling severity. Asymptotic significances (2-sided tests) are displayed. The significance level is .050.

b. Significance values have been adjusted using the Bonferroni correction for multiple tests.

Table 4 : Descriptive overview of gambling severity among SUR

PGSI Severity			no gambling severity	low gambling severity	medium gambling severity	high gambling severity	Total
Cohort Type	SUR	Count	32	15	4	3	54
		% within Are you engaging as	59.3%	27.8%	7.4%	5.6%	100.0 %
	GAR	Count	0	0	2	52	54
		% within Are you engaging as	0.0%	0.0%	3.7%	96.3%	100.0 %
	SUGAR	Count	0	0	2	17	19
		% within Are you engaging as	0.0%	0.0%	10.5%	89.5%	100.0 %
Total		Count	32	15	8	72	127
		% within Are you engaging as	25.2%	11.8%	6.3%	56.7%	100.0 %

a. The independent variable is the participant type, and the dependent variable is gambling severity.

SUR

The SUR group demonstrated the lowest overall gambling severity, with 59.3% (n=32) scoring in the 'no-risk' category on the PGSI. However, 40.7% (n = 22) exhibited some level of gambling severity. These findings indicate that while most participants in SUR exhibit low gambling risk, a notable minority remains vulnerable to gambling-related harm, particularly those in the low and medium severity categories. Without targeted intervention, these individuals may be at risk of escalating gambling behaviours, aligning with research that even low-severity gambling can lead to significant harm over time (Dowling et al., 2017).

GAR

The GAR group, comprising 54 participants in gambling-specific recovery, demonstrated a markedly different profile. None of the participants reported no or low gambling severity, with the majority of 96.3% (n = 52) falling into the high-severity category. Only 3.7% (n = 2) were classified as medium severity gamblers, indicating a concentrated pattern of severe gambling

behaviours. This finding reflects the entrenched challenges faced by individuals in this group, emphasising the need for intensive and specialised interventions.

SUGAR

The SUGAR group, consisting of 19 participants managing both substance use and gambling recovery, exhibited a gambling severity profile closer to the GAR group than to the SUR group. None of the participants reported no or low gambling severity, while 10.5% (n = 2) fell into the medium severity category. The vast majority, 89.5% (n = 17), were classified as high-severity gamblers, underscoring the compounded challenges faced by individuals with co-occurring substance use and gambling addictions.

Summary

The gambling severity patterns observed across the three groups highlight distinct challenges each population faces. In the SUR group, the majority of participants (59.3%, n=32) reported no gambling severity, suggesting that problematic gambling behaviours are less prevalent in this group compared to the others. However, 27.8% (n=15) were classified as having low gambling severity, 7.4% (n=4) as medium severity, and 5.6% (n=3) as high severity, indicating that gambling-related harm remains a concern for a subset of substance users in recovery. In contrast, gambling severity was markedly higher among the GAR and SUGAR groups. Within the GAR group, 96.3% (n=52) of participants were classified as having high gambling severity, with only 3.7% (n=2) in the medium severity category, reinforcing the high prevalence of gambling-related harm within this population. Similarly, among the SUGAR group, 89.5% (n=17) were categorised as having high gambling severity.

In comparison, 10.5% (n=2) reported medium severity, suggesting that individuals recovering from both gambling and substance use disorders face considerable gambling-related harm. These findings are consistent with research by Dowling et al. (2017), which highlights that even low-severity gambling can lead to financial, social, and psychological harm over time. The presence of gambling-related harm among the SUR group reinforces the need for screening and intervention strategies within substance use recovery settings to prevent escalation. The

exceptionally high levels of gambling severity within the GAR and SUGAR groups highlight the importance of tailored interventions that address the specific needs of individuals experiencing gambling harm, particularly those with co-occurring substance use disorders.

Despite the similarities between the GAR and SUGAR groups in terms of gambling severity, an important distinction lies in the presence of medium-severity gamblers in the SUGAR group. This slightly broader distribution suggests that co-occurring substance use may moderate gambling severity patterns, creating a more complex recovery landscape for individuals in dual recovery. Research supports this observation, indicating that co-occurring substance use and gambling addictions exacerbate recovery challenges through cross-addiction mechanisms (Cowlishaw, 2014; Kim et al., 2021). Cross-addiction may result in gambling behaviours replacing or intensifying substance use, further complicating recovery efforts and increasing the risk of relapse (Dermody et al., 2024; Sinclair & Sussman, 2021). Hodgins and Wild (2016) highlight that co-occurring substance-related and behavioural addictions increase relapse vulnerability, as addictive behaviours often serve as coping mechanisms in dual-diagnosis populations. Moreover, research by Kim and Hodgins (2021) calls attention to the prevalence of addiction substitution in recovery, revealing that individuals recovering from one addiction are at heightened risk of developing another, further complicating long-term recovery strategies. These findings align with observations of gambling severity patterns in the GAR and SUGAR groups. However, data from the SUR group indicate a need for further exploration, particularly regarding the nuanced dynamics of cross-addiction and its implications for treatment planning and relapse prevention (Sarginson, 2023).

Notably, the presence of individuals with low to medium gambling severity within a substance use recovery demographic may reveal an often-ignored aspect of recovery services. Recent studies stress that gambling behaviours are frequently under-evaluated in substance use recovery programs, resulting in care gaps and missed chances for early intervention (Arnevik et al., 2024; Clune et al., 2024). The literature addresses the necessity for comprehensive screening tools that combine assessments of gambling behaviours with evaluations of substance use disorders to enhance treatment outcomes (van der Sterren et al., 2023; Lind et al., 2024). Without

these integrated assessments, recovery systems may overlook co-occurring gambling behaviours, potentially jeopardising long-term recovery success (Armoon et al., 2023; Moreira et al., 2024).

These results emphasise the importance of tailored interventions for each group. For the SUR group, incorporating gambling-focused assessments and early interventions into substance use recovery programs could help identify and address gambling risks at an earlier stage, potentially preventing progression to more severe Behaviours. For the GAR and SUGAR groups, where severe gambling behaviours are the norm, specialised and intensive interventions are critical to tackling the entrenched nature of gambling addiction. The findings for the SUGAR group underscore the need for integrated recovery frameworks that address both gambling and substance use challenges simultaneously. Primary intervention strategies that identify dual recovery needs early are crucial in streamlining support pathways and improving outcomes for these populations.

Analysis of GAST Scores

This section examines gambling severity across the Substance Users in Recovery (SUR) and Substance Use and Gambling Recovery (SUGAR) groups, measured using the Gamble Aware Survey Tool (GAST). Group membership, categorised as SUR and SUGAR, serves as the independent variable, while the GAST score represents the dependent variable, reflecting gambling severity levels. A Kruskal-Wallis test was conducted to evaluate differences in gambling severity between the groups. Results revealed a statistically significant effect of group membership on GAST scores, $H(2) = 96.677$, $p < .001$. These findings indicate that the distribution of gambling severity significantly differs across the groups, which is explored further in the following pairwise comparisons table.

Table 5: GAST pairwise comparison

Sample 1-Sample 2	Test Statistic	Std. Error	Std. Test Statistic	Sig.	Adj. Sig. [a]
SUR-SUGAR	-57.063	9.134	-6.247	<.001	.000
SUR-GAR	-61.519	6.590	-9.335	<.001	.000
SUGAR-GAR	4.456	9.134	.488	.626	1.000

a. Each row tests the null hypothesis that the Sample 1 and Sample 2 distributions are the same, where the independent variable is the participant type, and the dependent variable is gambling severity. Asymptotic significances (2-sided tests) are displayed. The significance level is .050.
b. Significance values have been adjusted using the Bonferroni correction for multiple tests.

Participants in the SUGAR group demonstrated significantly higher gambling severity than those in the SUR group ($p < .001$). Additionally, the SUR group exhibited substantially lower gambling severity compared to the dual recovery group ($p < .001$). No significant differences were observed between the SUGAR and dual recovery groups ($p = .626$). These results suggest that individuals engaged in dual recovery or gambling recovery experience heightened levels of problematic gambling Behaviours compared to those focused solely on substance use recovery. The descriptive statistics further highlight differences in gambling severity between the Substance Users in Recovery (SUR) and Substance Use and Gambling Recovery (SUGAR) groups, measured using the Gamble Aware Survey Tool (GAST).

Table 6: Gambling-related harm severity levels amongst cohorts

GAST Severity							Total
			no risk	low risk	medium risk	high risk	
Are you engaging as	SUR	Count	32	18	1	3	54
		% within Are you engaging as	59.3%	33.3%	1.9%	5.6%	100.0%
	GAR	Count	0	0	3	51	54
		% within Are you engaging as	0.0%	0.0%	5.6%	94.4%	100.0%
	SUGAR	Count	0	0	2	17	19
		% within Are you engaging as	0.0%	0.0%	10.5%	89.5%	100.0%
Total		Count	32	18	6	71	127
		% within Are you engaging as	25.2%	14.2%	4.7%	55.9%	100.0%

a. Each row tests the null hypothesis that the Sample 1 and Sample 2 distributions are the same, where the independent variable is the participant type, and the dependent variable is gambling severity. Asymptotic significances (2-sided tests) are displayed. The significance level is .050.
b. Significance values have been adjusted using the Bonferroni correction for multiple tests.

Among participants in the SUR group (N = 54), the mean GAST score was 7.04 (SD = 11.92), indicating low overall gambling severity. Most individuals in this group (59.3%, N = 32) fell into the *no-risk* category, suggesting minimal engagement in problematic gambling Behaviours. However, a notable minority (33.3%, N = 18) were classified as *low risk*, highlighting the potential for emerging gambling issues. Additionally, 7.4% (N = 4) of SUR participants reported *medium-to-high* gambling severity, reflecting some variability within the group despite the lower mean score. In stark contrast, participants in the GAR group (N = 54) exhibited significantly higher levels of gambling severity, with a mean GAST score of 47.96 (SD = 5.28). Notably, most GAR participants (94.4%, N = 51) were categorised as *high risk*, emphasising the acute and widespread nature of gambling problems within this group. The narrow standard deviation further indicates less variability, underscoring the severity and consistency of gambling behaviours among gamblers in recovery.

Table 7: GAST mean scores by cohort group with a standard deviation

	Mean	N	Std. Deviation
SUR	7.0370	54	11.91632
GAR	47.9630	54	5.27709
SUGAR	46.3158	19	6.83986
Total	30.3150	127	21.96451

a. The independent variable is the participant type, and the dependent variable is gambling severity.

Similarly, the SUGAR group (N = 19) showed increased gambling severity, with a mean GAST score of 46.32 (SD = 6.84). Most participants in the SUGAR group (89.5%, N = 17) were classified as *high-risk*, while a smaller proportion (10.5%, N = 2) fell into the *medium-risk* category. These findings indicate that individuals in dual recovery—those dealing with both substance use and gambling Behaviours—experience similarly high levels of gambling severity as those in the GIR group. However, the slightly more significant variability in scores suggests a degree of heterogeneity in the gambling experiences of individuals within the SUGAR group. When comparing the groups, clear patterns emerge. The SUR group reported the lowest gambling severity overall, with minimal engagement in problematic gambling behaviours,

though the presence of individuals at low and medium risk warrants attention. In contrast, participants in the GAR and SUGAR groups reported significantly higher gambling severity, with the majority falling into the *high-risk* category. These findings emphasise the acute challenges faced by individuals in gambling recovery and those managing co-occurring substance use and gambling addictions.

The implications of these results are significant for triage and intervention strategies. For the SUGAR group, tailored programmes that address the unique challenges of dual recovery are essential. Integrating gambling-specific therapies into traditional substance use recovery frameworks can help mitigate the compounded risks of co-occurring addictions. For the SUR group, where gambling severity is lower overall, preventive strategies and continuous monitoring are key to identifying early signs of gambling Behaviours before they escalate. The presence of 33.3% of SUR participants in the *low-risk* category suggests that cross-addiction remains a potential risk within this population, even if the immediate severity is less pronounced.

In summary, the notable differences in gambling severity among the SUR, GAR, and SUGAR groups illustrate the specific recovery paths and obstacles encountered by individuals in each category. While the SUR group exhibits a lower overall gambling severity, the GAR and SUGAR groups show the urgent need for targeted interventions. These results highlight the importance of thorough screening processes to accurately identify group membership and any potential co-occurring addictions. Without effective screening, individuals who appear to be in the SUR group may go unrecognised as SUGAR, and those in the GAR group might be entirely missed, resulting in lost chances for intervention. To manage the variability and seriousness of gambling behaviours, especially regarding dual recovery, tailored, comprehensive strategies will be essential to achieve favourable outcomes for those in recovery.

Comparison of PGSI and GAST Scores

This section provides a comparative analysis of gambling severity scores assessed through the Problem Gambling Severity Index (PGSI) and the Gambling Assessment Severity Tool (GAST) across two key groups: Substance Users in Recovery (SUR) and Substance Use and Gambling

Recovery (SUGAR) participants. While both measures serve to quantify gambling-related risks, they also provide nuanced insights into the broader psychosocial, emotional, and financial impacts of gambling behaviour, particularly among recovery populations.

The analysis showed significant consistencies in gambling severity between the PGSI and GAST scales within the SUR group, where a majority of participants (59.3%, n = 32) reported *no-risk* levels on both assessments. This correlation reinforces PGSI's reliability and validity in identifying individuals facing lower levels of gambling-related harm (Ferris & Wynne, 2001; Currie et al., 2013). In contrast, for the SUGAR group, incorporating GAST scores offered a more nuanced perspective on gambling-related harm that transcended PGSI classifications. Although PGSI categorized a notable segment of SUGAR participants as *low-risk* gamblers, GAST scores uncovered significant psychosocial ramifications that PGSI did not specifically address. For example, 26.3% (n = 5) of SUGAR participants reported that gambling led to "quite a lot" of stress in their families. Similarly, 31.6% (n = 6) indicated that gambling negatively impacted their overall well-being. These findings resonate with Hodgins et al. (2011), who contend that even low-severity gambling can produce significant psychosocial effects, particularly among those with co-occurring substance use disorders. Additionally, research by Cowlishaw et al. (2014) emphasizes that individuals with dual diagnoses are at greater risk for compounded gambling-related harms, including disruptions in family dynamics and quality of life, which conventional measures like PGSI may not fully capture.

In contrast, some studies have suggested that PGSI alone provides sufficient insight into gambling severity, particularly in general populations (Currie et al., 2009). However, this argument may not hold in recovery contexts, where broader psychosocial dimensions play a significant role. The SUGAR group's GAST responses highlight the need for multidimensional measures beyond severity thresholds to assess gambling's emotional and familial impact (Williams & Volberg, 2014). Financial harm emerged as a distinguishing factor between the SUR and SUGAR cohorts. Within the SUR group, financial consequences were minor, with 96.3% (n = 52) reporting *no gambling-related debt*. A small minority (3.7%, n = 2) reported moderate financial difficulties, consistent with prior research suggesting that substance use recovery populations exhibit lower gambling severity (Toneatto & Millar, 2004). In stark

contrast, the SUGAR group reported markedly higher financial impacts, where 15.8% (n = 3) reported moderate gambling-related debt. One individual disclosed experiencing substantial financial hardship, including loss of savings and household instability. These findings reflect the compounding burden of co-occurring substance use and gambling disorders, a phenomenon extensively documented in the literature. Lesieur and Blume's (1987) foundational research emphasised the cyclical relationship between gambling, financial harm, and stress. More recently, Petry et al. (2005) demonstrated that financial instability exacerbates stress and can trigger relapse, especially in dual-recovery populations. The financial consequences observed among SUGAR participants reinforce the need for integrated treatment approaches that include financial counselling as a core component of recovery programs. However, while financial impacts are significant, Shaffer et al. (2004) caution that self-reported financial harm may be underreported in recovery populations due to stigma or limited insight into personal finances. This potential underreporting highlights the importance of using validated tools like GAST to elicit detailed financial and psychosocial impacts in treatment settings. The statistical analyses further substantiated these findings. A Kruskal-Wallis H test revealed significant differences in gambling severity across three recovery groups—SUR, SUGAR, and Gamblers in Recovery (GAR)—on both PGSI and GAST measures: PGSI: $H(2) = 89.06$, $p < .001$ vs. GAST: $H(2) = 101.15$, $p < .001$. Post-hoc pairwise comparisons highlighted a gradient in gambling severity, with GAR participants exhibiting significantly higher gambling severity scores than both the SUR ($p < .001$) and SUGAR ($p < .001$) groups. On the other hand, the SUGAR group demonstrated significantly higher scores than the SUR group ($p < .001$).

These results are consistent with prior findings that individuals in gambling recovery (GAR) exhibit heightened gambling severity compared to dual-diagnosis or substance-focused recovery groups (Petry et al., 2005; Slutske et al., 2010). The intermediate position of the SUGAR group supports arguments made by Dowling et al. (2015), who emphasise the need to assess gambling severity on a continuum, acknowledging that individuals managing multiple addictions may experience fluctuating patterns of harm. The findings carry significant implications for clinical practice, policy development, and future research. Specifically, they highlight the limitations of using a single measure, such as PGSI, to assess gambling severity in

populations with co-occurring substance use disorders. The complementary use of multidimensional tools, such as GAST, provides a more comprehensive understanding of gambling harm's emotional, familial, and financial dimensions (Williams & Volberg, 2014; Hodgins et al., 2011).

For the SUGAR group, the data calls attention to the necessity of integrated treatment programmes that address both substance use and gambling-related harm. Key components of such programmes should include psychosocial interventions to alleviate family stress and improve overall well-being and financial counselling to mitigate gambling-related debt and prevent economic instability from undermining recovery efforts. In contrast, while the SUR group exhibited lower gambling severity overall, the presence of participants in the *low-risk* and *moderate-risk* categories highlights the need for proactive screening and monitoring. Continuous assessment of emerging gambling behaviours is critical to preventing cross-addiction and ensuring holistic recovery outcomes (Shaffer et al., 2004; Petry, 2007).

In addition to financial difficulties, both SUR and SUGAR participants reported psychosocial impacts related to gambling. Among SUR participants, only 3.7% (n=2) reported significant stress or anxiety due to gambling. However, 15.8% (n=3) of SUGAR participants reported elevated levels of stress, and 10.5% (n=2) indicated relationship problems due to gambling. These findings suggest that SUGAR participants may experience more profound emotional and social consequences from their gambling behaviours. The higher prevalence of psychosocial issues among SUGAR participants is consistent with the literature on dual recovery, which suggests that managing multiple co-occurring addictions can increase stress and create added barriers to recovery (Hodgins et al., 2011). The emotional toll of both substance use and gambling recovery necessitates interventions that address mental health support, stress management, and strengthening family relationships.

The GAST scores for both the SUR and SUGAR cohorts provide critical insights into the severity of gambling behaviours and their broader psychosocial impacts. While most participants in both cohorts exhibited low or no gambling severity, the SUGAR group showed a higher prevalence of gambling-related risk. The inclusion of questions about family impact and well-being in the GAST scale revealed that even low-risk gambling can have significant consequences

for individuals managing multiple addictions. The data presented in Table 5.6 below focuses on the responses to the Problem Gambling Severity Index (PGSI), a validated tool designed to assess the severity and impact of gambling behaviours across different populations (Ferris & Wynne, 2001). The analysis examines how individuals in three groups—Gamblers in Recovery (GAR), Substance Users in Recovery (SUR), and those in Dual Recovery (SUGAR)—engage with and are affected by gambling-related behaviours. The PGSI assesses key dimensions of gambling behaviours, including financial strain, escalating behaviours to achieve the same level of excitement, and attempts to recover losses through further gambling. It also evaluates emotional and social consequences, such as self-perceived gambling issues, health impacts (e.g., stress and anxiety), financial difficulties, and external criticism from others (Currie et al., 2013).

The analysis highlights the variability in gambling severity and its associated impacts. The findings accentuate the importance of comparing responses across the three groups to identify gambling-related issues, as individuals may seem to belong to one group (e.g., SUR) while simultaneously experiencing unrecognised co-occurring gambling problems (Weinstock et al., 2011). Failure to identify gambling behaviours can lead to untreated secondary addictions, exacerbating challenges in recovery, particularly for those in dual recovery settings (Petry et al., 2013). The PGSI (Problem Gambling Severity Index) and GAST (Gambling Assessment Severity Tool) summary charts illustrate gambling severity and behaviour patterns across the three cohort groups. A Kruskal-Wallis test was conducted for each question within the PGSI and GAST, as these scores are ordinal, making this test appropriate for comparing multiple independent groups. The dependent variables were the PGSI and GAST scores for each question, reflecting different dimensions of gambling severity, while the independent variable was group membership (SUR, GAR, or SUGAR). Post-hoc pairwise comparisons were adjusted for multiple testing to identify specific group differences where statistical significance was observed. These results are displayed in the two tables below:

Table 8: PGSI Individual question Kruskal Wallis test scores, sig level with pairwise test results of gambling patters between groups

Question	Group Comparison (Test Statistic)	Significance (p-value)	Key Findings from pairwise test
Bet more than you could afford to lose?	47.478	<0.001	GAR; SUR lowest reported behaviour.
Needed to gamble with more significant amounts of money for excitement?	55.265	<0.001	GAR and SUGAR report higher stakes required; SUR has minimal impact.
Gambled another day to recover lost money?	65.758	<0.001	GAR reports frequent loss-chasing behaviour, which is moderate in SUGAR.
Borrowed money or sold items to gamble?	63.064	<0.001	Borrowing is most common in GAR, moderate in SUGAR, and minimal in SUR.
Do you feel you might have a gambling problem?	62.431	<0.001	More significant self-identified gambling problems in GAR and SUGAR.
Gambling caused health issues (e.g., stress, anxiety)?	67.261	<0.001	Health impacts are prominent in GAR and SUGAR; SUR is minimal.
Did people criticise your gambling Behaviour?	50.096	<0.001	GAR participants were heavily criticised; SUGAR was moderate, and SUR was rare.
Gambling caused financial issues?	72.491	<0.001	GAR faces the most significant financial harm; SUGAR is moderate, and SUR is minimal.
Felt guilty about gambling Behaviour?	73.99	<0.001	GAR reports significant guilt; SUGAR is less, and SUR is minimal.

a. Each row tests the null hypothesis that the Sample 1 and Sample 2 distributions are the same, where the independent variable is the participant type, and the dependent variable is gambling severity. Asymptotic significances (2-sided tests) are displayed.
b. The significance level is .050
c. Significance values have been adjusted using the Bonferroni correction for multiple tests.

Table 9: GAST Kruskal Wallis test scores, sig level, with pairwise test results summary of gambling patterns between groups

Question	Group Comparison (Test Statistic)	Significance (p-value)	Key Findings
Bet more than you could afford to lose?	55.936	<0.001	Significant differences: SUR has a lower risk than SUGAR and GAR.
Needed to gamble with more significant amounts of money to get excitement?	56.192	<0.001	SUGAR and GAR required higher stakes; SUR significantly lower.
Gambled another day to win back money lost?	77.32	<0.001	GAR is significantly more likely to chase losses; there is moderate risk for SUGAR.
Borrowed money or sold something to gamble?	77.587	<0.001	GAR and SUGAR had notable borrowing behaviour; SUR was minimal.
Do you feel you might have a gambling problem?	88.427	<0.001	GAR and SUGAR report higher self-identified gambling problems.
Gambling caused health problems (e.g., stress, anxiety)?	91.955	<0.001	Health-related impacts are highest in GAR, followed by SUGAR.
Did people criticise your gambling Behaviour?	79.993	<0.001	Peers heavily criticised GAR participants; SUGAR was moderate.
Gambling caused financial problems?	80.089	<0.001	GAR and SUGAR report more significant financial harm, which is minimal in SUR.
Felt guilty about gambling Behaviour?	77.519	<0.001	Higher guilt was reported in GAR, some in SUGAR, and some in SUR, which was minimal.
Amount of money spent on gambling in last 28 days	69.842	<0.001	GAR spent more than SUR and SUGAR.
Has gambling adversely affected family relationships?	77.659	<0.001	Family impact is significant for SUGAR and GAR less in SUR.
Gambling adversely affected well-being?	103.25	<0.001	SUGAR reports moderate impacts, which are highest in GAR.

a. Each row tests the null hypothesis that the Sample 1 and Sample 2 distributions are the same, where the independent variable is the participant type, and the dependent variable is gambling severity. Asymptotic significances (2-sided tests) are displayed.
b. The significance level is .050
c. Significance values have been adjusted using the Bonferroni correction for multiple tests.

Analysis of item-level responses from both the PGSI and GAST instruments revealed distinct behavioural profiles. Participants in the SUGAR and GAR groups frequently endorsed loss-chasing behaviours, borrowing money to gamble, and experiencing conflict with family due to gambling. In contrast, the SUR group more commonly exhibited low-frequency gambling in social settings. These behavioural distinctions are critical, as solitary and high-frequency gambling are known to be associated with more severe psychological harm and poorer recovery outcomes (Browne et al., 2016; Hing et al., 2021). This comparative analysis of PGSI and GAST scores highlights essential differences in gambling severity and related harms among recovery populations. While PGSI successfully identifies severity thresholds, GAST offers more comprehensive insights into the psychosocial and financial effects of gambling, especially for those in dual recovery. These results emphasise the necessity for integrated, multidimensional assessments and targeted interventions to meet the complex needs of recovery populations. By including these tools in standard screenings, clinicians can enable early identification of gambling-related issues and deliver personalised, person-centred care that supports lasting recovery outcomes.

4.4.2 Prevalence of Substance Use among GAR and SUGAR Groups

In response to *RQ1B: What is the past and current prevalence of substance use among gamblers in recovery and those in dual recovery groups?* The analysis of the Gamblers in Recovery (GAR) group revealed notable patterns of both lifetime and recent substance use.

Lifetime Use

Among the 73 respondents in this group, 12.3% (n=9) reported lifetime alcohol use, aligning with existing research that emphasises alcohol's role as a coping mechanism for emotional distress in individuals with gambling disorders (Petry, 2005; Rash et al., 2016). Additionally, lifetime use of crack cocaine and cocaine powder was reported by 5% (n=2) and 4.8% (n=2) of the GAR participants, respectively. These figures are slightly lower than what is commonly observed in similar studies, where stimulant use tends to be more prevalent among those with gambling disorders (McCormick et al., 2014). Notably, lifetime cannabis use within the GAR

group was reported by only 3.2% (n=1), significantly lower than what has been found in other studies of individuals with co-occurring gambling and substance use disorders (Cunningham-Williams et al., 2000). This low prevalence of cannabis use might suggest demographic or programmatic factors influencing the GAR population, potentially reflecting the independent nature of some gambling addictions that are not intertwined with substance use.

In contrast, the Substance Use and Gambling Recovery (SUGAR) group demonstrated significantly higher rates of substance use. Among individuals engaged in both substance use and gambling recovery, 32% (n=14) reported lifetime alcohol use, a figure that was significantly higher than that observed in the GAR group. Furthermore, 19.2% (n=8) of SUGAR participants reported lifetime use of crack cocaine, while 16.7% (n=7) reported lifetime cocaine powder use, both figures exceeding the GAR group's prevalence rates by a notable margin. This finding suggests a strong intersection between gambling and substance use disorders in the SUGAR group, with stimulant use playing a more central role. Cannabis use was also markedly higher in the SUGAR group, with 18.6% (n=8) reporting lifetime use, further highlighting the relationship between polydrug use and co-occurring addictions. This elevated use of cannabis is consistent with research that identifies cannabis as a common substance used to manage the psychological stress of dual recovery (Grant et al., 2004; Smith & Simpson, 2011).

Last 90 days

In terms of recent (last 90 days) substance use, out of the 16 GAR respondents, 68.8% (n=11) reported alcohol consumption. This high prevalence is consistent with findings in the literature, indicating that alcohol continues to be used as a coping mechanism even during recovery, potentially complicating efforts and increasing the risk of relapse (Abbott et al., 2018). Tobacco use was also reported by 15.7% (n=9) of GAR participants, a substance often linked with other addictive behaviours, particularly in gambling populations (Smith & Simpson, 2011). Additionally, 1.6% (n=1) of GAR participants reported recent use of cocaine powder and amphetamines, highlighting the continued, albeit low, engagement with these substances during recovery.

When examining recent substance use in the last 90 days, the data once again reflected higher engagement with substances among the SUGAR group. Alcohol consumption was

reported by 81.3% (n=13) of SUGAR participants, a significantly higher rate compared to the GAR group. Moreover, 22.4% (n=7) of SUGAR respondents reported recent tobacco use, again surpassing the rates observed in GAR. While fewer participants reported recent cannabis and stimulant use, the rates in SUGAR were still higher than in GAR, with 6.1% (n=2) reporting cannabis use and 4.3% (n=1) reporting cocaine powder or amphetamine use. A Kruskal-Wallis H test was conducted to determine if there were statistically significant differences in substance use behaviours across the GAR and SUGAR groups. The results indicated significant differences in substance-related problems, particularly for alcohol ($p < .001$), cannabis ($p = .030$), and stimulant use ($p = .048$), with the post-hoc comparison suggesting that individuals in the SUGAR group were more likely to engage in substance use than those in the GAR group. Post-hoc pairwise comparisons using Bonferroni corrections further confirmed that the SUGAR group exhibited significantly higher rates of cannabis and stimulant use compared to the GAR group, with an adjusted p-value of .025 for cannabis use. Effect size calculations revealed a moderate eta-squared value of 0.12 for cannabis use, indicating that group membership accounted for a substantial portion of the variance in substance use behaviours across the two groups.

The data collected for *RQ2B: What is the past and current prevalence of substance use among gamblers in recovery and those in dual recovery groups?* Shows a significant difference in substance use patterns between the GAR and SUGAR groups, with the latter showing a higher prevalence of both lifetime and recent substance use. These findings emphasise the need for integrated treatment approaches that address both gambling behaviours and substance use disorders, particularly for individuals with co-occurring addictions. Effective recovery frameworks should incorporate strategies to manage polydrug use, offering comprehensive support to individuals navigating the complexities of dual recovery (Grant et al., 2004; Rash et al., 2016).

4.4.3 Crime Types and Criminal Justice Engagement Among SUR, GAR, and SUGAR

Understanding the relationship between addiction and criminal behaviour requires examining how individuals in recovery from different types of addictions—Substance Users in Recovery

(SUR), Gamblers in Recovery (GAR), and those with both Substance Use and Gambling Recovery (SUGAR)—interact with the criminal justice system.

4.4.3.1 Criminal Justice Engagement Across Groups

A Kruskal-Wallis H test was used to evaluate the differences in criminal justice involvement, precisely the total number of arrests, among the three groups. The test revealed a statistically significant difference in the number of arrests across the SUR, GAR, and SUGAR groups, $H(2) = 6.44$, $p = .040$. This finding suggests that arrest rates differ significantly between these groups. Post-hoc pairwise comparisons using the Bonferroni correction were conducted to investigate these differences further. The post-hoc analysis results revealed that the arrest rates for the SUR group were significantly higher than those for the GAR group (adjusted $p = .038$). However, no significant difference was found between the SUR and SUGAR groups or between the GAR and SUGAR groups. These findings suggest that substance use recovery, particularly in the SUR group, is associated with higher levels of criminal justice involvement due to the well-documented relationship between substance abuse and crime (Gossop et al., 2000). On the other hand, the GAR group's lower arrest rates may reflect the distinct nature of gambling-related crimes, which are less likely to result in frequent arrests compared to drug-related offences.

4.4.3.2 Arrest History and Incarceration

A closer look at arrest history provides additional insights. Among all participants, 44.9% (n = 57) reported no prior arrests. A Kruskal-Wallis H test for the number of arrests revealed significant differences between the groups, $H(2) = 8.26$, $p = .016$. Post-hoc comparisons revealed that the SUR group had significantly higher arrest rates before the age of 18 compared to the GAR group (adjusted $p = .007$). This finding highlights an earlier onset of criminal behaviour in individuals with substance use disorders, often linked to early exposure to drugs and criminal environments. When it came to incarceration rates, 83.3% (n=45) of GAR participants reported no history of incarceration, compared to 75.9% (n=41) of SUR participants and 63.2% (n=12) of SUGAR participants. Although these percentages suggest a trend, the Kruskal-Wallis H test for lifetime incarceration rates did not yield statistically significant

differences between the groups, H (2) = 3.33, p = .189. This result suggests that while arrest rates may vary, incarceration does not differ significantly across these groups due to the types of crimes committed (i.e., substance-related crimes vs. financial crimes) and how the criminal justice system handles them.

4.4.3.3 Types of Crimes Committed

The analysis also revealed differences in the types of crimes committed by the SUR, GAR, and SUGAR groups. The initial Kruskal-Wallis test revealed significant differences between the groups in terms of the types of crimes committed, H(2) = 11.20, p = .004. Post-hoc pairwise comparisons showed that public intoxication was significantly more frequent in the SUR group compared to the GAR group (adjusted p < .001). In contrast, the GAR group had a lower involvement in substance-related crimes, with financial crimes such as forgery and fraud being the most reported offences. This finding is consistent with research indicating that gamblers often resort to financial crimes out of desperation due to gambling losses (Turner et al., 2009; Williams et al., 2005). The SUGAR group presented the most diverse criminal profiles, reporting higher rates of drug-related offences compared to the other two groups. A Kruskal-Wallis H test indicated significant differences in drug use offences across the groups, H (2) = 10.63, p = .005. Post-hoc comparisons revealed that drug use arrests were significantly higher in the SUGAR group compared to both the SUR and GAR groups (adjusted p = .003). This finding supports the idea that individuals with co-occurring substance use and gambling disorders are more likely to engage in a broader range of criminal activities, including both financial and substance-related offences (Dowling et al., 2016).

4.4.3.4 Criminal Justice Engagement within 90 Days Before Recovery

An analysis of recent criminal justice involvement (within the 90 days preceding entry into recovery) revealed that most participants had no recent arrests. A Kruskal-Wallis H test for arrests in the last six months revealed no significant differences between the groups, H (2) = 2.75, p = .253. However, a small percentage of SUR participants (3.7%, n=2) and SUGAR participants (5.3%, n=1) reported recent arrests, suggesting that substance use continues to be

associated with ongoing legal issues, even as individuals transition into recovery (Håkansson & Jesionowska, 2018).

4.4.3.5 Lifetime, Recent and Revocation History

The Kruskal-Wallis test was used to evaluate differences across three groups: Substance Users in Recovery (SUR), Gamblers in Recovery (GAR), and individuals engaging in Both Recovery Pathways (Both). Below are the key findings:

Table 10: Lifetime, recent and revocation history Kruskal-Wallis with key insights between the groups

Variable	Median	Test Statistic (H)	p-value	Decision	Key Insights
LCI (Lifetime Criminal Involvement)	14.000	6.589	0.037	Reject Null Hypothesis	Significant differences in LCI medians across groups, with pairwise differences not significant after Bonferroni correction.
RCI (Recent Criminal Involvement)	10.000	3.401	0.183	Retain Null Hypothesis	No significant differences in RCI medians across groups.
RVH (Revocation History)	10.000	7.602	0.022	Reject Null Hypothesis	Significant differences in RVH medians, with the SUR vs. GAR pair showing significance even after Bonferroni correction.

a. Each row tests the null hypothesis that the Sample 1 and Sample 2 distributions are the same, where the independent variable is the participant type, and the dependent variable is gambling severity. Asymptotic significances (2-sided tests) are displayed.
b. The significance level is .050
c. Significance values have been adjusted using the Bonferroni correction for multiple tests.

Lifetime Crime Involvement (LCI)

The median LCI score was 14.000. The test indicated a significant difference across the groups ($p = .037$), suggesting that levels of minor criminal activity vary depending on the recovery background (Dennison et al., 2021). Pairwise comparisons showed that gamblers in recovery differed from substance users in recovery, with an adjusted p-value of .083 after Bonferroni correction. This finding aligns with research indicating that individuals with gambling histories

may exhibit distinct behavioural patterns compared to those in substance use recovery alone (Dennison et al., 2021).

Recent Crime Involvement (RCI)

The median RCI score was 10.000. No significant difference was found across the groups (p = .183), implying that habitual criminal behaviours may not differ between individuals recovering from gambling and those recovering from substance use. This result mirrors findings suggesting that the regularity of criminal actions often correlates more with overarching social and economic factors than specific types of addiction recovery backgrounds (Best et al., 2016).

Revocation History (RVH)

The median RVH score was 10.000, and the test revealed a significant difference (p = .022). Pairwise analysis indicated a notable distinction between substance users in recovery and gamblers in recovery (p = .023), suggesting differing rates or circumstances of engagement in revocation history. Additionally, the comparison between gamblers in recovery and those identifying as both showed a near-significant adjusted p-value (p = .054). These findings align with studies emphasising that individuals with dual histories of substance use and gambling may exhibit unique patterns of high-risk behaviour due to compounded stressors associated with dual addictions (Gupta et al., 2021).

Table 11: Pairwise comparisons of criminal involvement and revocation history across recovery groups (GAR, SUR, SUGAR)

Variable (Dependent Variable)	Comparison (Independent Variable)	Test Statistic	p-value	Adjusted p-value (Bonferroni)	Significance
LCI (Lifetime Criminal Involvement**)**	Gambler vs. Substance User	4.856	0.028	0.083	Not Significant
LCI (Lifetime Criminal Involvement**)**	Gambler vs. Both	1.67	0.196	0.589	Not Significant
LCI (Lifetime Criminal Involvement**)**	Substance User vs. Both	0.226	0.634	1.0	Not Significant
RCI (Recent **Crim**inal **I**nvolvement**)**	Substance User vs. Gambler	3.03	0.082	0.245	Not Significant
RCI (Recent **Crim**inal **I**nvolvement**)**	Substance User vs. Both	0.854	0.355	1.0	Not Significant

RCI (Recent **Crim**inal **I**nvolvement**)**	Gambler vs. Both	0.087	0.768	1.0	Not Significant
RVH (Revocation History**)**	Substance User vs. Gambler	7.083	0.008	0.023	Significant
RVH (Revocation History**)**	Substance User vs. Both	0.004	0.95	1.0	Not Significant
RVH (Revocation History**)**	Gambler vs. Both	5.608	0.018	0.054	Not Significant

a. Each row tests the null hypothesis that the Sample 1 and Sample 2 distributions are the same, where the independent variable is the participant type, and the dependent variable is gambling severity. Asymptotic significances (2-sided tests) are displayed.
b. The significance level is .050
c. Significance values have been adjusted using the Bonferroni correction for multiple tests.

Overall, these results contribute to understanding crime engagement among different recovery populations, supporting research emphasising variability in behavioural outcomes based on recovery type (Holt-Lunstad et al., 2020). The significant differences, particularly in RVH, call attention to the complexity of factors influencing behaviour post-recovery, highlighting the necessity for tailored intervention strategies that consider specific recovery histories to effectively address varying levels of criminal involvement (Cambridge Handbook of Forensic Psychology, 2022).

4.5 Conclusion

This section addressed *(RQ1),* which focused on three key areas: A) the prevalence of gambling among Substance Users in Recovery (SUR), B) the prevalence of substance use among Gamblers in Recovery (GAR) and those in Dual Recovery (SUGAR), and C) the patterns and prevalence of crime across all three groups. This chapter has provided a comprehensive quantitative analysis of the prevalence of gambling, substance use, and crime across the three recovery groups: Substance Users in Recovery (SUR), Gamblers in Recovery (GAR), and those in Dual Recovery (SUGAR). By examining the distribution of these behaviours, the findings highlight key distinctions in the ways these groups engage with addiction-related harm, reinforcing the importance of tailored intervention strategies.

These findings contribute to an evolving body of knowledge around co-occurring addictions at a time when gambling-related harm is receiving renewed policy attention in the UK. The 2023 Gambling White Paper (DCMS, 2023) acknowledges the need for better integration of gambling into addiction treatment pathways, yet current service structures remain fragmented. By comparing behavioural risks and justice engagement across three recovery groups, this study supports the case for integrated triage and cross-addiction screening in both clinical and criminal justice settings.

The analysis of gambling prevalence among the SUR group found that, while most individuals reported low or no gambling severity, a subset exhibited moderate-to-high gambling severity, indicating a potential risk for cross-addiction within substance use recovery (Ledgerwood & Petry, 2010). This finding aligns with research suggesting that individuals in substance use recovery may develop secondary behavioural addictions, such as gambling, as an alternative coping mechanism (Gavriel-Fried et al., 2020). The presence of gambling risk, even in a group primarily focused on substance recovery, highlights the need for dual screening measures in treatment settings to ensure that gambling behaviours do not go undetected.

In contrast, the findings revealed that substance use was significantly more prevalent among the SUGAR group, with individuals recovering from both gambling and substance use reporting higher rates of lifetime and recent substance use. These findings are consistent with studies indicating that polydrug use is more common among those with multiple addictive behaviours, making recovery more complex and increasing the risk of relapse (Grant & Chamberlain, 2017). The GAR group, by comparison, exhibited lower levels of substance use, reinforcing the idea that gambling and substance use disorders follow distinct yet occasionally overlapping pathways (Hodgins et al., 2011).

Regarding criminal behaviour, the findings demonstrate that crime prevalence varied across groups, with each group engaging in different forms of criminal activity. The SUGAR group exhibited the highest levels of both substance-related and financial crime, reflecting the compounded challenges of managing two co-occurring addictions. The GAR group was more frequently associated with economic crimes, supporting previous research that links problem gambling with financial desperation, fraud, and theft (Turner et al., 2009; Rash et al., 2016).

Meanwhile, the SUR group had higher rates of drug-related offences, aligning with studies showing that individuals with substance use disorders often become entangled in the criminal justice system due to drug possession or distribution charges (Håkansson & Jesionowska, 2018).

This chapter has established the prevalence of gambling, substance use, and crime within different recovery trajectories, offering a purely quantitative analysis of how these behaviours manifest across the three groups. The findings reinforce that recovery is not a uniform process, as each group faces unique risks and challenges, requiring more targeted intervention strategies. Furthermore, the data highlights the critical need for early and integrated screening approaches, as individuals may present as belonging to one recovery group while simultaneously exhibiting behaviours associated with another (e.g., individuals in SUR unknowingly engaging in high-risk gambling behaviours).

Table 12: Summary of answers to RQ1

Behaviour	Prevalence
Gambling Prevalence in SUR	**Yes** (but low levels, small subset at risk)
Substance Use Prevalence in GAR	**Yes** (but not widespread)
Gambling and Substance Use in SUGAR	**Yes** (high prevalence of both)
Crime in SUR	**Yes** (higher rates of drug-related offences)
Crime in GAR	**Yes** (primarily financial crimes)
Crime in SUGAR	**Yes** (highest crime prevalence; both substance-related and financial crimes)

Having explored prevalence through a quantitative lens and established that behaviours are prevalent among the groups, the next section will shift towards a mixed-methods approach, integrating qualitative and quantitative data to explore recovery capital. This transition will enable a more in-depth examination of the structural, social, and personal resources that influence recovery outcomes, highlighting both protective and risk factors (Best & Laudet, 2010). The next chapter will move beyond numerical prevalence rates to explore the similarities and differences in the lived experiences of recovery, aiming to offer richer insights into how

different recovery groups navigate addiction, sustain long-term change, and interact with broader societal structures. This shift is crucial, as quantitative data alone cannot fully capture the complexities of addiction recovery, particularly concerning social support networks, economic stability, and treatment engagement (Cloud & Granfield, 2008). By bridging quantitative findings with qualitative insights, the upcoming section will provide a more holistic understanding of addiction recovery, ensuring that the experiences of individuals in SUR, GAR, and SUGAR groups are captured in a way that informs both policy and clinical practice.

Chapter 5 RQ2: Similarities and Differences in Recovery Capital

5.1 Introduction

This chapter expands on Chapter 4's findings related to gambling, substance abuse, and crime among SUR, GAR, and SUGAR, focusing on recovery capital—the resources that support or impede sustained recovery. While Chapter 4 quantified behaviours, it did not explore the underlying factors affecting recovery outcomes. Therefore, this chapter provides a contextual understanding of recovery capital, addressing Research Question 2 (RQ2): *What are the similarities and differences in recovery capital among SUR, GAR, and SUGAR?* Using a mixed-methods approach, it combines quantitative analysis with qualitative narratives to examine recovery capital across different addiction pathways. Quantitative data compares personal, social, and community capital, while qualitative data offers insights into participants' experiences, including challenges and coping strategies that numbers alone cannot capture (Best, Irving, & Albertson, 2017). The chapter systematically discusses three key components of recovery capital:

1. Personal Capital — Internal resources like emotional regulation, psychological resilience, and physical health (Cloud & Granfield, 2008; Laudet & White, 2008).
2. Social Capital — Support networks such as family, friends, and recovery communities that influence recovery outcomes (Best & Laudet, 2010).
3. Community Capital — Structural resources like healthcare, housing, employment, and legal support that impact long-term recovery prospects (Neale et al., 2016).

This structure, which covers individual to societal factors, thoroughly explores how recovery capital functions within different addiction pathways. While the quantitative analysis shows notable differences among groups, the qualitative data provides additional depth, especially in the SUGAR group, where smaller sample sizes reduce statistical significance. By combining detailed narratives with numerical trends, the chapter highlights subtle yet important variations in recovery experiences (Cloud & Granfield, 2008; Laudet & White, 2008).

5.2 Methodology

This section uses a convergent parallel mixed-methods design (Creswell & Plano Clark, 2017), where quantitative and qualitative data are collected and analysed separately but combined during interpretation. The aim is to investigate similarities and differences in recovery capital among individuals involved in Substance Use Recovery (SUR), Gambling Addiction Recovery (GAR), and Dual Recovery (SUGAR), thereby addressing Research Question 2 (RQ2): What are the similarities and differences in recovery capital among SUR, GAR, and SUGAR?

The quantitative data were collected from 127 survey participants: 54 from SUR, 54 from GAR, and 19 from SUGAR. The survey examined key areas of recovery capital, including psychological wellbeing, social support, housing stability, employment status, and involvement with the justice system. Due to the non-normal distribution of the data and unequal group sizes, non-parametric Kruskal-Wallis (KW) tests were used to identify statistically significant differences between groups. However, the small sample size in the SUGAR group (n = 19) limited the statistical power to detect all potentially important differences.

To address the limitations of the SUGAR group and broaden the analysis, the qualitative component includes 26 interviews from three recovery groups: 10 from the SUR group, 10 from the GAR group, and six from the SUGAR group. These semi-structured interviews investigated participants' experiences with addiction and recovery, highlighting themes such as emotional resilience, social connections, systemic barriers, and challenges specific to the SUGAR group. Thematic analysis was guided by the recovery capital framework outlined in Chapter 3 (Cloud & Granfield, 2008; Laudet & White, 2008), focusing on how personal, social, and community

resources can influence recovery from the perspectives of different recovery groups and how there are similarities and differences in recovery capital between the groups.

Data integration was achieved through side-by-side comparison and joint interpretation within each primary domain of recovery capital. For each thematic area, quantitative findings were initially presented, followed by qualitative narratives that provided context, deeper insight, or at times diverged from the statistical results. This approach enabled triangulation of data and ensured that participants' voices were not overshadowed by overarching trends (Fetters, Curry, & Creswell, 2013). By adopting this mixed-methods approach, the study offers a comprehensive understanding of recovery capital, highlighting both measurable trends and nuanced experiences. Notably, the qualitative component was vital in capturing the complexity of dual addiction within the SUGAR group, whose challenges were often underrepresented in statistical comparisons. This design not only bolsters the validity of the findings but also aligns with ethical commitments to prioritise lived experiences in recovery research (Hennessy, 2017).

5.3 Personal Capital

Personal capital encompasses individuals' internal resources during their recovery, including psychological resilience, emotional regulation, physical health, and adaptive behaviours (Cloud & Granfield, 2008; Laudet, 2008). This section examines how these facets of personal capital manifest in Substance Use Recovery (SUR), Gambling Addiction Recovery (GAR), and Dual Recovery (DR) groups, analysing both quantitative and qualitative data to identify commonalities and divergences across the groups. The findings emphasise the complex role of personal capital in addiction recovery, highlighting both shared challenges and unique barriers that reflect the distinct nature of each group’s addiction.

5.3.1 Psychological Quality of Life

Quantitative findings from the Kruskal-Wallis (KW) test indicated no significant differences in psychological quality of life across the three groups ($H(2) = 2.45$, $p = 0.287$). This suggests a comparable baseline of psychological distress among participants in the Substance Use Recovery (SUR), Gambling Addiction Recovery (GAR), and Dual Recovery (SUGAR) groups. However,

this statistical parity conceals key experiential differences in how psychological distress is lived and managed.

Qualitative narratives uncovered specific psychological struggles linked to each addiction pathway. Emotional difficulties—such as anxiety, stress, and managing cravings—were frequently reported across all three groups, although their causes and progressions varied. In the SUR group, emotional pain often originated from unresolved trauma, which participants described as a trigger for substance use. One participant stated, *"I drank because I could not handle the sadness... every time something bad happened, drinking was the only thing that helped me forget"* (SUR5). This aligns with trauma-informed views, where substance use acts as a maladaptive way to cope with psychological pain, often due to a lack of personal recovery resources like emotional resilience (Harris & Fallot, 2001; Cloud & Granfield, 2008).
GAR participants also reported using addiction as a means of regulating psychological distress. One participant described gambling as an escape mechanism:

> *I gambled to escape from the stress and panic attacks. It felt like a release at first, like everything slowed down and I didn't have to think about what was going wrong. I wasn't sleeping, I was anxious all the time, but when I was gambling, I could block it all out—even just for a bit. The problem was that once the losses started piling up, the stress worsened, and I had to gamble more just to cope with it. It became a cycle I couldn't get out of* (GAR1)

This narrative shows how behavioural addictions can act as maladaptive emotional regulation strategies, temporarily easing anxiety while reinforcing compulsive behaviour through negative reinforcement (Baker et al., 2004; Skinner, 1953). The participant's dependence on gambling to manage internal distress aligns with cognitive–behavioural models of addiction, which highlight the role of dysfunctional beliefs, impulsivity, and learned coping mechanisms in sustaining addictive behaviours (Sharpe, 2002; Toneatto, 2002). The increasing nature of the behaviour, described as a "cycle," reflects the emotionally vulnerable subtype identified in the pathways model, where mood disorders and chronic stress are key to gambling-related harm (Blaszczynski & Nower, 2002). Additionally, the participant's account supports elements of self-medication

theory, which suggests that individuals may turn to addictive behaviour to lessen psychological pain when more adaptive coping strategies are lacking (Khantzian, 1997).

While both SUR and GAR participants turned to addiction to manage internal discomfort, the underlying stressors differed: SUR narratives commonly referenced trauma, loss, and emotional dysregulation (Laudet, 2008), whereas GAR participants more frequently cited chronic stress from financial instability and relational strain (Dowling et al., 2016). Despite these differences, both groups demonstrate how addiction functions as a short-term emotional buffer that ultimately worsens psychological vulnerability, emphasising the need for early mental health interventions tailored to addiction type and underlying emotional drivers.

SUGAR participants described complex psychological struggles, with addiction serving both as a coping mechanism and a cause of further distress. One participant explained, *"Both gambling and alcohol helped me escape when things got bad, but they just made everything worse in the long run"* (SUGAR3). Another echoed this dual struggle:

> *It was like I was fighting two battles in my head all the time—one to stop drinking and the other to stop chasing wins. When I was down from losing money, I'd drink to numb it. When I was hungover or ashamed from drinking, I'd gamble to distract myself. It just kept feeding itself, and no one seemed to understand how both were connected* (SUGAR7)

These accounts demonstrate how co-occurring behavioural and substance addictions can interact in a self-perpetuating cycle, where efforts to manage emotional pain through one behaviour worsen the other. This dynamic reflects the idea of negative reinforcement in addiction theory, where individuals persist in using substances or behaviours to escape psychological discomfort despite deteriorating outcomes (Baker et al., 2004). The interaction of emotional dysregulation, compulsive behaviour, and shame not only heightens psychological distress but also diminishes various aspects of recovery capital—particularly psychological and social resources—leaving individuals increasingly isolated and overwhelmed (Best et al., 2015; Laudet & White, 2008).

The absence of significant group differences in quantitative measures conceals the complexity of dual recovery, emphasising the importance of qualitative insights in capturing lived experience. The cyclical nature of dual addiction described by participants aligns with the

cumulative disadvantage framework, which highlights how layered vulnerabilities—such as trauma exposure, stigma, and fragmented care—accumulate over time, restricting access to support and exacerbating recovery disparities (Grant et al., 2010; Van den Berk-Clark et al., 2024). Moreover, these experiences support Khantzian's (1997) self-medication hypothesis, where substances and behaviours are used to soothe underlying psychological pain, especially in the absence of integrated mental health support. In this context, recovery is not merely about abstaining from two behaviours; it involves reconstructing self-regulation, identity, and help-seeking within systems often ill-equipped to address complex comorbidities. Further illustrating the emotional burden of addiction, a SUR participant reflected:

> *I started drinking to cope with trauma. I'd lost people close to me, and there were things I went through that I couldn't talk about—so I drank to silence it all. At first it worked. I could sleep, I didn't feel as anxious, but it didn't take long before I was drinking just to feel normal. Eventually, it wasn't me choosing to drink—it was like I had to* (SUR3)

Another described a persistent lack of emotional control:

> *I was constantly stuck between feeling numb or completely overwhelmed—there was no middle ground. I either shut everything out or I broke down. Drinking was the only way I knew to manage it. I hated what it did to me, but it felt like the only thing that worked* (SUR7)

These reflections reveal how emotional dysregulation—where feelings become either overwhelming or entirely suppressed—can lead to self-medication through substance use (Khantzian, 1997; Berking & Lukas, 2015). The failure to tolerate distress without external numbing demonstrates the collapse of internal coping strategies, a key aspect of reduced psychological recovery capital (Laudet & White, 2008). These experiences also underscore how trauma and unresolved loss can remain hidden drivers of dependency, with alcohol used to stabilise what participants described as a volatile inner world.

Among GAR participants, psychological distress often stemmed from life stressors and financial pressures rather than trauma. Gambling emerged as a temporary emotional refuge. One participant explained:

> *I gambled to forget everything else. The stress about bills, work, letting people down—it all disappeared when I was gambling. It gave me a kind of focus, like nothing else mattered. But when it was over, reality would hit me like a brick, and the stress would be worse than before* (GAR4)

Another described the emotional impact of repeated losses:

> *Every time I lost money, it felt like I lost a piece of myself. I'd look in the mirror and not even recognise who I was anymore. But I kept going back, thinking maybe if I won, things would be okay again. It sounds stupid now, but in the moment, it felt like the only way out* (GAR6)

These accounts reflect the emotionally anaesthetising function of gambling—initially used to reduce anxiety and avoid painful thoughts, but ultimately reinforcing distress through shame and financial loss. This dynamic aligns with negative reinforcement models of addiction (Baker et al., 2004) and with the emotionally vulnerable pathway in Blaszczynski and Nower's (2002) gambling pathways model, which links mood disturbance and poor coping to problematic gambling behaviour.

Across both groups, the emotional fallout from addiction was also evident in participants' expressions of shame and damage to identity. Moral emotions such as guilt, self-blame, and secrecy were recurring themes, reinforcing social withdrawal and making recovery feel inaccessible. One participant reflected, *"I didn't just lose money—I lost myself. I lied to everyone. I let people down over and over again, and after a while, I started to believe I didn't deserve to get better"* (GAR10). Shame, as research has shown, is a potent inhibitor of self-efficacy and a predictor of relapse (Tangney et al., 2007; Luoma et al., 2012). These narratives point to a profound erosion of self-concept, where addiction is no longer just a behaviour but a lens through which the self is experienced. This collapse in psychological capital, particularly self-worth and internal motivation, illustrates how emotional pain—unaddressed—becomes both the origin and the outcome of addiction (Best et al., 2015; White & Cloud, 2008). Despite differences in addiction type, participants in both groups shared a familiar trajectory: the pursuit of emotional escape at the cost of identity, agency, and connection.

System-level failures in identifying gambling-related psychological distress emerged as a recurring theme. One GAR participant reflected:

> *I kept going to the doctor for stress and anxiety, but no one ever asked me about gambling. I didn't think it was relevant until everything spiralled out of control. I'd be shaking, unable to sleep, feeling like I was losing my mind—but every time it was just another prescription for anxiety. Looking back, I think I was asking for help without saying the word 'gambling' because I didn't know it was part of the problem* (GAR10)

This quote demonstrates how the psychological effects of gambling harm are often overlooked or misunderstood in healthcare environments. The hidden nature of gambling reflects gaps in standardised screening procedures and a clinical tendency to ignore behavioural addictions when there is no substance misuse (Orford et al., 2003; Wardle et al., 2019; Hing et al., 2022). These oversights delay interventions and hinder access to recovery options, particularly for individuals whose symptoms—such as anxiety or insomnia—conceal underlying gambling-related issues. This disconnect between clinical presentation and diagnostic focus underscores the vulnerability of community recovery resources, where the accessibility and responsiveness of systems directly shape recovery paths (Cloud & Granfield, 2008). In the justice system, a similar pattern of delayed recognition was evident. One GAR participant recounted:

> *It wasn't until I got arrested that anyone asked me if I had a gambling problem. By then, I'd already lost everything—my job, my home, my family. If someone had just asked earlier—at work, or the GP, or even at the bank when I was maxing out cards—maybe it wouldn't have got that far. But no one sees gambling until it explodes* (GAR8)

This narrative highlights a missed opportunity for early intervention and supports Braithwaite's (1989) theory of reintegrative shaming, which advocates for justice responses that restore rather than punish. When addiction remains undetected, punitive measures often reinforce shame and disconnection—undermining recovery capital and increasing social exclusion (Maruna & King, 2009; Farrall & Maruna, 2004). The lack of formal recognition can delay meaningful

engagement with services, while criminalisation without rehabilitation reduces the chances of sustained recovery (Best et al., 2022).

For SUGAR participants, this lack of identification was compounded by fragmented recognition across systems. One participant described the partial nature of their engagement:

> *I got help for my drinking because it was obvious—people can see when you're drunk. But no one talked about my gambling. That just carried on in the background, getting worse, but it never came up, not even in treatment. It was like only half of me was getting help* (SUGAR4)

This account highlights the difficulties of navigating systems that treat addiction in isolation, failing to consider dual diagnoses. Participants described moving between services that focus solely on either substance use or gambling, with neither fully addressing the intersection of their struggles. The outcome was a fragmented and often insufficient response—one that disrupted continuity of care and left gaps in both assessment and support. These experiences strengthen the case for integrated triage pathways across healthcare and justice sectors, where co-occurring behavioural and substance addictions are recognised as interconnected and treated simultaneously (Van den Berk-Clark et al., 2024; Best et al., 2016; Livingston et al., 2021). Ultimately, these stories reveal significant weaknesses in both personal and community recovery resources. When systems do not identify or address addiction holistically, individuals remain unsupported at crucial intervention points, limiting their ability to actively participate in recovery opportunities and increasing the risk of harm.

In summary, although the Kruskal-Wallis test showed no statistically significant differences in psychological quality of life across the three groups, the qualitative data uncovered profound differences in how psychological recovery capital is depleted, experienced, and restored across addiction pathways. These differences reflect not only individual suffering but also the wider relational and systemic contexts that shape recovery journeys. SUR participants often described long-term trauma, affective instability, and internalised shame, demonstrating how chronic adversity can fracture emotional resilience. This aligns with Khantzian's (1997) self-medication hypothesis, where substance use is seen as an attempt to manage dysregulated affect, but ultimately worsens psychological distress. Their stories revealed the vulnerability of personal

recovery capital, especially when co-occurring health issues and disrupted social ties increase fragility. On a micro level, these findings highlight the importance of trauma-informed, person-centred interventions that support affect regulation and repair of self-concept.

In contrast, GAR participants showed how gambling, although less visible in public health and clinical frameworks, also functions as an emotion-numbing strategy. Their experiences of psychological distress were often linked to financial strain, secrecy, and the delayed onset of shame—consistent with negative reinforcement models of behavioural addiction (Baker et al., 2004) and the emotionally vulnerable pathway in the pathways model (Blaszczynski & Nower, 2002). These accounts highlight the importance of recognising gambling not only as a financial behaviour but as a deeply emotional and relational disorder that needs early detection, mental health integration, and emotional literacy support. At a systemic level, the lack of formal recognition of gambling within healthcare pathways presents a macro-level blind spot, limiting access to timely care.

SUGAR participants, managing both substance and gambling addiction, described the most intense psychological strain. Their experiences were marked by cumulative trauma, emotional exhaustion, and identity fragmentation—highlighting how dual addiction drains psychological resources across various areas. These findings align with the cumulative disadvantage framework (Grant et al., 2010) and the concept of intersectional stigma, which emphasises how individuals with multiple marginalised identities (e.g., substance use and behavioural addiction) face layered discrimination across services (Earnshaw et al., 2013). This dual burden not only indicates individual coping breakdowns but also reveals the structural misalignment of support systems, demonstrating structural vulnerability (Quesada et al., 2011), where policy and service gaps actively perpetuate harm.

The experiences of SUGAR participants emphasise the limitations of fragmented systems in providing coherent, dual-focused care. Their partial recognition within services—for example, receiving support for alcohol use while gambling remains unnoticed—reflects systemic segmentation in treatment commissioning and professional training. These findings highlight a pressing need for integrated triage protocols, improved inter-agency collaboration, and holistic

treatment models that recognise the interdependence of substance and behavioural addictions (Van den Berk-Clark et al., 2024).

The justice system's role in recognising and responding to psychological distress also emerges as a key macro-level theme. Drawing on Braithwaite's (1989, 2001) theory of reintegrative shaming, the data suggest that punitive legal responses—especially in cases of unrecognised addiction—can worsen shame and hinder recovery engagement. In contrast, restorative approaches that acknowledge harm while promoting reintegration may aid in rebuilding psychological and social capital. Overall, these findings strengthen the explanatory power of the recovery capital framework (Cloud & Granfield, 2008; Laudet & White, 2008), demonstrating that psychological capital is not only an individual resource but also socially and structurally influenced. Combining recovery capital with trauma theory, behavioural addiction models, and critical structural perspectives allows for a more comprehensive understanding of psychological distress in addiction recovery.

5.3.2 Physical Quality of Life

The Kruskal-Wallis (KW) test revealed no significant differences in physical quality of life between the groups (H (2) = 1.69, p = 0.485), suggesting that all groups experienced similar self-reported physical health challenges during the addiction-to-recovery journey. However, the qualitative data reveal distinct causes and experiences of these physical health issues across the recovery groups. Qualitative data provided critical insights into these variations, highlighting how physical deterioration is experienced and understood differently across the SUR, GAR, and SUGAR groups.

Among SUR participants, physical health deterioration was a defining feature of the recovery journey, closely tied to the long-term physiological effects of alcohol and opioid use. One participant shared:

> *Years of heavy drinking have wrecked my liver. I've been sober for a while now, but the damage is done—I still go for check-ups, and there's always something else*

> *wrong. It's like I'm carrying the consequences with me, no matter how hard I try to move on* (SUR3)

Such reflections illustrate how physical symptoms not only persist after substance use ceases but also become part of the daily reality of living in recovery. Participants frequently described chronic conditions—such as liver disease, heart problems, and pain syndromes—that both stemmed from and reinforced cycles of substance use. These narratives are consistent with clinical literature documenting the cumulative and degenerative impact of prolonged alcohol and drug use on multiple organ systems (Rehm et al., 2013; Degenhardt et al., 2018). Another participant reflected on the embodied legacy of addiction: *"Even after I got sober, my body still felt broken. I had no energy, and my immune system was shot. I'm not using anymore, but I feel like I'm still paying the price"* (SUR7). This sentiment reflects how physical recovery lags behind behavioural change, and highlights the unevenness of the recovery process—where abstinence does not always equate to restored health. The lingering effects of substance use on physical functioning underscore the interconnectedness of physical and psychological recovery capital (Best et al., 2015). In many cases, deteriorating health also acted as a tipping point, prompting engagement with treatment services after acute episodes such as hospitalisation or medical crisis. However, as several participants noted, this engagement was often reactive and temporary—reflecting ongoing issues with fragmented follow-up care and a lack of continuity in addiction-informed health services (Neale et al., 2016; Public Health England, 2019).

Together, these experiences reveal the central role of physical health in shaping recovery trajectories for those in substance use recovery. The long-term nature of medical complications reinforces the need for integrated care pathways that recognise the persistence of health burdens beyond initial detox or abstinence. Consistent with the recovery capital model (Cloud & Granfield, 2008; Laudet & White, 2008), physical capital should be considered not only as a static resource but as one that requires active rebuilding and ongoing clinical support.

For SUGAR participants, the dual burden of substance use and gambling exerted an intensified toll on physical health. The compounding nature of these addictions—each with distinct but

overlapping stressors—created a cumulative strain on the body that participants described as overwhelming and relentless. One participant shared:

> *I was gambling, drinking, and using drugs. My body couldn't take it anymore, but I didn't know how to stop. I was always exhausted, always sick. I'd go days without eating properly, and I couldn't sleep—my mind was racing all the time. I kept crashing but never stopped* (SUGAR3)

These accounts reflect the physiological impact of both substance toxicity and chronic psychological stress—each feeding into the other. The physical decline described by SUGAR participants aligns with research on allostatic load in addiction, where the body's ability to maintain internal balance is eroded through repeated cycles of stress and substance use (McEwen, 2006; Koob & Schulkin, 2019). Another participant described this feedback loop in stark terms:

> *I'd use drugs to cope with the losses from gambling, and then I'd gamble again to try and fix the mess I was in. It was constant, and my body just gave up. I was underweight, had ulcers, and kept fainting. But I couldn't stop because everything felt like it was falling apart* (SUGAR4)

These narratives illustrate the embodied consequences of dual addiction—malnutrition, sleep deprivation, physical exhaustion, and stress-related illness—all of which contribute to the erosion of personal recovery capital. While the Kruskal-Wallis test found no statistically significant differences in physical health outcomes across groups, the qualitative data reveal important disparities in severity and cause. This may reflect both the small sample size for the SUGAR group and the limitations of standardised self-report measures in capturing the layered realities of dual addiction (Greaves et al., 2022; Laudet & White, 2008).

From a theoretical standpoint, these findings support the emphasis of recovery capital theory on the depletion of personal resources—particularly physical capital—as a barrier to recovery (Cloud & Granfield, 2008). Moreover, the intensity and complexity of physical deterioration among SUGAR participants underscore the relevance of structural vulnerability frameworks, which highlight how multiple, intersecting disadvantages (e.g., poverty, stigma, poor access to healthcare) compound health risks (Quesada et al., 2011; Bourgois et al., 2017).

Taken together, these findings underscore the importance of integrating lived experience into addiction research and treatment design. Recovery pathways for individuals with dual diagnoses require integrated care models that bridge behavioural and physical health services, recognising the distinctive profiles and needs that arise from co-occurring addictions. Addressing these compounded physical impacts is critical not only for stabilising recovery but also for restoring long-term wellbeing.

5.3.3 Substance Use Patterns

The Kruskal-Wallis (KW) test revealed significant differences in substance use patterns among the three recovery groups ($H(2) = 36.78$, $p < 0.001$), with post-hoc tests confirming that SUR and SUGAR participants reported significantly higher levels of substance use—particularly heroin and alcohol—compared to GAR participants ($p < 0.001$). These quantitative results were substantiated and deepened by qualitative data, which highlighted the divergent ways substance use was embedded in the participants' addiction pathways.

Among GAR participants, substance use was generally absent or peripheral. Many participants described gambling as their sole form of addiction, with little interest in alcohol or drugs. One participant reflected,

> *I wasn't interested in alcohol or drugs. My addiction was gambling. I didn't need anything else—it gave me the rush, the distraction, the escape. I didn't even think of using anything else because gambling took over everything—my time, my money, my head* (GAR3)

This aligns with research suggesting that for a substantial subgroup of individuals with gambling disorder, substance use is not a concurrent issue. Instead, gambling operates as a self-contained behavioural addiction driven by psychological reinforcement mechanisms such as intermittent reward and cognitive distortions (Hing et al., 2016; Blaszczynski & Nower, 2002). Feigelman and Wallisch (1998) similarly found that many problem gamblers do not engage in substance misuse, highlighting a distinct behavioural and neurological profile associated with gambling addiction.

In contrast, substance use among SUR participants was typically long-term, daily, and deeply intertwined with psychological and physiological dependence, "*Heroin was my drug of choice. I used it every day for years. It was like a routine—wake up, find money, get a fix. I didn't think about anything else. It was the only thing that kept me going, even though it was also killing me* " (SUR1). This experience was echoed in accounts of physical deterioration and failed withdrawal attempts. Another participant shared, "*I was using so much that my body couldn't function without it. I had seizures when I tried to stop. I'd be in and out of A&E, but I still went back to it. It was the only way I knew how to deal with everything I'd been through* " (SUR6). These narratives underscore the role of substance use as both a coping mechanism and a physical necessity, reflecting self-medication theory (Khantzian, 1997) and the chronic disease model of addiction (Volkow et al., 2016). The high level of dependency described by SUR participants demonstrates the compounded depletion of personal recovery capital—particularly physical and psychological health—undermining the stability needed for early recovery (Laudet & White, 2008).

Together, these findings illustrate not only divergent patterns of substance use across the groups but also the unique implications for treatment and engagement. For GAR participants, the absence of substance use suggests that traditional models built around detox and withdrawal may be poorly matched, requiring instead a focus on behavioural regulation, emotional processing, and financial recovery. In contrast, the entrenched substance use in SUR participants requires intensive medical, psychological, and social support to address complex dependency histories and long-term health damage. However, the complexity introduced by the SUGAR group makes these findings particularly compelling. Unlike the more distinct and compartmentalised patterns seen in the GAR and SUR groups, SUGAR participants navigated a deeply entangled cycle of substance use and gambling. The psychological fallout from gambling losses—shame, guilt, and anxiety—often acted as a trigger for substance use. In contrast, substance use in turn exacerbated impulsivity and emotional dysregulation, fuelling further gambling. One participant reflected:

> *I would gamble, then use heroin to deal with the losses. It became a cycle I couldn't break. Even when I stopped using for a bit, the gambling would start things off again, and before I knew it, I was back to square one. It all fed into each other. I never felt like I was clean from both at the same time*
> (SUGAR4)

This cyclical and mutually reinforcing pattern reflects both the pathways model of gambling addiction (Blaszczynski & Nower, 2002) and the concept of allostatic load, where repeated exposure to stressors—both emotional and physical—erodes resilience and stability (Koob & Le Moal, 2008). Another added:

> *It was like playing whack-a-mole with my addictions—stop one, the other would get worse. I'd use to escape the stress of losing money, and I'd gamble again when I felt like a failure for using. It was exhausting, and no one in treatment ever seemed to get the full picture* (SUGAR9)

These findings also echo evidence that individuals with co-occurring disorders experience a greater cumulative clinical burden: higher relapse risk, more severe mental health comorbidities, and poorer treatment retention (Grant et al., 2010; McGovern et al., 2014).

The lived experiences of SUGAR participants reinforce the notion that recovery capital in this group is not simply depleted—it is fragmented. Efforts to restore one domain of capital often come at the cost of another: for example, seeking short-term emotional relief through gambling undermines financial and psychological stability. This tension aligns with the cumulative disadvantage framework (Laudet & White, 2008), where the compounding effects of dual disorders multiply barriers to recovery and intensify systemic exclusion. In practice, many SUGAR participants described falling between services or being treated for only one side of their addiction, leaving the other unaddressed. As one participant summarised, " *I got referred to a drug service but they didn't talk about gambling. I went to a gambling group, but they didn't know what to do with someone using heroin. It's like I had to split myself in half to get help"* (SUGAR6). These accounts highlight the inadequacy of treatment systems that remain siloed by addiction type. While quantitative data confirms group differences in substance use patterns, qualitative narratives provide critical insight into the underlying mechanisms and lived consequences of these behaviours. For GAR participants, the absence of substance use does not equate to lower harm—stress, secrecy, and emotional fatigue still characterise their recovery. For SUR participants, longstanding physiological dependence presents unique medical and psychological hurdles. For SUGAR participants, recovery is complicated by a constant oscillation between two addictions, making stability especially elusive.

Informed by recovery capital theory (Cloud & Granfield, 2008), these findings highlight the need for coordinated, cross-domain interventions that extend beyond symptom-specific treatment. An integrated recovery approach—one that strengthens psychological resilience, rebuilds social trust, and addresses community-level barriers—is particularly urgent for the SUGAR group (Best et al., 2016; Van den Berk-Clark et al., 2024). The use of wraparound service models and triage-informed care planning offers a practical way forward, enabling tailored support for individuals whose needs exceed the boundaries of single-focus interventions (Salloum et al., 2015). Without such integration, dual-recovery participants risk continued marginalisation by systems unequipped to respond to the complexity of their lived experience.

5.3.4 Criminal Behaviour and Justice Involvement

The Kruskal-Wallis test revealed significant differences in criminal behaviour and justice involvement across the groups (H (2) = 25.34, $p < 0.001$). SUR and SUGAR participants had notably higher rates of substance-related and violent crimes than GAR participants. Post-hoc analysis indicated SUR participants primarily committed substance-related offences, including possession and distribution. SUGAR participants displayed a wider range of criminal behaviour, encompassing both substance-related and gambling-related financial crimes. In contrast, GAR participants were less likely to engage in violent or substance-related offences, with their justice involvement mainly tied to financial crimes.

Qualitative narratives provided valuable insight into the distinct patterns and root causes of criminal behaviour across recovery groups. For SUR participants, offending was often closely tied to the physiological demands of substance dependence and the structural barriers surrounding it, *"Most of my charges were for theft or possession. It was about surviving, getting what I needed to use. I wasn't robbing people for fun—I was sick, and that's what it took to feel okay"* (SUR2). Another echoed this survival-oriented framing,

> *When you're using every day, you do what you have to do to get by. Sometimes that meant stealing or worse. It wasn't who I was, but the drugs changed everything. You're constantly chasing that next fix, and it messes with your judgement* (SUR5)

These accounts reveal how criminal behaviour is often a consequence of diminished personal and community recovery capital—particularly physiological dependence, economic instability, and lack of access to supportive resources.

Participants described entering cycles of offending where the immediate priority was not criminal intent but meeting urgent needs brought on by withdrawal, hunger, or homelessness. This aligns with the economic-compulsive model of drug-related crime, which suggests that offending is frequently motivated by the financial necessity of sustaining substance use (Goldstein, 1985; Bennett & Holloway, 2009). From a recovery capital perspective, justice involvement for SUR participants also reflected depleted structural and social resources. Disrupted housing, long-term unemployment, and fractured family relationships left individuals without protective buffers, increasing their exposure to criminalised survival strategies (Best et al., 2016; Cloud & Granfield, 2008). As one participant put it: *"Once you've been inside, it's hard to get a job, hard to find somewhere to live, and people don't want to know you. You end up back in the same place, doing the same things"* (SUR7). This underscores the reinforcing cycle between systemic exclusion and recidivism, where involvement with the justice system itself becomes a barrier to recovery (McNeill, 2012).

Furthermore, many SUR participants indicated that contact with the justice system marked the first time they were offered any form of structured help—though the nature and quality of this support varied. These findings highlight the potential value of early diversion schemes and drug courts, particularly when embedded within restorative justice principles. By aiming to rebuild rather than punish, such approaches align with Braithwaite's (1989) theory of reintegrative shaming, which posits that supportive justice responses can preserve dignity and promote prosocial reintegration.

GAR participants mainly reported involvement in non-violent financial crimes, often driven by increasing debt and the urge to chase losses. These behaviours were often hidden until the legal or financial consequences became unmanageable. One participant reflected: *"I didn't get into trouble with the law for violent behaviour, but I did a lot of shady things financially to cover my debts—maxed out credit cards, took out loans in my partner's name. At the time, I told myself it*

wasn't really criminal because I'd pay it back" (GAR3). Another participant described the mix of desperation and denial, *"I stole from my employer to cover my losses. I thought I could pay it back after a win, but it just spiralled. I never saw myself as a criminal—I just felt trapped"* (GAR5). These quotes show the internal conflict and moral dissonance common in gambling-related crime, where shame and secrecy delay seeking help. This matches theories of delayed engagement and moral injury in behavioural addiction (Wardle et al., 2019; Hing et al., 2022). The hidden nature of gambling harm means such offences can escape early detection by criminal justice systems, especially when offenders show no visible signs of addiction (Barnes et al., 2015).

Unlike substance-related offences, which often trigger mandated interventions, financial crimes linked to gambling are typically processed as economic misconduct, not addiction-related behaviour. This limits opportunities for triage and treatment referrals, representing a significant blind spot in the justice system (DiMario, 2022; Cowell et al., 2020). SUGAR participants presented the most complex interactions within the justice system. Offences often spanned both substance-related and financially motivated crimes, compounding the risk of fragmented responses. One participant shared: *"I was doing scams to get gambling money, then selling drugs on the side. It all blurred together—whatever I could do to get by"* (SUGAR3). Another noted the partial recognition of their addiction, *"The police knew me for drug stuff, but the gambling—no one ever asked about that. It was like half of what I was struggling with didn't exist"* (SUGAR5). These narratives reflect the cumulative impact of co-occurring addictions on criminal behaviour. The overlap of behavioural and substance-related offences complicates identification, particularly in systems oriented toward single-diagnosis interventions. The justice system's tendency to silo addiction types risks overlooking the interconnected drivers of offending in this group (Grant et al., 2010; Dom & Moggi, 2016). This fragmentation often resulted in repeated system contact without appropriate support. As one SUGAR participant explained, *"They sent me to a drug programme, but I was still gambling the whole time. No one thought to ask. I ended up back inside six months later"* (SUGAR8). These findings underscore the need for dual-capacity triage mechanisms capable of screening for both substance and

behavioural addictions. When either condition goes unrecognised, recovery is jeopardised, and reoffending becomes more likely (Prenzler, 2021; Braithwaite, 2021).

In conclusion, the justice system triage plays a pivotal role in shaping recovery outcomes but remains inconsistent across addiction groups. While SUR participants often encounter court-mandated treatment for drug-related offences, GAR participants face delayed or absent identification due to the invisibility of gambling addiction. The SUGAR group falls through both gaps, with their dual needs only partially addressed, if at all. Integrating recovery capital theory with restorative justice principles provides a more holistic framework for intervention. Justice responses that recognise and respond to the full spectrum of addiction-related offending—acquisitive, financial, and behavioural—are better positioned to rebuild personal and community capital and reduce recidivism (Best et al., 2016; Braithwaite, 2001; Shinkfield & Graffam, 2009).

5.3.5 Summary

This section explored personal recovery capital across the SUR, GAR, and SUGAR groups through the domains of psychological wellbeing, physical health, substance use patterns, and criminal justice involvement. Integrating quantitative data and qualitative insights reveals both shared and distinct aspects of personal recovery capital across the SUR, GAR, and SUGAR groups. While the quantitative findings provided valuable overarching trends, the qualitative data offered crucial context, mainly where statistical significance was not observed, underscoring the importance of mixed-methods approaches in addiction research (Hennessy, 2017). Table 5.1 directly addresses Research Question 2 (RQ2), summarising the similarities and differences between SUR, GAR, and SUGAR from quantitative and qualitative perspectives in personal capital.

Table 13: Kruskal-Wallis test with significance compared with the degree[2] of qualitative alignment and implications for personal recovery capital

Personal Capital	KW Test (H, p-value)	(S/NS)	Qualitative Alignment	Implications
Psychological Quality of Life	H (2) = 2.45, p = 0.287	NS	Partial Alignment: Emotional challenges were identified, but unique group experiences were highlighted.	Interventions should address emotional challenges specific to each group's psychological struggles.
Physical Quality of Life	H (2) = 1.69, p = 0.485	NS	Partial Alignment: Different causes of physical health issues are identified across groups.	Tailored approaches are needed for physical health concerns tied to addiction type (e.g., direct vs. indirect impacts).
Substance Use Patterns	H (2) = 36.78, p < 0.001	S	Alignment: Patterns of substance use supported by narratives for SUR, GAR, and SUGAR.	Support must target distinct addiction patterns, with emphasis on co-occurrence in SUGAR participants.
Criminal Behaviour and Justice Involvement	H (2) = 25.34, p < 0.001	S	Partial Alignment: Quantitative trends aligned, but SUGAR's small sample obscures dual patterns.	Integrated programmes must address complex legal and behavioural challenges for dual recovery.

Each row tests the null hypothesis that the Sample 1 and Sample 2 distributions are the same, where the independent variable is the participant type, and the dependent variable is gambling severity. Asymptotic significances (2-sided tests) are displayed.

The significance level is .050.

Significance values have been adjusted using the Bonferroni correction for multiple tests.

The findings reveal distinct differences between the SUR, GAR, and SUGAR groups in how addiction influences health, behaviour, and justice involvement. While quantitative data identified broad patterns, qualitative narratives exposed the unique challenges faced by each group. SUR participants primarily experienced direct health impacts from substance use, leading to visible physical deterioration and immediate legal consequences due to substance-related crimes. GAR participants, in contrast, faced more indirect consequences—financial strain and psychological distress caused by gambling often resulted in non-violent financial crimes that

[2] Full Alignment, partial alignment and no alignment

were less likely to trigger addiction-focused interventions. The emotional burden of gambling-related debt further impacted their wellbeing, though these effects were less apparent in quantitative measures. SUGAR participants displayed the most complex patterns, navigating dual addictions that compounded their health issues, emotional distress, and legal challenges. Their involvement in both substance-related and financial crimes often masked the dual nature of their addictions in quantitative data, leading to fragmented interventions that addressed only part of the problem.

The integration of qualitative and quantitative data demonstrates the value of a mixed-methods approach in identifying both measurable and hidden disparities in recovery capital (Creswell & Plano Clark, 2017; Fetters, Curry & Creswell, 2013). Although statistical comparisons provided a broad structural view, participant narratives revealed the mechanisms, meanings, and lived consequences behind those patterns (Charmaz, 2006; Denzin & Lincoln, 2018). Although statistical comparisons provided a broad structural view, the qualitative narratives revealed a nuanced and dynamic range of factors influencing recovery, highlighting the mechanisms, meanings, and lived consequences behind the observed patterns (Charmaz, 2006; Denzin & Lincoln, 2018). These findings reinforce the importance of recognising recovery as a multidimensional, socially mediated process shaped by personal experiences, context, and systemic responses.

These findings reinforce the importance of recognising recovery as a multidimensional and socially mediated process. From a theoretical perspective, this section demonstrates the utility of recovery capital as a guiding framework (Cloud & Granfield, 2008; Laudet & White, 2008) while also identifying its limitations in the context of dual addiction. The findings call for models that not only categorise capital into domains but also address how these forms of capital interact, degrade, and compound over time (Best et al., 2016; Grant et al., 2010). Integrating recovery capital theory with trauma-informed practice, behavioural addiction models, and restorative justice principles offers a more nuanced and responsive approach to understanding addiction and recovery. These insights inform the discussion in subsequent chapters, where implications for service design, policy development, and structural reform will be explored.

5.4 Social Capital

Social capital, like personal capital, plays a crucial role in addiction recovery. While personal capital focuses on individuals' internal resources, social capital relies on external networks and relationships that affect recovery (Bourdieu, 1986; Coleman, 1988). Within the recovery capital framework (Cloud & Granfield, 2008), social capital includes both bonding ties—such as family, friends, and peer support—and bridging or linking connections to services, institutions, and community groups. Farahmand et al. (2024) emphasised that linking social capital through community networks is vital for both personal and collective recovery, providing access to resources. Evidence suggests that social capital has a significant impact on recovery outcomes, similar to personal capital. Those with strong social connections are better equipped to overcome challenges and rebuild their lives, whereas weaker networks increase the risks of relapse and isolation. Social capital offers essential emotional, informational, and practical support for recovery.

Quantitative and qualitative data in this section explore how the presence or absence of social capital shaped participants' recovery experiences across the SUR, GAR, and SUGAR groups. The analysis begins with statistical comparisons of social network strength and perceived support, followed by narrative accounts that illustrate how trust, stigma, and social disconnection influence recovery. Special attention is given to the role of institutional trust and justice system contact, particularly for the SUGAR group, where dual addiction often compounds social exclusion and disrupted access to help.

5.4.1 Social Support in Recovery

Social capital refers to the networks and relationships that offer emotional, informational, and tangible support (Bourdieu, 1986; Coleman, 1988), and it is crucial in the recovery process. Support from family, peers, and recovery communities plays a critical role in shaping recovery trajectories by providing emotional regulation, practical assistance, and social reinforcement (Boisvert et al., 2008; Reif et al., 2014). However, the type, quality, and consistency of such

support vary across recovery populations, with factors like stigma, co-occurring conditions, and prior justice involvement influencing access and impact (Dingle et al., 2015; Patton et al., 2022). A Kruskal-Wallis (KW) test revealed notable differences in social support levels among the three groups (H (2) = 41.38, $p < .001$). Post-hoc analyses revealed that SUR participants experienced significantly less social support compared to GAR and SUGAR participants ($p < .001$). Additionally, the qualitative data shed light on how these disparities are reflected in lived experiences.

Among the SUR group, the lack of social support often compounded recovery challenges. One participant reflected, *"My family did not trust me so that I couldn't rely on them for support. I felt alone"* (*SUR5*). Illustrate how stigma and behavioural volatility erode familial trust and community engagement, consistent with Laudet's (2006) work on social stigma in substance recovery. From a recovery capital perspective, depleted social capital further constrains access to treatment, housing and employment, reinforcing cycles of marginalisation (Best et al., 2015). In contrast, GAR participants reported higher levels of social support, primarily due to the hidden nature of gambling addiction in its early stages. This delay in visible consequences often preserves social bonds for more extended periods. One participant recounted, *"When the debts started to pile up, my family didn't abandon me; they helped me figure out how to manage it"* (*GAR4*). However, while family members were often supportive, the eventual revelation of the addiction led to feelings of betrayal and trust erosion. Another GAR participant shared, *"I think they were more upset that I hadn't told them. It wasn't the gambling itself—it was the lies"* (*GAR3*). This reflects broader research findings that gambling-related stigma often emerges later in the addiction trajectory, usually once financial losses become apparent (*Hing et al.*, 2016). Nevertheless, initial support can be stronger than in cases of substance misuse, particularly when the addiction remains hidden.

For SUGAR participants, social support networks were notably more fragmented. The dual challenges of managing both gambling and substance use frequently created inconsistent or partial support systems. One participant explained, *"My friends were supportive of me quitting gambling but didn't know how to help with my drinking"* (*SUGAR2*). This division in support structures is a recurring issue for individuals with dual addictions, where recovery communities

and social networks often focus on one addiction while overlooking the other. This fragmented support complicates recovery and exacerbates feelings of isolation and misunderstanding (*Harrison et al.*, 2017). The complexities faced by the SUGAR group are further compounded by the stigma surrounding dual addiction. Participants often described experiences of being "misunderstood" or feeling that services were ill-equipped to handle the dual nature of their recovery needs. As one participant stated, *"It felt like I didn't fit anywhere—gambling groups didn't get the substance stuff, and the drug programmes didn't get the gambling"* (*SUGAR4*). This aligns with the findings of Grant et al. (2010), who argue that integrated treatment approaches are crucial for addressing co-occurring disorders, thereby ensuring that individuals are not required to navigate fragmented care systems.

These findings emphasise the vital importance of social capital in the context of addiction recovery. While participants in the GAR group often maintained familial relationships for extended periods due to the less conspicuous nature of gambling addiction, those in the SUR group experienced swift social alienation as a result of the overt behaviours associated with substance use. Moreover, the SUGAR group faced the most intricate challenges, grappling with social isolation and disjointed support networks. This situation underscores the necessity for integrated recovery programmes that address the dual aspects of addiction, offering comprehensive support that encompasses both personal and social recovery capital (Gavriel-Fried & Moretta, 2019). The dual nature of addiction complicates the dynamics of social capital for individuals, as their addictions—substance use and gambling—provoke varied responses from their support networks. Harrison et al. (2017) underscore the importance of addressing both emotional and practical needs in cases of dual addiction, contending that recovery efforts should be attuned to the complex and multifaceted nature of dual recovery.

5.4.2 Criticism and Relationship Strain

A key dimension of social capital erosion in addiction recovery is the role of criticism and the strain it places on interpersonal relationships. Within the recovery capital framework, negative feedback from family, peers, and broader networks represents the depletion of bonding capital—those intimate, trust-based relationships essential for sustained support (Cloud & Granfield,

2008). Such criticism often manifests through stigma, blame, and moral judgment, weakening emotional reciprocity and amplifying social isolation (Best et al., 2015). The Kruskal-Wallis test revealed significant group differences in levels of perceived social criticism ($H(2) = 50.096$, $p < .001$), with post-hoc tests indicating that SUR participants experienced notably higher criticism than both GAR and SUGAR participants ($p < .001$).

For SUR participants, the high visibility of substance addiction often precipitated early and harsh moral judgment. One participant recalled, *"Everyone could see my drinking problem, and they were quick to judge me for it"* (SUR6). This visibility frequently triggered immediate social distancing and blame. Another participant elaborated, *"People didn't see the reasons why I drank; they just saw the chaos it caused and blamed me for it"* (SUR3). These accounts illustrate how stigma becomes embedded in close relationships, aligning with Laudet's (2008) observations that substance use disorders are highly stigmatised and often equated with personal failure. Within recovery capital terms, such dynamics rapidly undermine the relational scaffolding needed for recovery—leading to both emotional withdrawal and practical disconnection from support.

In contrast, GAR participants described a delayed but often more explosive form of criticism. The hidden nature of gambling meant that family and friends remained unaware of the problem until financial consequences became unavoidable. One participant noted, *"I didn't get much criticism until I started losing money, and people realised how bad it had gotten"* (GAR3). Another shared, *"Once my family found out how much debt I was in, everything changed. They were furious that I'd lied for so long"* (GAR5). These reflections mirror findings by Hechanova et al. (2024), who argue that the delayed visibility of gambling addiction preserves social trust—until disclosure, when breaches of honesty often result in sharp relational rupture. From a theoretical perspective, this reflects a sudden breakdown in bonding capital previously maintained through denial or secrecy. The perceived betrayal—particularly around finances—can provoke intense emotional responses, often disrupting familial and social support structures when they are most needed.

SUGAR participants experienced a more fragmented and inconsistent response to their addictions. The dual nature of their challenges complicated how family and networks perceived

their behaviours. One participant explained, *"I felt like I couldn't win. People criticised me for drinking, and then for gambling when the debts got too big"* (SUGAR4). Another recounted, *"My family wanted me to quit drinking but ignored the gambling. Others thought the gambling wasn't a big deal but hated that I was using drugs"* (SUGAR1). These narratives highlight the nonlinear and conflicted responses individuals with dual diagnoses often face—where one addiction might elicit sympathy while the other invites judgment or dismissal. Grant et al. (2010) identify such fragmented social responses as a key barrier to dual recovery, with inconsistent support exacerbating stigma, confusion, and self-doubt. From a recovery capital lens, the disjointed erosion of social support across both substance and behavioural domains weakens the foundations for long-term recovery.

It is essential to note that the quantitative analysis did not reveal statistically significant differences in perceived criticism among SUGAR participants compared to the other groups. This discrepancy likely reflects the small sample size of the SUGAR group, which may have limited the statistical power to detect meaningful effects. Nevertheless, the qualitative data provide strong evidence of cumulative relational strain, further underscoring the limitations of relying solely on standardised measures to assess complex interpersonal dynamics in dual recovery contexts (Van den Berk-Clark et al., 2024).

Taken together, these findings suggest that criticism operates differently across addiction pathways. For SUR participants, it emerges early and disruptively due to the overt nature of substance use. For GAR participants, it strikes later, often with intensity, as the veil of secrecy falls. For SUGAR participants, it presents as a persistent and contradictory burden, shaped by dual stigma and fractured recognition. These variations are not only socially mediated but also structurally reinforced, affecting access to support, service engagement, and overall recovery outcomes (Earnshaw et al., 2013; Quesada et al., 2011).

Understanding how criticism erodes social capital enables a more targeted approach to rebuilding trust within recovery ecosystems. This includes education for families and communities, trauma-informed care, and integrated treatment systems that acknowledge the full complexity of relational harm in addiction. Without such supports, individuals may remain

isolated at the very moment they most require connection, reinforcing cycles of stigma, relapse, and marginalisation (Gavriel-Fried & Moretta, 2019; Best et al., 2016).

5.4.3 Employment and Social Networks

Employment plays a pivotal role in addiction recovery by offering structure, financial stability, and a sense of purpose (Best et al., 2015). It serves as a key component of social capital, promoting reintegration into community life, decreasing the risk of relapse, and enhancing self-efficacy (*Cloud & Granfield*, 2008). However, securing and maintaining stable employment presents various challenges for individuals on different addiction recovery paths. A Kruskal-Wallis (KW) test revealed significant differences in employment challenges among the SUR, GAR, and SUGAR groups (H (2) = 47.945, $p < .001$). Post-hoc analysis revealed that SUR participants encountered the most severe employment challenges, primarily due to health complications and legal issues stemming from substance use. Qualitative narratives expand on these findings by illustrating how the causes and consequences of employment instability differ across addiction and recovery pathways.

For SUR participants, the visibility of substance misuse often triggered early and overt social judgment. One participant reflected,

> *I lost three jobs in two years. I'd turn up late, or not at all, then get angry when people called me out. I didn't realise how much damage I was doing until it was too late. Everyone could see my drinking problem, and they were quick to judge me for it* (SUR6)

Another stated, *"People didn't see the reasons why I drank; they just saw the chaos it caused and blamed me for it"* (SUR3). These accounts illustrate how substance use provokes rapid social alienation, consistent with stigma theory and research on addiction-related blame (Laudet, 2008; Best et al., 2015). Others described persistent barriers, even post-recovery: *"Even when I tried to get clean, no one wanted to hire me because of my criminal record. It's like the past keeps following me, no matter how much I've changed"* (SUR4). These accounts align with

findings by Farahmand et al. (2024), who highlight the structural barriers that persist long after initial recovery milestones. Employment instability in this group is not only a consequence of addiction but also a systemic barrier that obstructs social reintegration and recovery capital restoration. Criticism from close relationships was described not only as emotionally painful but also as a driver of further substance use—a coping mechanism that paradoxically reinforces the addiction-rejection cycle. This feedback loop weakens social capital while simultaneously intensifying dependence.

In contrast, GAR participants encountered employment instability at later stages of their addiction, typically once gambling-related stress and financial losses began to affect their work performance. Initially, many GAR participants were able to maintain steady employment while gambling, but as losses escalated, work performance deteriorated. One participant shared,

> *At first, I was fine at work, but once I started losing money, I couldn't focus and ended up losing my job. I'd stay up all night gambling online and come in totally exhausted. Eventually, I just stopped showing up* (*GAR6*)

Another described the impact on professional credibility: *"I started borrowing money from colleagues, making excuses for everything. People began to avoid me, and I got called into HR more than once. Eventually, I resigned before they could fire me"* (GAR2). This delayed impact aligns with research by Hechanova et al. (2024), who found that gambling addiction tends to disrupt employment later in the addiction cycle as financial strain and psychological distress increase. Moreover, the hidden nature of gambling addiction in its early stages often prevents employers and colleagues from recognising warning signs until the consequences—such as missed payments or legal issues—become unavoidable.

For SUGAR participants, the employment challenges were significantly compounded by the dual nature of their addiction. The combination of substance misuse and gambling led to both physical and psychological instability, creating substantial barriers to maintaining stable work. One participant explained, *"I was either too drunk or too stressed about gambling debts to keep a job for long"* (*SUGAR5*). Another shared, *"There were days I didn't even show up because I*

was too hungover or too anxious about what I owed" (*SUGAR2*). A third reflected, *"I tried a part-time job after rehab, but every payday triggered me. I'd use some, gamble some, then panic and disappear"* (SUGAR4). This dual burden complicates the employment landscape for SUGAR participants, as they must navigate both the immediate health consequences of substance use and the ongoing psychological strain from gambling-related debts. Harrison et al. (2017) emphasise the critical role of addressing physical and mental health in dual recovery to improve employment outcomes. The compounded stressors faced by SUGAR participants often result in prolonged unemployment and reduced social mobility, further diminishing social capital and increasing the risk of relapse. Additionally, the fragmented nature of support services—where employment programmes often focus on either substance use or behavioural addictions but not both—further marginalises dual-addiction individuals (Grant et al., 2010).

5.4.4 Social Isolation

Social isolation presents a significant barrier to successful addiction recovery, limiting access to essential emotional, informational, and practical support networks crucial for maintaining sobriety (Best et al., 2016; Reif et al., 2014). The lack of meaningful social connections exacerbates feelings of loneliness, increases the risk of relapse, and hinders reintegration into community life (Dingle et al., 2015; Columb et al., 2020). Isolation further deteriorates mental health, intensifying symptoms of depression and anxiety, which frequently co-occur with addiction (Meshi & Ellithorpe, 2021).

Kruskal-Wallis (KW) test demonstrated significant differences in social isolation among the SUR, GAR, and SUGAR groups ($H(2) = 55.649$, $p < .001$), with SUR participants experiencing the highest levels of isolation, particularly in early recovery. Post-hoc analysis revealed that GAR participants initially encountered less isolation, which increased over time due to escalating financial pressures, while SUGAR participants dealt with persistent isolation stemming from the compounded stigma of dual addictions (Pettersen et al., 2019; Avena et al., 2021).

SUR participants frequently described early social exclusion caused by the visibility and stigma of substance use. One participant shared, *"I lost all my friends because of my drinking…*

they just didn't want to be around me anymore. It was like they gave up on me before I even asked for help" (SUR7). Another echoed this experience, stating, *"Once I was labelled an addict, everything changed. Even people I'd known for years wouldn't talk to me. It was like I disappeared from their lives overnight"* (SUR5). This early disconnection limits access to support and reinforces cycles of relapse. Patton (2024) notes that rapid alienation often precedes help-seeking, leaving individuals without the social support or "scaffolding" necessary for recovery.

GAR participants initially maintained social ties due to the hidden nature of gambling. One explained, *"At first, I didn't feel isolated, but once the debts started piling up, I withdrew from everyone. I was ashamed, and I didn't want people to know how bad it had gotten. It was easier to disappear than to explain myself"* (GAR5). Another participant described a similar trajectory: *"Nobody knew for a long time. I was still working, still socialising. But once everything came out—the debt, the lies—I pushed everyone away because I couldn't face the disappointment"* (GAR3). The progression from secrecy to shame and eventual withdrawal mirrors the delayed onset of relational breakdown commonly seen in gambling addiction (Hechanova et al., 2024). As financial stress accumulates, individuals increasingly retreat, which reinforces isolation and complicates re-engagement.

For SUGAR participants, the experience of social isolation was both persistent and complex, arising from the dual stigma linked to both substance use and gambling addiction. This compounded stigma created multiple layers of exclusion, as social networks often struggled to understand or support the dual nature of the addiction. One participant described this cumulative effect: *"I felt like I had no one left, first because of my drinking, then because of all the debt from gambling"* (*SUGAR6*). This dual burden left many participants feeling alienated from both recovery communities and family networks, as support systems frequently focus on either substance use or gambling, but not both. *Van den Berk-Clark et al.* (2024) highlight the unique challenges faced by individuals with dual addictions, arguing that tackling social isolation within this group requires integrated support networks that address both the emotional and practical needs of recovery.

Interestingly, the SUGAR group also reported feeling misunderstood within recovery spaces, often perceiving that existing support systems were ill-equipped to handle the complexities of dual addiction. One participant reflected, *"I didn't fit in anywhere—people in AA didn't get the gambling part, and the gambling groups didn't understand the drinking"* (*SUGAR2*). This mismatch between support needs and available resources further isolates individuals with dual addictions, limiting their ability to engage with recovery programmes fully. Research by *Grant et al.* (2010) suggests that fragmented recovery pathways can worsen feelings of alienation, especially for those navigating complex co-occurring addictions. Van den Berk-Clark et al. (2024) emphasise the importance of integrated recovery spaces for dual-addicted individuals, where fragmented services often lead to unmet needs and exclusion. These findings highlight the different ways in which social isolation manifests across various addiction types:

1. SUR participants endure early and profound isolation due to the visible nature of substance use and the stigma associated with it.
2. GAR participants experience delayed isolation that intensifies as financial strain increases and social connections diminish.
3. SUGAR participants suffer from ongoing isolation driven by the compounded stigma of dual addiction and fragmented support systems.

Targeted interventions are necessary to reduce isolation across all groups. Early interventions that emphasise stigma reduction and family reintegration are vital for SUR participants. GAR participants can gain from financial counselling and peer support networks that address the emotional challenges stemming from debt and gambling losses. For SUGAR participants, recovery programs that integrate both substance use and gambling addictions are crucial to rebuild trust, minimise isolation, and strengthen community ties. Lowering social isolation not only aids individual recovery results but also boosts social capital, fortifying the broader networks essential for long-term resilience. *Harrison et al.* (2017) highlight that creating inclusive recovery environments where individuals with diverse addiction issues feel acknowledged and supported can significantly enhance engagement and lower relapse rates.

5.4.5 Summary

In conclusion, the interplay between personal and social capital plays a defining role in shaping recovery outcomes across different addiction pathways. Personal capital—encompassing emotional resilience, psychological stability, and physical health—supports individuals in navigating internal recovery challenges. Social capital—rooted in relational trust, support networks, and social ties—provides the external scaffolding necessary to sustain long-term recovery (Cloud & Granfield, 2008; Laudet, 2006). Table 5.2 addresses Research Question 2 (RQ2) about social capital by summarising the similarities and differences between SUR, GAR, and SUGAR from both quantitative and qualitative perspectives discussed in this section.

Table 14: Social capital topics, Kruskal-Wallis test with significance compared with the degree of qualitative alignment and implication

Topic	KW Test (H, p-value)	Significant (S/NS)	Qualitative Alignment	Implications
Social Support in Recovery	H (2) = 41.38, p < .001	S	Alignment: SUR reports the lowest social support, while GAR and SUGAR receive higher support.	Increase focus on rebuilding social networks for SUR and providing tailored dual support for SUGAR.
Criticism and Relationship Strain in Addiction	H (2) = 50.096, p < .001	S	Partial Alignment: SUR faces more criticism; SUGAR dynamics may be understated due to the small sample size.	Develop programs to mitigate social criticism and rebuild trust in relationships, particularly for SUR and SUGAR.
Employment and Social Networks	H (2) = 47.945, p < .001	S	Alignment: SUR has severe employment challenges; GAR faces delayed impacts; SUGAR experiences compounded barriers.	Employment support programs should address addiction-specific barriers with integrated approaches for SUGAR.

Social Isolation	H (2) = 55.649, p < .001	S	Alignment: SUR faces early isolation; GAR experiences delayed isolation; SUGAR suffers from persistent dual stigma.	Create an integrated recovery program to address early and persistent isolation across all groups, especially SUGAR.

a. Each row tests the null hypothesis that the Sample 1 and Sample 2 distributions are the same, where the independent variable is the participant type, and the dependent variable is gambling severity. Asymptotic significances (2-sided tests) are displayed.
b. The significance level is .050.
c. Significance values have been adjusted using the Bonferroni correction for multiple tests.

The findings of this chapter reveal that each group faced unique configurations of social capital. SUR participants exhibited the lowest levels, marked by early isolation, damaged trust, and employment exclusion, often compounded by legal stigma. GAR participants retained more intact social networks early on due to the concealability of gambling, but experienced breakdowns when financial consequences surfaced. SUGAR participants, managing dual addiction, reported fragmented support, relational misunderstanding, and persistent social exclusion. Their experiences illustrate how dual stigma and service fragmentation simultaneously erode both bonding and bridging capital (Van den Berk-Clark et al., 2024).

The integration of quantitative and qualitative findings reinforced and enriched these patterns. While statistical results revealed significant group differences in social support, criticism, employment, and isolation, participant narratives highlighted how these differences evolved over time and within specific contexts. In the case of SUGAR, qualitative accounts revealed substantial barriers not captured in statistical comparisons—underscoring the value of mixed methods in exposing hidden dynamics (Hennessy, 2017). Recovery capital theory provides a robust conceptual lens for understanding these group differences. However, the lived experiences of SUGAR participants reveal the limitations of single-domain frameworks when facing compounded adversity. Future recovery strategies must be adaptive, integrating trauma-informed, relational, and dual-diagnosis-informed approaches.

Effective recovery programming must account for these group-specific challenges. For SUR, interventions should prioritise stigma reduction, legal advocacy, and rebuilding social networks. GAR would benefit from earlier detection, financial peer support, and relational repair. SUGAR participants require fully integrated services—across treatment, employment, and peer networks—that recognise and address their dual needs (Grant et al., 2010; Harrison et al., 2017; Farahmand et al., 2024). While this section has focused on interpersonal and relational resources, the next chapter addresses the broader structural dimension of recovery capital—community capital. This includes access to stable housing, healthcare, justice supports, and employment services, as well as neighbourhood safety and community cohesion (Green & Haines, 2015; Cloud & Granfield, 2008). As we will explore, recovery is not only determined by individual agency or relationships, but also by systemic conditions that enable or constrain recovery pathways. Attention to community-level dynamics is essential for designing equitable and durable recovery systems that leave no group behind.

5.5 Community Capital

Community capital refers to the collective resources, networks, and services available within a community that contribute to the wellbeing and recovery of its members. These resources include healthcare, housing, employment opportunities, social services, and legal support, all of which play a critical role in supporting individuals as they recover from addiction (Green & Haines, 2015).In the context of addiction recovery, access to community capital determines the availability of essential resources required for stable reintegration, particularly for populations navigating complex addiction pathways (Green & Haines, 2015; Flora & Flora, 2013). This section examines how the SUR, GAR, and SUGAR groups experienced community capital throughout their addiction and recovery journeys, from both quantitative and qualitative perspectives.

While earlier sections addressed internal (personal) and relational (social) assets, community capital shifts the focus to external systems. It reveals how institutional access and policy environments shape the recovery process—often enabling progress, but at times

producing fragmentation and exclusion. Following the mixed-methods approach outlined in Chapter 3 (Creswell & Plano Clark, 2017), we triangulate quantitative data on system contact (e.g., healthcare, housing, justice) with qualitative narratives to understand how lived experiences intersect with systemic engagement. Recovery capital theory and Braithwaite's (1989) framework of reintegrative justice serve as guiding theoretical anchors throughout this analysis, helping to interpret how systems can either restore or further marginalise individuals.

5.5.1 Healthcare systems

Healthcare systems serve as critical gatekeepers for individuals in addiction and recovery, offering both immediate care and opportunities for entry into long-term support services. The Kruskal-Wallis test revealed significant differences in healthcare engagement across the three groups (H (2) = 2.725, p = 0.001), underscoring the uneven ways in which individuals interact with healthcare services depending on the type of addiction. These findings highlight the potential for targeted interventions within healthcare settings, extending beyond symptom management, to address systemic needs and provide recovery support (Laudet, 2006; Best et al., 2017).

For SUR participants, healthcare engagement typically emerged at points of physical crisis. These included emergency hospital admissions due to overdose, liver failure, or other long-term health complications related to alcohol or drug use. One participant reflected, *"I didn't go to the hospital until it got really bad, but once I was there, they finally talked to me about treatment options"* (SUR6). These encounters often served as critical moments of redirection, where healthcare providers could offer referrals to detox, mental health, or addiction services. However, participants also described a lack of continuity following discharge. This reflects broader critiques of fragmented care, where crisis intervention is not embedded in longer-term treatment planning (Neale et al., 2016). These moments of clinical contact, while promising, often failed to generate stable recovery pathways, demonstrating the fragility of community capital in practice.

While the physical health impacts of substance use have been well-documented (Neale et al., 2014), the real opportunity for intervention lies in the moments when individuals seek urgent

medical care—emergency rooms, detox units, or primary care visits for chronic health issues. These high-acuity touchpoints represent critical moments where healthcare professionals can offer referrals to addiction services, mental health counselling, and social support resources (Cloud & Granfield, 2008). However, systemic barriers—such as fragmented care pathways and stigma within healthcare settings—can limit the effectiveness of these interventions, leaving many SUR participants to cycle through crisis care without transitioning into sustained recovery programmes.

In contrast, GAR participants reported significantly more limited and delayed access to healthcare systems. Physical health decline was usually not an initial concern; instead, participants sought assistance only when gambling-related psychological distress—such as anxiety or suicidal thoughts—became unmanageable. One participant recalled, *"I didn't go to the doctor for gambling, but when I started having panic attacks, that's when I finally reached out for help"* (GAR7). Another reflected on the missed opportunity: *"I went to my GP and they basically just told me to read some stuff online… So I never really wanted to go down that route"* (GAR1). *A*lthough the physical consequences of gambling are less immediate than those associated with substance use disorders, the psychological toll—including anxiety, depression, and suicidal thoughts—often prompts healthcare engagement (*Wardle et al.*, 2019). Unlike substance use disorders, which are more visible and more frequently identified in clinical settings, gambling remains underdiagnosed, delaying access to appropriate care. This invisibility reduces community capital, as the system lacks the mechanisms to detect and intervene in gambling addiction effectively.

This highlights a key opportunity: Mental health services often serve as the first formal system engagement for GAR participants, providing a strategic point for early intervention. However, a lack of gambling-specific screening within general mental health services means that many cases go undetected until financial or legal consequences surface. Integrating gambling addiction assessments into broader mental health services could increase early identification and facilitate earlier entry into specialised recovery pathways (*Hechanova et al.*, 2024).

SUGAR participants face the most fragmented pathways to healthcare. Their dual diagnoses of gambling and substance use often resulted in partial treatment, where one condition

was addressed while the other remained undiagnosed. The fragmented nature of addiction treatment services usually forces individuals to address each addiction separately, leading to disjointed care and increased risk of treatment disengagement (*Grant et al.*, 2010). One participant described this challenge:

> *When I went to rehab, they focused entirely on my drinking. No one even asked if I had any other problems. But gambling was just as destructive—maybe even more so—because I'd get clean, then spiral again from the stress and losses. It felt like I was only ever getting half the help I needed* (SUGAR3)

This reflects the structural inadequacy of siloed treatment systems that fail to recognise the interdependence of co-occurring addictions (Grant et al., 2010). Another participant described the emotional toll of navigating services that were ill-equipped for dual needs:

> *I was bouncing between places—AA meetings, a gambling counsellor, the GP—and none of them were talking to each other. One place would say 'cut down on drinking,' another would say 'just stop gambling,' and no one asked how I was coping overall. It was exhausting and confusing, like trying to piece together a puzzle with half the pieces missing* (SUGAR2)

These narratives illustrate how fragmented care hinders recovery by providing incomplete or conflicting support, thereby diminishing the overall effectiveness of the intervention. Van den Berk-Clark et al. (2024) argue that individuals with co-occurring addictions require integrated healthcare systems capable of managing physical, psychological, and behavioural needs within a unified care model. The SUGAR group's experiences reinforce this, as they described disjointed referrals, conflicting treatment advice, and limited opportunities for holistic recovery, highlighting a pressing need for coordinated, person-centred approaches.

The broader literature highlights the importance of using healthcare touchpoints as opportunities for early intervention. Research shows that individuals in addiction recovery are more likely to engage with treatment if it is introduced during crisis points or moments of healthcare engagement (*Laudet & White*, 2008). For SUR participants, these opportunities often emerge in hospital settings, where the severity of physical health issues prompts immediate

action. For GAR participants, mental health services serve as the primary gateway to recovery support. In contrast, for SUGAR participants, integrated healthcare systems are vital for ensuring that neither addiction is neglected in the recovery process.

However, the current healthcare landscape often fails to capitalise on these opportunities. Systemic fragmentation, stigma within healthcare settings, and a lack of cross-disciplinary training among providers contribute to missed intervention points, particularly for individuals with complex or dual diagnoses (*Neale et al.*, 2016). To address these gaps, healthcare systems must adopt holistic, integrated approaches that recognise the multifaceted nature of addiction and recovery. This includes implementing routine screenings for co-occurring disorders, offering cross-referrals between addiction and mental health services, and training healthcare providers to recognise the signs of less visible addictions, such as gambling.

In summary, while physical health needs are essential for recovery—especially for SUR participants—the true benefit of engaging with healthcare is its role as an intervention gateway. By viewing healthcare systems as more than just symptom management providers, we can recognise them as strategic entry points into broader recovery networks, enhancing our ability to leverage these connections for ongoing support. Future healthcare models should emphasise integrated, person-centred care that addresses the full spectrum of addiction-related needs, particularly for those navigating the complexities of dual recovery.

5.5.2 Housing Instability

Housing stability plays a crucial role in addiction recovery, serving as a foundational element that influences both physical wellbeing and long-term rehabilitation outcomes. Stable housing provides a secure environment that is conducive to recovery and is vital for engagement with broader community systems, including healthcare, employment services, and legal support (Neale et al., 2014). However, the pathways to stable housing differ across types of addiction, shaped by various social, economic, and legal challenges. The Kruskal-Wallis test revealed significant differences in housing stability among Substance Use Recovery (SUR), Gambling Addiction Recovery (GAR), and Dual Recovery (SUGAR) participants (H (2) = 4.35, p = 0.024),

with the SUR and SUGAR groups experiencing greater housing instability compared to the GAR participants.

For SUR participants, housing instability often resulted from cumulative structural disadvantages, including long-term unemployment, legal barriers, and health complications related to substance use. While personal circumstances contributed to housing crises, the broader issue frequently stemmed from systemic exclusions—such as limited access to affordable housing, rental discrimination against individuals with criminal records, and a lack of addiction-informed housing services (Public Health England, 2019). One participant noted, *"Even after I got clean, it did not matter. I had an eviction and a criminal record, and that was enough to get turned down again and again. People said they wanted to help, but no one wanted to give me a lease"* (SUR3). Another reflected, *"At my worst, I was living in my car, trying to stay sober. You can't get well when you're worried about where to sleep"* (SUR7). These accounts illustrate how housing instability persists beyond the acute phase of addiction, aligning with recovery capital theory, which shows how depleted structural and social capital continue to constrain recovery opportunities (Cloud & Granfield, 2008). Even when individuals demonstrate personal capital—such as motivation or sobriety—systemic exclusions like rental discrimination or the absence of transitional housing undermine sustained recovery. This mirrors broader findings that substance use recovery is frequently destabilised by housing insecurity, creating a cycle in which homelessness and addiction reinforce each other (*Neale et al.*, 2014).

By contrast, GAR participants experienced housing instability that developed gradually, primarily due to mounting financial debt instead of sudden legal or health crises. The post-hoc analysis indicated that GAR participants faced fewer housing issues compared to SUR participants ($p < 0.01$). Nonetheless, qualitative evidence showed that housing instability often worsened in the later stages of gambling addiction. Financial pressure, intensified by hidden debts and unaffordable loans, frequently led to evictions or forced sales of property. Early in addiction, many were able to maintain appearances—jobs, homes, routines—until a tipping point was reached. One participant shared, *"I was in the same flat for years. Everything looked fine from the outside. But the loans, the credit cards—they just kept piling up until it all came crashing down"* (GAR4). Another added, *"I sold things, took out payday loans, kept secrets.*

When I couldn't pay rent, I didn't tell anyone. I just left before I got evicted" (GAR2). These narratives demonstrate how the invisibility of gambling addiction delays external intervention and social recognition of crisis, a pattern consistent with pathways models of gambling harm (Wardle et al., 2019), increasing the costs of intervention (Gainsbury et al., 2015). From a recovery capital perspective, GAR participants had more substantial initial community capital but experienced rapid depletion as financial strain intensified. The absence of early financial counselling or protective systems allowed instability to escalate unchecked, transforming private financial strain into structural vulnerability.

Participants in the SUGAR programme encountered significant housing challenges due to the combined effects of substance use and financial strain from gambling. While the Kruskal-Wallis test indicated that housing instability levels were comparable to those of the SUR group, qualitative findings showed that the intertwined nature of dual addiction often led to more severe and prolonged housing crises. Participants shared that the combination of gambling-related debt and the associated stigma of substance use created a double burden, hindering their access to housing services and forcing them into increasingly unstable living conditions. One participant explained, *"I was turned down from one place because of my criminal record, and another because they said they didn't deal with gambling stuff. It felt like no service knew what to do with me"* (SUGAR5). Another reflected on the cycle of instability: *"I would clean up, find a room, then fall behind because I was still gambling. Or I'd relapse. Eventually, I stopped trying to find housing through the system—they just didn't get what I was going through"* (SUGAR3). These experiences echo the concept of compounded marginalisation (Grant et al., 2010), where dual addiction results in exclusion from both substance-focused and financial support systems. Housing services tend to be siloed—addressing addiction or financial hardship, but rarely both—forcing SUGAR participants to navigate multiple uncoordinated systems. As Best et al. (2016) suggest, community recovery capital must be intersectional and integrated to address complex addiction profiles effectively.

Extensive research highlights the bidirectional relationship between housing instability and addiction, with both acting as cause and consequence in complex cycles of vulnerability (Matheson et al., 2021; Sharman, 2019). The nature of housing instability varies based on

addiction type and the available support networks. SUR participants often encounter early housing crises exacerbated by legal and health issues, while GAR participants primarily face instability due to escalating financial burdens over time (Marko et al., 2023). SUGAR participants experience the compounded effects of both substance use stigma and the economic ramifications of gambling, leading to more persistent and multifaceted housing challenges (Landon et al., 2021; Coelho et al., 2024). Research also underscores that untreated addictions and the resulting financial strain contribute significantly to homelessness and housing insecurity, emphasising the need for integrated support systems (Stefanovics et al., 2024; Matheson et al., 2022).

In conclusion, housing instability is not merely a consequence of addiction—it is both a driver and a barrier within the recovery journey. SUR participants experienced early and prolonged housing crises exacerbated by health and legal burdens; GAR participants faced delayed but severe instability tied to unaddressed financial strain; and SUGAR participants confronted systemic exclusion due to their dual status. These patterns underscore the need for tailored, integrated housing interventions that recognise the interplay of addiction type, stigma, and systemic barriers. Recognising housing as a core component of recovery capital, rather than a peripheral support, is essential for designing recovery frameworks that are equitable, inclusive, and effective.

5.5.3 Employment Support

Employment is essential in the recovery journey, offering financial stability and a sense of purpose, routine, and social connection—crucial elements for sustained recovery (Neale et al., 2014). Reliable jobs provide structure and promote engagement with others, both of which are vital for reducing the risk of relapse. However, the paths to finding and retaining employment differ greatly depending on the type of addiction, which is affected by systemic obstacles, workplace environments, and the societal stigma linked with addiction. The Kruskal-Wallis test indicated significant disparities in employment difficulties among the Substance Use Recovery (SUR), Gambling Addiction Recovery (GAR), and Dual Recovery (SUGAR) groups (H (2) =

12.36, $p < 0.001$), with participants in SUR and SUGAR facing the highest levels of employment instability.

For SUR participants, employment obstacles often arise from the lasting physical and psychological effects of substance use, aggravated by systemic issues such as criminal records, employment history gaps, and employer discrimination. The follow-up analysis indicated that SUR participants experienced notably more employment difficulties compared to GAR participants ($p < 0.01$), which aligns with broader research connecting substance use to chronic unemployment and workforce exclusion (Neale et al., 2014). One SUR participant expressed, *"I now work for the ambulance service... I love my job, and it has become an important part of my recovery"* (SUR1), underscoring the stabilising impact of meaningful employment on the recovery journey. Employment not only aids individuals in regaining financial autonomy but also acts as a cornerstone for recovery, enhancing self-esteem, structure, and social reintegration (Best et al., 2017). However, many SUR participants faced systemic barriers that made sustained employment difficult, such as employer bias, legal restrictions, and limited access to vocational rehabilitation. Participants reported struggling to secure work due to criminal records or health-related limitations. One participant stated, *"I wanted to get back into work, but the background checks always flagged up my past"* (SUR3), emphasising how legal histories continue to hinder recovery, even after individuals achieve sobriety. This underscores broader systemic issues, as numerous employment pathways remain closed to individuals with addiction-related legal histories, even when those individuals are actively engaged in recovery (Public Health England, 2019).

GAR participants encountered fewer immediate employment challenges, as gambling addiction does not typically lead to the same physical health deterioration or legal issues as substance use. The post-hoc analysis confirmed that GAR participants experienced fewer employment difficulties than SUR participants. However, qualitative data revealed that employment instability often surfaced later in the addiction cycle as gambling debts increased and psychological strain affected work performance. One participant reflected, *"I was still going to work, still dressing the part, but inside I was falling apart. Once I started using payday loans to cover bills, everything unravelled quickly"* (GAR3). Another shared, *"My job was in finance,*

and when it all came out—how much I'd lost, how I'd lied—I had to resign. It was humiliating" (GAR5). This pattern aligns with research indicating that gambling addiction often results in gradual job loss, driven by absenteeism, decreased productivity, and financial stress (*Wardle et al.*, 2019). GAR participants may maintain employment longer, but the fallout—when it comes—can be professionally and socially catastrophic. Moreover, the lack of workplace screening or policies around gambling harms means early opportunities for support are routinely missed (Hing et al., 2016). Consequently, GAR participants often fall through the gaps in employment support systems, receiving help only after substantial financial or psychological harm has occurred.

SUGAR participants faced the most complex employment challenges as they navigated the combined barriers associated with both substance use and gambling addiction. The KW test and post-hoc results indicated that SUGAR participants had significantly higher employment support needs than both SUR and GAR participants, reflecting the compounded impact of dual addiction on job stability. The narratives described these challenges in greater detail. Many had experienced repeated job loss, long-term unemployment, and unsuccessful attempts to re-engage with vocational support. One participant described the dual challenge: *"I'd be clean from drugs but still gambling, and it would mess with my head. I'd miss shifts or be late because I was chasing losses. Employers didn't see recovery—they saw chaos"* (SUGAR4). Another said, *"I was on a programme for alcohol, but when I told them I also gambled, they said they couldn't help with that. Then I went for financial help, and they told me to sort the addiction first. It was like no one wanted the full picture"* (SUGAR1). Participants often felt "unemployable" because of their recovery needs, legal issues, and stigma around dual addiction. Traditional employment support programmes, designed for either substance use or financial instability, rarely offer the integrated services necessary for dual recovery. As one participant mentioned, *"I could get help for my drinking, but no one wanted to discuss the gambling. And when I sought financial advice, they told me to address the addiction first"* (SUGAR3), illustrating how fragmented support systems force individuals to navigate uncoordinated pathways. Grant et al. (2010) argue that dual addiction requires cross-sectoral support, integrating vocational training, mental health services, and financial counselling in case management systems.

In summary, SUR participants often encountered immediate exclusion from the workforce due to visible stigma and legal histories; GAR participants experienced delayed but damaging consequences stemming from concealed financial harm; and SUGAR participants faced ongoing and compounding obstacles due to fragmented support systems and dual stigma. These group differences highlight the need for tailored, cross-sector employment strategies that not only prepare individuals for work but also reform systems that continue to exclude those with complex recovery needs.

5.5.4 Criminal Justice Involvement

Criminal justice involvement significantly shapes recovery pathways, serving as both a barrier to rehabilitation and a critical engagement point within the system. The Kruskal-Wallis test indicated substantial differences in criminal justice involvement among the Substance Use Recovery (SUR), Gambling Addiction Recovery (GAR), and Dual Recovery (SUGAR) groups (H (2) = 6.84, $p < 0.001$), with SUR and SUGAR encountering more legal challenges than GAR. Post-hoc analysis demonstrated that SUR participants experienced higher rates of legal involvement compared to GAR ($p < 0.01$). SUGAR participants confronted legal issues stemming from dual addiction risks. These findings highlight the connection between addiction and the justice system, uncovering gaps for targeted interventions. SUR participants often dealt with legal issues arising from substance-related offences such as drug possession or theft. Qualitative data corroborated this, with participants stating that encounters with law enforcement were pivotal in their recovery journey. One participant noted, *"The arrests were the wake-up call that made me realise I had to change"* (SUR3). This aligns with research emphasising the relationship between substance use and legal consequences, indicating that drug criminalisation directs individuals into the justice system instead of treatment (Degenhardt et al., 2013). While criminal justice involvement can serve as a motivation for recovery, punitive legal responses, such as incarceration without rehabilitation, may exacerbate substance use disorders and contribute to recidivism (Cloud & Granfield, 2008). Expanding diversion programmes, such as drug courts and community rehabilitation, is crucial.

In contrast, GAR participants experienced less immediate legal involvement, although financial pressures linked to gambling often led to criminal behaviour over time. While the KW test indicated that GAR participants encountered significantly fewer legal challenges than SUR and SUGAR participants, qualitative narratives revealed that gambling-related crimes—such as fraud, embezzlement, or theft—emerged later in the addiction cycle. One GAR participant admitted, *"When the money ran out, I started stealing to keep gambling"* (GAR5), underscoring the desperation that can drive gambling-related criminality. This delayed onset of legal issues aligns with research indicating that gambling addiction rarely triggers legal scrutiny until financial problems escalate (*Gainsbury et al.*, 2015). A key systemic issue here is the under-recognition of gambling addiction within legal frameworks; many offenders are processed without their gambling behaviours being identified or treated. Implementing gambling-specific legal screening—particularly in financial crime cases—could enable earlier interventions and reduce the risk of recidivism.

Participants in the SUGAR group faced serious legal issues linked to substance abuse and gambling. Their dual addiction led to overlapping difficulties, including drug-related arrests and fraud, which compounded their legal risks. One participant shared, *"I was bankrupt, and my health was failing. It felt like everything was collapsing all at once"* (SUGAR7), illustrating the crises brought on by dual addiction. Research indicates that individuals with co-occurring addictions face more severe legal repercussions due to financial, health, and behavioural impacts (Grant et al., 2010). However, legal systems often treat these offences separately, overlooking the interconnected nature of dual addiction. Integrated interventions, such as specialised addiction courts for substance abuse and gambling, may provide better recovery options and address systemic gaps.

In conclusion, criminal justice involvement varies by addiction type but is crucial for recovery; it can be hindered via punitive measures or fostered through interventions. SUR participants need alternatives to incarceration, like drug courts and community rehabilitation, to reduce recidivism. GAR participants would benefit from early legal screening for gambling addiction in financial crime cases, allowing intervention before legal issues grow. SUGAR participants require integrated legal responses addressing dual addiction complexities. Expanding

diversion programs, improving legal screening, and enhancing collaboration between the criminal justice system and addiction services are vital to transforming the system from a punitive to a recovery-oriented pathway.

5.5.5 Age of First Engagement with Health and Criminal Justice Services

The age at which people first interact with healthcare and criminal justice systems is essential in determining recovery paths, affecting both the intensity of addiction and the availability of early interventions. The Kruskal-Wallis test revealed significant variations in the age of first engagement among the Substance Use Recovery (SUR), Gambling Addiction Recovery (GAR), and Dual Recovery (SUGAR) groups (H (2) = 6.987, p = 0.030). Notably, participants in the SUR and SUGAR groups engaged with the criminal justice system at younger ages compared to those in the GAR group. These results highlight how early interactions with these systems can either worsen addiction-related issues or act as crucial opportunities for intervention.

For SUR participants, early engagement with the criminal justice system often stemmed directly from substance use during adolescence or early adulthood, frequently linked to offences such as underage drinking, drug possession, or petty theft. One participant reflected, For SUR participants, criminal justice contact frequently stemmed from drug possession, public intoxication, theft, or probation violations. Many described these encounters as pivotal moments—either exacerbating harm or prompting reflection. One participant explained, *"I was arrested five times in two years. The last time, I ended up in a court-mandated rehab. That probably saved my life"* (SUR4). Another reflected, *"Getting arrested was the first time someone asked me if I needed help instead of just locking me up"* (SUR6). These experiences align with research showing that criminalisation of substance use often channels individuals into punitive systems rather than therapeutic care (Degenhardt et al., 2013; Cloud & Granfield, 2008). While some described incarceration as a catalyst for change, others experienced it as a revolving door without support. One participant noted, *"Jail didn't fix anything. I detoxed alone, got out, and used the next day. No one followed up with me"* (SUR2). Research has long established that early encounters with the criminal justice system—mainly when approached from a punitive rather than rehabilitative perspective—can heighten the risk of chronic substance use and

recidivism (*Degenhardt et al.*, 2013). These findings underscore the critical need for youth-specific diversion programmes that prioritise treatment over punishment, providing early pathways into addiction services before criminal behaviours become entrenched.

In contrast, GAR participants typically engaged with healthcare and legal systems at later stages of their addiction, often well into adulthood. Gambling addiction tends to escalate more subtly than substance use, with legal and healthcare interactions generally triggered by financial crises or severe psychological distress rather than by criminal behaviour. One participant disclosed, *"No one knew how bad things were until I took money from my employer. That was the first time the law got involved"* (GAR5). Another stated, *"I forged cheques to pay for my gambling. I didn't even think of it as a crime until I was charged"* (GAR7). These stories illustrate how gambling harm tends to remain hidden until it reaches legal thresholds. Despite this, many participants reported that their gambling was never discussed in court or in pre-sentence assessments. *"I was sentenced for fraud, but no one ever asked why I did it. They missed the gambling part completely"* (GAR2). This under recognition reflects a systemic failure to screen for gambling harm. Showing that systems can limit early intervention opportunities, as gambling addiction often remains concealed until the consequences—such as bankruptcy or fraud—become legally or financially unmanageable (*Gainsbury et al.*, 2015). This delay highlights the necessity for early gambling education, routine screening in mental health services, and community outreach to identify problematic gambling behaviours before legal or financial crises arise.

Participants in SUGAR demonstrated a more intricate journey, often becoming involved with criminal justice systems early due to substance use, while healthcare interventions for gambling arose much later. The dual aspects of their addiction led to sporadic engagement with the systems, where early legal troubles were generally linked to substance use. In contrast, the financial and psychological impacts of gambling grew more severe over time. One participant noted, *"I'd get arrested for possession, get out, then gamble everything away trying to sort my mess out. Then I'd get desperate and do something stupid again"* (SUGAR6). Another shared, *"It was like one addiction fed the other, and the law was always just around the corner. Fines, court dates, jail time—it was constant"* (SUGAR3). A third added, *"When I finally tried to get*

help, the services were split—drug support in one place, gambling somewhere else. No one talked to each other, and I ended up back in court" (SUGAR1). These accounts align with dual diagnosis literature, which shows that individuals with co-occurring addictions often experience intensified legal consequences and reduced access to coordinated support (Grant et al., 2010). Their cases reveal a gap in justice systems that treat substance-related and financial crimes as distinct, even when they emerge from the same behavioural and psychological patterns. The lack of integrated legal responses results in missed opportunities for holistic intervention and increases the likelihood of recidivism.

Braithwaite's (1989) theory of reintegrative justice offers a valuable lens here. When legal systems provide opportunities for support, rehabilitation, and reintegration, they enhance recovery capital. When they rely on stigma, punishment, or isolation, they reduce it. The narratives across all three groups show that legal involvement can be either a turning point or a compounding harm—depending not on the offence, but on the structure of the response. In summary, SUR participants frequently encounter the justice system due to the visibility and criminalisation of substance use. Without diversion, these encounters often deepen addiction and trauma. GAR participants are less likely to be identified by justice systems until financial crimes escalate—yet even then, gambling remains under-assessed. SUGAR participants bear the most significant burden, caught between criminalisation and systemic fragmentation, without access to integrated justice pathways. To address these issues, reforms are needed across three fronts: (1) expanded use of drug and problem gambling courts, (2) mandatory legal screening for all addiction types, and (3) better coordination between criminal justice and recovery services. A shift from punishment to partnership is critical in transforming criminal justice systems into sites of restoration rather than revolving doors.

5.5.6 Healthcare Engagement Across Recovery Groups

Although the Kruskal-Wallis test did not identify significant differences in the age of first engagement with healthcare services among the three groups, the qualitative data revealed important distinctions in the context, triggers, and consequences of healthcare engagement. The median age across all groups was 24 years, yet the reasons for and outcomes of healthcare

contact varied significantly, providing insight into the distinct pathways through which individuals begin to engage with recovery-supportive services.

Figure 2: Median age of first engagement with healthcare services

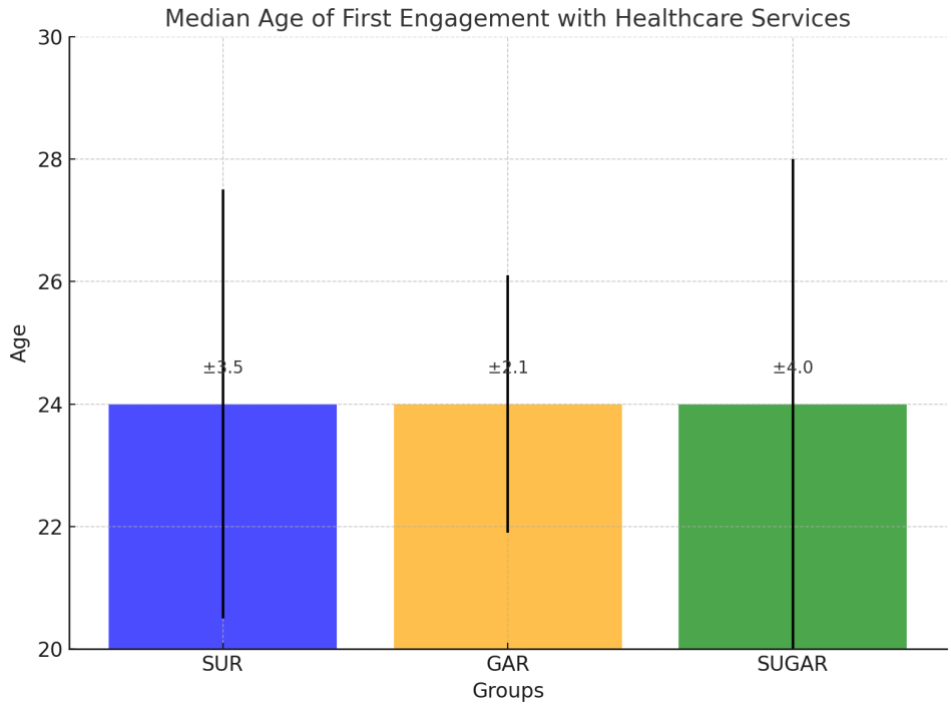


Figure 2 illustrates that, while the median age of first healthcare engagement was consistent across groups, variance in the data reveals divergent pathways into care. These patterns can be better understood through updated frameworks of recovery and health equity, which emphasise how structural barriers, stigma, and socio-economic disadvantage shape when and how individuals access services (Best et al., 2017; Hennessy, 2017; Van den Berk-Clark et al., 2024). The timing and nature of engagement reflect uneven access to recovery capital—particularly in relation to healthcare literacy, system trust, and service integration.

Members of the SUR group generally accessed healthcare services sooner during their recovery due to the severe physical health issues caused by substance use. The qualitative data indicated that many individuals sought assistance after experiencing major medical crises, such as overdoses or chronic health conditions related to substance use. One participant shared, "*I collapsed from drinking and ended up in A&E. I thought I was dying. That was the first time I talked to anyone*

seriously about addiction" (SUR2). Another noted, *"I had been ignoring pain and sickness for months. It wasn't until I was vomiting blood that I actually asked for help* (SUR6). These narratives align with research indicating that substance use disorders often produce urgent, visible health consequences that bring individuals into contact with healthcare earlier in the addiction timeline (Neale et al., 2014). However, this form of crisis-driven engagement may not always lead to long-term support, particularly if healthcare responses are not integrated with addiction services. The need for trauma-informed, addiction-aware frontline medical care is evident across this group.

GAR participants presented a distinct pattern, primarily seeking healthcare services for mental health issues rather than physical health concerns. One participant said, *"I was terrified of opening the post, avoiding calls, and could not sleep. That's when I finally saw a GP"* (GAR7). Another added, *"I thought I could fix it myself—get the money back, stop when I was ahead. When I realised I couldn't, and I was suicidal, I went to the walk-in centre"* (GAR4). These stories reflect the less visible but no less severe psychological harm linked to gambling (Wardle et al., 2019). Importantly, GAR participants reported mixed responses from healthcare providers—some felt dismissed, others were referred to mental health support, but very few were asked directly about gambling. This gap reinforces the need for universal screening protocols and education for healthcare professionals, as part of broader community capital reforms.

SUGAR participants experienced complex healthcare issues from substance use and gambling addictions. Quantitative data showed no significant age differences in engagement compared to other groups; however, qualitative insights revealed that many sought care for interconnected physical and mental health crises. One participant explained, *"I was drinking heavily, using occasionally, and gambling constantly. When I ended up in the hospital after an overdose, it wasn't just about the substances—it was the debt, the anxiety, everything"* (SUGAR5). Another reflected, *"I went to the GP for anxiety and stress, but I didn't mention the gambling because I didn't think they'd understand. When I finally did, they referred me to an addiction service, but it didn't cover gambling"* (SUGAR9). These experiences highlight a systemic failure to identify and treat co-occurring addictions holistically. Participants often felt that one condition was acknowledged while the other was sidelined, limiting the effectiveness of support. As Grant et al. (2010) suggest, dual diagnosis populations require integrated care systems capable of addressing intersecting physical, psychological, and behavioural issues.

The SUGAR group also showed a distinct pattern in their interactions with the criminal justice system, engaging with legal services at a younger age than the GAR group. However, their experiences mirrored those of the SUR group. Many reported simultaneous engagement with healthcare and criminal justice systems, as their dual addictions resulted in health crises and legal issues. One participant stated,

> *I was arrested for theft while struggling with addiction, and it wasn't until I was taken to the hospital for an overdose that I realised I needed help. It wasn't just the legal trouble—it was how bad my health had gotten that made me face reality.* (SUGAR3).

These cross-system encounters underscore the need for coordinated approaches between justice, healthcare, and recovery services. They also reflect a broader pattern of compounded marginalisation for dual-diagnosis individuals—often left to navigate fragmented systems with little support for the complexity of their needs (Van den Berk-Clark et al., 2024).

In summary, although the average age of healthcare engagement appears statistically similar across groups, the qualitative findings reveal strikingly different recovery contexts. SUR participants often access care in the context of physical crisis, GAR participants engage later due to mental health strain, and SUGAR participants navigate multifaceted distress with limited coordinated support. These differences highlight the urgent need for early intervention, holistic care models, and trauma-informed practice embedded across primary, emergency, and specialist care settings. Integrating addiction screening across all points of care—not just substance-focused environments—will be essential to building community capital and preventing relapse, criminalisation, and long-term health deterioration.

5.5.7 Summary

This section has demonstrated that community capital—comprising access to healthcare, stable housing, employment opportunities, and legal support—functions as both a protective and risk-amplifying factor in addiction recovery. The Kruskal-Wallis tests revealed statistically significant differences across all community capital domains, confirming that system engagement is unevenly distributed among the SUR, GAR, and SUGAR groups. However, the

qualitative findings brought critical nuance to these patterns, revealing experiential complexities—particularly for dual recovery (SUGAR) participants—that are not captured by statistical averages alone. Table 20 addresses Research Question 2 (RQ2) by outlining the points of convergence and divergence between the groups across these domains.

Table 15: Community Capital themes with Kruskal-Wallis test and significance with degree of qualitative alignment and implications

Topic	KW Test (H, p-value)	Significant (S/NS)	Qualitative Alignment	Implications
Healthcare Needs in Recovery	H (2) = 2.725, p = 0.001	S	Partial Alignment: Quantitative results suggest fewer needs for SUGAR, but qualitative data reveals complex dual recovery needs.	Tailored healthcare models are required, with integrated care for SUGAR participants addressing physical and mental health.
Housing Instability	H (2) = 4.35, p = 0.024	S	Alignment: Housing instability is severe for SUR and SUGAR groups; GAR faces delayed challenges.	Housing programmes must address the immediate needs of SUR and SUGAR groups and delayed risks for GAR.
Employment Support	H (2) = 12.36, p < 0.001	S	Alignment: Employment challenges are most severe for SUGAR due to dual addictions.	Employment support should prioritise addressing gaps in history for SUR and integrated approaches for SUGAR.
Criminal Justice Involvement	H (2) = 6.84, p < 0.001	S	Alignment: Legal issues are highest in SUR and SUGAR groups, with GAR facing fewer immediate challenges.	Interventions should focus on preventing recidivism for SUR and SUGAR participants, with financial counselling for GAR.
Age of First Engagement with Services	H (2) = 6.987, p = 0.030	S	Alignment: SUR and SUGAR groups engaged with services earlier; GAR experienced delayed engagement.	Early intervention strategies must target the distinct needs of SUR and SUGAR participants, with proactive outreach for GAR.

a. Each row tests the null hypothesis that the Sample 1 and Sample 2 distributions are the same, where the independent variable is the participant type, and the dependent variable is gambling severity. Asymptotic significances (2-sided tests) are displayed.

b. The significance level is .050.

c. Significance values have been adjusted using the Bonferroni correction for multiple tests.

SUR participants typically engaged with healthcare and legal systems earlier than GAR or SUGAR, often through acute crisis points such as overdose, arrest, or hospitalisation. This aligns with findings by Degenhardt et al. (2013) and Neale et al. (2014), who show that substance use often triggers emergency system contact due to the physical risks and criminalisation of drug use. These early encounters, while sometimes redirective, often lacked follow-up care or trauma-informed approaches, increasing relapse risk (Cloud & Granfield, 2008). Reforms such as drug courts and diversion schemes offer alternative pathways, redirecting individuals toward treatment and stabilisation (Werb et al., 2016).

In contrast, GAR participants typically delayed healthcare and justice engagement, with addiction remaining hidden until financial collapse or mental health deterioration. As Hing et al. (2016) and Wardle et al. (2019) argue, gambling addiction often lacks visible signs, allowing harm to escalate unnoticed. Several participants described being diagnosed with anxiety or depression without clinicians exploring underlying gambling behaviours—highlighting the lack of routine gambling screening in healthcare settings (Public Health England, 2021). Without early identification, GAR individuals miss opportunities for timely intervention, often entering services only at crisis.

SUGAR participants faced the most complex trajectories, characterised by chronic housing instability, cyclical unemployment, and repeated involvement with the justice system. This group frequently reported service fragmentation, where they were forced to navigate separate systems for substance use and gambling, with little coordination or integration. These findings are consistent with Grant et al. (2010) and Van den Berk-Clark et al. (2020), who argue that dual-diagnosis clients are at high risk of "falling through the cracks" in non-integrated service environments. Additionally, Best et al. (2017) emphasise the importance of recovery capital across various domains—housing, legal status, employment, and healthcare access—arguing that rebuilding one domain without the others weakens the sustainability of recovery.

While community capital—such as supported housing, job programmes, or rehabilitation schemes—can strengthen recovery pathways, poorly designed systems often reinforce exclusion. For example, criminal justice responses focused on punishment rather than reintegration reduce

recovery capital, particularly for individuals with prior convictions or visible substance use histories (Hennessy, 2017). Similarly, employment support that does not account for mental health or addiction history is likely to reproduce marginalisation (Neale et al., 2015). Effective recovery must be understood as a structural and ecological process, not merely an individual endeavour (White & Cloud, 2008; Best & Laudet, 2010).

Future interventions must include early screening across healthcare and criminal justice services (Gainsbury et al., 2015), integrated dual-diagnosis treatment (Cooper et al., 2022), and trauma-informed, cross-sector recovery systems that are inclusive of financial harm, legal vulnerability, and co-occurring addiction complexity. Policy development must centre equity—ensuring that access to recovery resources is not determined by addiction type or visibility. Without this, dual recovery pathways will remain fragmented, high-risk, and underserved.

Ultimately, community capital is not just a support scaffold—it is a gatekeeper. How systems respond to addiction determines whether individuals are rehabilitated or recycled through harm. By acknowledging the structural nature of recovery capital and prioritising integrated systems of care, services can move closer to realising practical, inclusive, and sustainable recovery outcomes for all.

5.6 Conclusion

This chapter extends the quantitative patterns presented in Chapter 4 through a mixed-methods analysis that examines the distribution and depth of recovery capital across three distinct recovery cohorts: Substance Users in Recovery (SUR), Gamblers in Recovery (GAR), and those in Dual Recovery (SUGAR). By integrating statistical findings with narratives of lived experience, this chapter illustrates the nuanced ways in which personal, social, and community capital interact to shape recovery trajectories. It has also revealed how systemic gaps—particularly in healthcare access, housing stability, employment support, and legal intervention—undermine the efficacy of recovery pathways, especially for individuals with dual diagnoses.

Findings suggest that while recovery capital is essential to sustained recovery, its distribution is uneven and often shaped by structural factors. SUR participants typically encountered acute health crises and early criminal justice involvement, which triggered contact

with services but also prolonged cycles of penalisation and relapse. These findings are consistent with research indicating that substance users are often diverted into punitive systems rather than comprehensive care (Degenhardt et al., 2013; Werb et al., 2016).

In contrast, GAR participants retained stronger social ties during the early stages of their addiction. However, they engaged with services later, often when gambling-related harms had escalated into legal and financial crises. The concealed nature of gambling limited opportunities for early detection and intervention, echoing previous findings that gambling harm is under-recognised across healthcare, financial, and legal systems (Wardle et al., 2019; Public Health England, 2021). This delayed engagement frequently resulted in missed intervention windows and a need for prolonged psychological and financial support.

SUGAR participants, managing co-occurring gambling and substance use disorders, faced the most complex recovery barriers. However, the quantitative data revealed some similarities with SUR and GAR, while the qualitative insights highlighted chronic service fragmentation, stigma, and exclusion. Participants frequently reported that treatment and support were available for either substance use or gambling—but not both—resulting in fragmented care that intensified vulnerability. These findings highlight the limitations of conventional treatment models and underscore the need for fully integrated dual-diagnosis pathways, as argued by Grant et al. (2010) and Van den Berk-Clark et al. (2020).

Table 21 summarises the similarities and differences in how recovery capital operates across the three groups. While all participants require a blend of emotional resilience, social support, and community infrastructure, the composition and urgency of these needs vary significantly:

Table 16: Similarities and differences of recovery capital domains among groups

Recovery Capital	Similarities	Differences
Personal	All groups rely on emotional resilience and psychological coping mechanisms; mental health needs are a common theme across cohorts.	SUR faces severe physical health issues; GAR struggles primarily with mental health challenges; SUGAR experiences both physical and psychological difficulties.
Social	All groups benefit from social support networks but experience challenges in maintaining these during recovery.	SUR participants report strained family relationships and isolation early; GAR participants maintain

		ties longer but face isolation due to financial issues; SUGAR participants often lack integrated support addressing dual challenges.
Community	All groups require access to healthcare, housing, and employment resources; mental health services are universally essential. SUR requires urgent healthcare for physical health; GAR needs mental health-focused care; SUGAR demands integrated services addressing dual addiction complexities.	SUR requires urgent healthcare for physical health; GAR needs mental health-focused care; SUGAR demands integrated services addressing dual addiction complexities.

The chapter reinforces that recovery is not merely an individual challenge, but one deeply embedded in institutional and social structures. The disparities identified in system responsiveness and resource availability highlight how different recovery capital configurations can either scaffold or destabilise long-term recovery. These findings underscore the need for policy and service innovations that focus on integrated care, early screening, and structural reforms to reduce exclusion and enhance access.

The next phase of this study transitions to Research Questions 3 and 4, which adopt a qualitative, longitudinal lens to examine how individuals navigate recovery over time. Whereas previous chapters established the scope of addiction and the distribution of recovery capital, the following chapter will explore how people define recovery, construct meaning, and sustain motivation through evolving social, personal, and institutional landscapes. RQ3 will focus on personal definitions of recovery, internal drivers, and the relational dimensions of resilience. RQ4 will examine how systemic actors—such as healthcare providers, employers, and justice professionals—shape or constrain recovery journeys. This shift enables a more dynamic and participatory account of recovery, building on the structural insights of this chapter with more profound explorations of agency, adaptation, and institutional navigation.

Chapter 6: Recovery Perspectives and Pathways

6.1 Introduction

Building on the findings of Chapters 4 and 5, which examined behavioural patterns through quantitative analysis and explored group differences using a mixed-methods recovery capital framework, this chapter turns to a qualitative exploration of recovery experiences and definitions. It addresses the final two research questions:

A) RQ3: What are the perspectives of participants on the relationship between gambling, substance use, and crime?

B) RQ4: How do participants define recovery?

To answer these questions, the chapter draws on life narrative interviews with participants from the three recovery groups (SUR, GAR, and SUGAR), analysed using reflexive thematic analysis. Unlike the earlier chapters, which relied on statistical tests and deductive frameworks, this chapter adopts an inductive approach, generating themes directly from participants' accounts before mapping them onto recovery capital.

The chapter is organised into three main sections. Section 6.2 outlines the methodology, describing the interview process, analytic procedures, and the rationale for the inductive approach. Section 6.3 presents the findings for RQ3, thematically exploring participants' perspectives on the relationship between gambling, substance use, and crime. Section 6.4 then addresses RQ4, analysing how participants define and sustain recovery, including both shared and group-specific understandings. Section 6.5 provides a summary of thematic insights, and Section 6.6 concludes by synthesising these findings within the recovery capital framework and presenting a final table linking the emergent themes to recovery capital domains. For ease of navigation, Tables 6.1 and 6.2 appear within the methodology section (6.2) and summarise the overarching themes for RQ3 and RQ4. The final recovery capital table is included in the conclusion (6.6), drawing these themes together conceptually.

6.2 Methodology

This chapter presents the qualitative findings addressing Research Questions 3 and 4, based on 26 in-depth semi-structured life narrative interviews conducted with participants from three purposively sampled recovery groups: Gamblers in Recovery (GAR, n=10), Substance Users in Recovery (SUR, n=10), and individuals in Dual Recovery (SUGAR, n=6). The interviews followed a narrative format, guided by a modified version of the Victoria Responsible Gambling Foundation's recovery questionnaire. This approach enabled participants to reflect on their addiction journeys, treatment experiences, and evolving definitions of recovery in their own words.

While Chapter 5 used recovery capital as the initial coding framework, Chapter 6 took an inductive approach where themes emerged from the data and were then analysed in relation to recovery capital. Thematic analysis followed Braun and Clarke's (2006; 2019) six-phase framework, within a constructivist paradigm. The initial familiarisation stage involved repeatedly reading transcripts and actively making notes, allowing the researcher to engage deeply with participants' narratives. This method ensured that the emerging interpretations stayed grounded in participants' language and contexts, thereby enhancing the authenticity and credibility of the analysis (Creswell & Poth, 2018; Patton, 2015; Ravitch & Carl, 2020).

During the coding phase, initial codes were generated inductively, with particular focus on questions related to life narratives. This process did not use grounded theory coding methods (e.g., axial or theoretical coding). Instead, it employed Braun and Clarke's thematic analysis framework to identify recurring patterns and meaningful units across transcripts. The mapping was conducted iteratively, with themes reviewed against the original definitions of personal, social, and community capital (Cloud & Granfield, 2008; Best & Laudet, 2010). Where themes spanned multiple domains—such as *continuity and adaptation* or *recovery maintenance strategies*—they were coded across categories to reflect their multidimensional nature. This process was cross-checked against existing recovery capital applications in the literature (Neale et al., 2015; Best & Hennessy, 2022) to ensure conceptual consistency, while also allowing space for inductive insights from participant narratives.

The flexible yet organised nature of this approach facilitated the emergence of rich insights while maintaining transparency and a clear link between participants' accounts and analytical interpretations (Charmaz, 2014; Saldaña, 2016; Silverman, 2020). The second phase of analysis involved reviewing and refining initial codes into broader conceptual categories. Although this stage is sometimes compared to axial coding, it was not employed in the grounded theory sense; instead, it focused on identifying relationships between codes to support the development of overarching candidate themes. These were iteratively mapped onto the Recovery Capital framework (Cloud & Granfield, 2008; Laudet & White, 2008), which categorises recovery resources across personal, social, and community domains. This conceptual approach enhanced transferability by providing a structured framework for comparing and interpreting experiences across diverse recovery contexts (Geertz, 1973; Morrow, 2005; Bazeley & Jackson, 2013). NVivo 14 software was used throughout the analysis to support data organisation, visualisation, and comparison across participant groups. NVivo's coding matrix and charting tools enabled cross-case comparison of recovery capital dimensions and thematic patterns, thereby improving confirmability through a transparent audit trail of coding decisions and theme development (Edhlund & McDougall, 2019; Bazeley & Jackson, 2013).

While findings from each group (GAR, SUR, and SUGAR) are presented where relevant, the primary analytical strategy focused on thematic coherence across the dataset rather than a direct comparative approach. Group identifiers are used to contextualise quotes and highlight differences or similarities, but themes were developed across all interviews to reflect shared recovery experiences and structural challenges. The Recovery Capital framework was utilised not only as an interpretive tool but also as a means to conceptualise how participants mobilised personal, social, and community resources throughout their recovery journeys. Before presenting the findings, Tables 6.1 and 6.2 are included here to summarise the overarching themes identified for RQ3 and RQ4. These tables provide a clear overview of the analytic structure and serve as a roadmap for the detailed thematic discussion that follows in Sections 6.3 and 6.4.

Table 6.1. Summary of the overarching themes for RQ3

Theme	Description
Addiction-Crime Cycle	Addiction—especially when involving both gambling and substance use—was described as a mutually reinforcing cycle involving emotional distress, financial harm, and criminal behaviour. This cycle was often intensified by late intervention.
Emotional Regulation and Escapism	Gambling and substances were frequently used to suppress trauma, stress, and shame. These short-term coping strategies became entrenched and exacerbated addictive behaviours.
Stigma, Secrecy, and Silence	Particularly in GAR and SUGAR groups, participants concealed their addiction due to stigma and shame, delaying disclosure and help-seeking until harm became unmanageable.
Financial Desperation and Crime	Crime often emerged in the context of acute financial strain—especially theft, fraud, or borrowing under false pretences—to sustain gambling or substance use, most commonly among GAR and SUGAR participants.
Turning Points and Motivations for Change	Participants across all groups described emotional collapse, family breakdown, or arrest as catalysts for initiating recovery. These events often marked a shift in identity and self-perception.
Different Pathways and Prioritised Behaviours	Addiction sequences varied: SUR typically began with substances, GAR with gambling, and SUGAR with shifting patterns of both. The prioritisation of one behaviour often changed over time, altering the trajectory into crime and recovery.
Crime as a Function of Addiction Focus	The form of criminal behaviour was closely linked to addiction type: fraud and financial crimes were more common in GAR, while SUR participants reported acquisitive and sometimes violent crimes. SUGAR participants displayed patterns from both.
Help-Seeking and Systemic Gaps in Dual Recovery	Participants—particularly in the SUGAR group—described significant challenges accessing services that addressed both gambling and substance use. Stigma and siloed service structures led to delays, poor triage, and inadequate support, increasing risks of relapse and criminality.

Table 6.2: Summary of themes for RQ4

Theme	Description
Recognition and Readiness for Change	Turning points such as emotional collapse, relational rupture, or crisis moments that prompt recovery.
External Pressures and Interventions	Influence of family, legal systems, or workplaces in pushing individuals toward help-seeking.
Emotional Pain and Identity Collapse	Shame, guilt, and psychological distress as motivators for behavioural change and identity transformation.
Age of First Engagement	Age and triggers at first service contact—linked to addiction type and systemic visibility.
Pathways into Recovery Services	How participants accessed recovery: mutual aid, NHS, or self-navigation across fragmented systems.
Triage and Crisis Management	First encounters with support services and how they shaped trust, identity, and recovery trajectory.
Personal Transformation	Recovery as a process of rebuilding identity, values, and emotional health.
Relational Support	The central role of peers, family, and community in supporting recovery.
Continuous Nature of Recovery	Recovery seen as an ongoing, adaptive process rather than a fixed goal.
Entry Points into Recovery	Behavioural, emotional, or dual-entry triggers marking the beginning of recovery.
Focus Areas in Recovery	Prioritised goals—e.g., emotional healing, financial restitution, stability.
Approaches to Maintaining Recovery	Strategies for long-term engagement: peer support, therapy, integrated care.
Abstinence vs. Quality of Life	Recognition that abstinence is necessary but not sufficient for meaningful recovery.
Comparison to Broader Health Recovery	Recovery defined through a biopsychosocial lens—emphasising purpose, connection, and wellbeing.

The following sections examine these themes in detail, beginning with participants' views on the links between gambling, substance use, and crime (RQ3), and then discussing definitions and experiences of recovery (RQ4).

6.3 Exploring the Relationship Between Gambling, Substance Use, and Crime

This section addresses Research Question 3 (RQ3): What are the perspectives of participants on the relationship between gambling, substance use, and crime? Drawing on inductive thematic analysis of the life narrative interviews, the findings are organised thematically rather than by recovery group, allowing both shared experiences and group-specific differences to be highlighted. Each subsection introduces a theme, illustrates it with participant quotations, and situates it within relevant theoretical frameworks, before concluding with a brief summary of key insights.

6.3.1 The Cycle of Addiction

A dominant theme emerging from the data was the cyclical and self-perpetuating nature of addiction, where gambling and substance use fed into one another and often escalated into criminal activity. Participants described addiction not as a series of isolated behaviours but as a continuous, revolving pattern driven by emotional distress, financial collapse, and reactive coping. The cycle typically started with one behaviour—either gambling or drug use—but quickly grew complex, with each feeding into and intensifying the other. This dynamic aligns with Cloud and Granfield's (2008) recovery capital framework, in which reduced personal, social, and community resources heighten vulnerability to relapse and deepen entrenchment in addictive behaviours. The cyclical pattern was strongly reflected in participants' accounts. One explained;

> *It started with the gambling. It was just a flutter at first, something harmless. But when the losses started piling up, I began lying, borrowing, and hiding things from my family. Then I started drinking more to take the edge off the panic. Before I knew it, I was stealing from work and using drugs to numb everything. It felt like I was on a runaway train I couldn't get off* (GAR4).

Another described how the cycle unfolded despite efforts at recovery;

> *I was always using [drugs], from my teens. Then the gambling came in after I got clean the first time. It gave me the same buzz, the same escape. But it didn't stop*

> *there. I was lying to my partner, borrowing off dealers, robbing shops. They fed off each other until I was back to square one, maybe worse* (SUGAR3)

Across the three recovery groups, the core experience of being trapped in a reinforcing behavioural loop was consistent — but the pathways into and through the cycle varied. Among GAR participants, the usual entry point was gambling. Their stories framed gambling as an initial coping mechanism for emotional pain or life stress, which then resulted in financial ruin, shame, and eventual substance use to deal with those effects. These accounts reflect the "emotionally vulnerable" and "antisocial impulsivity" profiles in the pathways model of problem gambling (Blaszczynski & Nower, 2002). As one participant explained: *"I'd gamble and lose, then turn to crime for money... and use drugs to escape the guilt"* (GAR4). For this group, gambling served as both a trigger and a shield, delaying crisis while deepening harm.
SUR participants, by contrast, often described substance use as the initial behaviour, with gambling entering the cycle at a later stage—sometimes during periods of sobriety or boredom. Gambling was frequently seen as a secondary behaviour that reactivated or replaced drug use. One participant reflected: *"Addiction is a cycle, and it doesn't really matter which door you walk through first. For me it was heroin, but later on, the slots took over. It was just another way to escape, and it brought the same destruction"* (SUR7). Here, the cycle is driven by underlying emotional or psychological needs rather than any specific behaviour.

SUGAR participants presented the most integrated and complex cycles. Their accounts highlighted simultaneous engagement with both gambling and substance use from early stages of addiction;

> *I'd be gambling at the pub while using. Or I'd score, then go to the bookies because I was high and felt invincible. When I lost, I'd use again to stop myself feeling like a failure. It was endless. One fed the other. I never had any money, and everything I did was just about getting the next fix, the next bet, whatever kept me from thinking* (SUGAR2)

This interplay reflects the concept of compounded behavioural dependencies, in which each addiction intensifies the cravings and consequences of the other (Yakovenko & Hodgins, 2018). Despite differences in starting points, participants across all groups shared a strong sense of inevitability within the cycle. They described repeated efforts to stop, only to find that one behaviour would trigger the other again. Whether gambling or substances came first, the emotional, financial, and relational damage built up quickly. Many participants observed that it was not the addiction itself but the interconnectedness of behaviours—and the shame, isolation, and survival strategies that followed—that made recovery seem out of reach. This pattern supports the idea of negative recovery capital (Best et al., 2010), in which a lack of resources and support strengthens harmful coping mechanisms.

These findings indicate that breaking the addiction cycle requires tailored and integrated responses. For GAR participants, early interventions focusing on shame, secrecy, and financial harm may help prevent escalation. SUR participants could benefit from relapse-prevention models that specifically address substitute behaviours like gambling. SUGAR participants need dual-focused, trauma-informed services capable of recognising the synergistic effects of co-occurring addictions. In all cases, the cyclical relationship between gambling, substance use, and crime highlights the fragility of recovery capital and the need for holistic, systemic interventions (Best & Laudet, 2010; White & Kurtz, 2006).

6.3.2 Emotional Regulation and Escapism

A core theme in participants' stories was the use of gambling and/or substances to cope with emotional pain, psychological trauma, and ongoing distress. Instead of viewing addiction as purely recreational or hedonistic, most participants described it as a form of survival—an effort to manage unbearable internal states. This aligns with Khantzian's (1997) self-medication hypothesis, which views addiction as an attempt to control emotional states when healthier coping strategies are unavailable. Recent research also supports this view, showing that individuals with co-occurring mental health issues often turn to substances and gambling to reduce symptoms of depression, anxiety, or trauma (Limbos et al., 2023; Pickering et al., 2022).

The theme also aligns with trauma-informed models of care, which position addiction as a response to unresolved trauma or emotional dysregulation (SAMHSA, 2014; Sweeney et al., 2018). These frameworks suggest that individuals engage in addictive behaviours not simply for pleasure but to create temporary relief from chronic psychological strain. This is particularly salient for individuals with histories of abuse, neglect, or emotional instability (Oram et al., 2021). From a conceptual standpoint, addiction can be seen as a compensatory strategy used to navigate intolerable emotions. Many participants described gambling or substance use as a means of avoiding shame, fear, or emotional chaos. One SUR participant reflected:

> *I used to drink or use every time something went wrong. A fight, a bill, even just being on my own with nothing to do. If I had time to think, I'd spiral—thinking about everything I'd messed up, how much I hated myself, or things from my past I couldn't forget. I couldn't be alone with my feelings. I didn't have the tools to handle them. It wasn't about getting high anymore—it was about not having to feel. The drugs gave me a way to switch off the noise in my head. That became my normal. I honestly didn't know how to live without them* (SUR6)

This supports growing evidence that affect regulation plays a critical role in addiction development and maintenance, particularly among individuals with adverse childhood experiences (Flyger et al., 2024; Jørgensen et al., 2023). GAR participants frequently described gambling as a cognitive distraction. Rather than numbing physical sensations or altering consciousness, it offered a dissociative focus that temporarily silenced distress. One participant explained:

> *I'd sit there at the machines for hours. I wouldn't even notice time passing. It didn't matter if I was winning or losing—it was just about zoning out. I didn't have to think about the bills piling up, or the arguments at home, or the fact that I'd let everyone down. I'd just stare at the screen, press the buttons, and*

> *everything else would disappear. That silence in my head was addictive. It was the only place I felt calm, even though it was destroying me* (GAR1)

These patterns are consistent with research on behavioural addiction, where ritualised engagement offers psychological escape (Dowling et al., 2017; Nower & Blaszczynski, 2021). Research has also found that dissociative states during gambling are more common among individuals experiencing chronic stress, which may contribute to escalation of harm (Hing et al., 2022). In contrast, SUR participants more explicitly linked substance use to trauma and mental health challenges. One described:

> *I started using to deal with stuff that happened when I was a kid. It was never about parties or fun—it was about getting through the day. When I was high, I didn't have flashbacks. I didn't feel scared. I could finally sleep. Even now, if I feel that panic rise up—the same panic I've felt for years—my first thought is to get something. It's like my brain thinks, 'you know what will fix this.' The worst part is that it works… for a while. Then it all comes crashing back, harder* (SUR3)

This account reflects clinical studies that link childhood trauma and PTSD symptoms to early substance initiation and chronic dependence (Green et al., 2021; Kelly et al., 2020). Such narratives affirm the pharmacological effect of substances in blunting trauma-related hyperarousal, a function not typically achieved through gambling alone. SUGAR participants presented a more entangled coping process, using both gambling and substances interchangeably or simultaneously. One participant explained:

> *I never really separated them. I'd use before I gambled, or gamble to numb out, then use after when the guilt hit. Sometimes I couldn't even tell which one I needed more—it was just a loop. I couldn't face life sober or straight. It was too painful. Every day was about finding ways to avoid myself. The worst thing wasn't*

> *the money or the hangovers—it was what I felt when I was sober. That emptiness. That self-hatred. I used both to get through the day without completely falling apart* (SUGAR5)

Another described;

> *I'd use to get the nerve to go into the bookies and then gamble until I had no money left. Then I'd score again to stop the feelings. It was a constant loop of numbing and forgetting. There wasn't a minute of the day when I felt clear. Even when I was getting help, no one really understood how tightly linked they were for me. If I stopped using, the gambling got worse. If I stopped gambling, I'd start using again. I felt like I was just swapping poisons* (SUGAR2)

These accounts reflect findings in co-occurring disorder research that demonstrate the intensification of distress when multiple behaviours serve similar emotional functions (Yakovenko & Hodgins, 2018; Slutske, 2019). From a recovery capital perspective (Best & Laudet, 2010), this theme highlights the personal domain—specifically, emotional resilience, psychological literacy, and trauma processing. These capacities are often underdeveloped in individuals with complex addiction histories and require targeted interventions that go beyond detox or abstinence. Integrative models that combine psychological support with trauma-informed peer mentoring have shown promise in addressing these deficits (Neale et al., 2023; Seddon et al., 2022).

While many addiction models acknowledge emotional avoidance, some scholars challenge the assumption that psychological distress alone explains addiction. Granfield and Cloud (2001) argue that recovery narratives risk being overly individualistic, ignoring how economic insecurity, stigma, and social marginalisation exacerbate emotional crises. They suggest that addiction is better understood as a response to structural exclusion rather than as a solely internal failure. This critique is supported by contemporary research that links poor

housing, unemployment, and systemic neglect to both the onset and persistence of addictive behaviours (Orford et al., 2023; Bramley et al., 2020).

These narratives reflect the consequences of underfunded mental health services, fragmented trauma support, and a reactive rather than preventative public health model. Participants' reliance on gambling and substances as coping mechanisms highlights systemic failings in emotional education, early intervention, and trauma-responsive care (Fitzpatrick et al., 2021). In recovery terms, addressing emotional regulation without structural reform risks placing responsibility entirely on the individual. As such, emotional recovery must be situated within both personal growth and collective transformation—aligning therapeutic models with equity-focused public health strategies.

6.3.3 Financial Desperation and Crime

A recurring and powerful theme across participants' accounts was the link between financial desperation—often resulting from gambling, substance use, or both—and subsequent involvement in criminal activity. Participants described a progressive collapse of their financial stability that eventually pushed them into behaviours they would not have previously considered, including theft, fraud, and other illegal acts. This finding supports criminological theories of need-driven offending, which posit that crime often arises from acute material pressures rather than criminal intent (Welte et al., 2017). It also aligns with Best and Laudet's (2010) framework, which highlights how diminished financial and social capital can severely undermine recovery potential. Crime, in these narratives, was not framed as a deliberate choice but as an act of desperation. Participants spoke of the psychological toll involved in crossing legal lines, often under severe duress and with no perceived alternatives.

> *The debts were piling up, and I couldn't keep up. Eventually, I felt like I had no choice but to resort to theft to cover the costs. It wasn't like I wanted to be a criminal—I was terrified. But there was no one I could tell and no way out* (GAR9).

Another participant stated;

> *I used to sell anything I had just to keep going. When that ran out, I started nicking stuff—first from my family, then from shops. It was either that or go cold turkey with no support, and I just couldn't face that* (SUR7)

While the experience of financial collapse was common across the groups, the drivers and trajectories differed significantly. Among GAR participants, compulsive gambling was often the primary source of mounting debt. Participants described a cycle of trying to "win it back," only to find themselves deeper in financial and psychological distress.

> *I thought I could win it back. Every time I lost, I convinced myself the next one would fix everything. I maxed out credit cards, borrowed from friends, even took out payday loans. Eventually, I started taking money from work. I hated myself for it, but I felt trapped* (GAR3).

These narratives echo research by Lesieur and Rosenthal (1991), who identified escalating financial harm as a central feature of gambling disorder. The psychological burden of shame and secrecy often delayed help-seeking, exacerbating the financial fallout. In contrast, SUR participants traced their financial pressures to the cost of daily substance use, combined with unstable employment and precarious housing. Their accounts were often shaped by economic survival and systemic disadvantage.

> *I was spending £50 to £100 a day on drugs, easy. When I couldn't afford it, I'd rob, scam, do whatever I had to. It's not glamorous, it's desperate. You're not thinking long-term, you're thinking about the next couple of hours* (SUR4).

This framing reflects broader structural inequalities and the role of poverty in substance-driven crime (Carver et al., 2022). The need for immediate relief often eclipsed any capacity for long-term planning or legal alternatives. Participants in the SUGAR group faced compounded financial challenges, as they juggled the costs of both gambling and drug use. The interaction between these addictions frequently resulted in relentless cycles of debt, shame, and increasingly serious criminal behaviour.

> *It wasn't just one thing—I had to pay for drugs and also try to cover gambling debts. I was stealing, selling things, borrowing from loan sharks. I couldn't even keep track of who I owed anymore. Crime just became a way of life because nothing else was working* (SUGAR5)

This dual burden—intensified by gaps in service provision—left SUGAR participants especially vulnerable to persistent offending and disengagement from support systems. Their experiences mirror recent evidence linking co-occurring disorders with higher rates of recidivism and unmet treatment needs (Dowling et al., 2021; Mennis et al., 2020).

Taken together, these accounts reveal how financial desperation manifests differently across addiction profiles. While GAR participants were more likely to conceal gambling-related debts until they escalated into fraud or embezzlement, SUR participants often engaged in high-frequency, low-value crimes to sustain substance use. SUGAR participants, facing intersecting pressures, described a pattern of chaotic, multi-faceted offending driven by cumulative need.

From a theoretical perspective, this theme calls for an expanded understanding of economic harm in recovery. This reinforces the argument that financial strain should not be viewed in isolation, but rather as part of a broader matrix involving addiction, social exclusion, and systemic neglect (Miller & Stuart, 2023). It also raises important policy questions: how might early debt relief, financial literacy training, or wraparound services reduce crime among addiction-affected populations?

Critically, the findings emphasise that recovery cannot succeed in environments where financial survival is precarious. Interventions must include justice-informed support, debt intervention, and access to meaningful income generation, particularly for those managing dual harms. Without addressing the economic dimensions of recovery capital, individuals are likely to remain vulnerable to relapse, reoffending, and marginalisation (Best et al., 2022; Gavriel-Fried et al., 2022).

6.3.4 Stigma, Silence, and Isolation

Stigma emerged as a pervasive and structurally significant theme across all participant groups, shaping how individuals understood their addiction, interacted with services, and navigated recovery. Participants described stigma not only as external judgement or discrimination but as an internalised force that deeply impacted their sense of identity and worth. Drawing on Goffman's (1963) classic concept of the "spoiled identity," participants' narratives echoed the enduring stigma that surrounds addiction—particularly when compounded by criminality or dual diagnoses. Stigma, in this context, was both a social construct and a lived experience that served to delay recovery, deepen shame, and constrain access to supportive networks and services. From a recovery capital perspective, stigma constitutes a critical erosion of both social and community capital, acting as a direct barrier to engagement and reintegration (Best & Laudet, 2010; Hing et al., 2016).

Participants frequently spoke about concealing behaviours out of fear of judgement, rejection, or disbelief. This silence—motivated by both 'felt stigma' (internalised shame) and 'enacted stigma' (external discrimination)—delayed help-seeking and created profound isolation. For those in the GAR group, stigma was marked by invisibility: gambling addiction was not only misunderstood but often completely unrecognised.

> *I didn't even know you could get help for gambling. I thought it was just me being reckless or stupid. When people talk about addiction, they talk about drugs or drink. No one talks about the damage gambling does, so I kept it quiet for years* (GAR10).

Others described institutional neglect and misunderstanding, particularly when their behaviour led to criminal sanctions*, "Even when I got arrested, they never asked if I had a gambling problem. They just assumed it was drink or drugs. It was like gambling didn't count as a real issue"* (GAR3). This erasure of gambling harm not only delayed intervention but also delegitimised their need for support. Research has similarly shown that gambling addiction often

lacks the cultural visibility of substance use disorders, reinforcing shame and delaying access to appropriate care (Hing et al., 2016; Parke et al., 2022).

For SUR participants, stigma was more overt and punitive. Their stories emphasised how visible indicators—such as homelessness, criminal records, or appearance—invited moral judgement and exclusion, especially within healthcare settings.

> *I couldn't walk into a GP without feeling like they were judging me. They'd clock my file and straight away I'd get the look. I stopped trying after a while because I knew I wasn't going to be treated like anyone else"*(SUR2).

Another participant stated*, "I kept everything to myself. I lied constantly. It became easier than admitting the truth, because the truth made me feel like a failure"* (SUR5). These experiences resonate with findings in substance use literature that suggest stigma is often reinforced by service providers themselves, leading to negative service experiences and disengagement (Lloyd, 2013; Pauly et al., 2021). In this way, stigma becomes a self-perpetuating cycle: individuals internalise rejection and adjust their behaviour accordingly, often retreating from potential sources of help.

SUGAR participants reported the most entrenched and systemic forms of stigma. They spoke of being misunderstood not only by society but by services themselves. Dual addiction was often viewed as too complex or inappropriate for single-issue services, leading to frequent rejection or redirection.

> *By the time I hit rock bottom, I'd pushed everyone away. They didn't understand what it meant to have both issues. Services didn't either. I'd get bounced between drug places and gambling helplines. I felt like I didn't belong anywhere*
> (SUGAR2).

This compounded marginalisation—what might be called layered stigma—intensified isolation and made it more difficult to build or sustain recovery capital. The SUGAR group's experiences

support emerging research on "intersectional stigma" (Earnshaw et al., 2013), where individuals face multiple, overlapping sources of discrimination that heighten barriers to care. The emotional toll of stigma was consistent and often profound. Participants across groups described secrecy as a coping strategy—a way to preserve dignity in the face of perceived moral failure.

> *I felt disgusting. I was using, I was gambling, I was lying to my family. Every time I thought about telling someone, I'd stop myself because I thought they'd just see me as a criminal, not a person who needed help* (SUGAR6)

These reflections echo Maruna's (2001) work on desistance, which argues that identity transformation in recovery requires a supportive environment that affirms rather than condemns the individual. Without such conditions, stigma undermines self-efficacy and sustains cycles of harm. Comparing the groups revealed distinct patterns of stigma. For GAR participants, the harm was largely invisible—gambling was rarely recognised as a legitimate addiction, leading to minimisation and erasure. SUR participants encountered public and institutional stigma—visible addiction coupled with justice involvement meant they were judged harshly and treated with suspicion. SUGAR participants faced systemic and service-based stigma—being excluded not only by society but by the very systems meant to support them. These differences highlight the ways stigma manifests depending on addiction type, setting, and support infrastructure.

These accounts reveal how stigma operates not only within interpersonal interactions but through institutional practices, language, and policy. The absence of dual-diagnosis frameworks, limited gambling treatment provision, and criminal justice-led interventions all reinforce narratives of blame and failure. In this context, stigma is not just a feeling—it is an outcome of system design.

Addressing stigma in recovery-oriented systems of care is therefore both a therapeutic and structural imperative. Research indicates that reducing stigma requires multi-level intervention: public education, including service users in the design process, and the use of person-first, non-labelling language are all essential components (Livingston et al., 2012; Best et al., 2022). Trauma-informed service design and staff training are also essential to counteract

provider-based stigma and ensure that people are met with dignity and understanding. From the perspective of recovery capital, this theme highlights how stigma diminishes both social and community resources. Relationships become fractured, trust in services declines, and the motivation to recover diminishes. Therefore, addressing stigma must be a key component of any intervention aimed at enhancing engagement, retention, and recovery outcomes.

6.3.5 Different Pathways and Prioritised Behaviours

A recurring element across the interviews was how participants described the progression of their addictions and the hierarchy of behaviours they considered central to their experiences. Although all participants recognised the interconnectedness of gambling, substance use, and crime, the *order*, *timing*, and *perceived importance* of these behaviours varied considerably across the three groups. This theme closely relates to the concept of addiction trajectories (Laudet & White, 2008) and helps illustrate how different behavioural patterns influence recovery needs, identity formation, and engagement with services.

Participants often reflected on the *first behaviour* they became dependent on, how other behaviours developed over time, and which activity they viewed as most destructive. These personal narratives revealed complex addiction journeys, where one form of dependency would evolve, fade, or reappear in response to emotional, relational, or environmental stresses. One participant shared:

> *It was always gambling first for me. That was the main problem. It started small, then took over everything—money, time, even my thoughts. Drugs came later, when I needed something stronger to shut my mind off after the losses. But gambling was the root of everything"* (GAR4).

Another described a different path;

> *I've always been using something since I was a teen. Drink, weed, pills—whatever I could get. Gambling came into it when I was clean the first time. It seemed safer. But it wasn't. It just gave me another way to lose control"* (SUR1).

For GAR participants, gambling was often identified as the initial and predominant behaviour. Their addiction journeys typically began with low-stakes or social gambling during adolescence or early adulthood, progressing to compulsive patterns in their late twenties or thirties. Many noted that substance use only emerged after gambling had caused significant psychological or financial harm. These accounts reflect the gateway hypothesis in gambling research, which proposes that gambling can serve as a precursor to other addictions, especially where emotional regulation is compromised (Ledgerwood & Petry, 2010).

SUR participants, by contrast, almost uniformly identified substance use as the core of their addiction. Drug and alcohol use was often linked to early trauma, peer pressure, or mental health issues. Gambling was introduced later, if at all, often during attempts at abstinence or in situations of boredom, substitution, or emotional regulation. As one participant explained,

> *I didn't gamble until I got clean. It filled the space where the drugs used to be. It didn't feel like a problem at first, but it crept up. Then I was losing money I didn't have, lying to people, all over again"* (SUR6).

These accounts support substitution theory, which suggests that individuals may shift compulsive behaviours without addressing the underlying needs that drive them. SUGAR participants, meanwhile, tended to report engaging in both gambling and substance use simultaneously from early in their addiction journeys. For them, the co-occurrence of behaviours was not sequential but concurrent, leading to complex patterns of dependency and increasing harm. One participant explained:

> *I was always doing both. I'd gamble to feel something, then use to escape the panic. Or I'd use first, and gambling would come after. They were just two sides*

> *of the same coin, really. I couldn't tell where one ended and the other began* (SUGAR5).

This pattern of dual emergence presents specific challenges for intervention. While single-behaviour approaches might be practical for GAR or SUR participants, SUGAR individuals are more likely to be overlooked when systems treat treatment as separate silos. This emphasises the importance of integrated service models that address the full range of behavioural and substance-related addictions (White, 2009). What also emerged was a clear distinction in how each group *prioritised* the behaviour they felt must be addressed first in recovery. GAR participants overwhelmingly named gambling as the linchpin. *"If I didn't stop gambling, nothing else would have changed. That was the start of everything going wrong"* (GAR6). SUR participants focused on substance use: *"The drugs were the real problem. Once I stopped using, the rest of my life started to come back together"* (SUR10). SUGAR participants viewed dual resolution as essential. *"I couldn't quit one without dealing with the other. They were too connected"* (SUGAR3).

These findings highlight how participants' perceptions of addiction hierarchy influence their recovery goals, treatment choices, and relapse risks. For practitioners, this emphasises the importance of assessing both *the perceived importance* and *functional role* of each behaviour in a client's life. A recovery pathway that overlooks what the individual considers central may weaken motivation and sustainability. This theme also intersects with identity models of recovery (Maruna, 2001), where individuals rebuild meaning around behaviours they most associate with personal failure or growth. Ultimately, recognising addiction as a multidimensional and evolving process—rather than a fixed or linear condition—enables more responsive, person-centred care. By tailoring interventions to individual pathways and priorities, services can foster more substantial personal recovery capital and reduce the risk of behavioural substitution or fragmented care.

6.3.6 Crime as a Function of the Addiction Focus

A central theme in participants' narratives was the connection between addiction and offending behaviours. While all participants across the GAR, SUR, and SUGAR groups disclosed some form of criminal activity, they consistently framed these actions not as evidence of criminal identity but as outcomes of addiction-driven desperation. Crime, in their view, was instrumental—motivated by financial crisis, withdrawal, or sheer survival—rather than premeditated harm. These findings align with criminological perspectives on need-driven and instrumental crime (Becker, 1968; Merton, 1938) and mirror recovery capital theory, which identifies the erosion of financial, social, and community capital as a major risk factor for offending (Best & Laudet, 2010; Cloud & Granfield, 2008). Participants' accounts echoed moral distress and dissonance. One GAR participant reflected:

> *The debts from gambling were so high, I didn't see any other way out. I started stealing from work to cover them. I hated it, but it felt like the only option. It wasn't about being greedy—it was survival, or at least trying to stop the shame swallowing me* (GAR2).

Among GAR participants, crime was most often described as a response to concealed, mounting gambling debt. Participants portrayed a slippery slope from hidden borrowing to fraud, theft, and workplace embezzlement. One explained:

> *At first, I took money out of the till to cover a bill. Then it became a pattern. I convinced myself I'd pay it back. But the losses kept coming. Before I knew it, I was thousands down and getting paranoid all the time* (GAR5).

These narratives are vividly reflected in the findings of *The Howard League's Commission on Crime and Gambling Related Harms* (2022), which emphasises that problem gamblers are more likely to commit acquisitive crimes—particularly fraud and theft—often going undetected because of the concealed nature of gambling harm. **Evidence Theme 6** of the Commission's

report highlights that gambling-related crime is frequently overlooked within the criminal justice system, with gambling seldom included in assessments or court reports, and even less often addressed through treatment-focused interventions (Howard League, 2022).

SUR participants exhibited a more visible form of criminality tied to everyday struggles with physical dependency and street-level survival. Their crimes—often petty theft, dealing, or shoplifting—were described as compulsive, reactive, and necessary to avoid withdrawal. One participant said, *"I needed a fix, or I was going to be sick. So, I did what I had to do. I'd rob a corner shop or hustle a few quid. There wasn't time to think, it was just reaction"* (SUR8). This aligns with structural strain theory, which suggests that when legitimate means of survival are blocked by poverty, unemployment, or discrimination, individuals may resort to illegal activities. SUR participants' interactions with the criminal justice system were often early and repeated, reflecting not only their substance use but also systemic failures to provide comprehensive care at critical moments.

SUGAR participants faced the most entrenched and overlapping forms of criminality. Balancing two addictions, they described cycles of income loss, compounding debt, and escalating illegal activity to sustain both habits. These ranged from shoplifting and fraud to more organised or violent offences. One participant shared:

> *I'd get paid, use half for gear, gamble the rest, and then end up doing something dodgy to get through the week. It just went round and round. I felt like I didn't even know who I was anymore* (SUGAR3)

Another added;

> *The crimes weren't planned. It was just reacting to the mess I was in. Debt collectors, landlords, people after me—it felt like crime was the only thing I could control* (SUGAR6)

The Howard League (2022) warns that the dual harms of gambling and substance use are especially under-addressed, and that the justice system lacks comprehensive screening for co-occurring disorders. As these narratives demonstrate, SUGAR participants fell through the cracks of fragmented services, which increased their risk of repeated offending and long-term exclusion.

Participants across all groups emphasised how criminal justice professionals frequently overlooked addiction as a driver of crime, particularly gambling. One GAR participant noted: *"Probation never mentioned my gambling. They wanted me to do drug tests, not discuss why I was stealing in the first place"* (GAR9). This reflects the Howard League's critique that current justice processes do not routinely screen for gambling harms, leading to missed opportunities for diversion, support, and rehabilitation (Howard League, 2022). From a recovery capital lens, criminalisation depleted participants' social trust, employment options, and institutional legitimacy. Criminal records hindered access to housing and treatment, and for some, reinforced internalised stigma. These outcomes limited their ability to rebuild capital, even after achieving behavioural change. As Flyger et al. (2024) and Best et al. (2022) argue, successful recovery requires not only individual motivation but also the repair of social and structural losses created by addiction and involvement in the justice system.

Addressing this issue requires more than reactive punishment. The evidence indicates that holistic, trauma-informed, justice-integrated care models are essential—especially those that actively screen for gambling harms and dual diagnoses. Improved cross-sector collaboration, early intervention, and non-criminal diversion schemes are crucial. Recovery-focused criminal justice policies should aim to understand the root causes of offending, not just the surface behaviours, as a step towards genuine rehabilitation.

6.3.7 Help-Seeking, Stigma, and Service Gaps

A final theme emerging from participants' narratives was the difficulty of seeking help in the face of stigma and fragmented services. Across all three groups, individuals described a range of personal and structural barriers that delayed or obstructed their recovery. These included internalised shame, a lack of service awareness, professional dismissiveness, and a systemic

failure to recognise the complexity of co-occurring conditions. This reinforces the understanding that recovery is shaped not only by personal readiness but also by the availability, accessibility, and responsiveness of external systems—a principle central to the recovery capital framework (Cloud & Granfield, 2008; Best & Laudet, 2010).

Participants frequently described how feelings of guilt and unworthiness limited their ability to reach out to others. For many, these feelings were compounded by previous negative experiences or fear of being judged. One SUR participant shared, *"I didn't think I deserved help. I thought I'd messed up too much. When I finally walked into a service, I was waiting for them to tell me to leave. I didn't believe I could change"* (SUR2). This narrative demonstrates how internalised stigma can undermine self-efficacy and delay early intervention—particularly where trauma histories or social exclusion are involved (Goffman, 1963; Hing et al., 2016; Livingston et al., 2012).

In the GAR group, one of the clearest barriers was service invisibility. Participants described being met with confusion or indifference when they named gambling as their primary concern. As one explained, *"They asked about drink and drugs, but never gambling. When I said that was my issue, they looked confused. Like it wasn't something people needed help for"* (GAR7). Several reported being referred from one service to another, with no clear pathway or integration in place. This reflects broader critiques in the literature around gambling being 'orphaned' within the UK addiction treatment landscape—lacking dedicated funding, strategic leadership, and consistent clinical pathways (Griffiths et al., 2010; Bramley et al., 2019; Wardle et al., 2022).

SUR participants, by contrast, often encountered stigma within healthcare and criminal justice settings. Help-seeking was frequently met with moral judgment or bureaucratic disengagement. One participant recounted, *"I went to the GP and said I was struggling, and she told me I needed to sort myself out. Like I hadn't tried that already. That pushed me further into using"* (SUR1). Another described the hollow nature of justice-mandated treatment, *"Probation was just about ticking boxes. No one asked what was behind the using. They just told me to turn up, pee in a cup, and go home"* (SUR9). These accounts echo findings that people who use drugs frequently face stereotyping, discriminatory practices, and low expectations of change within

institutional settings (van Boekel et al., 2013; Radcliffe & Stevens, 2008). Rather than offering support, these interactions often reinforce trauma and further entrench disengagement.

For SUGAR participants, service fragmentation emerged as the dominant challenge. Many were passed between drug and gambling services that failed to acknowledge or respond to the complexity of their needs. One participant noted:

> *I had to lie sometimes. If I told the drugs people, I was gambling, they'd say I needed someone else. If I told the gambling people I was using, they said they couldn't help. I felt like no one knew what to do with me* (SUGAR2)

This reflects longstanding concerns about the lack of dual-diagnosis pathways, especially where behavioural addictions are involved. Petry et al. (2005) and Reith et al. (2022) argue that dual presentations often fall through the cracks of narrowly defined treatment models, leading to delays, dropout, and reduced treatment efficacy.

Amid these frustrations, participants across all groups identified moments of compassion, understanding, and peer connection as transformative. One GAR participant described a turning point in recovery, *"It was the first time someone said, 'I believe you, and we can work through this'. That moment changed everything. It made me feel human again"* (GAR10). These insights resonate with the values embedded in Recovery-Oriented Systems of Care (ROSC), which prioritise dignity, respect, and peer-led engagement (White, 2009; Best et al., 2022). Peer support and trauma-informed practice were especially valued for their non-judgmental stance and relational continuity. When viewed comparatively, each group faced distinct service barriers. GAR participants struggled with invisibility and inadequate gambling-specific care. SUR participants encountered stigma and punitive systems, particularly in health and justice contexts. SUGAR participants endured fragmented care and felt institutionally unrecognised, often self-navigating a confusing network of disconnected services.

From a theoretical perspective, these findings reinforce the notion that structural stigma and system design can act as negative recovery capital, actively impeding access, belief in change, and long-term progress (Best et al., 2011). The integration of trauma-informed, dual-

diagnosis, and peer-led approaches is therefore essential. Policy responses should include better cross-training for professionals, clear pathways for behavioural and substance-related addictions, and co-located, multi-disciplinary services. Ultimately, this theme illustrates that help-seeking is not just a matter of willpower or insight. It is shaped by trust, accessibility, institutional attitudes, and whether services are designed to recognise and accommodate complex needs. Redesigning recovery systems with this understanding in mind is critical for equity, effectiveness, and long-term success.

6.3.8 Summary: Findings Related to Research Question 3

This section has examined the lived experiences of addiction among participants from the SUR, GAR, and SUGAR groups in response to Research Question 3 (RQ3): *What are the similarities and differences in how individuals experience addiction and its links with crime?* This question is important because it goes beyond generalised assumptions about addiction to explore how specific patterns of gambling, substance use, and offending develop across different groups. Understanding these distinctions is essential for creating tailored, integrated support systems that reflect real lived experiences.

Using reflexive thematic analysis (Braun & Clarke, 2006), this section examined semi-structured interviews from 26 participants. The approach was inductive and narrative-driven, based on participants' accounts. Themes were not predetermined by group membership but emerged through interpretative coding reflecting cross-cutting issues relevant to addiction, crime, and recovery. NVivo software was used to organise, code, and map the data thematically. As the interviews revealed recurring patterns related to emotional distress, secrecy, financial instability, and offending, it became necessary to understand how addiction functioned not only as a behavioural issue but as a response to systemic, psychological, and relational challenges. This required drawing on multiple theoretical perspectives, including the recovery capital model (Best & Laudet, 2010), self-medication theory (Khantzian, 1997), and criminological frameworks (Becker, 1968; Merton, 1938), to situate participant narratives within broader conceptual debates.

One core theme, emotional regulation and escapism, revealed that gambling and substance use were employed to suppress trauma, anxiety, or shame. Drawing on Khantzian's theory of self-medication and trauma-informed care models (SAMHSA, 2014), these behaviours were seen as coping strategies rather than mere pleasure-seeking. Participants used dissociation, numbing, or emotional withdrawal as tools for survival. Critics such as Granfield and Cloud (2001), however, caution against over-medicalising addiction by neglecting structural factors like poverty or marginalisation. At a macro level, these findings demonstrate how untreated trauma and emotional dysregulation underpin addictive behaviour across populations.

Another theme, financial desperation and crime, showed how debt and economic insecurity led participants to commit theft, fraud, or survival crimes. Theoretical perspectives from Becker's (1968) rational choice model and Merton's (1938) strain theory helped interpret this behaviour as instrumental rather than pathological. Participants described offending not as lifestyle deviance but as a crisis response to addiction-related financial collapse. For GAR participants, this usually involved workplace theft to cover gambling losses; for SUR and SUGAR participants, drug costs and homelessness pushed them into criminal activity. These findings align with recent research by Bramley et al. (2023) and Howard League reports (2022), which connect gambling harms and crime through systemic vulnerability, not individual pathology.

Stigma, secrecy, and silence formed another shared theme, particularly impacting help-seeking. Drawing on Goffman's (1963) concept of stigma as a "spoiled identity," the analysis showed how internalised shame and external judgement delay or derail recovery. While some argue (e.g., Simmonds & Coomber, 2021) that destigmatising addiction can encourage treatment uptake, others warn that excessive focus on stigma may obscure structural service failures. Macro-level implications include the need for public education, stigma reduction in clinical settings, and broader cultural recognition of gambling and dual diagnosis as serious health issues.

The analysis also examined pathways and prioritised behaviours, demonstrating that addiction trajectories are influenced by initial behaviour and its social visibility. GAR participants typically started with gambling, then moved to debt concealment and crime. SUR participants began substance use during adolescence and described early contact with systems.

SUGAR participants followed a more chaotic route, managing addictions that supported each other and hindered access to services. These differences support the idea that recovery pathways need to be behaviour-specific and capable of addressing co-occurring issues (White & Kurtz, 2006; Kelly et al., 2021).

Closely linked to this was the theme of crime as a function of addiction, which challenged dominant narratives of individual moral failure. Participant stories demonstrated that criminality was situational, arising under pressure rather than as a deliberate choice. This supports criminological research on need-driven offending and aligns with recovery capital theory, which views loss of housing, employment, or social trust as triggers for offending (Best et al., 2016). Critics, however, such as Hughes et al. (2014), have cautioned that framing crime solely as a result of addiction may obscure the need for personal accountability and justice sector engagement. The macro implication here is that justice systems should adopt screening tools and integrated pathways that connect offenders with addiction support early in their journey.

Finally, the themes of help-seeking, stigma, and service gaps highlighted how fragmented systems and limited awareness of dual diagnosis create significant barriers. Participants—especially from the SUGAR group—reported being bounced between services, mislabelled, or excluded due to complexity. The concept of recovery-oriented systems of care (White, 2009; Best et al., 2022) was used to illustrate the need for integrated, trauma-informed, and person-centred support. Opposing views argue that such integration is expensive and challenging to implement at scale; however, evidence increasingly suggests that coordinated models are cost-effective in the long run (Petry et al., 2005; Reith et al., 2022). On a broad level, these findings demonstrate a failure of current systems to recognise the multi-faceted nature of addiction and the influence of social determinants on both harm and recovery. This section has shown that addiction, crime, and help-seeking are not isolated issues but are deeply connected—each influenced by internal distress, systemic shortcomings, and social disadvantages.

In summary, the findings for RQ3 show that while addictive behaviours may seem similar on the surface, the underlying causes, harm patterns, and recovery requirements differ across the GAR, SUR, and SUGAR groups. These insights emphasise the need for tailored and inclusive policy frameworks that avoid a one-size-fits-all approach, instead addressing individual

histories, co-occurring challenges, and resource environments. They also set the stage for the next part (6.4), which shifts focus to Research Question 4 (RQ4) to examine how participants define and maintain recovery on their terms.

6.4 Perspectives on Recovery

This section addresses Research Question 4 (RQ4): How do individuals in recovery define, understand, and sustain their recovery from addiction, and what are the similarities and differences across groups? It draws on qualitative interviews with participants from three groups—Substance Users in Recovery (SUR), Gamblers in Recovery (GAR), and Substance Users and Gamblers in Recovery (SUGAR)—to explore how recovery is personally understood, initiated, and maintained. Unlike the previous section (6.3), which examined how addiction and crime intersect in participants' lives, the current analysis shifts focus to participants' subjective experiences of recovery itself: what it means to be "in recovery," how it begins, what sustains it, and how these understandings vary depending on the type of addiction.

Across the dataset, participants consistently described recovery as more than just the cessation of addictive behaviour. Rather than a fixed endpoint or singular act of abstinence, recovery was understood as a dynamic and ongoing process involving psychological transformation, identity repair, social reconnection, and lifestyle reorientation. This understanding aligns with contemporary theoretical perspectives that conceptualise recovery as a multidimensional process of growth, encompassing personal, social, and spiritual domains (Best & Lubman, 2012; Slade, 2010; Varga & Copoeru, 2023). The idea of recovery capital—defined as the internal and external resources that support recovery (Best & Laudet, 2010)—is central to interpreting how participants described their recovery journeys. Participants' narratives also reflected elements of identity change and narrative reconstruction, consistent with theories of desistance and rehabilitation (Maruna, 2001; McNeill, 2016).

By foregrounding participants' definitions of recovery, this section contributes to a growing person-centred orientation within addiction research and policy (White, 2009; Krentzman & Gass, 2024). While many studies have focused on treatment effectiveness or behavioural outcomes, fewer have investigated how individuals with differing addiction

profiles—especially those with co-occurring substance and gambling disorders—make sense of recovery on their terms (Flyger et al., 2024; Sneed & Baronia, 2024). Through this focus, the analysis offers a more nuanced and ecologically valid understanding of what recovery entails in lived experience, which is essential for designing services that resonate with service users' needs and goals.

This section is organised into two parts. The first examines themes shared across all three groups, including core recovery processes such as emotional regulation, identity reconstruction, relational repair, and persistence. These shared experiences suggest that, despite differences in addiction type, recovery is underpinned by standard psychological and social mechanisms. The second part explores group-specific differences in how recovery was understood and maintained. Here, the analysis highlights how GAR participants tended to frame recovery in terms of abstinence and financial repair; SUR participants focused more on emotional healing and mental health; and SUGAR participants emphasised the necessity of addressing dual harms in an integrated and simultaneous manner.

Together, these thematic strands provide both a cross-cutting and differentiated perspective on recovery. They demonstrate that while standard mechanisms may underpin the recovery process, the pathways, priorities, and obstacles encountered differ significantly depending on the type and complexity of addiction. Understanding these patterns is vital for developing practical, inclusive, and responsive systems of care. Through this analysis, the section aims to clarify not only how recovery is lived and defined by participants but also how systems might better support the complex and evolving nature of recovery across diverse addiction profiles.

Table 2: Themes for RQ4

Theme	Description	Relevant Groups
Recognition and Readiness for Change	Turning points such as emotional collapse, relational rupture, or crisis moments that prompt recovery.	All groups (SUR, GAR, SUGAR)
External Pressures and Interventions	Influence of family, legal systems, or workplaces in pushing individuals toward help-seeking.	All groups, with varied emphasis (SUR: justice/workplace; GAR: family; SUGAR: compounded crises)
Emotional Pain and Identity Collapse	Shame, guilt, and psychological distress as motivators for behavioural change and identity transformation.	All groups
Age of First Engagement	Age and triggers at first service contact—linked to addiction type and systemic visibility.	SUR (younger, visible harm); GAR (older, hidden); SUGAR (delayed due to system gaps)
Pathways into Recovery Services	How participants accessed recovery: mutual aid, NHS, or self-navigation across fragmented systems.	GAR: mutual aid; SUR: NHS/justice; SUGAR: fragmented/dual navigation
Triage and Crisis Management	First encounters with support services and how they shaped trust, identity, and recovery trajectory.	All groups; SUGAR experienced highest system fragmentation
Personal Transformation	Recovery as a process of rebuilding identity, values, and emotional health.	All groups (emphasis varies)
Relational Support	The central role of peers, family, and community in supporting recovery.	All groups (GAR: repair; SUR: connection; SUGAR: dual validation)
Continuous Nature of Recovery	Recovery seen as an ongoing, adaptive process rather than a fixed goal.	All groups
Entry Points into Recovery	Behavioural, emotional, or dual-entry triggers marking the beginning of recovery.	GAR: behavioural; SUR: emotional; SUGAR: dual-acknowledgement
Focus Areas in Recovery	Prioritised goals—e.g., emotional healing, financial restitution, stability.	SUR: emotional; GAR: financial/relational; SUGAR: holistic

Approaches to Maintaining Recovery	Strategies for long-term engagement: peer support, therapy, integrated care.	GAR: GA/structure; SUR: holistic; SUGAR: integrated dual care
Abstinence vs. Quality of Life	Recognition that abstinence is necessary but not sufficient for meaningful recovery.	All groups
Comparison to Broader Health Recovery	Recovery defined through a biopsychosocial lens—emphasising purpose, connection, and wellbeing.	Cross-comparison with mental health fields; especially SUGAR and SUR

6.4.1 Shared Recovery Perspectives

This section examines the common themes in how the SUR, GAR, and SUGAR groups began and navigated their early recovery journeys. These similarities reflect shared psychological, relational, and situational pressures that go beyond the type of addiction. Although participants differed in their primary behaviours and pathways into recovery, they identified common catalysts for change—such as emotional distress, crisis points, and external interventions—as well as a shared reliance on personal motivation and social support. This section investigates these overarching experiences, providing insight into the core elements that underpin recovery regardless of whether the starting point was substance use, gambling, or both. Recognising these similarities offers an important perspective for creating more inclusive, integrated, and person-centred support systems.

Section 6.4.1.1: Recognition and Readiness for Change

A central theme across all three groups—SUR, GAR, and SUGAR—was the crucial moment of recognising that change was essential. This realisation often followed an extended period of increasing harm. It resulted in a crisis event—emotional, social, or physical—that triggered the transition from ongoing addiction to the pursuit of recovery. Such turning points are frequently described in recovery literature as “rock bottom” experiences, symbolising moments of psychological rupture that compel individuals to reassess their behaviours and futures (Miller & Rollnick, 2013; Marlowe et al., 2012).

This process aligns with the Stages of Change model proposed by Prochaska and DiClemente (1983), specifically the transition from the pre-contemplation to the contemplation and preparation stages. Additionally, it aligns with theories of identity transformation, such as Maruna's (2001) concept of the "redemption script," wherein individuals commence reframing their life narratives to centre around a desire for change and reconstruction. Within the framework of recovery capital, this phase signifies a pivotal transition from depletion to renewal of personal resources, as agency, awareness, and motivation begin to re-emerge (Best & Laudet, 2010).

Across the three groups, participants described emotional exhaustion, relational breakdowns, or an accumulation of losses as their primary catalysts for change. One GAR participant reflected:

> *It was that moment when you realised you'd hurt people you care about and couldn't keep living like this anymore. I looked at my partner in tears after she found out I'd remortgaged the house without telling her. I remember thinking: this isn't who I am. That moment—it wasn't about being caught—it was about finally admitting I'd become someone I didn't recognise. That's when I knew I couldn't keep doing it.* (GAR5)

Others spoke about the slow accumulation of shame and consequence, especially around the collapse of social trust and identity:

> *I had to face what gambling had cost me—not just money, but trust and relationships. I'd built my whole life around hiding it, and when it all came out, I saw the damage. Friends stopped calling. My family didn't know if they could ever believe me again. I just felt completely hollow. That was the breaking point.* (GAR7)

These narratives support research showing how gambling-related harms are often hidden but profoundly interpersonal, undermining relational and social capital even before professional or legal interventions occur (Langham et al., 2016). SUR participants more frequently described readiness for change as emerging from a visible collapse, such as the loss of housing, health, employment, or freedom. One explained:

> *When my health started failing, I knew I couldn't keep drinking and hoping it would fix itself. I was in and out of A&E, struggling to breathe from the withdrawals, sleeping rough some nights. I was scared I wouldn't wake up. It stopped being about getting drunk and started being about whether I'd survive. That fear made me walk through the doors of detox.* (SUR6)

Another recalled the shock of how much had quietly unravelled;

> *I didn't realise how bad things had gotten until I started losing everything—my relationships, my job, even my self-respect. I woke up one morning on someone's floor, and I didn't even know whose place it was. I looked in the mirror and didn't recognise myself. That's when it hit me—if I didn't stop, I was going to die.* (SUR3)

These moments exemplify the erosion of personal and social capital that often precedes service engagement (Cloud & Granfield, 2008), and highlight the role of accumulated deprivation in triggering help-seeking. Among SUGAR participants, the crisis was often more intense and multifaceted. The co-occurrence of gambling and substance use created layered harms and a compounded sense of urgency. One participant remarked:

> *The moment I saw how gambling and drugs were destroying my family, I knew I needed help. My partner had left with the kids. I hadn't seen them in months. I'd spent all the money on bets and booze, and I didn't even have enough to buy food.*

> *I was sitting in my flat with no heat, no electric, shaking from withdrawal, and I thought—this isn't life. It's just surviving. And barely that.* (SUGAR4)

Another reflected on the psychological toll of maintaining the illusion of control;

> *I always thought I could manage it—that I could keep the drugs separate from the gambling, keep it hidden. But I couldn't. It got to the point where I just couldn't pretend anymore. Every lie felt heavier, and every day felt like I was getting further from the person I used to be. I realised if I didn't ask for help soon, there wouldn't be anything left to fix."* (SUGAR5)

These testimonies align with literature indicating that dual addiction increases both harm and treatment resistance, often leading to greater psychological distress and disengagement from fragmented systems (Petry et al., 2005; Reith et al., 2022). Despite the widespread acceptance of the "rock bottom" narrative, scholars have increasingly questioned its usefulness as a prerequisite for recovery. White and Cloud (2008) warn that waiting for collapse can delay intervention and cause additional harm, particularly in groups with limited access to early care and support. Davidson et al. (2006) advocate for approaches that foster recovery readiness before major crises arise, emphasising proactive, preventative engagement over reactive intervention.

The recurring pattern of crisis-driven change in these narratives highlights systemic failures in prevention, triage, and early support. That many participants only sought help at the point of desperation suggests significant missed opportunities for earlier intervention, particularly in contexts where gambling harms are insufficiently recognised or systematically overlooked (Wardle et al., 2022; Hing et al., 2016). For GAR participants, the relative invisibility of gambling within mainstream addiction discourse delayed acknowledgement and access to appropriate care (Langham et al., 2016; Orford et al., 2023). SUR participants frequently encountered institutional stigma and punitive responses, especially within healthcare and justice systems, which have been shown to undermine engagement and reinforce exclusion (Lloyd, 2013; Radcliffe & Stevens, 2008). SUGAR participants, meanwhile, reported the most

substantial barriers to coherent care, reflecting long-standing critiques of siloed service structures that fail to accommodate dual or multiple diagnoses (Petry et al., 2005; Reith et al., 2022).

Overall, these findings underscore the importance of implementing early screening, developing services that can address co-occurring conditions, and creating accessible entry points to identify and support individuals before their lives are severely disrupted. Recognition and readiness for change should not be viewed solely as personal psychological milestones, but rather as outcomes shaped by the availability—or absence—of timely, integrated, and non-judgmental systems of care (Best and Laudet, 2010; White & Cloud, 2008; Kelly et al., 2021). Addressing these systemic gaps could help transform the recovery process from being crisis-driven to one centred on connection, opportunity, and timely intervention (Davidson et al., 2006; Slade, 2010).

6.4.1.2 External Pressures and Interventions

Besides internal readiness and self-motivated change, many participants described external pressures as crucial in driving their recovery journeys. These external influences—often in the form of family ultimatums, workplace consequences, or involvement in the criminal justice system—acted as catalysts, compelling individuals to confront their behaviour even when they were not yet emotionally ready to seek help. These dynamics align with the concept of "structured pressure," as defined in the recovery literature, where entering treatment is not necessarily voluntary but still yields positive change (White & Kurtz, 2006). Instead of negating agency, such pressures frequently sparked a process of reflection and transformation that participants later considered essential to their growth.

Across the GAR group, family played a central role in initiating help-seeking, often after long periods of hidden gambling. The theme of relational rupture as a wake-up call was consistently echoed. One participant shared:

> *My family finding out about my gambling was a huge shock to them. I'd kept it secret for so long. When it all came out, the disappointment in their eyes hurt*

> *more than anything else. They pushed me into getting help. They said they'd support me, but only if I got serious. That was the moment I realised I couldn't lie anymore.* (GAR6)

Another echoed the emotional gravity of a partner's ultimatum;

> *My partner stood by me through more than I deserved. But one day they said, 'Either you get help, or we're done. I love you, but I can't watch you destroy everything anymore.' That was it. I knew if I didn't change, I'd lose the only good thing I had left* (GAR8)

These stories illustrate research showing how gambling-related harm often remains hidden until a significant rupture occurs, with secrecy delaying help-seeking and increasing relational shock when the truth is finally revealed (Hing et al., 2015; Langham et al., 2016). From a conceptual perspective, this highlights the role of social capital — as described in the recovery capital framework — as both a resource and a constraint. When relationships break down, they can either support recovery or worsen isolation, depending on how those around the individual respond (Best & Laudet, 2010).

For SUR participants, formal institutions—particularly employers and the justice system—were more frequently cited as triggers for recovery engagement. Several participants described how job loss or arrest marked a threshold moment where avoidance became unsustainable. One explained:

> *Getting fired for showing up drunk again was the wake-up call I needed. I'd made excuses for years, but when I lost my job—the one stable thing I had left—it broke something in me. I realised I couldn't keep pretending I had it under control* (SUR9)

Another described how contact with the criminal justice system disrupted the cycle of substance use;

> *I got arrested and ended up in front of a judge. I was scared stiff. They gave me a chance to go to treatment instead of prison, and that's what finally got me to try. I realised I couldn't do this alone anymore* (SUR4)

These accounts correspond with findings from McSweeney et al. (2009), who highlight the importance of court-mandated treatment in encouraging initial engagement, especially for individuals with chronic substance use and histories of contact with systems. However, the success of these interventions often hinges on whether they are delivered punitively or supportively—whether the individual is shamed or motivated. The narratives presented here suggest that pressure, combined with empathy and opportunity, can lead to practical recovery efforts.

SUGAR participants often reported complex crises as external triggers—especially the breakdown of both financial and relational support. These pressures were frequently described as overwhelming and highly emotional, reflecting the layered impact of coping with two addictions. One participant shared:

> *I lost everything—money, relationships, my self-respect. I was bouncing between debts and withdrawals, gambling binges and drug crashes. I was stealing from people I loved, lying every day. That's when I finally knew I had to stop. There was nothing left to lose except myself.* (SUGAR4)

Another noted the emotional impact on their children;

> *When my kids started seeing the worst of me—coming home to see me passed out, seeing the bailiffs at the door—that's what broke me. I didn't want them to grow*

> *up thinking this was normal. I knew then that something had to change, not just for me, but for them* (SUGAR2)

These accounts align with research on dual diagnosis populations, where cumulative stressors and lack of integrated care increase harm and the chances of crisis (Kelly et al., 2021; Reith et al., 2022). The external pressures in these situations are not isolated—they illustrate systemic gaps in detection, triage, and support. The emotional toll is especially severe when individuals feel abandoned or misunderstood by the services meant to help them.

While some critics argue that coerced or externally motivated treatment may lead to lower levels of long-term engagement (Wild, 2006), the participants in this study challenge this view. Many described external pressure not as coercion but as a crucial disruption to denial and inertia. In some cases, these moments prompted deep reflection, especially when the pressure was accompanied by a clear pathway to support. This nuance supports White and Kurtz's (2006) call for rethinking coercion in recovery as potentially constructive, particularly when it is administered with dignity and access.

These findings highlight the importance of recognising that recovery does not occur in a vacuum. Relationships, systems, and consequences influence it. Family, criminal justice, and workplace actors all have potential roles in triggering recovery, but their impact relies on how pressure is exerted—whether through condemnation or compassion. From a recovery capital perspective, having structured support following external intervention may determine whether an individual descends further or begins to rebuild. These insights suggest that services should be designed with relational and structural points of contact in mind. Improving family-inclusive care, establishing trauma-informed justice diversion pathways, and providing workplace referral programmes can bridge the gap between crisis and care. By supporting individuals not only when they seek help but also when life demands it, we move closer to a responsive, equitable recovery system.

6.4.1.3 Emotional Pain and Identity Collapse

A third consistent motivator for entering recovery across all groups was the intense emotional distress caused by prolonged addiction. Participants described feeling consumed by guilt, shame, hopelessness, and fear—emotions that eventually became intolerable and prompted a turning point. These feelings were not merely consequences of addiction; they were central drivers of the decision to seek change. The narratives illustrate how emotional suffering eroded participants' sense of self, leading to a collapse in identity that made recovery feel not only desirable but essential. This aligns with Goffman's (1963) concept of a "spoiled identity," where the perceived self becomes irreconcilable with one's values or aspirations, prompting the need for narrative repair and redefinition.

This theme also draws on theories of identity transformation in recovery, such as Maruna's (2001) work on desistance, which suggests that sustainable change often begins with reconstructing a redemptive self. Emotional collapse, in this context, serves as both a rupture and a starting point—a space where the old identity is no longer viable and a new one must be envisioned. From a recovery capital perspective, this turning point represents the lowest point of internal resources—particularly self-esteem and hope—making emotional capital a vital focus for early recovery support (Best & Laudet, 2010; Cloud & Granfield, 2008).
Participants in the GAR group often described overwhelming guilt stemming from deception and financial harm. One explained:

> *I couldn't live with the person I'd become anymore. I'd lied to everyone—my family, my boss, my friends. Every time I saw someone I cared about, I saw disappointment in their eyes. The guilt was too much. I thought, if I don't fix this now, I'll lose everything for good* (GAR3)

These accounts align with findings that gambling-related harm often affects social and relational capital, producing shame not just for losses but for the secrecy and deceit that accompany them (Langham et al., 2016). SUR participants reflected more on shame tied to visible addiction behaviours and the cumulative losses of control, stability, and dignity. One participant shared:

> *I was consumed by shame—shame about what I'd done, what I'd lost, and what I'd become. I wasn't just using drugs—I was burning my life to the ground. I couldn't look in the mirror. I hated myself. That's when I knew something had to change. Not for anyone else, but because I couldn't keep living like that* (SUR6)

Such reflections highlight the internal devastation caused by substance dependency, supporting research that links emotional distress with treatment motivation and recovery engagement (Davidson & Roe, 2007; Flyger et al., 2024). Importantly, these emotions were not merely triggers but were deeply entwined with participants' constructions of themselves.
For SUGAR participants, emotional collapse was especially pronounced, compounded by the dual burden of managing two addictions simultaneously. This duality intensified their psychological strain, leaving little room for coping or regulation. One participant explained:

> *It wasn't just about the drugs or the gambling—it was the mess I'd made of my life. Every day I was hurting people I loved, lying to myself, living in fear. I felt like I was failing everyone who cared about me. I didn't recognise myself anymore. That's what pushed me to get help. I wasn't just broken—I was disappearing* (SUGAR5)

Another echoed this interlinked despair;

> *The stress of losing money, being high all the time, covering up the lies—it just got to the point where I couldn't handle it anymore. My brain was never quiet. I was either wired or wrecked. I couldn't carry on like that* (SUGAR7)

These powerful expressions speak to the compounded emotional toll of co-occurring gambling and substance use. They reinforce the argument for integrated services that address not just

behaviours but the psychological fragmentation experienced by dual-recovery clients (Reith et al., 2022; Kelly et al., 2021).

Some scholars have questioned the assumption that emotional suffering is a necessary precursor to change, cautioning against the tendency to romanticise collapse or 'rock bottom' experiences as inevitable stages of recovery (Granfield & Cloud, 2001; White & Cloud, 2008). From this perspective, meaningful support should not depend on individuals reaching a point of profound crisis before intervention becomes available or practical (White, 2012; Best & Hennessy, 2022; Neale et al., 2023). While this critique is important, the narratives of participants in this study suggest that emotional exhaustion—though profoundly challenging—often created the psychological space for new insight and a willingness to initiate recovery. This reinforces the importance of earlier, trauma-informed interventions that can anticipate crisis rather than waiting for collapse (Davidson & Roe, 2007; Flyger et al., 2024).

These findings suggest that services must address emotional and identity distress as central components of the recovery process (Davidson & Roe, 2007; Best et al., 2016; Neale et al., 2015). Without space to confront shame, fear, and grief, recovery risks becoming superficial or short-lived (Goffman, 1963; Hing et al., 2016; Kelly et al., 2021). Peer-led initiatives, compassionate care models, and non-judgemental therapeutic environments have been shown to play crucial roles in restoring self-worth and coherence to personal narratives (White, 2009; Best & Hennessy, 2022; Seddon et al., 2022). As demonstrated here, recovery is not merely about stopping harmful behaviour; it is an ongoing process of identity reconstruction and personal transformation—about becoming someone one can live with and for (Maruna, 2001; Slade, 2010; Varga & Copoeru, 2023).

6.4.2 Differences in recovery perspectives

While earlier themes revealed common catalysts for entering recovery, this section focuses on the divergent ways participants across the GAR, SUR, and SUGAR groups found and engaged with recovery. These differences were shaped by the nature of the addiction itself—whether gambling, substance use, or both—as well as by the degree of stigma, visibility, and systemic responsiveness encountered. From the full thematic analysis, three areas stood out as the most

distinctive in differentiating the groups: the age at which participants first engaged with services, the recovery pathways they followed, and the barriers they encountered at the triage stage. By examining these group-specific differences, the analysis highlights the unique challenges and support needs of each recovery profile and identifies critical gaps in service provision. The following discussion is therefore organised into three themes: (1) age of first engagement with services, (2) differences in recovery pathways, and (3) disparities in triage and early treatment experiences.

6.4.2.1 Age of First Engagement with Services

Participants' age at first engagement with recovery services emerged as a key point of divergence across the SUR, GAR, and SUGAR groups. This theme highlights how the visibility of harm, the responsiveness of services, and the type of addiction influenced access to support—and ultimately, the trajectory of recovery (Ledgerwood & Petry, 2010; Humphreys & Lembke, 2014; Wardle et al., 2022). From a theoretical perspective, these patterns reflect the interaction between individual distress and systemic structures, aligning with social determinants of health models (Marmot, 2020) and the recovery capital framework, which conceptualises recovery as dependent on the availability of personal, social, and community resources (Cloud & Granfield, 2008; Best & Laudet, 2010). Age at first contact was not only shaped by when problems began but also by when systems intervened—or failed to intervene (Hing et al., 2016; Radcliffe & Stevens, 2008).

For SUR participants, early engagement often resulted from acute, visible harms such as legal involvement, job loss, or severe physical decline. Their substance use typically brought them into contact with health or justice systems in their twenties or even earlier. One participant recalled:

> *I was nineteen when I got picked up for a shoplifting charge. I'd been using daily, but that was the first time someone actually asked what was going on with me. My probation officer referred me to a programme. That was the first time I heard the word recovery in a way that made sense (SUR2)*

This quote highlights how criminal justice pathways—though punitive—can serve as early intervention routes. Literature supports this, with studies showing that substance users often engage with treatment earlier due to their higher visibility and associated institutional contact (Humphreys & Lembke, 2014; McSweeney et al., 2009).

In contrast, GAR participants typically engaged later, with many reporting that they had been in active addiction for a decade or more before accessing support. Gambling, being a largely hidden addiction without immediate physical symptoms, often remained undetected until a personal or financial crisis occurred. One GAR participant described:

> *I was in my late thirties before I told anyone. I'd already lost two houses, my savings, and most of my friends. I just thought I could fix it myself—until I realised I couldn't stop, and I didn't know how to ask for help (GAR6)*

This reflects findings from Ledgerwood and Petry (2010) and Hing et al. (2015), who emphasise that low visibility, stigma, and internalised shame delay help-seeking in gambling addiction. While these individuals often experience profound harm, the lack of immediate social or legal intervention contributes to prolonged periods of unmanaged distress.

The SUGAR group, however, faced the most prolonged delays in accessing appropriate support, not because of a lack of recognition, but due to service fragmentation and diagnostic confusion. Many reported engaging with treatment multiple times—often for one addiction only—before finding a programme that acknowledged both conditions. One participant reflected:

> *I'd been using and gambling since I was a teenager, but I was nearly 40 before I got proper help. I'd been to drug services—they said gambling wasn't their remit. I called gambling helplines—they told me to deal with the drugs first. It took me years to find a service that would actually look at the full picture (SUGAR4).*

This emphasises a dual exclusion effect, where co-occurring addictions are misunderstood, misclassified, or ignored altogether. Studies by Petry et al. (2005), Reith et al. (2022), and Kelly et al. (2021) highlight systemic silos that hinder effective dual-diagnosis care, often leading to increased harm and delayed recovery.

From a critical perspective, these patterns expose persistent structural inequalities in access to care, with each group encountering distinct barriers linked to how systems recognise and respond to addiction. SUR participants often entered treatment only at the point of crisis, frequently through criminal justice involvement, which raised concerns about coercion and the limited effectiveness of mandated treatment without broader therapeutic support (McSweeney et al., 2009; Wild, 2006). While this provided visibility and a pathway into services, it also reinforced stigma and placed recovery within punitive rather than supportive frameworks. By contrast, GAR participants were more likely to be neglected altogether, as gambling continues to be under-recognised within mainstream health and addiction policy. Stigma, invisibility, and service gaps contributed to delayed help-seeking and the intensification of harm, creating a situation in which participants were often excluded until financial collapse or relational breakdown forced disclosure (Hing et al., 2016; Wardle et al., 2022). For SUGAR participants, the barriers were compounded: their co-occurring profiles placed them outside the remit of siloed systems, resulting in structural marginalisation and repeated exclusion from both gambling and substance use pathways (Petry et al., 2005; Reith et al., 2022).

Taken together, these intergroup differences illustrate how systemic design—rather than individual readiness or motivation—determines opportunities for recovery and reproduces inequalities across addiction groups (Marmot, 2020; Livingston et al., 2012). SUR participants faced coercive but visible interventions; GAR participants encountered invisibility and neglect; and SUGAR participants experienced structural abandonment due to a lack of integrated care. This theme underscores the importance of embedding screening, early detection, and co-occurring capable services across healthcare and justice systems. Recovery pathways are not only shaped by individual readiness but also by the willingness of systems to recognise and respond to diverse addiction profiles. Improving access to dual-diagnosis care, training frontline staff in gambling-related harms, and embedding trauma-informed approaches are therefore

essential to address these disparities and mitigate the long-term consequences of delayed or fragmented intervention (White, 2012; Best & Hennessy, 2022; Neale et al., 2023).

6.4.2.2 Pathways into Recovery Programmes

The pathways into recovery across the three groups—SUR, GAR, and SUGAR—revealed distinct trajectories shaped by the visibility of harm, service availability, and the cultural framing of each addiction type. These differences are best understood through the lens of recovery capital (Best & Laudet, 2010), which emphasises that individuals access and build recovery differently based on the resources available to them—personal, social, and community. The structure and accessibility of services often dictated not only *how* recovery was initiated but also *what* forms of support were seen as legitimate, acceptable, or even possible.

For many GAR participants, mutual aid groups—particularly Gamblers Anonymous (GA)—provided the clearest and most immediate access point. In the absence of formal or NHS-provided gambling treatment pathways, GA offered both structure and connection. One participant explained:

> *I walked into GA because I had nowhere else to go. I needed to hear someone say they'd been through it too. In that room, I didn't have to explain everything from the start—they got it. I remember one guy said, 'you're not broken—you're just stuck,' and I just broke down. That night gave me the courage to keep trying (GAR4)*

This account illustrates how peer-led communities can provide a sense of belonging, moral repair, and identity transformation—key components of recovery capital (White & Kurtz, 2006; Best et al., 2016). However, while mutual aid offered emotional and relational support, many GAR participants noted a lack of clinical input or trauma support, especially when gambling was accompanied by anxiety, depression, or early life trauma.

In contrast, SUR participants more commonly accessed treatment through formal healthcare systems—especially the NHS, mental health teams, or justice-mandated referrals. Their experiences often involved structured assessments, case management, and access to therapy or psychiatric support. One participant described:

> *I didn't just need to stop using—I needed help unpacking all the reasons why I kept doing it. My GP referred me to a dual-diagnosis team, and that changed everything. My counsellor didn't just focus on the drugs; she asked about my past, my anxiety, the things I'd never said out loud. It wasn't easy, but for the first time, someone saw the whole me (SUR9)*

This reflects broader trauma-informed care principles, which prioritise emotional safety, validation, and therapeutic exploration as vital for sustainable recovery (SAMHSA, 2014; Davidson et al., 2006). Unlike the GAR group, SUR participants were more likely to access multi-disciplinary support, particularly when substance use had resulted in visible crises—such as criminal charges, housing problems, or hospitalisation.

The SUGAR group, however, consistently encountered the most fragmented and frustrating pathways into recovery. Participants described being "bounced between services" that either refused to address one half of their experience or provided contradictory advice. Dual addiction appeared to exceed the capacity of most existing frameworks. One participant explained:

> *I was trying to get help for both. One service told me to stop gambling first; the other said sort the drugs out first. No one could take me as I was. I ended up lying to both places just to get in the door, but it didn't work. I felt like I was being punished for having two problems instead of one (SUGAR6)*

These narratives expose not only the persistence of service silos but also the institutional reluctance to accommodate complexity in addiction presentations. As Kelly et al. (2021) and

Reith et al. (2022) note, most treatment systems remain designed around single-issue models, leaving individuals with co-occurring gambling and substance use excluded from both pathways. The emotional toll of this fragmentation—confusion, shame, and despair—was especially pronounced among SUGAR participants, whose dual diagnoses repeatedly fell between service mandates. By comparison, GAR participants described being overlooked altogether, as gambling was rarely acknowledged as a legitimate health issue (Hing et al., 2016; Wardle et al., 2022), while SUR participants encountered early but often punitive engagement through healthcare or justice systems, which reinforced stigma rather than promoting recovery (McSweeney et al., 2009; Radcliffe & Stevens, 2008).

Some researchers have proposed specialist dual-diagnosis services, co-located interventions, and harm-reduction programmes as possible solutions (Neale et al., 2023; White, 2012). However, the field continues to struggle with integrating gambling into mainstream addiction responses. Critics argue that this reflects a moral hierarchy of addictions, where substance use receives greater policy and funding attention due to its visible social costs, while gambling remains marginalised despite growing evidence of harm (Livingstone et al., 2019; Bramley et al., 2019; Orford, 2023). This hierarchy not only shapes service priorities but also reproduces inequities in who receives timely, adequate care.

Taken together, the intergroup differences in recovery pathways highlight how systemic recognition, stigma, and funding priorities intersect to produce unequal opportunities for recovery. GAR participants often faced prolonged invisibility until crisis forced disclosure, SUR participants were channelled into coercive systems that rarely addressed underlying trauma, and SUGAR participants bore the compounded costs of fragmented care and systemic neglect (Yakovenko & Hodgins, 2018). These findings reinforce the need for integrated, person-centred systems capable of meeting individuals where they are—whether in a church basement, a GP's office, or a police cell—without requiring them to minimise or separate parts of their experience. Recovery pathways are not simply matters of individual preference but are shaped by structural inequalities in recognition, funding, and political will. Addressing these gaps requires trauma-informed, co-occurring capable systems that see gambling and substance use not as isolated disorders but as overlapping challenges shaped by stigma, poverty, and exclusion (Best &

Hennessy, 2022; Slade, 2010). Without reform at this level, recovery journeys will remain unequal, and many will continue to fall through the cracks.

6.4.2.3 Triage and Crisis Management

Participants' early experiences of triage—whether supportive, fragmented, or absent—had enduring impacts on the course and sustainability of their recovery journeys. These initial encounters with recovery systems often influenced not only whether individuals accessed help but also whether they built trust in the process and stayed engaged over time. Thus, triage functions not only as a service process but as a vital point of meaning-making—a moment where individuals start to realign their identity within a recovery framework (Maruna, 2001; Slade, 2010).

In the GAR group, triage usually occurred through mutual aid routes, such as Gamblers Anonymous (GA), which offered a clear structure and emotional connection through peer-led support. For many, this method provided not only a practical entry into recovery but also a crucial sense of connection and shared language. One participant reflected on this early experience:

> *At first, I just focused on getting through each day, staying away from gambling, and working on the steps. But the most powerful thing was hearing other people share their stories—stories that sounded like mine. It made me feel less alone, and that was the beginning of real recovery." (GAR9)*

Such peer-led models are key components of the recovery capital framework, especially in strengthening social identity transformation and hope (Best & Laudet, 2010; Best et al., 2016). The Social Identity Model of Recovery (SIMOR) indicates that participation in mutual aid reshapes identity through association with a non-using peer group, facilitating the development of a pro-recovery narrative (Best et al., 2016). These models also support the well-established evidence for the effectiveness of mutual aid groups in promoting long-term change, especially in

behavioural addictions where access to formal services is limited (Humphreys et al., 2004). However, some researchers warn that peer-led triage may be less capable of identifying co-occurring disorders or trauma, which could reduce responsiveness for individuals with complex needs (White, 2009; Kelly et al., 2021).

By contrast, participants in the SUR group described entering more structured systems involving both psychological and pharmacological interventions. This integrated support was often critical in addressing comorbid mental health conditions and building recovery stability. One participant described this multi-pronged approach as foundational:

> *I began seeing a therapist, started medication for my depression, and went to group meetings for support. Each part on its own wouldn't have been enough. It was having all those pieces together that helped me believe I could change (SUR8)*

This experience aligns with integrated treatment models and dual-diagnosis best practices, which advocate for synchronised treatment of mental health and substance use disorders to reduce dropout rates and enhance outcomes (Mueser et al., 2013; Slade et al., 2014). From a conceptual perspective, this also supports biopsychosocial understandings of addiction, where pharmacological, psychological, and social factors must all be addressed for lasting recovery (Davidson & Roe, 2007). The recovery capital approach also views this form of triage as a crucial point in rebuilding personal and community resources—through mental health stability, therapeutic alliance, and access to group-based social resources.

For SUGAR participants, however, triage was much more precarious. Their narratives highlighted a system poorly equipped to handle both behavioural and substance-based addictions. Instead of being smoothly directed to the right support, they were often left to negotiate a fragmented landscape on their own. One participant's account illustrated the emotional toll of this disjointed process:

> *The only way I could begin my recovery was by finding a programme that worked for both my addictions. But no one pointed me there—I had to find it on my own, and that nearly broke me. There were nights I didn't think I'd make it through without help (SUR5)*

This analysis reinforces long-standing critiques of siloed service models that lack the mandate or capacity to address complexity. Co-occurring capable care remains uncommon in most treatment systems, and individuals with dual diagnoses often encounter gatekeeping, duplication, or conflicting eligibility requirements, leaving them excluded from both pathways (Kelly et al., 2021; Reith et al., 2022; Neale et al., 2023). Theoretically, these patterns reflect what Bourdieu (1986) described as institutionalised structural exclusion, whereby those with fewer forms of legitimate social and cultural capital are systematically denied access to the very systems that claim to provide support. For SUGAR participants, these structural dynamics significantly hindered the development of recovery capital: fragmentation delayed access, undermined confidence, and magnified harm at the most vulnerable stages of recovery (Cloud & Granfield, 2008; Best & Laudet, 2010).

Taken together, these experiences highlight the central role of triage systems—whether formal, peer-led, or absent—in shaping long-term recovery trajectories. Triage is more than a logistical gateway; it is a symbolic entry point into belonging, identity transformation, and systems of care (Davidson & Roe, 2007; Maruna, 2001). Intergroup differences were pronounced: SUR participants generally benefited from earlier and more holistic engagement, albeit often through crisis-led or coercive channels; GAR participants frequently accessed recovery through mutual aid or informal peer networks, compensating for the lack of statutory provision; and SUGAR participants faced the steepest terrain, as their dual conditions collided with systemic limitations, leaving them structurally abandoned at the very moment when accessible, person-centred triage was most critical (Yakovenko & Hodgins, 2018; Radcliffe & Stevens, 2008).

These findings support the development of Recovery-Oriented Systems of Care (ROSC), which prioritise flexibility, continuity, and cross-sector accountability as essential components of

effective service design (Sheedy & Whitter, 2009; White, 2012). They also emphasise the necessity of embedding trauma-informed approaches within both clinical and peer-led triage, recognising that first contact can either reinforce exclusion or initiate recovery (Slade, 2010; Seddon et al., 2022). At a systemic level, the design and delivery of triage must move beyond diagnostic silos and risk-averse gatekeeping to embrace complexity, ambiguity, and personhood, ensuring that no individual is excluded because of the intersectionality of their addiction experience.

6.4.3 Similarities in Defining Recovery Across Cohorts

Despite the distinct nature of their addiction experiences, participants across the SUR, GAR, and SUGAR groups expressed notable commonalities in how they understood recovery. Three prominent themes emerged: recovery as personal transformation, as rooted in relational support, and as an ongoing, continuous process. These shared concepts challenge narrow definitions of recovery as mere abstinence, instead highlighting broader psychosocial change, which aligns with current person-centred frameworks in recovery research (Davidson & Roe, 2007; Best & Lubman, 2012).

6.4.3.1 Personal Transformation

A core theme across all three groups was the understanding of recovery as a process of profound personal transformation—more than just abstinence or symptom management. Participants consistently described recovery as the rebuilding of identity, values, and emotional integrity. These accounts resonate with recovery models that prioritise meaning-making, agency, and identity reformation (Best et al., 2016; Maruna, 2001; Davidson & Roe, 2007). Recovery here was framed not as a static state but as a lifelong, iterative journey of becoming—one that necessitated internal harmony as much as behavioural change.

SUR and SUGAR participants in particular spoke about transformation as an inward, often painful process of confronting emotional trauma, shame, and existential dislocation. Recovery was not described as a return to a previous self, but as the emergence of a new, more coherent identity.

> *Recovery for me is about learning to be okay with myself—without the noise, without the shame. I didn't realise how much of my life was spent trying to run away from things inside me. It's about figuring out who I am when I'm not high, when I'm not chasing something outside of me. That's when the real work started—not when I stopped using, but when I stopped hiding (SUR1).*

Another participant stated;

> *It's about rebuilding from the inside. I don't want to just stop using or gambling—I want to live in a way that feels honest and stable. I've spent so long reacting to pain that I forgot how to actually feel anything properly. Now I'm trying to sit with things instead of escaping them (SUGAR4)*

These narratives highlight the importance of *intrapersonal recovery capital* (Laudet & White, 2008)—the internal resources required to regulate emotions, process trauma, and redefine self-worth. In this perspective, transformation is not merely a secondary outcome of abstinence but the core mechanism of sustainable recovery. For SUGAR participants, this process seemed particularly intense due to the compounded emotional and behavioural dysregulation linked to dual addiction. Their accounts correspond with emerging research on identity fragmentation and complex self-stigma among individuals with co-occurring conditions, where recovery involves untangling layers of shame, secrecy, and behavioural entrapment (Kelly et al., 2021; Flyger et al., 2024).

GAR participants, while also articulating transformation, more frequently framed recovery through the lens of *moral self-repair* and social restoration. The process of regaining trustworthiness or respect—especially in the eyes of family—was a recurring motif.

> *It's about becoming someone I can respect. Someone my family can believe in again. I want to be the kind of person who shows up, who doesn't lie, who takes*

> *responsibility. Not just someone who doesn't gamble, but someone who owns their choices. That's what recovery means to me—it's not about pretending it never happened, it's about making it right (GAR5)*

This framing aligns with what Gavriel-Fried et al. (2022) and Best and Hennessy (2022) describe as relational recovery capital—the process of repairing and revalidating identity through trust, accountability, and relational belonging. Unlike SUR participants, who often engaged earlier with health or justice systems but did so under coercive or stigmatised conditions, many GAR participants described prolonged periods of concealed harm and self-isolation prior to disclosure. This concealment meant their recovery journeys were closely bound to processes of shame resolution and moral accountability (Hing et al., 2014; Slutske, 2019; Baxter et al., 2021). In turn, this suggests that behavioural addictions such as gambling evoke particularly internalised shame because of their social invisibility and the perception of gambling as a matter of 'choice', rendering identity transformation a moralised and heavily self-surveilled endeavour (Miller et al., 2020; Orford, 2023).

Conceptually, these findings highlight the importance of identity theories of recovery, particularly those grounded in desistance and narrative criminology. Such models emphasise the adoption of a prosocial, future-oriented identity that integrates but is not defined by the past (Maruna, 2001; Farrall, 2002; Giordano et al., 2002). For SUR and SUGAR participants, this often meant reconstructing a coherent sense of self that could withstand distress while establishing and maintaining relational boundaries (Neale et al., 2015; King et al., 2023). For GAR participants, by contrast, recovery was more explicitly tied to re-establishing moral credibility and repairing damaged social standing, making accountability to others a central feature of transformation.

At a broader level, these narratives underscore limitations in clinical definitions of recovery that emphasise abstinence or compliance with treatment targets. While such markers are practically useful, they neglect the multidimensional and identity-based aspects of recovery as experienced. A recovery capital approach (Cloud & Granfield, 2008) provides a more holistic lens, recognising emotional, social, and identity-related resources as equally important to long-

term outcomes. These findings also resonate with strengths-based and trauma-informed paradigms, which stress the existential aspects of recovery—purpose, belonging, and integrity—as essential dimensions of meaningful change (Davidson et al., 2012; Krentzman & Gass, 2024). In conclusion, personal transformation emerged not as a by-product of abstinence but as the foundation of recovery itself. Whether framed as trauma resolution (common among SUR and SUGAR participants), moral restitution (prominent among GAR), or narrative identity reconstruction (across all groups), participants described recovery as a journey of self-becoming. This ongoing, relationally embedded, and emotionally grounded process—rather than the mere cessation of addictive behaviour—was at the heart of how recovery was defined.

6.4.3.2 Relational Support

A second prominent theme evident across all three groups was the vital role of relationships in shaping recovery. Participants consistently emphasised that meaningful connections—with peers, family members, sponsors, or recovery communities—were not just supportive but essential to their recovery journey. These relationships were seen not only as sources of emotional support and accountability but also as mechanisms for restoring identity, realigning values, and social reintegration. This view aligns with the conceptual framework of social and community recovery capital (Cloud & Granfield, 2008; Best & Laudet, 2010), demonstrating how connection can serve as a safeguard against relapse and emotional decline (White & Cloud, 2008).

Participants in the SUR and SUGAR groups described their relationships as emotionally restorative—emerging after long periods of isolation, disconnection, or stigma. Many individuals noted that being "seen" by someone who understands addiction acted as a catalyst for their trust, not only in others but also within themselves.

> *I didn't realise how alone I had been until I met others who understood. That connection saved me. For years, I was surrounded by people but felt like I couldn't talk to anyone—not really. When I finally went to group, there were people there who just got it. I didn't have to explain everything. They knew the*

> *guilt, the fear, the lies. That was the first time I thought maybe I wasn't broken beyond repair (SUR6)*

A participant in the SUGAR programme reiterated this theme of emotional safety, emphasising that their recovery was supported through the consistent and non-judgemental presence of a peer mentor.

> *I had a sponsor who showed me love I hadn't felt in years. I mean real love—not romance, not pity—just someone who genuinely cared whether I lived or died. In early recovery, I was hanging on by a thread. I didn't believe I could do it, but she kept telling me I could. She saw something in me I'd stopped seeing. That was my lifeline. If I had to say what saved me, it wasn't the service, it was her voice on the phone when I didn't want to be here anymore (SUGAR5)*

These accounts directly connect to the social identity model of recovery (Best et al., 2016), which states that lasting change is fostered through adopting new identities within prosocial and recovery-focused groups. The "recovery identity" formed through these connections represents not just the end of addictive behaviour but also an alternative framework for self-perception and social embedding.

Participants in the GAR group also emphasised the transformative potential of relationships but framed these more in terms of repairing harm and restoring lost trust. Unlike the more emotionally supportive narratives of the SUR and SUGAR participants, GAR individuals often described recovery as a moral and interpersonal reckoning. One participant reflected:

> *I lied to everyone for so long. Recovery meant owning up to it and slowly earning back that trust. I'd look my partner in the eye and see disappointment and fear. I wasn't just fixing myself—I was trying to show them that I could be different. That they could believe in me again. I wasn't just quitting gambling; I was trying to become someone I could stand to be (GAR4)*

This focus on relational restitution aligns with moral and reputational models of recovery, where healing is rooted in accountability and identity rebuilding (Maruna, 2001; White, 2007). In cases of behavioural addiction, such as gambling—where external consequences may be delayed but relational deception remains important—participants see recovery as a way of reasserting their moral agency.

Across all groups, participants consistently emphasised that recovery was deeply rooted in relationships—with others, with community, and with the self. Relational support was described as essential for sustaining change, providing accountability, and rebuilding trust, making it one of the most consistently expressed elements of recovery. Within this shared theme, however, the ways in which relationships functioned differed according to addiction profile and social context. For SUR participants, relationships were often corrective, addressing attachment issues and offering safety, consistency, and affirmation—particularly relevant given their trauma histories (Laudet & White, 2008; Davidson et al., 2012). For SUGAR participants, relationships were required to serve multiple purposes simultaneously, demanding what Chen (2023) calls "multi-modal scaffolding": a coordinated blend of peer support, trauma-informed care, and system navigation. GAR participants, by contrast, tended to frame relationships as opportunities for moral rehabilitation and interpersonal validation, focusing on restoring credibility and reconnecting with loved ones affected by secrecy and financial betrayal (Gavriel-Fried et al., 2022).

These insights challenge the assumption that "relationship-based support" can be delivered uniformly across recovery settings. Instead, they highlight that while relational recovery is a common foundation, the form it takes must adapt to the harm profile and lived experience of each group. For example, peer support for SUR and SUGAR participants may be most effective when it incorporates trauma-sensitive practices and emotional containment (Best et al., 2015), whereas GAR participants may benefit more from structured relational repair strategies such as family therapy or facilitated disclosure processes (Shaw et al., 2023).

6.4.3.3 The Continuous Nature of Recovery

A third shared theme was the realisation that recovery is not a fixed destination but an ongoing, developing process. Participants across all three groups described recovery not as a single event or endpoint, but as a continuous commitment to change—one that demands sustained effort, emotional vigilance, and behavioural consistency. Their accounts consistently challenged linear models of recovery and instead echoed the idea of recovery as a lived, adaptable practice. These reflections align with modern theories that define recovery as a dynamic, non-linear process influenced by context, time, and experience (Slade, 2010; Best et al., 2016; Flyger et al., 2024). Among GAR participants, the continuity of recovery was most clearly expressed through the structure and ritual of programme-based models, especially Gamblers Anonymous (GA). Participants explained how consistent attendance at GA meetings, step work, and sponsorship relationships helped them manage urges and remain accountable. For these individuals, recovery was woven into daily routines that reinforced behavioural discipline and identity change.

> *Recovery is work—it's not something you tick off. Every day, I have to choose not to gamble. And that choice doesn't get easier, it gets deeper. You don't stop being a gambler—you learn to live differently. The meetings remind me of who I am and who I don't want to be again. Some days it's a struggle, and some days it's automatic, but it's never finished (GAR3).*

This articulation reflects the theoretical focus within peer-led recovery literature on the importance of structured community support, regular reflection, and the gradual reshaping of one's sense of self (White, 2009; Humphreys et al., 2004). The repetition of rituals—such as sharing stories and practising the 12 steps—acted as stabilising mechanisms for those whose addiction had been marked by cycles of secrecy and impulsivity.

SUR participants, by contrast, described the continuity of recovery in terms of internal resilience and psychological integration. Rather than relying solely on formal treatment structures, many emphasised the importance of emotional self-regulation, mindfulness, and the

ongoing effort to manage triggers and trauma. Their accounts framed recovery as a daily negotiation with emotion and memory.

> *I still get triggered. Certain smells, places, even songs—those things don't go away. But recovery for me is about learning how to respond differently. I've had to train myself to pause, to breathe, to call someone instead of reaching for something. It's not about perfection—it's about persistence. Every time I choose not to use, I get a little stronger (SUR2)*

This perspective is consistent with trauma-informed recovery models, which emphasise the importance of emotional literacy, self-compassion, and the development of internal coping strategies (Davidson et al., 2012; Krentzman & Gass, 2024). SUR participants often described early recovery as disorderly, but over time, they reported a growing capacity to endure discomfort without reverting to substance use—an achievement that indicates increased intrapersonal recovery capital and resilience (Best & Laudet, 2010).

For SUGAR participants, the continuity of recovery was particularly complex due to the presence of dual addictions. Their accounts stressed the need for cross-domain vigilance and flexibility, with recovery described as an interdependent balancing act involving emotional, behavioural, financial, and relational elements:

> *It's not like you can just focus on one thing. If I ignore my gambling, it creeps back in. If I ignore my mental health, I'll end up using again. It has to be all of it—my emotions, my money, my relationships, my routines. Recovery isn't one lane for me—it's a whole motorway (SUGAR3)*

This metaphor of recovery as multi-lane traffic illustrates the challenges of managing dual diagnosis, where behavioural patterns often reinforce each other and stress in one area can trigger both addictions. These accounts support recent findings advocating for integrated, holistic recovery services for individuals with co-occurring conditions (Kelly et al., 2021; McKay, 2017).

For these participants, continuity depended not only on internal motivation but also on system responsiveness, emotional regulation, and coordinated support.

Across the three groups, distinct understandings of what continuity required emerged. GAR participants frequently relied on structured, external anchors such as Gamblers Anonymous to maintain consistency, illustrating the centrality of peer-led routines in sustaining abstinence (Kelly et al., 2020; Moos, 2007). SUR participants, by contrast, described the gradual development of internal tools to manage affective and psychological risk, reflecting the importance of self-regulation and emotional regulation capacities in substance recovery (Volkow et al., 2016; Witkiewitz et al., 2019). SUGAR participants emphasised adaptability across multiple domains, drawing on fragmented and overlapping sources of support, which demanded resilience in navigating services not designed for dual-diagnosis needs (Yakovenko & Hodgins, 2018; Reith et al., 2022). These contrasts suggest that continuity is not simply a matter of personal discipline, but a contextually embedded experience shaped by addiction type, visibility of harm, treatment access, and systemic responsiveness.

Conceptually, these findings highlight the limitations of binary recovery frameworks that position individuals as either “in recovery” or “relapsed.” Such frameworks risk obscuring the lived reality of recovery as a fluctuating, lifelong process, characterised by growth, setbacks, and adaptation (White, 2007; Slade, 2010; Best & Hennessy, 2022). Recovery in this context was described less as the absence of use or behaviour and more as the active practice of self-care, self-awareness, and connectedness.

The narratives also underline the urgent need for flexible, long-term recovery systems. Rather than time-limited or narrowly focused interventions, participants across all groups implicitly or explicitly called for structures capable of evolving with them over time. This includes sustained access to peer communities, trauma-informed mental health provision, and integrated care pathways responsive to the unique challenges of dual recovery (Laudet & Humphreys, 2013; McKay, 2017; Neale et al., 2015). Without such frameworks, the responsibility for maintaining recovery falls disproportionately on individuals already navigating emotional exhaustion, stigma, and systemic neglect (Livingston et al., 2012; Marmot, 2020).

In summary, although recovery appeared differently configured across GAR, SUR, and SUGAR groups, each described it as a non-linear, active, and ongoing journey. Their accounts stress that continuity is simultaneously a personal and structural process—shaped by internal growth and external conditions. These findings reinforce the need for recovery systems that treat continuity not as an afterthought but as the foundation of long-term change.

6.4.4 Differences in Defining Recovery Across Cohorts

While participants across the SUR, GAR, and SUGAR groups shared common understandings of recovery, they also expressed differences shaped by their addiction experiences. These distinctions emerged in three areas: entry points into recovery, focus during recovery, and strategies for sustaining progress. SUR participants often described earlier but coercive interventions, GAR participants highlighted delayed disclosure and moral restitution, and SUGAR participants emphasised navigating fragmented systems and balancing multiple recovery demands. These variations illustrate how addiction type and systemic context shape both the meaning of recovery and the supports needed to sustain it.

6.4.4.1 Entry Points into Recovery

A key area of divergence across the three groups was how recovery was understood to begin—what marked the initial turning point and prompted movement toward change. While all participants described some form of crisis, reckoning, or shift in perspective, the nature of that shift varied significantly. These differences reflect not only addiction type but also the emotional, relational, and structural contexts in which the addiction was embedded. This aligns with recovery literature that recognises multiple and nonlinear pathways into change, shaped by psychological readiness, cognitive transformation, and the availability of supportive environments (Cloud & Granfield, 2008; Laudet & White, 2008; Maruna, 2001; Giordano et al., 2002; Best & Hennessy, 2022). Among GAR participants, the entry point into recovery was most frequently framed as a conscious behavioural decision to stop gambling. This decision was often triggered by the collapse of secrecy and the external exposure of harm, particularly financial

damage and relational fallout (Hing et al., 2016; Langham et al., 2016; Slutske, 2019; Baxter et al., 2021; Orford, 2023). One GAR participant explained:

> *Recovery started the day I said it out loud. I'd been hiding it for years—lying to my partner, borrowing from friends, moving money around. I kept telling myself I had it under control, but I knew I was losing everything. One night I just broke down and told my wife everything. I thought she'd leave me, but she didn't. That moment—that truth—was when I knew I had to change. It wasn't just about stopping gambling. It was about finally telling the truth and living like someone I could respect (GAR1)*

This story highlights the importance of cognitive insight and honesty as triggers for behavioural change, aligning with cognitive-behavioural models of addiction recovery where recognising and verbalising problems are key intervention points (Miller & Rollnick, 2013; Hodgins et al., 2011). For GAR participants, honesty often marked the symbolic and practical start of recovery—a moment that broke denial and began accountability. Their view of recovery was usually linear and goal-focused, moving from disclosure to abstinence, then towards financial restitution and rebuilding trust.In contrast, SUR participants more often described the start of recovery not as a distinct behavioural choice but as a gradual emotional awakening—an internal shift towards self-preservation, healing, or existential survival. The catalyst was not necessarily the stopping of substance use, but the realisation of emotional pain, accumulated losses, or the overwhelming burden of shame and self-loathing. One participant reflected:

> *It wasn't like I woke up and said, 'I'm quitting today.' It was more like… I just couldn't take the pain anymore. I was drinking every day, losing jobs, losing friends, but what really hit me was when I looked in the mirror and didn't recognise who I was. I felt broken—like I wasn't even a person anymore. I started going to therapy, not because I wanted to stop drinking straight away, but*

> *because I wanted to understand why I didn't want to live. That's where recovery started for me—when I wanted to feel like I was worth saving (SUR5)*

This focus on emotional recovery supports trauma-informed models, which emphasise healing and affect regulation—not just behavioural change—as central to recovery (Davidson et al., 2006; Krentzman & Gass, 2024). SUR participants tended to describe recovery as an ongoing process of developing emotional awareness and seeking safety from both internal and external chaos. Rather than a clean break from substance use, their stories reflected layered processes of self-exploration and rebuilding. SUGAR participants offered perhaps the most complex accounts of entry into recovery, influenced by the intertwined nature of their dual addictions. Almost all participants in this group expressed frustration at the ineffectiveness of treating one addiction in isolation, describing a cycle of substitution and relapse. One participant's account highlighted the recursive pattern:

> *I'd quit drinking, but then the gambling would get worse. Or I'd stop gambling, but then I'd start using again to deal with the stress. It was like plugging one hole just made the other one burst. I remember thinking, 'I'm doing what they told me—why isn't it working?' Recovery didn't start until someone finally asked me about both. That was the first time I felt like I wasn't broken—I just needed help with the whole picture, not just one part (SUGAR2)*

These accounts resonate with poly-addiction and dual-diagnosis research, which warns against fragmented care and the risks of substitution when only one behaviour is addressed (Petry et al., 2005; Yakovenko & Hodgins, 2018; Reith et al., 2022). For SUGAR participants, recovery could not truly begin until services—or at least a single practitioner within them—recognised the interconnectedness of their conditions. Entry into recovery required a simultaneous and integrated acknowledgement of both behaviours and their shared emotional, social, and cognitive roots (Kelly et al., 2021; McKay, 2017).

The comparative patterns across groups reveal how entry into recovery is multidimensional and context-specific. For GAR participants, recovery was framed around the rupture of denial and the moral act of disclosure—consistent with theories of identity reparation and social accountability in behavioural addictions (Hing et al., 2016; Gavriel-Fried et al., 2022; Shaw et al., 2023). This framing also reflects the moral hierarchy of addictions: gambling remained socially invisible until financial collapse or relational fallout forced recognition (Orford, 2023). For SUR participants, recovery more often began from states of emotional collapse and existential reflection, driven by trauma, shame, and accumulated loss rather than discrete behavioural choice. These pathways align with psychological models of self-determination and trauma recovery, where emotional readiness becomes the catalyst for change (Deci & Ryan, 2008; Neale et al., 2015; Dingle et al., 2015; Best et al., 2016). For SUGAR participants, by contrast, the catalyst was not primarily internal but systemic: recovery was obstructed until services acknowledged dual conditions, highlighting policy and practice failures to accommodate complexity (Chen, 2023; Reith et al., 2022).

Taken together, these findings highlight a broader conceptual shift in the recovery field—from fixed entry models, such as the "rock bottom" narrative, to more dynamic, person-centred understandings of when and how people begin to change (White, 2012; Slade, 2010; Best & Hennessy, 2022). Entry into recovery is not a singular event but a situated, relational process—shaped by readiness, recognition, and the response of others. Crucially, the intergroup contrasts illustrate how structural factors enable or constrain recognition: SUR participants were often pushed into visibility through coercive or crisis-driven systems, GAR participants were neglected until disclosure forced acknowledgement, and SUGAR participants remained excluded altogether unless services adapted. For practitioners and policymakers, the implication is clear: early interventions must be flexible, trauma-informed, and co-occurring capable, meeting individuals at behavioural, emotional, or relational points of crisis before systemic neglect amplifies harm.

6.4.4.2 Focus Areas in Recovery

While participants across all groups emphasised that recovery is an ongoing process, their definitions of success and the outcomes they prioritised varied significantly depending on their addiction profile. These differences reflect how recovery capital is mobilised across emotional, social, financial, and behavioural domains (Cloud & Granfield, 2008; Best et al., 2016).
For GAR participants, recovery goals centred on restoring credibility, both financially and interpersonally. Their reflections were strongly shaped by the consequences of hidden gambling harms—secrecy, broken trust, and unmanageable debt. One participant explained:

> *I'd spent years making everything look okay on the outside while everything was falling apart underneath. I was lying to my partner, hiding debts, borrowing from friends, juggling credit cards. It was only when I got found out that I had to face it. Recovery, for me, was about getting honest and proving I could be reliable again—not just saying it but living it every day (GAR5).*

This emphasis on restitution and dependability reflects the social restitution model of recovery, where re-establishing broken trust and repairing social identity are essential for maintaining abstinence and regaining social capital (Gavriel-Fried et al., 2022; Hing et al., 2023). Participants highlighted the emotional toll of living a double life and described recovery as an opportunity to live transparently and rebuild damaged reputations—a finding supported by studies linking relational integrity to sustained recovery in gambling populations (Ledgerwood & Petry, 2010; Daughters et al., 2022). In contrast, SUR participants mainly viewed recovery as the restoration of emotional and psychological stability. Many had long histories of trauma, mental health challenges, or emotional dysregulation. Their narratives focused less on social restitution and more on healing from internal fragmentation. One participant explained:

> *I'd been surviving for years, not really living. I couldn't sleep, I'd panic if I was alone too long, and I didn't even know how to breathe properly without a drink. Recovery meant learning to be still in myself again. To not feel like I was running*

> *from something all the time. That's the real work—it's not about not drinking, it's about not needing to escape (SUR8)*

This understanding aligns with trauma-informed and psychologically integrative models of recovery, which emphasise self-regulation, emotional literacy, and nervous system safety as prerequisites for long-term change (Flyger et al., 2024; Krentzman & Gass, 2024). Rather than focusing on external validation, SUR participants described recovery as a form of internal repair—a recalibration of the self that allowed for stable functioning and emotional resilience.

For SUGAR participants, recovery goals were expansive and multifaceted, reflecting the complex interplay between their co-occurring addictions. Many spoke of having to rebuild every aspect of life simultaneously, with the dual nature of their addiction complicating progress in any single area. As one participant put it:

> *It was like trying to fix a sinking ship with holes everywhere. If I sorted the drinking, the gambling would flare up. If I focused on my money, my mental health would crash. I had to learn how to do everything—eat right, sleep, talk to people, ask for help, stay away from toxic places. It wasn't just about stopping—it was about building a whole new way of living from scratch (SUGAR4)*

This account closely reflects research on dual recovery, which indicates that individuals with co-occurring gambling and substance use disorders experience more severe impairments and require integrated, cross-domain support (Kelly et al., 2021; Slutske, 2019).

The focus on holistic functioning—encompassing physical, emotional, financial, and social domains—mirrors the need for comprehensive recovery capital mobilisation (Cloud & Granfield, 2008; Best et al., 2021; Best & Hennessy, 2022). At the same time, these accounts highlight how fragmented systems of care struggle to address the interconnected needs of those with dual addictions (Neale et al., 2015; Reith et al., 2022).

The intergroup distinctions demonstrate that "recovery" was never a singular or uniform concept but instead reflected addiction type, stigma visibility, and systemic responsiveness. For

GAR participants, recovery was framed relationally and reputationally: the task was to rebuild trust, restore credibility, and repair accountability in the wake of secrecy and financial harm (Hing et al., 2016; Orford, 2023). For SUR participants, recovery was more often defined in emotional and psychological terms, emphasising the cultivation of inner calm, stability, and meaning after experiences of trauma and self-destructive behaviour (Dingle et al., 2015; Volkow et al., 2016). For SUGAR participants, recovery was cast in existential and systemic terms, requiring balance and resilience across multiple disrupted life domains simultaneously. This definition reflected not only the personal complexity of dual recovery but also a systemic critique of services that demand coherence within siloed, unintegrated pathways (Yakovenko & Hodgins, 2018; Reith et al., 2022).

Taken together, these differences underline the importance of tailoring recovery pathways to specific addiction profiles and lived experiences (White, 2009; Monteiro et al., 2024). They also enhance the broader discussion of personalised recovery journeys, which recent research suggests must move beyond abstinence towards aligning goals with personal values, relational belonging, and emotional well-being (Davidson & Roe, 2007; Best et al., 2016; Varga & Copoeru, 2023). By recognising these diverse goals and definitions, services can better support recovery as a holistic transformation—rather than reducing it to the cessation of harmful behaviours.

6.4.4.4 Approaches to Maintaining Recovery

Distinct preferences for maintaining recovery emerged across the three participant groups, shaped not only by addiction type and perceived relapse triggers but also by prior service experiences and the extent of recovery capital available. While structure, support, and consistency were broadly valued, how these were enacted and interpreted varied meaningfully, highlighting the need for tailored recovery systems that can adapt to different trajectories and levels of complexity. Among GAR participants, recovery maintenance was deeply entwined with peer-led recovery programmes—particularly Gamblers Anonymous (GA)—which provided not only structure but also a consistent ethos of accountability. These programmes were seen as

foundational to managing urges and rebuilding a coherent sense of identity after years of secretive and isolating gambling behaviour. One GAR participant reflected:

> *Without GA, I wouldn't have a clue how to stay stopped. The steps, the people, the fact that someone checks in if I miss a meeting—it gives me a rhythm. It's more than not gambling; it's a way of staying honest every day. I know now that I need that structure because left to my own devices, I get lost in my head (GAR6)*

Another GAR participant elaborated:

> *I tried going it alone, but it never stuck. It's the sharing and hearing others that brings me back to reality. My sponsor calls me out when I'm making excuses. That kind of truth is hard but it's what keeps me from slipping (GAR9)*

These accounts align with behavioural addiction literature that emphasises the importance of ritualised routines, cognitive-behavioural scaffolding, and identity transformation within mutual aid models (Humphreys et al., 2004; Pickens, 2024). The GAR group externalised recovery, anchoring it in structured environments that provided repetition, validation, and correction—elements essential for managing the compulsivity and distorted thinking patterns linked to gambling. In contrast, SUR participants adopted more flexible and individualised maintenance strategies. Their approaches reflected a greater focus on therapeutic work, daily functioning, and emotional resilience. For many, traditional 12-step or group-based structures had either failed to resonate or had been only partially effective. One participant described their routine:

> *Recovery for me is a mix of things. I have a therapist who I see weekly, and that's my anchor. But I also write in my journal most nights, I've started yoga, and I go for walks when I feel triggered. I need to be able to tune into my body and mind, not just follow a set programme. That's what keeps me balanced (SUR3)*

Another reflected;

> *I used to think I had to do recovery a certain way—meetings, steps, all that. But I realised my trauma needed more than that. Now it's about what soothes my nervous system, what helps me cope. Sometimes that's painting, sometimes it's just breathing properly. The hard part is keeping it going when life throws stuff at you (SUR6)*

These reflections are grounded in trauma-informed and holistic recovery frameworks that promote personal agency, emotional regulation, and lifestyle restructuring as essential for sustainable recovery from substance use (Davidson et al., 2006; Slade, 2010; Krentzman & Gass, 2024). Unlike the GAR group, the SUR group internalised recovery as a dynamic process involving daily emotional labour and self-care, prioritising psychological coherence and bodily regulation over external structures.

SUGAR participants exhibited the most complex and layered maintenance strategies, often influenced by earlier frustrations with fragmented service provision. Their recovery involved not only abstinence from two types of addictive behaviour but also navigating systemic challenges posed by co-occurring triggers, which were frequently interconnected and reinforcing. One participant captured this tension:

> *I'd go to a gambling programme and they'd say 'don't talk about drinking', or I'd see a substance counsellor who didn't get the gambling part. It was maddening. I kept swinging from one to the other. What finally worked was finding a team that saw the whole picture—mental health, money stuff, trauma, all of it (SUGAR5)*

Another added:

> *It's like walking a tightrope. If I focus too much on one side, the other sneaks back in. So I have to be on top of everything—my moods, my triggers, my finances. I*

> *check in with a coach, I do DBT therapy, I track my spending, I've got alarms on my phone. It's exhausting, but it's what keeps me safe (SUGAR2).*

These narratives illustrate the heightened complexity of dual recovery, where managing both behavioural and chemical dependencies requires coordinated and integrative care (Kelly et al., 2021; Gavriel-Fried et al., 2022; Petry et al., 2005). A recurring motif was the "seesaw effect," in which suppression of one addiction led to compensatory engagement in another, underscoring the risks of fragmented care that focuses narrowly on a single behaviour (Yakovenko & Hodgins, 2018; Reith et al., 2022). Participants described feeling destabilised when confronted with service silos, but empowered when support was comprehensive, consistent, and contextually responsive (Neale et al., 2015; White, 2012).

The intergroup comparison highlights divergent orientations toward recovery maintenance. GAR participants tended to thrive within structured, communal systems such as Gamblers Anonymous, where external anchors and accountability frameworks compensated for gambling's invisibility in formal treatment systems (Kelly et al., 2020; Orford, 2023). SUR participants, by contrast, emphasised therapeutic self-regulation, describing recovery as the cultivation of emotional stability, coping skills, and inner calm—an orientation that reflects both the psychological demands of substance dependence and systemic reliance on individual resilience (Volkow et al., 2016; Dingle et al., 2015). For SUGAR participants, recovery maintenance demanded holistic and integrative systems capable of addressing multiple vulnerabilities at once. Their accounts underscored how fragmented pathways not only undermined progress but also reproduced structural exclusion (Yakovenko & Hodgins, 2018; Reith et al., 2022).

These differences map directly onto recovery capital theory, which holds that individuals draw on a constellation of personal, social, and community resources specific to their recovery needs (Cloud & Granfield, 2008; Best & Laudet, 2010). Yet the comparative analysis suggests that systemic context shapes how recovery capital can be mobilised: GAR participants leveraged communal capital, SUR participants focused on personal and psychological capital, and SUGAR participants required coordinated mobilisation across all domains. Critically, these findings

highlight the necessity of adaptive service models that can flex across recovery stages and addiction profiles. Recovery sustainability depends not on static service protocols but on aligning interventions with the lived needs, rhythms, and evolving contexts of those in recovery (McKay, 2017; Krentzman & Gass, 2024; Best & Hennessy, 2022). Uniform, siloed systems remain insufficient for individuals navigating dual disorders, chronic trauma, or fragmented care histories. Ultimately, maintaining recovery emerges less as compliance with a fixed protocol and more as the cultivation of a dynamic ecosystem of support, insight, and flexibility—an ecosystem that evolves alongside the person and their shifting context.

6.4.4.5 Personal Transformation and Identity Change

Recovery was consistently described by participants across the SUR, GAR, and SUGAR groups as a process of profound personal transformation—a shift not only in behaviour but also in identity, values, and worldview. This perspective aligns with contemporary models of personal recovery, which view recovery as a journey of growth, meaning-making, and self-reconstruction rather than simply the cessation of symptoms (Slade, 2010; Davidson & Roe, 2007). Participants portrayed this process in emotionally intense, highly individualised terms, revealing distinct yet overlapping pathways influenced by the nature of their addiction and the personal significance they attributed to recovery.

Among GAR participants, personal transformation was closely connected to restoring integrity and self-respect, often following years of secrecy, financial damage, and relational breakdown. Many regarded recovery as a moral journey—reclaiming their identity prior to addiction or becoming someone deserving of trust. One participant offered a detailed account of this inner shift:

> *For years I lied to everyone. I lied to my wife, my kids, my colleagues. I couldn't even look in the mirror. Recovery, for me, was when I finally stopped lying—first to myself, then to them. It wasn't just about not gambling anymore. It was about becoming someone I could respect again. I had to build that from scratch—*

> *accountability, honesty, routine. That's when I started to feel like a human being again (GAR5)*

This aligns with literature on gambling recovery that emphasises moral self-repair and identity reconstruction, especially given the often-hidden nature of gambling-related harm (Gavriel-Fried et al., 2022; Hing et al., 2014). In these accounts, transformation is not seen as a sudden rupture, but as a gradual rebuilding of self-worth through honesty and social restitution. The process reflects White's (2007) view of recovery as the creation of a new, socially acceptable identity rooted in accountability and relational repair. Conversely, participants in the SUR group described transformation more as emotional liberation and internal coherence. Their narratives frequently centred on trauma, psychological distress, and a desire to regain a sense of peace and control. One SUR participant provided an especially reflective account:

> *I used to think recovery was about getting clean. But it's not. It's about learning to live with yourself. The hardest part wasn't quitting—although that was rough. It was sitting with my feelings without trying to numb them. It was facing stuff from my past that I'd buried for years. Every day I wake up and choose to face life without running. That's what recovery is to me: not just surviving, but feeling like I belong in my own skin (SUR1)*

This experiential framing aligns with trauma-informed and emotion-focused approaches to substance use recovery, which see substance use as a response to unprocessed pain and recovery as reclaiming emotional and psychological selfhood (Davidson et al., 2006; Krentzman & Gass, 2024). For SUR participants, recovery was less about a behavioural milestone and more about re-learning how to live one's life with emotional safety and authenticity.

SUGAR participants described transformation in the most multidimensional terms, reflecting the compounded harms and layered recovery demands of dual addiction. For these individuals, recovery meant not just stopping harmful behaviours, but redefining what it meant to

live well across emotional, relational, and existential domains. One participant captured this complexity vividly:

> *When I was using and gambling, I didn't care if I lived or died. I was numb. I didn't recognise myself. Recovery started when I asked, 'What do I actually want from life?' It wasn't just about not drinking or gambling. It was about learning how to be a decent mum again, how to sleep through the night, how to look in the mirror and not feel disgusted. I had to build a new me from the ground up, and some days it still feels fragile. But now I have hope, and that's the biggest difference (SUGAR4)*

These accounts are strongly aligned with recovery capital theory, particularly in its emphasis on psychological, social, and existential resources required for sustained recovery (Cloud & Granfield, 2008; Best et al., 2016; Best & Hennessy, 2022). They also echo recent arguments that dual recovery must be conceptualised as an integrative life project rather than a narrowly clinical outcome (Monteiro et al., 2024; Varga & Copoeru, 2023). The complexity of these transformations points to the need for recovery frameworks attuned to intersectional harms, poly-addiction patterns, and the cumulative impacts of marginalisation and trauma (Yakovenko & Hodgins, 2018; Reith et al., 2022).

At a conceptual level, the narratives revealed shared patterns of transformation, particularly the shift from self-alienation to self-recognition and from fragmentation to coherence. Yet the *content* of transformation differed across groups. GAR participants framed change as moral and relational repair, seeking to restore credibility and rebuild trust after secrecy and financial betrayal (Hing et al., 2016; Orford, 2023). SUR participants emphasised emotional healing and the rebuilding of self-trust, reflecting both the enduring effects of trauma and the systemic expectation that individuals regulate themselves into recovery (Dingle et al., 2015; Neale et al., 2015). SUGAR participants focused on comprehensive reintegration across multiple disrupted domains, highlighting the necessity of systemic, rather than solely individual, repair (McKay, 2017; Davidson & Roe, 2007). These differences are significant: they show how

addiction type and its social visibility shape not only the experience of harm but also the aspirational goals of recovery.

Recent critiques have challenged the dominance of "heroic recovery" narratives—linear accounts of progress from crisis to self-mastery (Best et al., 2001; Edwards, 2000; McKendy, 2006). Such narratives, while appealing, risk marginalising those whose recovery journeys are cyclical, ambivalent, or constrained by systemic barriers. They also reflect a policy bias towards "success stories" that simplify recovery into measurable endpoints. While participants here often spoke of growth and renewal, they also acknowledged setbacks, ambivalence, and the need to live with ongoing uncertainty. These accounts align with calls to view recovery not as a single transformative event but as a series of ongoing decisions and adaptations made in pursuit of stability and meaning (White, 2012; Flynn et al., 2010; Flyger et al., 2024).

In this light, transformation is better understood as a dynamic, relational process that develops differently depending on history, social environment, and available support. Tailoring interventions to these varied pathways is essential. Recovery-oriented systems must be sensitive to whether an individual seeks redemption, emotional repair, existential clarity, or simply stability. As voiced by participants, recovery was not only about ceasing harmful behaviours but about rewriting the story of who they are and who they aspire to become.

6.4.4.6 Support Systems and Community Engagement

Support networks emerged as a distinct theme across the GAR, SUR, and SUGAR groups, recognised not merely as helpful relationships but as structural anchors of recovery. Participants described these networks as providing emotional safety, accountability, and identity reconstruction, suggesting that sustained engagement with others was indispensable to long-term stability. The nature of these networks varied: for GAR participants, support often took the form of peer groups such as GA, functioning as spaces of moral accountability and social reintegration; for SUR participants, networks provided emotional containment and attachment repair; while for SUGAR participants, they acted as multi-layered scaffolds spanning peers, professionals, and system navigators.

This variation highlights that while support was universally valued, its role was not uniform. Instead, it mapped onto the specific vulnerabilities and service contexts of each group. These findings confirm the importance of social and community recovery capital (Cloud & Granfield, 2008; Best et al., 2010; Best & Hennessy, 2022), while also aligning with recovery models that place interpersonal connection at the heart of abstinence maintenance, resilience, and identity transformation (White, 2012; Kelly et al., 2020; Krentzman & Gass, 2024). Crucially, the accounts also reveal that support networks acted as gatekeepers of legitimacy and belonging in recovery—providing recognition and stability in contexts where formal services were inconsistent or inaccessible.

GAR participants often emphasised structured peer-support models, especially Gamblers Anonymous (GA), as key to their ongoing recovery. These groups offered not only a behavioural framework but also a relational environment where trust, discipline, and shared understanding could flourish. One participant shared:

> *I needed the structure of GA, the steps, the same people showing up every week, checking in. It gave me something to hold onto when everything else felt unstable. Just sitting in that room and hearing people tell my story in their words—it reminded me I wasn't alone. The sponsor system gave me the accountability I needed to stop making excuses. I could see myself in their recovery, and it made me believe I could get there too (GAR3)*

This narrative emphasies how the ritual, routine, and relational resonance of 12-step programmes support recovery not just through content, but through community. Research on peer-led models confirms that behavioural addictions often benefit from structured environments where moral repair, identity realignment, and social mirroring can take place (Humphreys et al., 2004; Slutske et al., 2023). For many GAR participants, GA provided a reliable relational anchor, especially important in the aftermath of financial betrayal, familial conflict, and self-stigma.

SUGAR participants also highlighted the significance of structured support, but their narratives emphasised more the emotional and identity-affirming aspects of mentorship.

Sponsorship relationships were described as multidimensional—offering not only guidance but also genuine emotional sanctuary. One participant provided a reflective account:

> *Having a sponsor saved my life. Not just because she helped me work the steps, but because she listened. She didn't judge me for using or gambling. She got it. For the first time in years, I felt like someone actually saw me—not just the addiction, not just the chaos. She believed I could change when I didn't. That kept me going when I wanted to quit (SUGAR5)*

Such testimonials highlight the increased importance of interpersonal validation in dual recovery, where individuals often feel excluded or misunderstood in both substance use and gambling environments. Integrated peer-based communities provide a rare space where co-occurring experiences are not pathologised but acknowledged. This aligns with research showing that multi-layered support—particularly within dual-diagnosis services—boosts psychological resilience and promotes a more unified recovery identity (Kelly et al., 2021; Gavriel-Fried et al., 2022).

In contrast, SUR participants spoke less about formal programme structures and more about organic, emotionally attuned connections. These relationships, often formed within informal peer networks or therapeutic settings, were described as crucial in helping participants move from shame and isolation towards relational repair. One participant explained:

> *I didn't know what trust felt like until I started talking to other people who'd been through it. We'd just sit and talk about stuff—loss, trauma, how we were coping. No agenda. That's what saved me. Not a programme, not a book—just someone saying, 'I hear you, I've been there too (SUR7)*

This focus on affective attunement and relational authenticity aligns with trauma-informed recovery approaches that prioritise empathy, safety, and empowerment in the healing process (Davidson et al., 2006; Best et al., 2016). For many in the SUR group, recovery was not about

following external steps but rebuilding relational trust from within. This form of social capital is less formalised but equally vital, offering emotional grounding and co-regulation during vulnerable periods (McKay, 2017).

The differences between groups highlighted distinct entry points and recovery needs within the realm of relational support. For GAR participants, peer-led programmes such as Gamblers Anonymous functioned as containment—structured spaces to process guilt, reduce secrecy, and gain behavioural clarity (Kelly et al., 2020; Hing et al., 2016). This reliance reflected not only the need for moral accountability but also the absence of gambling-specific statutory provision, which made peer groups the de facto recovery infrastructure. For SUR participants, relational safety was established through shared vulnerability and emotional validation, consistent with trauma-informed perspectives that emphasise the role of empathy and trust repair in sustaining recovery (Neale et al., 2015; Dingle et al., 2015). For SUGAR participants, mentorship acted as both a mirror and a lifeline: guidance from someone who understood the dual recovery landscape provided coherence amid fragmentation, compensating for the lack of integrated dual-diagnosis services (Yakovenko & Hodgins, 2018; Reith et al., 2022).

Notably, these relational pathways diverge from broader health recovery frameworks, where support is commonly conceptualised as familial caregiving, clinical alliance, or practical assistance (Slade, 2010; Flyger et al., 2024). While such forms of support are important, they risk overlooking the specific emotional ruptures, breaches of trust, and identity dislocations that characterise addiction-related harm. Addiction recovery, as described by participants, required spaces where shame could be acknowledged without judgment and where identities could be reconstructed in the presence of others who carried similar scars (Best & Hennessy, 2022; Miller & Rollnick, 2013).

Considering these insights, recovery systems must integrate both formal and informal support mechanisms, tailored to the lived and emotional realities of addiction. Support networks should be co-developed with those in recovery to ensure they are not only clinically effective but also emotionally meaningful (Davidson et al., 2012; White, 2012). This entails investment in diverse peer-led structures, including dual-recovery groups, trauma-informed communities, and

culturally responsive mentorship models that can flexibly adapt to varied recovery pathways (Best et al., 2016; Krentzman & Gass, 2024).

Ultimately, the quality of relational engagement in recovery cannot be treated as secondary to clinical intervention. It is a fundamental mechanism of change, shaping how individuals perceive themselves, manage shame, and continue through the daily effort of becoming well. Support, in this context, was not described as merely a tool for behaviour change but as the very social fabric through which recovery became possible, sustainable, and meaningful.

6.4.4.7 The Continuous Nature of Recovery

A central theme across participant narratives was the recognition that recovery is not a fixed endpoint but a lifelong, evolving process. However, the way continuity was understood and sustained differed markedly across the groups. GAR participants emphasised behavioural consistency, often anchored in structured peer-led routines; SUR participants highlighted emotional resilience, developed through therapeutic tools and self-regulation; while SUGAR participants stressed integrated self-management, requiring adaptability across multiple domains of vulnerability. These differences underline how the meaning and practice of continuity in recovery are shaped by addiction type and systemic context, making continuity not a universal pathway but a group-specific challenge.

Among GAR participants, the idea of continuity was most vividly expressed through structured engagement with programmes such as Gamblers Anonymous (GA). These routines were not merely tools for abstinence but ongoing practices for maintaining identity and managing behaviour. As one participant described:

> *Recovery is work—it's not something you tick off. Every day I have to choose not to gamble, and that choice doesn't get easier—it gets deeper. I still feel the urge when I walk past a bookie or see a betting ad, but I've learned to pause, call my sponsor, go to a meeting. It's a discipline. That repetition keeps me grounded (GAR3)*

This daily commitment aligns with cognitive-behavioural views that see recovery from behavioural addictions as a process of managing cues, reshaping habits, and reconstructing self-narratives (Slutske et al., 2023; Humphreys et al., 2004). GA's focus on structure, accountability, and shared responsibility provides GAR participants with a stabilising mechanism in a recovery journey that might otherwise be derailed by impulsivity and secrecy.

SUR participants, by contrast, tended to view continuity as a more internal process of emotional literacy, self-awareness, and trauma regulation. Their narratives focused on learning how to maintain internal balance rather than merely resisting external triggers. One participant expressed:

> *I used to think being clean was enough. But now I know it's about learning how to live in your own skin—how to sit with yourself when everything feels like it's too much. Recovery for me is staying present, catching my thought spirals, reaching out before I spiral. It's not about never falling—it's about getting up with compassion (SUR2)*

These reflections align with trauma-informed recovery models that prioritise safety, self-regulation, and meaning-making (Davidson et al., 2006; Krentzman & Gass, 2024). For these participants, recovery continuity involved sustained psychological growth and coping flexibility, drawing not only on formal therapy but also on informal tools such as journaling, meditation, and creative expression.

SUGAR participants described continuity in the most complex terms, reflecting the compounded nature of their dual addiction experiences. Recovery was seen not only as enduring but precarious—requiring vigilance across multiple domains, including emotional, behavioural, financial, and relational wellbeing. One participant explained:

> *I've learned the hard way—if I just focus on the drink, I'll end up gambling. If I just focus on the gambling, I'll start using again. It's like a pressure valve. I need*

> *to look after all of it—my triggers, my emotions, my money, my sleep. I journal every day, I see two counsellors, I've got two sponsors. It's exhausting but it's the only way I stay stable (SUGAR3)*

This account highlights the importance of holistic and integrative care approaches for dual recovery, in line with the literature that advocates for multi-systemic frameworks that recognise overlapping vulnerabilities and cross-addiction risks (Kelly et al., 2021; Gavriel-Fried et al., 2022). For this group, continuity was not a passive process but an active recalibration of risk across different aspects of life.

Across all groups, then, continuity in recovery was framed not as a steady upward slope but as a lived negotiation—resisting perfectionism, embracing self-care, and normalising the cyclical nature of progress. While these perspectives align with theoretical models that reject linear recovery trajectories (Best & Lubman, 2012; Neale et al., 2015), they also challenge rigid abstinence models that fail to accommodate lapses, harm-reduction goals, or adaptive slowing. As one SUR participant candidly noted:

> *It's not always moving forward. Some weeks I'm just surviving. And that has to be okay too. I used to think relapse meant failure, but now I think it's information. It shows me where I need more support. Recovery is learning what keeps you grounded (SUR7)*

Such reflections highlight a more inclusive and adaptable understanding of recovery—one that responds to modern critiques of abstinence-only models and emphasises personalised recovery journeys (White, 2009; Varga & Copoeru, 2023). Instead of prescribing a universal standard, these narratives indicate that successful recovery is characterised by one's capacity to maintain meaningful life changes, manage setbacks without falling apart, and shift focus towards growth even during regression.

Taken together, these accounts confirm that recovery is an iterative, evolving process based on behavioural consistency, emotional reflection, and navigating systems. This

conceptualisation challenges linear, abstinence-only models and aligns more with relational and developmental frameworks of recovery, which highlight flexibility, resilience, and personal meaning-making (Slade, 2010; Best et al., 2016). Participants' narratives showed that continuity in recovery does not just develop over time, but is maintained through deliberate, often demanding efforts across multiple areas—emotional regulation, social engagement, identity reconstruction, and adaptive coping (Krentzman & Gass, 2024; Davidson et al., 2006).

These findings resonate with calls in the recovery literature for more person-centred care systems that recognise the emotional labour and social embeddedness involved in long-term recovery (White, 2009; Varga & Copoeru, 2023). They also bolster critiques of rigid service models that equate success with continuous abstinence, ignoring the nuanced and nonlinear paths many individuals take—especially those with co-occurring disorders or histories of trauma (Neale et al., 2015; Flyger et al., 2024).

Furthermore, these perspectives support incorporating models of recovery from chronic illness into addiction services, where recovery is understood not as returning to a pre-addiction state, but as building a meaningful life despite ongoing vulnerability (Davidson & Roe, 2007; Monteiro et al., 2024). Focusing on adaptability, compassion, and relational support enables services to remain responsive to the changing needs of individuals as they face setbacks, milestones, and transformations. This approach makes recovery frameworks more inclusive, less punitive, and ultimately more aligned with the lived experiences of those they seek to assist (Best & Lubman, 2012; Gavriel-Fried et al., 2022).

6.4.4.8 Abstinence and Quality of Life: Complementary, Not Competing

While abstinence was broadly recognised as a crucial foundation, particularly by participants in the GAR and SUGAR groups, it was rarely seen as enough for meaningful recovery. Instead, abstinence served as a starting point—a necessary but incomplete step that enabled deeper work on relationships, identity, and emotional wellbeing. This distinction mirrors a growing consensus in the literature that, although behavioural cessation is vital, long-term recovery fundamentally involves reconstructing one's life and self-concept (Best & Laudet, 2010; Monteiro et al., 2024).

Among GAR participants, abstinence was often described as a threshold event—the moment recovery could begin, but not where it ended. One participant explained:

> *Stopping gambling was the first step. It had to happen, or nothing else could start. But recovery wasn't just about stopping. After I quit, I had to look at how I'd been lying to everyone for years—my wife, my kids, even myself. I'd been hiding the truth so long that I didn't know how to be honest. That's what recovery really meant—learning how to live without hiding, without shame, without trying to fix everything with a bet (GAR6)*

Another described abstinence as a gateway to relational repair and emotional maturity:

> *I used to think that if I just stopped gambling, everything would go back to normal. But it didn't. People didn't trust me just because I stopped. I had to show up, consistently, and prove that I'd changed—not just with money, but in how I listened, how I treated people. Recovery became about who I was becoming, not just what I'd stopped doing (GAR3)*

These accounts support research that emphasises the moral, relational, and reputational aspects of gambling recovery, particularly when secrecy and debt have eroded trust (Ledgerwood & Petry, 2010; Slutske et al., 2023). The restoration of social credibility and emotional integrity was key to how GAR participants described successful recovery.

SUGAR participants shared similar views but emphasised the distinct challenges of achieving abstinence from two co-occurring addictions simultaneously. Their reflections often described abstinence as a complex, interconnected process that required ongoing vigilance and cross-domain support. One participant reflected:

> *Quitting gambling or quitting drinking on its own didn't work. If I stopped one, the other would take over. I had to stop both at the same time, and even then, it*

> *wasn't enough. I had to learn how to deal with life—like, how to handle stress without exploding, how to show up for people, how to sit with my feelings. That's when I realised recovery wasn't about abstinence alone—it was about being able to live in a way that didn't hurt me or anyone else anymore (SUGAR5)*

Another SUGAR participant shared;

> *I didn't even know what recovery looked like at first. All I knew was that I couldn't keep living how I was. Stopping both addictions gave me the space to think, to feel. But that was when the hard stuff started—learning how to build a routine, how to make amends, how to be okay in silence. I needed help with everything, not just the cravings (SUGAR2)*

These narratives align with findings on dual recovery, highlighting the need for integrated interventions that address co-occurring addictions simultaneously and support holistic life transformation (Kelly et al., 2021; Gavriel-Fried et al., 2022). For SUGAR participants, abstinence was not an endpoint but a foundation for re-learning how to live. SUR participants also recognised abstinence as essential but tended to emphasise emotional and psychological growth as equally important. Their reflections often focused on healing from trauma, finding internal peace, and cultivating emotional resilience. One shared:

> *Drinking was just the way I numbed everything. When I stopped, all the stuff I'd been avoiding came rushing in. That's when the real recovery started—figuring out how to deal with all the pain, how to face myself. I had to learn how to trust people again, how to breathe, how to sleep. It wasn't just about not drinking; it was about learning to live again (SUR3)*

Another SUR participant described abstinence as the first act of self-respect;

The day I stopped using was the first time I did something kind for myself in years. But I had to keep going. Recovery meant learning how to look after myself, how to set boundaries, how to believe I was worth saving. It's not just about sobriety—it's about self-worth, about having a life that feels possible (SUR8)

These reflections are consistent with trauma-informed and recovery capital models that emphasise emotional healing, identity coherence, and psychosocial resources as central to recovery beyond abstinence (Davidson & Roe, 2007; Neale et al., 2015; Best et al., 2016; Best & Hennessy, 2022). Participants across the GAR, SUR, and SUGAR groups consistently described recovery not as a discrete endpoint but as a process of rebuilding self-worth, repairing damaged relationships, and learning to live without destructive coping mechanisms. Yet the content of this broader process differed across groups. GAR participants framed recovery largely in relational and moral terms, emphasising accountability, restitution, and the restoration of credibility following secrecy and financial harm (Hing et al., 2016; Orford, 2023). SUR participants highlighted emotional and psychological repair—learning to regulate distress, rebuild trust in themselves, and create stability after trauma and substance-related losses (Dingle et al., 2015; Volkow et al., 2016). For SUGAR participants, recovery was defined in systemic and existential terms, requiring reintegration across multiple disrupted life domains and the navigation of fragmented services that often failed to acknowledge dual conditions (Yakovenko & Hodgins, 2018; Reith et al., 2022). These intergroup contrasts demonstrate how addiction type and systemic recognition shape not only recovery pathways but also the aspirational goals of recovery itself.

Collectively, these findings challenge abstinence-only definitions of recovery that equate success with the cessation of substance use or gambling. While abstinence was often acknowledged as an important first step, participants positioned it as a means rather than an end. Instead, recovery was understood as a dynamic and person-centred process, aligning with recovery capital theory, which identifies personal, social, and community resources as key determinants of long-term outcomes (Cloud & Granfield, 2008; Best & Laudet, 2010). Recent research reinforces this view: Monteiro et al. (2024) and Flyger et al. (2024) argue that

abstinence should be conceptualised as a tool within recovery, while White (2009, 2012), Kelly et al. (2020), and Krentzman & Gass (2024) highlight emotional literacy, relational repair, and purposeful living as more reliable indicators of sustained wellbeing. From a theoretical perspective, these accounts reflect a shift from narrow, behaviourist models of recovery towards strengths-based and trauma-informed approaches, where recovery capital is mobilised not simply to maintain abstinence but to enable broader transformations in identity, belonging, and meaning (Laudet, 2007; Best & Hennessy, 2022). Ultimately, as voiced by participants, recovery was not described as the mere absence of gambling or substance use but as the ongoing work of starting anew and building lives rooted in honesty, dignity, and connection.

6.4.5 Summary of findings for RQ4

Across the SUR, GAR, and SUGAR groups, participants described recovery not as a fixed goal but as an evolving, lifelong process. Rather than equating success with abstinence alone, recovery was portrayed as rebuilding identity, repairing relationships, and creating stability in everyday life. This emphasis on transformation, belonging, and meaning aligns with recovery capital and trauma-informed frameworks, which highlight psychological, social, and community resources as essential to sustaining long-term change (Cloud & Granfield, 2008; Best & Laudet, 2010; Davidson & Roe, 2007).

Within this shared foundation, clear differences emerged between the groups. GAR participants often framed recovery as a moral and relational project, beginning with disclosure and maintained through accountability in peer-led programmes such as Gamblers Anonymous. Their focus was on repairing credibility and restoring trust (Maruna, 2001; Gavriel-Fried et al., 2022). SUR participants, in contrast, described recovery as an emotional awakening, shaped by trauma, shame, and loss. For them, the emphasis lay in cultivating resilience, self-trust, and psychological stability, resonating with trauma-informed and self-determination perspectives (Dingle et al., 2015; Krentzman & Gass, 2024). SUGAR participants provided the most complex accounts, casting recovery as an integrative life project across multiple disrupted domains—emotional, relational, financial, and behavioural—and critiquing the inadequacy of fragmented services to support dual conditions (Reith et al., 2022; Kelly et al., 2021).

Despite these differences, common threads were also evident. Transformation, relational connection, and continuity were universally described as central to recovery, though each group emphasised them differently: behavioural consistency for GAR, emotional resilience for SUR, and integrated self-management for SUGAR. Collectively, these findings challenge abstinence-only models and instead support ecological, person-centred understandings of recovery as dynamic, relational, and context-dependent (Best & Hennessy, 2022; Monteiro et al., 2024; Varga & Copoeru, 2023). While abstinence was often acknowledged as a necessary foundation, participants made clear that the real work of recovery lay in emotional healing, relational repair, and building lives that felt sustainable, purposeful, and connected. These intergroup similarities and differences are drawn together in the Recovery Capital Table presented in the chapter conclusion, which integrates the themes into a comparative framework and highlights how personal, social, and community resources shape recovery across GAR, SUR, and SUGAR groups.

6.5 Conclusion

This chapter addressed Research Questions 3 and 4, exploring how individuals in recovery understood the intersections of addiction, crime, and recovery, as well as how they defined and maintained their recovery. Participants described addiction as part of a cyclical interaction of coping and harm, often reinforced by stigma, fragmented services, and criminalisation. GAR participants usually entered this cycle through gambling and financial harm; SUR participants through substance use and criminalisation; and SUGAR participants through the compounded vulnerabilities of dual addiction, which created the most fragmented and marginalised pathways. These findings highlight the need for integrated approaches that see addiction not as an isolated disorder but as embedded within broader systems of distress, inequality, and exclusion (Yakovenko & Hodgins, 2018; McKay, 2017).

To go beyond descriptive findings, the analysis was synthesised using the Recovery Capital framework. Themes were mapped onto domains of personal, social, and community capital to show how recovery resources were mobilised, where they were lacking, and how these dynamics varied across groups. This mapping was interpretive and reflexive, combining

deductive use of established recovery capital domains (Cloud & Granfield, 2008; Best & Laudet, 2010) with inductive insights from participant narratives. Some themes—such as personal transformation—clearly aligned with personal capital, while others, like continuity and adaptation, spanned multiple domains, reflecting recovery as both an internal and relational process. This approach provided conceptual coherence, enabled systematic comparison across GAR, SUR, and SUGAR participants, and offered a critical test of recovery capital theory in dual-addiction contexts.

Table 6.3 below shows the final mapping, illustrating how themes relate to recovery capital domains. This synthesis highlights the usefulness of recovery capital in capturing a range of recovery experiences, while also exposing its limitations. In particular, the framework finds it difficult to address structural inequalities and systemic fragmentation, issues most evident in the SUGAR group. By placing these findings within recovery capital theory, the chapter demonstrates both its explanatory strength and its blind spots, extending recent critiques that call for the framework to be applied beyond the individual level to include social determinants and institutional structures (Neale et al., 2015; Keane, 2017).

Table 6.3 Themes mapped to Recovery Capital Domains

Theme	Description	Domain of Recovery Capital
Personal Transformation	Identity reconstruction and internal emotional work	Personal
Relational Support and Accountability	Importance of peer and family support, group membership, emotional connection	Social
Continuity and Adaptation	Recovery as an ongoing, non-linear process requiring daily commitment	Personal / Social
Entry Points into Recovery	Emotional readiness, behavioural crisis, or moral rupture as initial motivators	Personal
Recovery Priorities	Group-specific goals (e.g., trust, stability, peace, dual integration)	Personal / Social
Recovery Maintenance Strategies	Differentiated models: GA, therapy, dual-focus programmes	Personal / Social / Community
Abstinence and Quality of Life	Abstinence as foundation, but not sole indicator of recovery	Personal / Community

Service Access and System Navigation	Influence of triage, referral, fragmentation, and accessibility	Community

The findings also contribute to wider theoretical debates about recovery. Across all groups, recovery was viewed not as a fixed endpoint but as a lifelong, adaptable process characterised by identity reconstruction, relational repair, and emotional regulation (White, 2009; Best et al., 2021; Monteiro et al., 2024). Group comparisons showed distinct emphases: GAR participants emphasised moral restitution and rebuilding credibility; SUR participants focused on emotional healing and stability; and SUGAR participants needed multi-domain reintegration but often faced the greatest systemic barriers. These intergroup differences align with Bourdieu's (1986) analysis of unequal distributions of capital and with desistance theory, which stresses belonging and identity transformation as vital for lasting change (Maruna, 2001; Farrall, 2002).

Practically, the findings emphasise the need for recovery-oriented systems of care (Sheedy & Whitter, 2009; Best & Irving, 2020) that incorporate trauma-informed, dual-diagnosis, and relational interventions. For practitioners, this involves moving beyond behaviour management to foster identity, belonging, and purpose. For policymakers, it necessitates coordinated cross-sector systems that prioritise gambling and substance harms equally, minimise penalisation, and recognise diverse definitions of recovery success (White, 2012; Kelly et al., 2021).

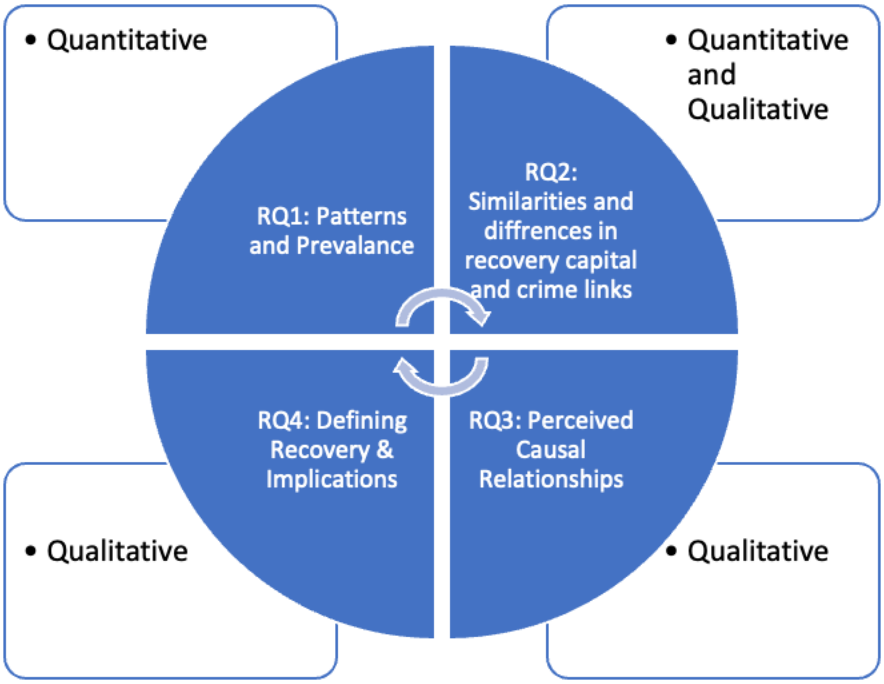
In summary, this chapter has demonstrated that recovery is not merely about abstinence or symptom management. It is a relational, identity-focused, and structurally embedded process that depends on personal resilience, social inclusion, and systemic support. By applying and expanding recovery capital theory, the chapter provides both a conceptual framework and a practical tool for pinpointing where resources are being mobilised, where gaps exist, and how services can adapt to address the complex realities of addiction and recovery. Looking ahead to Chapter 7, these qualitative insights will be combined with quantitative and policy findings to develop a more holistic model of recovery and justice reform.

Chapter 7: Discussion

7.1 Introduction

The findings of this thesis highlight the complexities of addiction recovery and the systemic barriers that prevent effective identification and support for individuals facing gambling and substance use disorders. The following chapter will outline the key findings from the overall research findings and then each research question, followed by an overall synthesis of the results. The figure below provides a recap of the progression of each research question and methodologies used in this research.

Figure 3: Research questions and associated methodology



Recovery involves more than personal will; it is significantly affected by the systems that dictate access to care, interventions, and ongoing support. Current triage and referral systems often overlook gambling addiction within mainstream health and criminal justice services, allowing harm to remain unnoticed until it leads to serious personal, financial, and legal repercussions

(Bowden- Jones et al., 2022; Wardle et al., 2018). In contrast to the well- embedded national healthcare strategies for substance use disorders, gambling is regarded as a lesser issue, worsening inequalities in service availability and access (Langham et al., 2016; House of Lords, 2019). Those dealing with both gambling and substance use disorders encounter heightened vulnerabilities, such as financial distress, worsening mental health, and a greater likelihood of criminal activity (Wardle et al., 2019; Håkansson & Widinghoff, 2020). Additionally, stigma deters individuals from seeking help, thereby sustaining cycles of harm and social exclusion (Manning et al., 2015; Hodgins et al., 2011). This chapter places these insights within the context of theoretical and empirical discussions on addiction, recovery capital, and public health, emphasising the structural shortcomings that obstruct early detection and intervention, particularly in substance use treatments and criminal justice environments (Bowden- Jones & Prever, 2020). Recovery capital theory highlights the need for social, cultural, and economic resources to support recovery; however, many who suffer from gambling- related harm face significant hurdles in accessing these essential supports (Best et al., 2001; Hing et al., 2016). The absence of cohesive screening and treatment approaches has resulted in disjointed service delivery, leaving individuals to navigate fragmented care experiences (Langham et al., 2016; Bowden- Jones et al., 2022). Tackling these issues demands enhanced triage processes, incorporating gambling harm prevention into national health strategies, and creating integrated recovery models that address the common risk factors and recovery challenges related to both gambling and substance use disorders (Cowlishaw et al., 2014; Grant et al., 2020).

7.2 Key Findings

The findings, outlined in the table below, provide key insights into cross-addiction risks, substance use patterns, crime involvement, recovery capital, and the multidimensional nature of recovery. The following discussion is structured around the key findings, organized under their relevant research questions (RQs) and corresponding topics. This approach allows for a systematic and focused exploration of specific areas of interest, including the prevalence and patterns of co-occurring addictions, the role of recovery capital in sustaining long-term recovery, the relationship between addiction and criminal behaviours, and the ways in which recovery is

defined and experienced across different groups. This section provides a comprehensive analysis of the complexities of addiction recovery by structuring the discussion around these key findings, each aligned with its relevant RQ and topic. It highlights common themes across the research while also delving into the unique dynamics within each area of focus. The findings of each research question will be examined in relation to existing literature, identifying where the research offers new insights or challenges prevailing assumptions. This structured approach ensures a detailed and coherent analysis demonstrating how various addiction and recovery aspects interact within broader social, health, and policy contexts. The implications of these findings for theory, practice, and policy will be explored, leading to evidence-based recommendations for improving addiction services, strengthening recovery support systems, and informing future research directions.

7.2.1 Key Findings Summary

This research explored the complexities of addiction recovery by examining the overlapping nature of gambling, substance use, and crime. The findings reveal that addiction is not an isolated issue, but a process deeply intertwined with personal circumstances, structural inequalities, and access to recovery capital. Across the different participant groups, the research highlights how co-occurring addictions, stigma, and delayed recovery engagement shape the trajectory of addiction and influence long-term recovery outcomes. Crucially, the research challenges traditional treatment models that separate gambling and substance use disorders, demonstrating the need for integrated care that acknowledges the complex realities of addiction. Table 23 below outlines the category, finding and related RQ and topic with the individual summaries outlined below.

Table 17: Key findings summary by RQ

Research Question	Key Finding	Summary
RQ1 – Prevalence	1. Cross-Addiction Risks	40.7% of SUR participants reported gambling severity, with 7.4% at medium risk and 5.6% at high risk. SUGAR had 89.5% in the high-risk category, reinforcing the need for early gambling screening.
RQ1 – Prevalence	2. Substance Use Patterns	GAR participants primarily engaged in alcohol use (68.8%). SUGAR group had higher substance use rates (81.3% alcohol, 22.4% tobacco, notable polydrug use).
RQ1 – Prevalence	3. Delayed Recovery Engagement	SUGAR participants had significantly longer addiction histories before seeking treatment. GAR sought help later due to financial strain, highlighting the need for financial counselling in gambling recovery.
RQ1 – Prevalence	4. Crime Involvement	SUR participants had higher prior arrest rates, mainly for drug-related offences. GAR participants engaged in financial crimes. SUGAR had the most diverse criminal profiles, spanning financial and substance-related offences.
RQ2 – Personal Capital	5. Psychological Quality of Life	SUR participants use substances to manage trauma; GAR participants gamble to cope with stress; SUGAR experiences compounded distress.
RQ2 – Personal Capital	6. Physical Health	SUR faces direct health consequences from substance use; GAR experiences indirect health effects due to financial strain; SUGAR experiences compounded health issues.
RQ2 – Personal Capital	7. Mental Health Challenges	SUGAR group struggles with untreated depression and anxiety, increasing relapse risk.
RQ2 – Social Capital	8. Stigma Impact	SUGAR experiences compounded stigma due to dual addiction, impacting self-esteem and access to support.
RQ2 – Social Capital	9. Social Support in Recovery	SUR has the lowest social support; GAR retains support but later experiences strain; SUGAR has fragmented networks.
RQ2 – Social Capital	10. Criticism & Relationship Strain	SUR faces early social criticism; GAR faces delayed criticism due to financial losses; SUGAR experiences compounded judgment.
RQ2 – Social and Community Capital	11. Employment and Social Networks	SUR faces legal and health barriers; GAR experiences delayed instability due to gambling; SUGAR faces the highest instability.

RQ2 – Community Capital	12. Fragmented Care Systems	Separate gambling and substance use treatment services lead to inadequate care for co-occurring addictions.
RQ2 – Community Capital	13. Healthcare System Engagement	SUR seeks healthcare in crisis; GAR accesses mental health services later; SUGAR falls through fragmented care gaps.
RQ2 – Community Capital	14. Housing Instability	SUR faces early housing instability; GAR faces delayed instability due to debt; SUGAR faces compounded housing challenges.
RQ3 – Addiction & Crime	15. Criminal Justice Involvement	SUR engages in substance-related crimes; GAR engages in financial crimes; SUGAR faces legal challenges from both.
RQ3 – Addiction & Crime	16. Age of First Engagement	SUR and SUGAR enter the criminal justice system earlier for substance-related offenses; GAR enters later due to financial crises.
RQ4 – Defining Recovery	17. Recovery as Personal Transformation	87% of participants view recovery as self-redefinition and personal transformation.
RQ4 – Defining Recovery	18. Social Support in Recovery	78% of participants emphasize relational support as a key recovery factor.
RQ4 – Defining Recovery	19. Recovery as a Continuous Process	81% of participants see recovery as an ongoing, dynamic process requiring continuous effort.

7.2.2 RQ1: Prevalence

This section explores the findings for Research Question 1 (RQ1): Prevalence, focusing on addiction patterns in SUR, GAR, and SUGAR recovery groups. Following the Key Findings, Table 7.1 discusses cross-addiction complexities, substance use behaviours, delayed recovery engagement, and crime involvement. This analysis links the data with broader research aims, emphasising that co-occurring addictions increase relapse risk and present compounded challenges due to the interplay of behavioural and substance use disorders (Sinclair, 2022; Nelson et al., 2024). Evidence shows that gambling and substance use often overlap,

complicating addiction profiles and recovery paths in vulnerable populations (Derevensky et al., 2019). Findings stress the need for integrated, individualised treatment that considers the interaction between gambling, substance use, and criminal behaviours. Identified patterns reveal the limitations of current care models in addressing co-occurring addictions and delayed recovery engagement (Love, 2018; Milhorn, 2018). Research indicates that fragmented care and delayed interventions worsen addiction severity, leading to increased legal issues and poorer recovery outcomes (Taylor et al., 2015; Walsh et al., 2020). This section highlights the critical need for holistic care models and early intervention strategies that address individual and systemic factors in addiction trajectories.

1. *Cross addiction*

Research highlights the risk of cross-addiction, particularly with 27.8% of SUR participants reporting medium to high gambling severity, which is higher in the SUGAR group. The combination of gambling and substance use creates compounded vulnerabilities, increasing relapse likelihood. Previous studies indicate that individuals with lower recovery capital are at risk for secondary addictions. Moreover, gaps in care models worsen these risks as untreated behavioural vulnerabilities can lead to new addictions. Effective treatment must include behavioural and emotional therapies tailored for individuals with multiple addictions. Interestingly, 59.3% of SUR participants showed no gambling severity, indicating a challenge to deterministic cross-addiction models and highlighting the need for individualised approaches. This aligns with literature advocating for recovery monitoring to address cross-addiction risks while offering individualised support proactively. Additionally, adequate personal and social resources may protect against secondary addictions, contributing to recovery capital discourse.

2. *Substance Use*

Distinct substance use patterns emerged among groups: GAR participants mainly consumed alcohol, while SUGAR participants engaged in polydrug use, including cannabis and stimulants. Previous studies show that polydrug use intensifies addiction's psychological and social consequences (Kelly et al., 2021). The gambling-substance use link in SUGAR participants highlights more complex challenges than those of the GAR group. These findings support a

holistic recovery approach that integrates both substance use and gambling treatments, addressing broader behavioural and social implications of addiction. Distinct substance use profiles appeared in the GAR and SUGAR groups. GAR participants primarily used alcohol, while SUGAR participants showed high rates of polydrug use, including cannabis and stimulants. This aligns with Dowling et al. (2016) and Grant & Chamberlain (2017), which link co-occurring addictions to increased substance use complexity. The higher polydrug use in SUGAR participants highlights the challenges of managing dual addictions (Petry, 2005; Rash et al., 2016). These findings emphasise the urgent need for integrated care that addresses the psychosocial and health implications of polydrug behaviours, a gap often noted in addiction treatment frameworks (Hodgins et al., 2011; Slutske, 2019).

3. *Delayed engagement*

One of the most striking findings was the delayed engagement with recovery services among GAR and SUGAR participants. Compared to the SUR group, these participants reported seeking help much later, often only after their addiction had escalated to crisis levels. This delay was attributed to the progressive nature of gambling addiction, alongside the challenge of identifying co-occurring disorders early. These findings align with previous research highlighting the need for early screening tools for gambling-related harms (Pickering et al., 2019). Without effective early intervention strategies, individuals at risk of dual addictions remain vulnerable to prolonged harm and increased barriers to recovery.

4. Crime Patterns Across Recovery Groups

The analysis showed notable crime pattern differences among cohorts. SUR participants mostly committed substance-related offences like possession and intoxication, while GAR participants tended towards financial crimes due to gambling-related desperation. These results align with Turner et al. (2009) and Williams et al. (2005), who identified socio-economic pressures as key drivers of gambling-related crime. The SUGAR group exhibited the broadest range of criminal behaviour, involving both financial and substance-related offences, revealing the complexities of dual addictions, echoing Dowling et al. (2016) on the legal and social challenges of co-occurring disorders. However, these results challenge linear addiction-crime models proposed by Best et al.

(2001), suggesting a more intricate interplay of socio-economic, psychological, and behavioural factors. Findings support integrated rehabilitation approaches that meet distinct addiction profiles' varied legal and recovery needs (Friedman, 2001; Rash et al., 2016).

In summary, RQ1's findings provide a nuanced perspective on the relationship between gambling, substance use, and crime in various recovery groups. Contextualising these findings within the broader literature highlights the need for personalised, integrated recovery strategies that address the multifaceted challenges of addiction. The insights gained illuminate the shared and distinct experiences of SUR, GAR, and SUGAR participants, thereby enriching the discourse on addiction recovery.

7.2.3 RQ2: Similarities and differences in recovery capital

This section presents findings for Research Question 2 (RQ2): Similarities and Differences in Recovery Capital**,** focusing on its impact on individuals in Substance Use Recovery (SUR), Gambling Addiction Recovery (GAR), and Dual Recovery (SUGAR) groups. Recovery capital, as defined by Cloud and Granfield (2008), is essential for understanding resources that influence addiction recovery. Recent studies show its importance in sustaining recovery, particularly for co-occurring addictions (Best & Hennessy, 2022; Gavriel-Fried & Moretta, 2019). This section reviews findings from the **Key Findings Chart** to analyse how recovery capital influences recovery trajectories, service engagement, and outcomes. The analysis finds disparities in recovery capital across groups, highlighting different levels of personal resilience, social support, and community resources that affect recovery success. SUGAR participants faced significant deficits in social networks and healthcare, complicating dual addiction management (Gavriel-Fried & Lev-El, 2022). Conversely, GAR participants had stronger social ties, while SUR participants depended on peer support within recovery communities (Hennessy et al., 2019). These patterns align with literature emphasising recovery capital's protective role in addiction

recovery (Bowen et al., 2023; Savolainen et al., 2019) and highlight systemic gaps affecting those with co-occurring addictions (Pars et al., 2023).

This section explores the components of personal, social, and community recovery capital and their influence on psychological well-being, physical health, social integration, and access to services. The vulnerabilities experienced by SUGAR participants resonate with the findings of Gavriel-Fried and Moretta (2020) regarding relapse risks in dual recovery. Systemic deficiencies in healthcare frequently leave individuals with co-occurring addictions without adequate support (Pars et al., 2023; Zschau et al., 2016). There are also negative aspects of recovery capital—factors that obstruct the recovery process. Gavriel-Fried and Lev-El (2022) developed a recovery capital index specifically for gambling disorders, which reveals gaps in mental health support and social stigma as significant barriers. Younger adults encounter recovery obstacles due to life stressors and reduced social capital (Gavriel-Fried et al., 2020). These insights accentuate the necessity for integrated strategies that consider varied recovery needs (Heiskanen, 2017). This section builds on existing theories and critiques of linear recovery models, advocating for more nuanced approaches that reflect the complexities of addiction recovery and urging for systemic changes in healthcare integration and community recovery initiatives (Hennessy et al., 2019; Best & Hennessy, 2022).

Personal Capital

Personal capital, encompassing resilience and health, revealed diverse experiences among groups. Qualitative data indicated that SUR participants frequently resorted to substances as a means to cope with trauma, which aligns with Cloud and Granfield's (2008) perspective on recovery capital related to personal adversity. Neale et al. (2014) also emphasise the necessity of addressing trauma in addiction recovery. Nevertheless, the findings challenge linear narratives of trauma recovery, demonstrating that some participants exhibited resilience despite enduring prolonged addiction. This suggests a need to broaden models to encompass a variety of emotional responses. GAR participants described gambling as a way to escape stress, a notion supported by Hing et al. (2016), who classified it as an unhealthy coping strategy. The research also uncovered indirect physical health issues stemming from gambling-related financial stress,

extending Ledgerwood and Petry's (2010) emphasis on psychological effects. SUGAR participants encountered compounded challenges from both gambling and substance use, reflecting Grant et al.'s (2010) observations regarding the complexities of dual recovery while underlining the cyclical relationship between these two addictions, a detail frequently overlooked in recovery literature. The following subheadings are linked to the numbers in the key findings chart above for RQ2.

5. Psychological Quality of Life

Though its impact varied, psychological quality of life emerged as a critical factor influencing recovery outcomes across all participant groups. SUR participants often used substances as a coping mechanism to manage underlying trauma, while GAR participants turned to gambling as an escape from stress and emotional distress. In contrast, the SUGAR group faced compounded emotional challenges due to the co-occurrence of substance use and gambling disorders, leading to more severe psychological distress and a higher risk of relapse. This aligns with research by Dowling et al. (2015), which highlights that individuals with co-occurring gambling and substance use disorders often report lower emotional well-being and higher levels of psychological distress than those with single addictions. The findings also reflect patterns observed by Petry et al. (2005), who identified emotional dysregulation as a key driver of addictive behaviours, particularly in populations with multiple addictions.

This finding further call attention to the role of Personal Capital in shaping recovery outcomes. Participants with lower psychological resilience and untreated mental health conditions were more likely to experience setbacks in their recovery journeys. Despite the centrality of emotional well-being to recovery, existing triage systems frequently overlook psychological well-being issues, particularly in individuals presenting with gambling-related concerns. This gap in assessment leads to fragmented treatment pathways and leaves emotional vulnerabilities unaddressed, increasing relapse risks. Gainsbury et al. (2014) similarly emphasise the need for integrated mental health screening within addiction services, particularly for dual-diagnosis populations. To improve recovery outcomes, triage systems must adopt a holistic

approach that includes comprehensive mental health evaluations, ensuring that emotional and psychological challenges are addressed early in recovery.

6. Physical Health

Physical health emerged as a key determinant of recovery success, with distinct patterns across the groups. SUR participants faced immediate health risks from substance use (e.g., liver disease), while GAR participants experienced indirect effects, such as stress-related health issues stemming from financial strain. SUGAR participants, however, faced the most severe health consequences, with dual addictions compounding physical decline. This aligns with findings from Lorains et al. (2011), who noted poorer health outcomes in dual-diagnosis populations. Despite these risks, triage systems often fail to assess physical health comprehensively, especially for those with co-occurring addictions, leading to gaps in care. The research shows the need for integrated health screenings within addiction services to better address the full spectrum of recovery needs.

7. Mental Health

The research also revealed the significant impact of untreated mental health conditions on recovery outcomes. Many SUGAR participants reported struggling with depression and anxiety, which had remained undiagnosed or untreated throughout their addiction. This reflects existing research on the importance of integrating mental health care within addiction treatment (Davidson et al., 2006). However, the findings highlight a critical gap in services, as the current system fails to provide adequate support for individuals with co-occurring mental health and addiction issues. Expanding access to integrated mental health and addiction care is essential to improving recovery outcomes.

8. Stigma

Stigma emerged as a significant barrier to recovery, particularly for participants in the SUGAR group, where the combination of gambling and substance use was associated with compounded stigma. Participants reported feeling judged and marginalised, both by society and within

recovery spaces, which in turn impacted self-esteem and limited access to support. These findings reinforce the argument that stigma remains one of the most significant obstacles to seeking help (Varga & Copoeru, 2023). Addressing this requires public health initiatives and culturally sensitive recovery programmes that normalise help-seeking behaviours and create inclusive treatment environments.

Social Capital

Social capital showed stark disparities among the groups, revealing the systemic challenges faced by those in recovery. The isolation and strained relationships reported by SUR participants echo Laudet's (2008) findings on the stigma surrounding substance use. However, this research provides a more granular view by illustrating how this stigma disrupts trust within familial and social networks, limiting access to support. For GAR participants, the delayed impact of gambling on social ties due to its concealed nature aligns with Patton's (2024) observations but also introduces the idea that this delay can mask opportunities for early intervention. The fragmented social capital of SUGAR participants, facing dual-layered support challenges, corroborates Durham's (2023) findings while emphasising the inadequacy of current systems to address co-occurring addictions comprehensively.

9. *Social Support in Recovery and Social Isolation*

Social support played a crucial role in shaping recovery trajectories, though its availability and quality varied significantly across groups. SUR participants reported the lowest levels of support, often facing early social alienation due to substance use. In contrast, GAR participants initially retained social networks that later strained under the weight of financial issues. SUGAR participants, however, experienced the most fragmented support, navigating complex dynamics caused by dual addictions. This aligns with Best et al. (2010), who found that strong social networks are key to sustained recovery, but dual-diagnosis individuals often face the most significant social isolation. The research highlights the need for treatment programs to actively rebuild social capital by fostering peer support networks and involving families in recovery to improve long-term outcomes.

Social isolation was a recurring theme across all groups, though its onset and impact varied based on addiction patterns. SUR participants experienced early isolation due to the stigmatisation of substance use, while GAR participants faced delayed isolation as gambling-related financial crises strained personal relationships. SUGAR participants, however, experienced the most persistent isolation, driven by dual stigma and complex recovery challenges. Hing et al. (2014) emphasise that gambling stigma uniquely contributes to social withdrawal, as gamblers often internalise shame, leading to reduced help-seeking. Similarly, Langham et al. (2016) highlight how gambling-related harm extends beyond financial issues, affecting social ties and community engagement. This finding reflects the need for treatment programs to integrate peer support networks and community-based initiatives to reduce isolation and rebuild the social capital essential for long-term recovery.

10. *Criticism & Relationship Strain*

Criticism and relationship strain emerged as significant barriers to recovery, with participants across all groups reporting varying degrees of social judgment and conflict. SUR participants often faced immediate criticism due to the visible nature of substance use, leading to early social alienation. In contrast, GAR participants experienced delayed criticism tied to financial losses from gambling. SUGAR participants faced the most severe relational strain, encountering compounded judgment due to their dual addictions. This mirrors findings by Hing et al. (2014), who noted that stigma and social criticism can erode essential recovery supports. The research emphasizes the importance of incorporating family counselling and peer support initiatives into treatment plans to help repair strained relationships and rebuild the social capital necessary for sustained recovery.

11. Employment and Social Networks (Social and Community Capital)

Employment and social networks significantly influenced recovery outcomes, with each group facing unique challenges in maintaining stable work and supportive connections. SUR participants struggled with legal and health barriers that limited employment opportunities, while GAR participants experienced delayed job instability, often triggered by financial crises linked to

gambling. SUGAR participants encountered the most complex challenges, facing compounded employment instability due to the dual impact of substance use and gambling. This reflects findings by Laudet and White (2010), who emphasize that stable employment and strong social networks are key predictors of long-term recovery success. However, fragmented care systems often overlook employment support in addiction treatment plans. The research highlights the need for integrated recovery programs that include **vocational training** and **social reintegration strategies** to strengthen social capital and enhance recovery outcomes.

Community Capital

Community capital, which encompasses healthcare access, housing, and employment, revealed further evidence of disparities. For SUR participants, the urgent need for healthcare interventions due to physical decline reinforces the findings of Neale et al. (2014) and highlights systemic shortcomings in delivering these services comprehensively. The GAR participants' emphasis on mental health services supports the conclusions of Wardle et al. (2019); however, it also critiques the inadequate integration with financial counselling and other community resources. Meanwhile, SUGAR participants emphasised the necessity for comprehensive, dual-focused healthcare, supporting the advocacy of Grant et al. (2010) and Best et al. (2017) for integrated care models. Nevertheless, these insights point to a critical issue: fragmented care not only hinders recovery but also perpetuates disparities, particularly for individuals grappling with dual addictions who face increased challenges in accessing essential resources.

12. Fragmented Care Systems

Participants consistently reported experiencing fragmented care systems, where gambling and substance use were treated as separate issues. This disjointed approach left many struggling with untreated co-occurring addictions, making long-term recovery more complex. These findings strongly align with existing arguments for holistic integrated care models that address dual addictions (Pickering et al., 2020). Without integrated services, individuals are forced to navigate disconnected treatment pathways that fail to account for the complexity of their addiction.

13. Healthcare System Engagement

Healthcare system engagement varied significantly across the groups, highlighting key gaps in triage and treatment for individuals with gambling and substance use disorders. SUR participants typically engaged with healthcare services during crises, such as overdoses or acute health episodes, leading to reactive rather than proactive care. GAR participants often accessed mental health services later in their addiction, usually when financial strain or psychological distress reached a critical point. In contrast, SUGAR participants frequently fell through systemic gaps due to fragmented care models that treat gambling and substance use disorders separately. This aligns with findings from Gainsbury et al. (2014), who identified that problem gamblers often underutilize healthcare services due to stigma and a lack of gambling-specific screening protocols. Furthermore, Langham et al. (2016) argue that healthcare systems often fail to recognize the compounded risks faced by individuals with co-occurring addictions, leading to inadequate treatment plans. The research highlights the need for integrated triage systems that screen for both gambling and substance use disorders, ensuring that co-occurring conditions are identified early and addressed through comprehensive, coordinated care.

14. Housing Instability

Housing instability emerged as a significant barrier to recovery, with varying causes and consequences across participant groups. SUR participants often faced early housing challenges linked directly to substance use, such as eviction or homelessness resulting from legal issues or health crises. In contrast, GAR participants typically encountered housing instability later in their addiction, driven by mounting gambling-related debt and financial strain. SUGAR participants faced the most severe and compounded housing barriers, navigating the dual impacts of substance misuse and gambling debt, which often led to chronic housing insecurity. This aligns with Langham et al. (2016), who highlight the financial consequences of problem gambling as a leading driver of housing instability, particularly when combined with other risk factors like substance use. Despite these risks, existing triage systems often fail to assess housing status comprehensively, leaving critical social determinants of health unaddressed. Gainsbury et al.

(2014) emphasize the importance of integrating social factors, such as housing and employment, into treatment plans for gambling addiction, while Cloud and Granfield (2008) stress the need for recovery programs to address broader social determinants, including stable housing, to support long-term recovery outcomes. The research highlights the need for recovery programs to incorporate housing support services and financial counselling to strengthen community capital and provide individuals with the stability necessary for sustained recovery.

Summary

The findings also engage critically with key debates in addiction studies, particularly regarding the progressive nature of addictions. The progressive nature of addictions, historically emphasised by Griffith Edwards, has been increasingly scrutinised by contemporary research. While some individuals exhibit escalating patterns of substance use, others maintain stable consumption levels over extended periods, challenging deterministic models of addiction progression (Day & Morris, 2021; Cummins-Beebee et al., 2023). This variability reflects the importance of adopting more nuanced frameworks that consider individual differences in addiction trajectories and recovery pathways. This complexity suggests that while some addictions may follow progressive trajectories, others may remain stable, reinforcing the need for more nuanced theories that account for variability in addiction pathways. These observations support Gavriel-Fried and Lev-El's (2022) emphasis on recovery barriers specific to gambling, such as financial stress and social stigma, which may not align with substance addiction models. This highlights the need for a more integrated framework that considers both neurological and socio-behavioural factors in understanding gambling addiction.

7.2.4 RQ3: Perspectives on the relationship between gambling, substance use and crime

RQ3 investigated participants' perspectives on the relationship between gambling, substance use, and crime. This section utilised qualitative data from life narrative interviews to explore these behaviours among Substance Users in Recovery (SUR), Gamblers in Recovery (GAR), and those

in dual recovery for both substance use and gambling (SUGAR). The analysis provided insights into whether these behaviours were viewed as co-occurring, mutually reinforcing, or sequentially related and how these perceptions align or differ from existing literature. Understanding these narratives informs the design of integrated treatment interventions and guides public health and criminal justice policies.

15. Criminal Justice Involvement

Criminal justice involvement was prevalent across all groups, with distinct patterns based on addiction type. SUR participants were primarily involved in substance-related crimes, such as drug possession, trafficking, and offenses committed while under the influence. GAR participants, on the other hand, were more likely to engage in financial crimes, including theft, fraud, and embezzlement, as a means to fund their gambling habits. The SUGAR group presented a more complex legal profile, facing both substance-related and financial crimes, reflecting the dual nature of their addictions. This aligns with Petry et al. (2005), who observed that gambling problems often lead to financial criminal activity, while Bennett & Holloway (2005) demonstrated that substance use is strongly linked to criminal behaviours. The research highlights how co-occurring addictions complicate the legal challenges faced by individuals, necessitating more nuanced interventions that address both gambling and substance use issues simultaneously. Crime patterns further distinguished the cohorts. SUR participants were primarily involved in substance-related offences, GAR participants in financial crimes, and SUGAR participants spanned both categories. These findings align with previous research linking financial desperation to gambling-related crime (Turner et al., 2009) while also supporting the argument that individuals in recovery often rationalise past criminal behaviour in ways that shape their recovery narratives (Best et al., 2001). The relationship between addiction and crime is highly complex, and these findings suggest that punitive justice responses may be counterproductive. Instead, the evidence supports the need for rehabilitative strategies that acknowledge addiction as a key driver of criminal behaviour and provide pathways towards recovery that address its root causes.

These findings resonate with Braithwaite's (1989) theories of reintegrative shaming, which argue that stigmatising offenders often perpetuates criminal behaviour. In contrast, reintegrative practices—such as community-based restorative justice—can disrupt cycles of crime by addressing root causes like addiction. For participants whose addiction-driven behaviours led to criminal activity, restorative justice approaches—particularly those aligned with recovery-oriented systems of care (ROSC)—could provide not only accountability but also the necessary resources for rehabilitation. ROSC emphasizes holistic, person-centred interventions that support long-term recovery by integrating social, health, and justice-based initiatives (Burford & Leibowitz, 2019). Within this framework, restorative justice can address underlying financial stressors that often drive gambling-related crimes while prioritizing rehabilitation over punitive measures (Best & Musgrove, 2019; Kawalek et al., 2018).

This aligns with the narratives of GAR and SUGAR participants, who emphasised the critical role of economic recovery in their broader journeys to rehabilitation. Additionally, Strang's (2002) work on restorative justice reinforces the importance of involving both victims and offenders in a process that aims for mutual understanding and reparation. Applying such models to addiction-related crimes could facilitate a deeper understanding of how financial desperation, as driven by gambling or substance use, contributes to criminal behaviour. This approach aligns with participants' experiences, particularly in the GAR and SUGAR groups, who often viewed their criminal acts as desperate measures to sustain their addictions rather than calculated offences.

Moreover, Michael Tonry's (2011) critiques of punitive justice systems emphasise the importance of rehabilitative approaches over solely punitive measures, particularly in cases of addiction-driven crime. For the SUR and SUGAR groups, where substance-related offences were common, Tonry's argument advocates for the development of diversion programs that incorporate addiction counselling and financial education aimed at preventing recidivism by addressing the underlying causes of their behaviours. These insights complement earlier critiques by Best et al. (2001), which questioned the reliability of offender narratives and highlighted the necessity for systemic interventions that transcend individual blame to tackle broader socio-

economic contexts. Similarly, Petrich (2021) asserts that restorative justice and alternative sentencing strategies can be more effective in reducing reoffending among individuals with substance use disorders, stressing the importance of approaches that prioritise rehabilitation over punishment (Petrich, 2021). By embedding participant narratives within these theoretical frameworks, this research advances current understandings of the relationship between addiction and crime and these understandings point to how financial stressors, emotional distress, and systemic gaps in treatment contribute to cycles of addiction and crime. Integrating addiction recovery with restorative and rehabilitative justice systems, as advocated by Braithwaite and Strang, could significantly enhance the effectiveness of interventions for individuals in the GAR, SUR, and SUGAR groups, addressing the dual challenges of recovery and engagement with the criminal justice system. These findings advocate for an integrative approach that merges public health, criminal justice reform, and social support systems to disrupt these interconnected cycles and foster sustainable recovery (Petrich, 2021).

16. Age of First Engagement

Participants in the criminal justice system engaged at different ages. SUGAR and SUR participants typically entered earlier due to substance use and gambling, with SUGAR facing legal issues linked to dual addictions. SUR participants encountered the system largely from substance-related offences tied to illegal drug use. Conversely, GAR participants usually entered later due to financial crises and psychological pressures from gambling addiction. This aligns with Petry et al. (2005), noting those with gambling addictions face legal issues later compared to substance disorders. Hodgins & el-Guebaly (2000) found that gambling-related crime increases with age and addiction progression. The findings highlight that current triage systems often fail to screen early for criminal justice engagement in co-occurring addictions. Early identification and intervention are essential for SUGAR and SUR participants to mitigate legal and personal consequences. May-Chahal et al. (2017) emphasise that timely intervention can lessen long-term addiction and criminal behaviour impacts. The research advocates for early screening protocols in treatment and criminal justice to pinpoint and address gambling and substance use issues at first contact, ensuring effective interventions that prevent severe legal problems.

The links between gambling, substance use, and crime highlight the limits of siloed treatment. For the GAR group, gambling was the primary concern, indicating that interventions need to address the financial and emotional triggers of gambling. The SUGAR group's dual addiction shows the need for integrated care that addresses both gambling and substance use together, as supported by Grant and Chamberlain (2017) and Pickering et al. (2020). The SUR group emphasises substance use as the main issue, suggesting that while prioritising substance use treatment, secondary gambling behaviours also need attention to prevent relapse.

Summary

These findings advocate for integrating ROSC principles into restorative justice frameworks. Individuals in recovery can gain customised support, such as financial counselling, addiction treatment, and programs for community reintegration (Dallinger et al., 2023). This strategy is consistent with emerging research indicating that justice interventions focused on recovery capital and social connection result in improved long-term outcomes compared to solely punitive approaches (Best & Ivers, 2022). By incorporating these methods into criminal justice systems, we can break the cycle of addiction-related offences, foster sustainable recovery, and lower recidivism rates by approaching addiction as a public health issue instead of just a legal matter (Dallinger et al., 2023; Kawalek et al., 2018).

7.3.5 RQ4: Defining recovery

Research Question 4 (RQ4) examined how participants conceptualised recovery, concentrating on the experiences of three distinct groups: Substance Users in Recovery (SUR), Gamblers in Recovery (GAR), and those addressing both substance use and gambling issues (SUGAR). This discussion outlines the participants' definitions of recovery, exploring shared themes and differences while comparing these findings with the broader literature on health and addiction. Analysing these life narrative interviews reveals insights into personal transformation, the importance of social support, and the ongoing nature of recovery.

17. Recovery as a personal transformation

Participants from all groups characterised recovery as a journey beyond abstaining, highlighting aspects of personal development, rebuilding relationships, and demonstrating resilience. While those in GAR and SUGAR saw abstinence as a critical initial step, SUR participants prioritised autonomy and self-discovery more. These views generally align with multidimensional recovery models (Best and Laudet, 2010) but differ from conventional frameworks that mainly regard abstinence as the key indicator of success (Davidson and Roe, 2007). The results imply that recovery frameworks should embrace a wider scope, merging abstinence-focused strategies with broader indicators of well-being and social reintegration.

18. Social Support in Recovery

Social support is a critical component in the recovery process for individuals dealing with gambling and substance use disorders. Recent research stresses that structured peer-based programs, such as Gamblers Anonymous, offer a vital platform for sharing experiences, building trust, and establishing accountability (Borgland, 2024). These mutual aid fellowships not only provide direct support but also foster environments where both receiving and offering help contribute to enhanced recovery outcomes.

In studies focusing on substance use disorders, family support and professional mental health services emerge as pivotal elements. Robust familial and clinical support has been linked to improved treatment outcomes, with research highlighting that low baseline social support is associated with more severe substance use problems (Bellaert et al., 2025; Gan & Liu, 2024). Moreover, integrated interventions—such as peer mentorship and group therapy—address the compounded stigma experienced by individuals with dual addictions, as evidenced by findings that call attention to the role of group support in mitigating social discrimination (Nicklin et al., 2024). Additional studies extend these findings by examining how recovery capital is built through structured community support. For instance, research into the stability of recovery capital demonstrates that structured peer and community networks can sustain long-term recovery, further validating the effectiveness of integrated support systems (Matheson et al., 2024). Finally, comprehensive studies confirm that integrating peer-support specialists and community-based interventions into treatment programs enhances long-term recovery, reflecting

the critical interplay between social capital and recovery outcomes (Kumar et al., 2024; Višnjić et al., 2024).

19. Recovery as a continuous process

The findings in Chapter 4 reinforce the non-linear and evolving nature of recovery, highlighting that it is not a fixed endpoint, but a continuous process shaped by personal, social, and structural factors. Participants' narratives reveal that recovery often involves setbacks, relapses, and gradual progress, challenging traditional stage-based models. Instead, recovery emerges as a dynamic process of adaptation, identity reconstruction, and social reintegration (Best & Laudet, 2010; White & Cloud, 2008). This aligns with Patton and Best (2022a), who describe turning points as catalysts for change, emphasizing that recovery is often marked by profound personal realizations and shifts in motivation. Additionally, Patton, Best, and Brown (2022b) explore the management of negative recovery capital, illustrating how financial struggles, social stigma, and emotional burdens complicate the process but can be mitigated through adaptive coping strategies and supportive networks.

The qualitative analysis highlights recovery differences across groups. Substance Users in Recovery (SUR) view recovery as an introspective process focused on self-awareness and emotional healing, while Gamblers in Recovery (GAR) prioritize external factors like financial repair and rebuilding trust. The SUGAR group, facing co-occurring disorders, navigates complex social and psychological barriers, emphasizing the need for integrated treatments (Kelly & Hoeppner, 2021; Slade et al., 2014). Best and Patton (2022) note that recovery capital is personal and multidimensional, where individuals define success in various ways—some through abstinence, others via harm reduction and improved quality of life. A key finding is the role of social support in sustaining recovery. All groups stress the importance of peer mentorship, family, and community support in reducing relapse risks and fostering resilience. These findings align with research on social capital in recovery, showing those with stronger networks have better long-term stability (Best et al., 2016; White, 2007). However, some achieve recovery with limited support, relying on intrinsic motivation and structured programs like 12-step interventions (Best & Lubman, 2012). Ultimately, the findings give emphasise to the need for

person-centred recovery models that acknowledge diverse pathways to change, addressing both structural challenges and individual agency in recovery journeys.

7.3.5 Summary

This research provides a detailed insight into the complex relationship between addiction, crime, and recovery, highlighting how closely substance use, gambling, and co-occurring disorders are linked. It emphasises that recovery is more than just abstaining from substances; it involves tackling the wider social, psychological, and systemic influences affecting an individual's path to recovery. A key finding reveals the heightened vulnerability faced by those with co-occurring addictions, especially within the SUGAR group, where the combination of substance use and gambling increases relapse risks, intensifies social stigma, and makes it harder to access necessary recovery services. These complications are worsened by disjointed triage and treatment systems that often separate gambling from substance use, leading to fragmented care and less effective recovery outcomes (Gavriel-Fried & Moretta, 2020; Martyres & Townshend, 2016).

There is an urgent need for integrated interventions for behavioural and substance use disorders. Public health and criminal justice systems act independently, neglecting the links between gambling and substance use in individuals with dual diagnoses (Potenza et al., 2019). To enhance recovery and reduce recidivism, research supports comprehensive triage models that include early screening for co-occurring disorders, mental health support, and considerations like housing, employment, and community reintegration (Page et al., 2021; Lind et al., 2024). At-risk groups, such as the SUGAR cohort, need specialised interventions addressing their complex recovery challenges.

This research advances recovery capital theory (RQ2) by illustrating how personal, social, and community resources shape recovery trajectories. Findings indicate that social support, community engagement, and stable housing are crucial for sustained recovery, while stigma, housing instability, and fragmented care are significant barriers (Best & Hennessy, 2022; Pars et al., 2023). The study also emphasises the diverse recovery pathways among participants.

Some, particularly in the GAR and SUGAR groups, view abstinence as fundamental, while others in the SUR group focus on emotional peace, self-liberation, and relational healing, showing recovery as a personalised and dynamic journey (White, 2009; Slade, 2010).

This research demonstrates that recovery is a continuous journey of personal development, social reintegration, and transformation of identity, rather than a definitive conclusion. Participants stated the importance of rebuilding social ties, enhancing resilience, and attaining emotional well-being alongside behavioural changes. This aligns with holistic recovery models that define success beyond mere abstinence and include better mental health and community involvement (Best & Laudet, 2010; White, 2007). The findings indicate a need for policy changes towards integrated care approaches for co-occurring disorders, advocating for holistic strategies that connect mental health, addiction services, and social support to disrupt cycles of addiction-related crime (Patton & Best, 2022a; Slade, Amering, & Oades, 2014). Recovery journeys are varied and deeply personal; some individuals focus on abstinence, while others prioritize emotional peace, self-liberation, or social reintegration (Best et al., 2016; Patton, Best, & Brown, 2022b). This study reinforces recovery capital theories, supporting the views of White (2007) and Best (2016) on holistic recovery, while questioning strict abstinence-centered frameworks (Best & Lubman, 2012). Importantly, GAR and SUGAR participants saw abstinence as crucial, while SUR members emphasized self-liberation and emotional stability, advocating for recovery models that blend both abstinence and broader well-being objectives, consistent with modern addiction research (Kelly & Hoeppner, 2021; Patton & Best, 2022a).

This research confirmed and expanded existing recovery theories. While it supports White's (2009) and Best's (2012) views of recovery as a holistic and relational process, it also questions rigid frameworks that prioritise abstinence too heavily. For GAR and SUGAR participants, abstinence was often viewed as essential. However, the SUR group's emphasis on self-liberation and emotional peace revealed alternative recovery paths that don't always focus on stopping behaviours. These differences highlight the necessity for recovery models that accommodate varied experiences, especially for those facing dual recovery challenges. The findings promote integrative strategies that blend abstinence with broader well-being objectives,

consistent with emerging discussions in addiction and health recovery research (Slade, 2010; Monteiro et al., 2024).

This research highlights diverse recovery pathways, demonstrating that recovery is a personal and dynamic journey. While some prioritise abstinence, others seek emotional peace, social integration, or personal empowerment. Recovery emphasizes personal growth, meaningful social connections, and a balanced life. Acknowledging this diversity is essential for creating inclusive recovery models that respect individual experiences and enhance long-term well-being. The following section will explore the implications for policy and practice, detailing strategies for integrated treatment models, improving triage systems, and developing supportive frameworks in public health and criminal justice. Addressing identified systemic gaps can lead to more equitable and holistic addiction recovery approaches.

7.4: Implications for policy and practice

This research delivers a detailed understanding of addiction recovery processes, offering important insights for public health and criminal justice policies. It emphasises the necessity for person-centred interventions that cater to the varied and interconnected needs of individuals undergoing recovery. By focusing primarily on lived experiences, this research not only supports existing theories but also points out significant gaps where recovery frameworks must adapt to be more inclusive and responsive to the complexities of addiction. This discussion highlights these insights, examining how they advance our understanding of recovery and guide the development of more effective policy and practice approaches.

Table 18: Implications for policy and practice

Research Question	Key Findings	Policy Implications	Practice Implications
RQ1: Prevalence and First Engagement	Cross-addiction risks, varying substance use patterns, delayed engagement for gamblers.	- Integrated screening protocols for co-occurring addictions. - Education campaigns on cross-addiction risks. - Prioritise early intervention through community outreach and criminal justice intake.	- Specialised triage services with trauma-informed care. - Tailored engagement strategies based on primary addiction profiles.

RQ2: Recovery Capital	Disparities in personal, social, and community recovery resources across SUR, GAR, and SUGAR groups.	- Develop recovery capital-building initiatives (housing, employment, peer networks). - Allocate funds for gambling-specific support services (financial counselling, mental health access).	- Incorporate family-centric interventions and culturally sensitive recovery frameworks. - Strengthen social recovery capital by rebuilding trust and connection.
RQ3: Behavioural Interconnections	Gambling, substance use, and crime are interconnected but vary in priority across groups.	- Shift criminal justice from punitive to rehabilitative approaches. - Establish cross-sector collaboration policies to address interconnections between gambling, substance use, and crime.	- Implement integrated care models in rehabilitation and community health. - Develop case management systems for coordinated care across addiction, justice, and social services.
RQ4: Definitions of recovery	Recovery is a multidimensional process that includes personal growth, social integration, and resilience beyond abstinence.	- Adopt person-centred recovery frameworks. - Expand policy definitions of recovery to include quality of life and well-being goals alongside	- Design customised recovery plans tailored to individual definitions of success. - Expand peer-led initiatives to foster shared learning and emotional support.

The findings across all research questions highlight critical opportunities for advancing practice and policy in addiction recovery. Early detection and intervention emerge as essential components, beginning with prevalence and first engagement. The risks of cross-addiction, particularly among individuals in dual recovery, shows the urgent need for integrated screening protocols. Existing research supports this, with studies by Dowling et al. (2016) and Petry et al. (2014) emphasising that co-occurring addictions require simultaneous intervention to prevent escalation. Moreover, expanding community outreach programmes and employing trauma-informed care during initial engagement align with recommendations from Laudet & White (2008), who highlight the importance of creating supportive and non-stigmatising environments to encourage help-seeking behaviours.

The analysis of recovery capital provides a nuanced understanding of how personal, social, and community resources influence recovery trajectories. The disparities faced by

individuals managing dual addictions, particularly in accessing healthcare and rebuilding social support networks, echo the findings of White & Kurtz (2006), who emphasise the critical role of recovery capital in sustaining long-term progress. Addressing these inequities requires recovery capital-building initiatives such as accessible housing, employment support, and peer-led recovery networks. Gavriel-Fried et al. (2020) similarly stress that enhancing social and community capital can mitigate barriers to recovery, particularly for those with compounded challenges like the SUGAR group. Furthermore, the need for culturally sensitive frameworks aligns with Best et al. (2015), who argue that effective recovery models must account for diverse lived experiences and systemic inequities.

The interconnection between gambling, substance use, and crime, explored under behavioural patterns, reveals the necessity of moving away from punitive justice systems. This research supports existing findings by Turner et al. (2009) and Williams et al. (2005), which link gambling and substance use to financial and substance-related crimes. However, the nuanced accounts from this research suggest that integrated approaches are needed to address these behaviours holistically. Rehabilitative criminal justice strategies, such as diversion programmes that include financial counselling and addiction treatment, align with Rash et al. (2016), who advocate for addressing the root causes of addiction-driven crimes. Case management systems can facilitate cross-sector collaboration, ensuring that individuals receive coordinated care, consistent with recommendations from Banks et al. (2019) on the efficacy of integrated care models in reducing recidivism.

Finally, participants' definitions of recovery challenge traditional abstinence-focused frameworks by highlighting the importance of personal growth, social reintegration, and resilience. This research supports broader definitions of recovery as proposed by Best & Laudet (2010), who describe recovery as a multidimensional process involving behavioural, social, and emotional change. However, the findings also diverge from rigid abstinence models by illustrating that individuals, particularly in the SUR group, often prioritise self-discovery and emotional peace over mere cessation of addictive behaviours. Davidson & Roe (2007) and Slade (2010) provide similar critiques, advocating for recovery models that integrate quality-of-life

measures alongside abstinence goals. Expanding peer-led initiatives and creating customised recovery plans tailored to individual definitions of success can further enhance the inclusivity and effectiveness of recovery services, as supported by White (2009) and Gavriel-Fried et al. (2022).

7.4.1 Using Existing Substance Use Treatment Models for Gambling Disorders to Expand Integrated Screening and Care Systems

One of the central findings of this research was the lack of integrated screening and care systems that adequately address the dual challenges of gambling and substance use. Participants in the SUGAR group repeatedly highlighted the fragmented nature of care pathways, which often led to untreated gambling issues while focusing primarily on substance use. This points out the critical need to integrate gambling assessments into existing substance use treatment frameworks. Leveraging the established infrastructure of substance use treatment programmes provides a practical and efficient starting point for addressing these gaps.

The substance use treatment system is well-positioned to incorporate gambling assessments due to its existing models of comprehensive intake evaluations, behavioural health screening, and interdisciplinary care approaches. Current systems already utilise validated tools for substance use assessments, such as the Alcohol Use Disorders Identification Test (AUDIT) and the Drug Abuse Screening Test (DAST) (Saunders et al., 1993; Skinner, 1982). Similar tools, such as the Problem Gambling Severity Index (PGSI) or, with further validation parts of the GAST, could be seamlessly integrated into these processes to identify gambling behaviours during intake (Ferris & Wynne, 2001; Lesieur & Blume, 1987). This integration would improve detection rates and foster a more holistic understanding of individual needs, aligning with Grant and Chamberlain (2017) that dual-addiction interventions must begin at the point of triage.

Integrating gambling screenings into substance use treatment programmes is supported by substantial evidence that highlights the shared psychological, behavioural, and neurological foundations of these addictions (Petry, 2005; Slutske, 2019). Both gambling and substance use disorders are associated with impairments in impulse control, decision-making, and reward

system dysregulation, indicating that individuals with one disorder face an increased risk of developing the other (Goudriaan et al., 2006; Grant et al., 2006). By leveraging existing systems that already address these underlying mechanisms, integrated screening processes can offer early intervention opportunities that mitigate the progression of co-occurring disorders. Identifying gambling issues earlier through robust triage systems yields benefits at the individual, social, and policy levels:

1. **Individually**: Early identification reduces the psychological and financial toll of prolonged, untreated gambling. It provides opportunities for less punitive and more therapeutic interventions, helping individuals avoid criminal records, lessen debt burdens, and access targeted treatments before the addiction reaches a crisis point.
2. **Socially**: Early detection prevents gambling from escalating into criminal behaviour. This reduction mitigates the burden on the criminal justice system and limits harm to victims of financially motivated crimes, such as fraud and theft. Additionally, it **decreases social costs** by maintaining family stability, reducing homelessness associated with gambling-related debt, and enhancing community resilience.
3. Policy: This approach is highly feasible because the infrastructure for substance use triage already exists within both health and criminal justice systems. By incorporating gambling screenings into these established frameworks, policymakers can maximise current resources with minimal structural changes. This integration supports broader public health objectives by treating gambling as a legitimate health concern, similar to substance use. It aligns with policy goals aimed at crime prevention and social reintegration.

This strategy aligns with the broader recovery capital framework, highlighting the significance of early identification and intervention in building personal, social, and community resources (Cloud & Granfield, 2008; Laudet & White, 2008). Addressing gambling alongside substance use from the very first contact empowers individuals to develop the psychological resilience and social support essential for long-term recovery. For instance, White & Kurtz (2006) observed that recovery capital can strongly predict successful results, especially when systems grant access to comprehensive care. Neglecting to include gambling in the initial assessment may leave significant barriers to recovery unaddressed, as pointed out by Gavriel-Fried et al. (2020) in their research of negative recovery capital in gambling disorders. Research indicates that integrated screening can enhance treatment retention and results by minimising the

sense of fragmentation reported by participants in this research (Best et al., 2017). When individuals feel their treatment programme effectively tackles their challenges, they are more inclined to remain engaged and adhere to recovery plans (Slutske, 2019). By integrating gambling evaluations into substance use programs, providers can craft tailored treatment plans that recognise the interconnectedness of these disorders. This approach is especially vital for populations such as the SUGAR group, where unresolved gambling issues were found to worsen substance use behaviours and hinder recovery.

International models provide further evidence for the feasibility and effectiveness of this approach. For example, Australia has implemented integrated screening frameworks in its public health system, where gambling is assessed alongside other behavioural and mental health issues during routine substance use evaluations (Dowling et al., 2016). Similarly, Canada's Problem Gambling Institute of Ontario (PGIO) has developed protocols for embedding gambling assessments into broader addiction services, demonstrating improved identification and intervention rates for co-occurring disorders (Turner et al., 2009). These models highlight the potential for scalability and adaptation within existing substance use systems in other countries.

Reforming policies is essential to institutionalise these changes and maintain their sustainability. Grant et al. (2010) stress the importance of tackling systemic barriers, including funding silos and insufficient cross-disciplinary training, to facilitate integrated care. Training professionals in substance use to identify and address gambling behaviours is crucial, as is ensuring funding mechanisms support the inclusion of gambling treatment in substance use programs. Research by Rash et al. (2016) and Gainsbury et al. (2014) shows that funding for gambling interventions is significantly lower than for substance use, even though both have similar prevalence rates and societal costs. This highlights the need to revise current recovery models to encompass gambling. For instance, widely used Twelve-Step programmes for substance use recovery, such as Alcoholics Anonymous (AA) and Narcotics Anonymous (NA), have equivalents for gambling like Gamblers Anonymous (GA). Improving access to both support groups within a coordinated framework can enhance recovery capital by fostering abstinence and social reintegration (White, 2009; Laudet, 2006). Utilising the substance use treatment system to address gambling offers a practical, evidence-based solution to a notable gap

in addiction care. Incorporating gambling assessments into current intake processes and customising treatment plans for co-occurring disorders can enable recovery services to deliver more comprehensive and actionable support. This integrated approach resonates with theoretical frameworks such as recovery capital and holistic care models, as well as insights from global practices. To realise this potential, systemic reforms must target training, funding, and policy changes that cement gambling's integration into the broader addiction recovery framework.

Systemic reforms are crucial and need to be inclusive, integrated, and sensitive to the complexities of addiction recovery. Meeting the unique needs of individuals at various recovery stages—whether through early engagement, focused development of recovery capital, or multidimensional recovery frameworks—can result in fairer outcomes. By contextualizing these findings within current research, this discussion highlights the ability of evidence-based practices to improve public health and criminal justice responses, ultimately promoting more sustainable recovery paths. The next section will delve deeper into these insights by exploring the research's contributions to knowledge and demonstrating how these findings enhance theoretical perspectives on addiction recovery, guiding future research, policy, and practice.

7.5: Contributions to knowledge

The findings of this research offer substantial contributions to addiction recovery scholarship, practice, and policy while introducing novel methodological advancements. The table below summarises the overarching contributions to knowledge of this research, followed by a more in-depth discussion by RQ.

Table 19: Contributions to knowledge by RQ

Research Question (RQ)	Key Contribution	Details	Supporting research
RQ1: Prevalence	Enhanced understanding of cross-addiction risks	Identified a significant minority of SUR participants with medium to high gambling severity and high polydrug use rates in SUGAR participants, underscoring the risks of untreated co-occurring addictions.	Ledgerwood & Petry (2010), Grant & Chamberlain (2017), Dowling et al. (2016)
RQ1: Prevalence	Crime patterns linked to addiction types	Found distinct crime profiles: SUR participants engaged more in substance-related offences, GAR participants in financial crimes, and SUGAR	Turner et al. (2009), Best et al. (2001),

		participants in both, highlighting the impact of addiction type on criminal behaviour.	Banks et al. (2019)
RQ2: Recovery Capital	Variability in recovery capital across groups	Demonstrated that SUGAR participants faced the most deficits in recovery capital, while GAR participants had more substantial initial social capital, and SUR participants relied heavily on peer networks.	White & Kurtz (2006), Gavriel-Fried et al. (2020), Cloud & Gran
RQ3: Perspectives on Gambling, Substance Use, and Crime	Revealed interconnected and cyclical addiction patterns	Participants described addiction behaviours as interconnected, with GAR participants emphasising gambling as a primary trigger, SUR participants focusing on substance use, and SUGAR participants highlighting mutual reinforcement.	Ledgerwood & Petry (2010), Petry et al. (2014), Turner et al. (2009)
RQ4: Definitions of Recovery	Nuanced definitions of recovery	It was found that recovery was universally viewed as a transformative process. Still, GAR participants prioritised abstinence, SUGAR participants emphasised dual-focused recovery, and SUR participants framed recovery as self-discovery.	Monteiro et al. (2024), Best (2012), White
All RQs	Advocated for integrated care models	Highlighted the necessity of treating gambling and substance use concurrently, particularly for SUGAR participants, to reduce relapse and improve recovery outcomes.	Slutske (2019), Pickering et al. (2020), Grant & Chamberlain (2017)
All RQs	Informed public health and criminal justice strategies	Demonstrated the need for tailored interventions, early screening for co-occurring addictions, and rehabilitative approaches that address the interconnected nature of gambling, substance use, and crime.	Yakovenko & Hodgins (2018), Best & Lubman (2012), White & Ku
Methodological Contribution	Significance of qualitative methods in addiction research	Enriched understanding of recovery by capturing nuanced experiences often missed in quantitative studies, filling gaps in the literature on recovery capital and co-occurring addictions.	Laudet & White (2008), Cloud & Granfield (2008), Best et al. (2017)
Methodological Contribution	Development of a unique quantitative tool	Created a novel quantitative instrument that simultaneously measures gambling, substance use, and crime involvement, providing an innovative approach to integrated addiction research and intervention.	Pickering et al. (2020), Slutske (2019), Best & Lubman (2012)

These findings contribute to the existing body of research by clarifying the influence of specific addiction profiles on behaviour, particularly highlighting the compounded effects observed within the SUGAR group. The development of a novel quantitative instrument that simultaneously measures gambling, substance use, and criminal behaviour is particularly significant, as it addresses a methodological gap in addiction research. This instrument enables integrated assessments that inform intervention strategies and promote multidisciplinary treatment approaches (Pickering et al., 2020).

7.5.1 RQ1: Prevalence

RQ1: Prevalence

This study enhanced the understanding of cross-addiction risks, revealing a subset of SUR participants exhibiting moderate to severe gambling issues and SUGAR participants engaging in high polydrug use rates. These findings emphasize the dangers of untreated co-occurring addictions, reinforcing prior research on addiction complexity and the need for comprehensive intervention strategies (Ledgerwood & Petry, 2010; Grant & Chamberlain, 2017). Additionally, the study identified distinct crime patterns associated with different addiction types, demonstrating that SUR participants were more likely to engage in substance-related offenses, GAR participants in financial crimes, and SUGAR participants in both categories. This reinforces the argument that the nature of an individual's addiction shapes their criminal behaviours, highlighting the necessity for tailored rehabilitative strategies within the criminal justice system (Turner et al., 2009; Best et al., 2001; Banks et al., 2019).

7.5.2 RQ2: Similarities and differences

Findings on recovery capital demonstrated significant variability across addiction groups, with SUGAR participants experiencing the greatest deficits in personal, social, and community resources necessary for sustained recovery. GAR participants benefited from stronger initial social capital, which aided in their recovery journey, while SUR participants relied more heavily on peer networks for support (White & Kurtz, 2006; Gavriel-Fried et al., 2020; Cloud & Gran). These differences indicate that recovery pathways are shaped by pre-existing social structures and available support systems, highlighting the need for targeted interventions that account for these disparities. Addressing recovery capital deficits, particularly among SUGAR participants, is crucial for promoting long-term stability and relapse prevention.

7.5.3 RQ3: Perspectives

This research uncovered the cyclical and interconnected nature of gambling and substance use behaviours, challenging traditional treatment models that address these issues separately. Participants' narratives revealed distinct addiction pathways, with GAR participants identifying gambling as a primary trigger, SUR participants focusing on substance dependence, and SUGAR participants emphasizing the mutual reinforcement of both behaviours (Ledgerwood & Petry, 2010; Petry et al., 2014; Turner et al., 2009). This supports the argument that gambling and substance use disorders often operate within a reinforcing cycle, making integrated treatment approaches essential for effective recovery and relapse prevention. These findings highlight the importance of addressing addiction holistically, rather than through isolated interventions.

7.5.4 RQ4: Defining recovery

The study found that recovery was universally viewed as a transformative process, but participants' definitions varied based on their addiction experiences. GAR participants prioritized abstinence, aligning with traditional recovery models, while SUGAR participants emphasized a dual-focused recovery approach, reflecting the complexities of managing two co-occurring addictions. In contrast, SUR participants framed recovery as self-discovery and emotional healing, illustrating alternative recovery pathways beyond abstinence alone (Monteiro et al., 2024; Best, 2012; White). These findings reinforce the need for flexible recovery models that accommodate diverse personal definitions of success, rather than imposing a one-size-fits-all abstinence-based framework.

7.5.5 Methodological Contributions

The development of a new quantitative tool represented a notable methodological advancement, enabling the simultaneous evaluation of gambling, substance use, and crime across different populations. This instrument generated robust data that complemented qualitative insights, validating participants' narratives and providing a holistic understanding of the complex interplay

between these behaviours. For example, it revealed that the SUGAR group experienced the highest levels of financial and substance-related offenses, reinforcing the compounded difficulties highlighted in qualitative accounts. This integrated approach effectively merged the depth of qualitative research with the broad applicability of quantitative analysis, responding to calls for more cohesive and multi-method research in addiction studies (Best et al., 2017; Grant & Chamberlain, 2017).

Additionally, this study made a significant contribution to in-depth qualitative research on recovery capital, enriching the literature by capturing the nuanced experiences of individuals navigating addiction recovery. Unlike standardized measures of recovery, this research illuminated the subjective and evolving nature of recovery capital, demonstrating that social networks, financial stability, and emotional resilience are deeply intertwined and differentially experienced across addiction groups (Laudet & White, 2008; Cloud & Granfield, 2008). This methodological emphasis on qualitative recovery capital allowed for a more person-centred exploration of recovery trajectories, identifying critical barriers and facilitators that traditional models often overlook.

Furthermore, the research critically engaged with existing deterministic addiction and crime models, challenging the notion of fixed causal relationships between addiction and criminal behaviours. For example, Best et al. (2001) suggested that self-reported narratives might serve as post-hoc justifications rather than direct causes of behaviours. By combining qualitative and quantitative methods, this study validated participants' lived experiences while demonstrating the contextual and cyclical nature of addiction-related behaviours. As a result, the findings advocated for a shift away from linear addiction models toward a more nuanced and multidimensional understanding of gambling, substance use, and crime, emphasizing recovery as an individualized and socially embedded process.

7.5.6 Practical Contributions

The knowledge contributions also extended to practical implications. This research showed the limitations of isolated methods in addiction treatment and criminal justice, advocating for integrated care models that encompass a wide range of behaviours. By identifying specific group

priorities—gambling recovery for the GAR group, substance use treatment for the SUR group, and dual- focused care for the SUGAR group—the findings guided the creation of customised programmes more closely aligned with individual needs. This bolstered existing calls for integrated treatment frameworks (Slutske, 2019; Dowling et al., 2016) while delivering empirical evidence to facilitate their application.

In summary, this research enriched the theoretical, methodological, and practical comprehension of addiction and its relationship with crime. It validated and extended current models, introduced new methodological tools, and highlighted the necessity of integrated public health and criminal justice strategies. These contributions enhanced the discussion on co-occurring addictions and established a foundation for future studies to delve deeper into the intricacies of gambling, substance use, and crime. The methodological improvements made in this research, particularly integrating qualitative and quantitative methods, address significant gaps in addiction research. Creating a quantitative tool to measure gambling, substance use, and crime simultaneously offers a valuable asset for forthcoming studies and practices. Paired with qualitative narratives, this mixed-methods approach delivers a more holistic understanding of addiction recovery, paving the way for innovative interventions and policies that confront the full scope of recovery challenges. These findings carry considerable implications for recovery services and policy formulation. Recovery programs should adopt flexible definitions of success beyond mere abstinence, incorporating personal growth, social connections, and quality-of-life enhancements. For instance, GAR-specific programs could prioritise abstinence while incorporating strategies for relational recovery and social reintegration. SUGAR initiatives must embrace integrated care models that tackle gambling and substance use concurrently.

Meanwhile, SUR-focused interventions should concentrate on personal empowerment and self-discovery, equipping individuals with meaningful tools to reconstruct their lives. In conclusion, RQ 4 adds to the recovery literature by highlighting the varied definitions of recovery across groups, challenging conventional abstinence-focused paradigms, and fostering a more comprehensive understanding of recovery. By merging qualitative narratives with existing theoretical frameworks, this research offered nuanced insights that connect individual experiences with broader recovery models. These contributions highlighted the significance of

creating inclusive, person-centred approaches encompassing the full range of recovery experiences and priorities. The following section will address the limitations of this research.

7.6: Limitations of research

While this research offers valuable insights, it is essential to recognise its limitations to provide context for the findings and guide future studies. Grasping these limitations is vital for interpreting the results accurately and strengthening the rigour of future research in addiction and recovery.

7.6.1 Sample Size and Generalisability

A key limitation was the sample size, which, while sufficient for qualitative insights, may not represent the broader recovery population. Purposive sampling ensured participants had rich recovery experiences but limited the generalisation of findings. This approach aligns with qualitative research, which values depth over breadth (Patton, 2015) yet restricts its applicability to broader populations. Future research should incorporate larger, diverse samples to validate and extend these conclusions (Creswell & Poth, 2018).

7.6.2 Self-Reported Data and Subjectivity

Self-reported data limits reliability, as participants' accounts reflect personal perspectives. While valuable for capturing experiences, these reports may be influenced by recall bias or a desire to appear favourable (Podsakoff et al., 2003). This issue is common in qualitative research, where the authenticity of narratives may conflict with potential inaccuracies in memory. Triangulating self-reports with other sources, such as clinical assessments or support network reports, could enhance the reliability of future research (Patton, 2015).

7.6.3 Qualitative Focus and Lack of Quantitative Validation

This research's qualitative focus provided deep insights into participants' perspectives on recovery, gambling, substance use, and crime; however, it did not include quantitative measures that could offer broader statistical validation of these findings. The use of narrative interviews

captured nuanced experiences but limited the ability to apply findings to larger populations or establish causal relationships between co-occurring addictions and criminal behaviour. Combining qualitative methods with quantitative tools in future studies would help validate these findings and explore their prevalence on a larger scale (Johnson & Onwuegbuzie, 2004).

7.6.4 Potential Bias in Interview Interpretation

Another limitation is researcher bias in interpreting interview data. Although thematic analysis and coding frameworks were used to reduce subjectivity (Braun & Clarke, 2006), the risk persists due to the interpretative nature of qualitative researchers t. To ensure credibility, participant inter-judgement, peer debriefing, and detailed coding notes were included (Lincoln & Guba, 1985), but complete objectivity is elusive. Future research should involve multiple researchers for data analysis to enhance inter-rater reliability and minimise bias (Guest et al., 2012).

7.6.5 Limited Exploration of Socio-economic and Cultural Variables

This research did not explore how socio-economic and cultural factors influenced recovery experiences. While participants shared diverse stories, the research lacked a systematic examination of how variables like socio-economic status, ethnicity, or cultural background affected gambling, substance use, or criminal behaviour in recovery. Literature shows these factors shape addiction and recovery pathways (Room, 2005; Hser et al., 2007). Future studies should include these variables to provide a better understanding of recovery experiences and develop tailored interventions.

7.6.6 Focus on Subjective Definitions of Recovery

Focusing on participants' definitions of recovery offered valuable insights but limited comparisons to standardised clinical definitions. This focus created challenges when comparing studies that use objective recovery measures like abstinence rates (Davidson & White, 2007). Future research could bridge subjective and objective definitions, aligning individual experiences with standardised recovery criteria (Best et al., 2017).

7.6.7 Cross-Sectional Nature of the Research

The research was cross-sectional, capturing participants' perspectives at one point. This design limited the assessment of how experiences and definitions of recovery evolved. Longitudinal studies would provide better data on recovery progression and the changing relationships between gambling, substance use, and crime as individuals advance through their recovery journey (Dennis et al., 2005).

7.6.7 Limitations Summary

When interpreting the findings, the limitations of this research, including sample size constraints, reliance on self-reported data, and qualitative focus, should be considered. These limitations highlight areas for improvement and suggest future research directions incorporating more extensive, more diverse samples, quantitative validation, and longitudinal designs. Addressing these limitations will help build a more comprehensive understanding of recovery pathways and enhance the development of effective, evidence-based interventions for individuals dealing with substance use and gambling.

7.7 Future Recommendations

This research has highlighted several significant gaps and opportunities for future inquiry in addiction recovery. It presents pathways to refine theoretical frameworks, enhance service delivery, and improve policy interventions. The findings emphasise the need to develop tailored, integrated recovery approaches and suggest specific areas for further exploration.

Table 20: Findings and recommendations for future research

Key Theme	Findings/Contributions	Recommendations	Future Research Directions
Integrated Recovery Models	Highlighted the necessity of treating gambling and substance use concurrently, particularly for dual addiction populations like SUGAR. Emphasised the compounded risks of untreated co-occurring disorders, supporting the need for integrated care models (Grant &	Develop integrated care pathways that screen for and address both gambling and substance use simultaneously. Enhance existing triage systems to ensure early detection and intervention for co-occurring addictions.	Validate tools that measure co-occurring gambling, substance use, and crime. Conduct longitudinal studies to assess the long-term outcomes of integrated recovery models.

	Chamberlain, 2017; Slutske, 2019).		
Role of Recovery Capital	Showed that personal, social, and community resources significantly affect recovery outcomes. Highlighted gaps in recovery capital, especially for SUGAR participants, and called for expanded peer mentorship, housing, and employment support (Best & Lubman, 2012; White, 2009).	Prioritise interventions that build recovery capital, such as peer-led mentorship programs, stable housing initiatives, and employment support schemes. Strengthen community-based recovery programmes to enhance social and emotional resilience.	Investigate the interplay between recovery capital and outcomes in diverse socio-economic contexts. Explore strategies to strengthen recovery capital in dual addiction populations.
Complexity of Addiction and Crime	Demonstrated the cyclical relationship between addiction and crime. GAR participants were more prone to financial crimes linked to gambling, while SUR participants were primarily involved in substance-related offences. SUGAR participants exhibited dual criminal behaviours, reinforcing the need for cross-sector collaboration between public health and criminal justice systems (Turner et al., 2009; Dowling et al., 2016).	Expand rehabilitative criminal justice strategies, including financial counselling, addiction treatment, and cognitive-behavioural therapy for justice-involved individuals. Develop diversion programmes to address the root causes of addiction-driven crime.	Examine how integrated addiction and criminal justice programmes can reduce recidivism. Develop predictive models for understanding crime risks in addiction populations.
Service Improvements	Revealed deficiencies in current service provisions, particularly the fragmented care for individuals managing dual addictions (e.g., gambling and substance use). Highlighted the inadequacy of existing triage and treatment systems that often fail to detect or address co-occurring disorders (Grant et al., 2010).	Implement dual-focused service models that combine addiction treatment with financial counselling, mental health care, and social reintegration. Strengthen screening tools to identify dual diagnoses in early treatment stages.	Explore the impact of multi-disciplinary care models on long-term recovery outcomes. Investigate how service gaps exacerbate challenges for vulnerable populations.
Recovery as a Holistic Process	Defined recovery as more than abstinence. Participants emphasised personal growth, social reintegration, and continuous transformation, contributing to recovery models that extend beyond traditional abstinence-centric approaches (Best, 2012; Davidson & Roe, 2007).	Implement flexible recovery frameworks incorporating personalised care plans, addressing psychological growth, social reintegration, and relapse prevention strategies. Develop recovery programmes emphasising self-discovery and empowerment.	Explore the long-term effects of holistic recovery models on relapse prevention. Investigate the psychological and social dimensions of recovery in dual-addiction populations.

Criminal Justice Improvements	Highlighted that punitive responses to addiction-related crimes are often ineffective. Dual addiction participants, especially in the SUGAR group, were disproportionately involved in both financial and substance-related crimes, underscoring the need for a rehabilitative approach (Dowling et al., 2016; Turner et al., 2009).	Shift criminal justice strategies from punitive to rehabilitative, integrating addiction treatment into sentencing frameworks. Develop partnerships between criminal justice and public health systems to offer comprehensive rehabilitation options.	Examine the effectiveness of diversion programmes that integrate addiction treatment, financial counselling, and behavioural therapy. Investigate how early intervention can disrupt the cycle of addiction-driven crime.

Future research endeavours should validate and expand upon the quantitative instrument presented in this research, which concurrently measures gambling, substance use, and crime, thereby addressing a significant gap in addiction research where these behaviours are frequently examined in isolation. Subsequent studies should enhance this instrument across varied populations to ascertain its reliability and applicability. Longitudinal research has the potential to trace the interactions of these behaviours over time, thereby providing profound insights into their progression during the recovery process. Moreover, the investigation of socio-economic and cultural factors that influence recovery capital is of paramount importance. This research under-resourced disparity resources among the SUR, GAR, and SUGAR groups. Future inquiries should explore how income, education, cultural heritage, and systemic inequities impact access to recovery capital. A comprehensive understanding of these influences could result in more equitable interventions for marginalised populations grappling with dual-diagnosis addictions.

Further investigation is warranted regarding the relationship between addiction and criminality, with particular emphasis on the correlations among gambling, substance use, and unlawful activities. This research has delineated distinctive patterns of criminal behaviour within recovery groups; however, additional research could elucidate the socio-psychological factors that underlie these behaviours. Longitudinal studies involving justice-involved individuals in recovery might illuminate how integrated interventions can mitigate recidivism and promote sustained behavioural change. Incorporating criminological theories, such as Braithwaite's reintegrative shaming framework, into empirical research could enhance our comprehension of these dynamics. Furthermore, the function of integrated care models in dual recovery necessitates thorough examination. Findings indicate that individuals within the SUGAR group

encounter unique challenges that require comprehensive interventions addressing both gambling and substance use. Future research should evaluate the efficacy of these models, focusing on relapse rates, psychological resilience, and recovery capital. Comparative analyses of integrated versus siloed treatment approaches may yield substantial evidence for reform in addiction care. Subsequent studies should persist in exploring the evolving definitions of recovery, particularly exemplified by the SUGAR group's concentration on self-discovery in contrast with the GAR group's priority on abstinence, showcasing the diversity of recovery experiences. Investigating how these perspectives evolve over time and across various demographics could provide valuable insights into tailored recovery programs. Additionally, an inquiry into how these definitions of recovery align with or deviate from traditional abstinence-centred models may enhance person-centred care. By addressing these domains, future research can build upon the findings of this research, deepening the understanding of addiction recovery and contributing to the development of inclusive, evidence-based interventions for individuals in recovery.

7.8 Personal Reflections

Undertaking this research has been both a deeply personal and professionally transformative journey, shaped not only by my academic engagement with addiction recovery but also by my lived experience of 18 years in recovery from alcohol and drugs. This thesis was never just about examining addiction as an abstract concept; instead, it was about understanding the deeper why—why people develop harmful behaviours, why specific individuals struggle to recover while others thrive, and why structural barriers continue to leave so many without adequate support. Much of the discourse around addiction remains focused on the what—what substances are used, what behaviours are repeated, and what consequences follow. However, I have come to believe that understanding the motivations, vulnerabilities, and emotional landscapes that drive addiction is far more critical than simply documenting its symptoms.

From a personal and professional standpoint, this shift in focus from what to why has been this research's most significant learning experience. As someone who has walked the path of recovery for nearly two decades, I have often reflected on my reasons for substance use—escapism, unresolved emotional pain, and the search for meaning. These motivations are not

unique to me or those with a history of addiction; they are universal human experiences. Through this research, I have had the privilege of listening to individuals from diverse backgrounds whose struggles, despite outward differences, were underpinned by remarkably similar emotional drivers—disconnection, shame, a longing for control, or simply the need to silence the noise of their thoughts. This reinforced something I have long believed: we are more the same than different.

Engaging with participants across different addiction experiences—gambling, substance use, and both—has deepened my understanding of how addiction functions as a coping mechanism, regardless of the substance or behaviour involved. While existing research and treatment models often distinguish between different forms of addiction, this research reinforced the idea that addiction itself is less about the specific substance or behaviour and more about the emotional and psychological states that drive it. The surface-level differences—whether one struggles with alcohol, cocaine, or gambling—are far less significant than the underlying reasons that fuel these behaviours. Recognising this has profound implications, both for treatment services and for how society understands addiction and recovery. Too often, people are labelled by the specific nature of their addiction rather than being seen as individuals grappling with more profound human struggles that manifest in different ways.

This realisation also strengthened my belief in the necessity of compassionate, person-centred approaches to recovery. I have long understood this from my own experience in recovery, but conducting this research brought a new depth to that understanding. The people I spoke with were not simply 'addicts' or 'offenders'—they were individuals seeking meaning, connection, and relief from pain. Many had been failed by systems that focused on punishing their behaviours rather than addressing the root causes that led them to addiction in the first place. This echoed my own experience of early recovery, where it became clear that sustaining change was not just about removing substances but about confronting the why—the beliefs, experiences, and unmet needs that had driven me towards addiction in the first place. This same lesson emerged repeatedly in my participants' experiences, reinforcing that long-term recovery is about transformation, not just cessation.

At times, this research was emotionally challenging. Immersing myself in the narratives of those who had faced severe isolation, financial devastation, and criminal justice involvement was difficult, particularly knowing that many of these stories could have had different outcomes with earlier intervention and more effective support systems. It also made me reflect on the factors that enabled my recovery—support networks, structured pathways, and access to services others might not have had. These reflections deepened my commitment to advocating for more integrated, compassionate, and structurally aware recovery frameworks that do not merely address outward behaviours but recognise and respond to the emotional and psychological drivers of addiction. Beyond the research content, the research process was a test of resilience. Completing this work while remaining actively engaged in recovery required me to draw on many of the same strengths that have sustained my sobriety—persistence, self-awareness, and the ability to sit with discomfort. At times, the intensity of the work felt overwhelming, but it also affirmed the value of recovery in a way that I did not expect. Much like recovery, this thesis was not about reaching a single end goal but about engaging in continuous learning, reflection, and growth.

Looking back, this research has reaffirmed my belief that addiction is not a moral failing or a weakness—it is a human response to pain, uncertainty, and unmet needs. We may develop different coping mechanisms, but the emotional undercurrents that shape our behaviours are often remarkably similar. Suppose we can shift the conversation away from **what** people are doing towards **why** they are doing it. In that case, we can develop more compassionate, effective, and sustainable approaches to addiction recovery. I hope this research contributes to that shift—not just within academic discourse but also in treatment services, public health policies, and the broader cultural understanding of addiction and recovery. This process has reinforced the importance of listening—truly listening—to the stories behind addiction and recognising that, at our core, we are all searching for the same things: connection, meaning, and a way forward.

7.9 Conclusion

This research delivers a powerful message: Addiction recovery is not a straightforward journey; structural supports, integrated services, and acknowledgement of co-occurring conditions

influence it. It calls into question the effectiveness of current treatment models, exposing how the lack of integration of gambling disorder into mainstream addiction and criminal justice services puts individuals at greater risk for harm, delays their recovery, and keeps them trapped in cycles of addiction-related crime. The research highlights the dangers of cross-addiction, inequities in recovery capital, and fragmented care systems—especially for those grappling with both gambling and substance use disorders. These system failures demand a dramatic policy overhaul. Gambling harm must be screened and addressed within substance use and criminal justice frameworks, not treated in isolation.

A crucial insight from this research is that siloed treatment models fall short for individuals facing co-occurring gambling and substance use disorders. Their addiction pathways, risk factors, and recovery journeys are intricately linked. Instead, integrated care models that embed gambling screening into existing substance use treatments, probation, and rehabilitation programs can create a more effective and accessible recovery framework. Moreover, disparities in recovery capital remind us of the need for customised interventions that focus on more than just abstinence—highlighting financial stability, social support, and mental health as vital components of long-term recovery. This research also challenges the failure of punitive responses to addiction-related crime and advocates for a rehabilitative approach in the criminal justice system, emphasising addiction treatment over punishment.

Ultimately, this research champions a transformational, policy-driven response to addiction recovery—one that transcends outdated abstinence-only models and embraces recovery as a dynamic, multifaceted process. By integrating gambling screening into existing addiction triage systems, fostering collaboration across public health, criminal justice, and social services, and removing barriers to early intervention, we can create recovery frameworks that are fair, effective, and sustainable. These compelling findings lay the groundwork for rethinking addiction recovery, defying conventional paradigms, and offering a clear roadmap for the future of policy, practice, and research.

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Appendix 1: Life Narrative Interview Questions

Life Narrative Interview Questions[3]

Patterns, Behaviour and Background

1. Behaviour History

- Can you first tell me how you started gambling/substance use/both, at what stage in your life, your main reasons for doing so, and what type of game you played?
- What made you continue? And why did you?
- Do you feel that you have a problem with gambling, or some forms of gambling/substance use or both? Have you felt that since you started or later on?
- What was happening at the time in your life when your gambling/substance use or both became problematic?
- What kind of gambling/substance use or both have you done, and how have they changed over time?
- What is the best and worst thing about gambling/subtstance use or both?
- Have you ever tried to stop or thought about stopping? When? Why? What happened?
- Have you ever sought help through counselling or Gamblers Anonymous/Alcoholic Anonymous/Narcotics Anonymous/Other mutual aid? Why or why not? What was it like?

2. Early Family Background

- Where did you grow up?
- Parents' background, occupation
- Relationship with parents/siblings
- Any addictions/offending/gambling behaviour among family members when growing up?
- Are there any other problems in the family?
- Aspirations when growing up? What kind of life did you see yourself having?
- Parents/family expectations about what you would do when you grew up

3. School/educational background

- Relationship with teachers/other children at school
- Experiences of learning/studying
- Any exposure to gambling/substance use/both/offending while at school
- Educational achievements
- Leaving school decision
- Post school studies

4. Employment

[3] **Saugeres, L, Thomas, A, Moore S, Bates G (2012). Gamblers tell their stories: an in-depth exploration of lifetime patterns of gambling. Victorian Responsible Gambling Foundation, Melbourne, Victoria, Australia.**

- Employment history after leaving school
- Influence of gambling on employment at different times
- Current employment, if any, and feelings about this employment
- If not employed, what are the main reasons

5. Relationships as adult/family

- Family reaction to gambling behaviour, any pressure to stop?
- Influence of gambling on intimate relationships and children, if any
- Influence of relationships on gambling behaviour (partner encouragement to gamble or other influence in the family)
- Other relationships with siblings/parents and the influence of gambling on these
- Work relationships and the impact of gambling on these
- Relationships with other gamblers
- Has your gambling caused any financial problems for you and your household?
- Has anybody in your family ever asked you to stop gambling?
- Have you ever lied to your family/close friends or at work about your gambling?

6. Health

- Any health problems since childhood?
- Has your gambling/substance use/both caused you any health problems, including stress and anxiety?
- If so, how do you manage these?
- Would you stop gambling/substance use/both because of your health?

8. Gambling Related Harm, Substance Use and Offending

- Which came first, substance use, gambling or offending?
- In your experience, did engagement in one behaviour lead to the others?
- What is your perspective on the relationship between substance use, gambling and criminal offending? Is there a relationship? Has it impacted your journey?
- When were you first offered intervention services? Was it for Substance Use, Gambling or Offending?
- Were you ever offered services for gambling when engaged in the criminal justice system?
- How about in NHS or public health systems?
- From your experience, would it be beneficial to screen for both substance use and gambling simultaneously in all public health and criminal justice service settings?

Additional Questions

- How long have you been in recovery?
- Why did you stay in recovery?
- What is your definition of recovery?

Appendix 2: Quantitative Survey Tool

Gambling Related Harm, Substance Misuse and Offending Research Questionnaire
Part A

Section 1: Demographics

1. Are you engaging as a:	
Gambler in Recovery	
Substance User in Recovery	
Substance User and Gambler in Recovery	

2. How long have you been in recovery	
Less than 1 year	
1 to 5 years	
6 to 10 years	
11 to 15 years	
16 to 20 years	

3. Age	
18 to 24	
25- 34 years old	
35-44 years old	
55 to 64 years old	
65+ years old	

4. Ethnic status:
○ White ○ White Asain ○ White Arab ○ Black/African/Caribbean ○ Asian (Indian, Pakistani, Bangladeshi, Chinese ○ Arab ○ Mixed or two more ethic groups ○ Any other ethnic group please describe: _____

5. Gender Identification	
Male	
Female	
Non-binary/third gender	
Prefer to self-describe	
Prefer not to say	

6. Marital Status	
Married	
Living with partner	

Widowed	
Divorced/Separated	
Never been married	

7. Employment	
Full-time	
Part time	
Unemployed and looking for work	
Homemaker or stay at home parent	
Student	
Retired	
Other	

8. **Housing: Please indicate where you have been living for the past 90 days. If multiple places, then indicate the number of days spent in each location.**

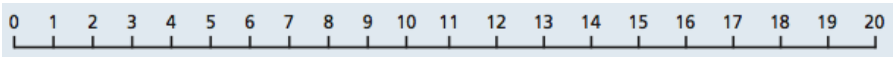
Days	Days	Days
a. Own home	**e. Supported accommodation**	**h. Hospital**
b. With family	**f. Hostel**	**i. Treatment center**
c. With friends	**g. On streets**	**j. Prison**
d. Recovery house		

Gambling, Substance Misuse and Criminal Background

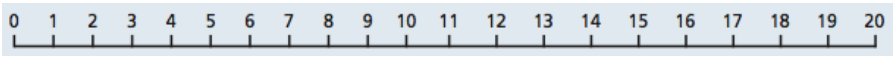
Research Questionnaire

Section 2: Quality of Life[4]

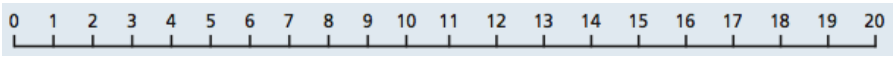
2.1 How good is your psychological health?

poor  good

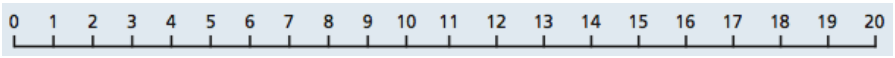
2.2 How good is your physical health?

poor  good

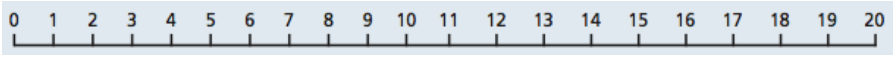
2.3 How would you rate your overall quality of life?

poor  good

2.4 How would you rate the quality of your accommodation?

poor  good

2.5 How would you rate your support network?

poor  good

[4] Best, D (2016) REC-CAP: Self-Administered Tool. Helena Kennedy Center for International Justice, Sheffield Hallam University (Quality of Life Section).

Section 3: Gambling[5]

3.1 In thinking about lifetime habits in relation to gambling:

3.1.1 Have you bet more than you could really afford to lose?

Never (0) Sometimes (1) Most of the time (2) Almost always (3)

3.1.2 Still thinking about the last 12 months, have you needed to gamble with larger amounts of money to get the same feeling of excitement?

Never (0) Sometimes (1) Most of the time (2) Almost always (3)

3.1.3 When you gambled, did you go back another day to try to win back the money you lost?

Never (0) Sometimes (1) Most of the time (2) Almost always (3)

3.1.4 Have you borrowed money or sold anything to get money to gamble?

Never (0) Sometimes (1) Most of the time (2) Almost always (3)

3.1.5 Have you felt that you might have a problem with gambling?

Never (0) Sometimes (1) Most of the time (2) Almost always (3)

3.1.6 Has gambling caused you any health problems, including stress or anxiety?

Never (0) Sometimes (1) Most of the time (2) Almost always (3)

3.1.7 Have people criticized your betting or told you that you had a gambling problem, regardless of whether or not you thought it was true?

Never (0) Sometimes (1) Most of the time (2) Almost always (3)

[5] Gamble Aware Assessment Tool: Specialist Version. Developed for Gamble Aware (2017). (unpublished tool)

3.1.8 Has your gambling caused any financial problems for you or your household?

Never (0) Sometimes (1) Most of the time (2) Almost always (3)

3.1.9 Have you felt guilty about the way you gamble or what happens when you gamble?

Never (0) Sometimes (1) Most of the time (2) Almost always (3)

3.1.10 Gambling Impact: *When you think about gambling include lottery tickets, instant scratch tickets or raffles and other types of gambling: poker machines, card games, racing, sports betting, day trading, bingo and casino games.*

In the 28 days how much money have you spent gambling?

TOTAL monthly spend £ _____

3.1.11 Has your gambling had an adverse effect on your family: ☐ Yes ☐ No

3.1.12 Has your gambling had an adverse effect on your wellbeing ☐ Yes ☐ No

3.2: To what extent has your life been adversely affected by any of the following things in the last 12 months as a result of your gambling:

Please tick one box for each area….	Not at all	A little	Quite a lot	A lot
3.2.1 Debt				
3.2.2 Employment problems				
3.2.3 Alcohol problems				
3.2.4 Drug problems				
3.2.5 Relationship issues				
3.2.6 Lack of social support				
3.2.7 Involvement with the criminal justice system				
3.2.8 Physical health problems				

3.2.9 Mental health problems (such as anxiety or depression)
3.2.10 Family or parenting issues
3.2.11 Other key life events

Section 4: Lifetime and Current Substance Use History[6]

	a. Ever been a problem?	b. Used in the last 90 days
4.1. Alcohol	☐ No ☐ Yes	☐ No ☐ Yes
4.2. Heroin	☐ No ☐ Yes	☐ No ☐ Yes
4.3. Crack cocaine	☐ No ☐ Yes	☐ No ☐ Yes
4.4. Cocaine powder	☐ No ☐ Yes	☐ No ☐ Yes
4.5 Amphetamines	☐ No ☐ Yes	☐ No ☐ Yes
4.6. Cannabis	☐ No ☐ Yes	☐ No ☐ Yes
4.7. Methadone (prescribed)	☐ No ☐ Yes	☐ No ☐ Yes
4.8. Methadone (street)	☐ No ☐ Yes	☐ No ☐ Yes
4.9. Buprenorphine (prescribed) (Subutex)	☐ No ☐ Yes	☐ No ☐ Yes
4.10. Buprenorphine (street) (Subutex)	☐ No ☐ Yes	☐ No ☐ Yes
4.11. Benzos (prescribed)	☐ No ☐ Yes	☐ No ☐ Yes

[6] Best, D (2016) REC-CAP: Self-Administered Tool. Helena Kennedy Center for International Justice, Sheffield Hallam University (Substance Use Section).

(specify _____)		
4.12. Benzos (street) **(specify _____)**	☐ No ☐ Yes	☐ No ☐ Yes
4.13. Tobacco	☐ No ☐ Yes	☐ No ☐ Yes
4.14. Other problem substance? **(specify _____)**	☐ No ☐ Yes	☐ No ☐ Yes

Section 5: Criminal History[7]

5.1: Criminal Justice Engagement History

5.1.1 In total, how many times have you been arrested in your LIFETIME?

○None ○1-5 times ○6-10 times ○11-50 times ○Over 50 times

5.1.2 In total, how many times have you been convicted (found guilty) of a crime, as an adult or juvenile?

○None ○Once ○2-5 times ○6-10 times ○Over 10 times

5.1.3 Altogether, how many times have you ever been incarcerated (jail or prison)?

○None ○Once ○2-5 times ○6-10 times ○Over 10 times

5.1.4 In total, how many DAYS have you ever spent in jail or prison?

○None ○1-30 days ○31-60 days ○61-365 days ○Over 365 days

5.1.5 What was your age the first time you were incarcerated (in jail or prison)?

○Never ○Under 18 ○18-25 years ○Over 25 years

5.1.6 How many times were you arrested BEFORE AGE 18?

○None ○Once ○2-5 times ○6-10 times ○Over 10 times

5.1.7 In total, how many times have you had license, parole or probation REVOKED for any reason?

○None ○Once ○Twice ○3 or more times

5.1.8 How many of those revocations were for TECHNICAL VIOLATIONS?

○None ○One ○Two ○3 or more

5.1.9 During the last six months before entering this program, how many times were you arrested?

○None ○Once ○2-5 times ○6-10 times ○Over 10 times

[7] Institute of Behavioral Research. (2008). *TCU Criminal History Form (TCU CJ CI Form)*. Fort Worth: Texas Christian University, Institute of Behavioral Research. Pages 7-10. Available at ibr.tcu.edu (Criminal Recidivism Risk Questions only)

5.1.10 How many different times (during those 6 months) were you in jail?

○None ○Once ○2-5 times ○6-10 times ○Over 10 times

5.1.11 How many days (during those 6 months) did you spend in jail?

○None ○1-7 days ○8-30 days ○31-60 days ○Over 60 days

5.2 Offending Type[8]

Please place your answer in the boxes provided

Crime Patterns Chart	q1d. times arrested – type of crimes (lifetime)	q3a. times arrested – ever last 6 months	q4a. days of these activities – last 30 days
[1]. Public intoxication from drinking alcohol?	|___|___|	|___|___|	|___|___|
[2]. Drunk or Drug Driving?	|___|___|	|___|___|	|___|___|
[3]. Use of illegal drugs (possession)?	|___|___|	|___|___|	|___|___|
[4]. Possession with intent to distribute?	|___|___|	|___|___|	|___|___|
[5]. Possession of drug paraphernalia)?	|___|___|	|___|___|	|___|___|
[6]. Manufacturing of drugs (growing, chemical lab)?	|___|___|	|___|___|	|___|___|
[7]. Sale or distribution of any drugs (not counting drug use or possession)?	|___|___|	|___|___|	|___|___|
[8]. Forgery or fraud (writing bad checks, running con games)?	|___|___|	|___|___|	|___|___|
[9]. Fencing or buying/receiving stolen property?	|___|___|	|___|___|	|___|___|
[10]. Gambling, running numbers, or bookmaking?	|___|___|	|___|___|	|___|___|
[11]. Prostitution or pimping?	|___|___|	|___|___|	|___|___|
[12]. Burglary or auto theft?	|___|___|	|___|___|	|___|___|
[13]. Other theft (larceny, shoplifting)?	|___|___|	|___|___|	|___|___|
[14]. Robbery (armed robbery, mugging)?	|___|___|	|___|___|	|___|___|
[15]. Violence against other persons (homicide, aggravated assault, kidnapping, etc.)?			

[8] Institute of Behavioral Research. (2007). *TCU Criminal Justice Comprehensive Intake (TCU CJ CI Form)*. Fort Worth: Texas Christian University, Institute of Behavioral Research. Pages 7-10. Available at ibr.tcu.edu (Section D: Crime Chart)

[do not include "rape"]	|___|___|	|___|___|	|___|___|
[16]. Arson offenses?	|___|___|	|___|___|	|___|___|
[17]. Weapons offenses?	|___|___|	|___|___|	|___|___|
[18]. Vandalism, vagrancy, loitering?	|___|___|	|___|___|	|___|___|
[19]. Sex offenses (rape, aggravated sexual assault, indecent exposure)?	|___|___|	|___|___|	|___|___|
[20]. Probation/Release Violation	|___|___|	|___|___|	|___|___|
[21]. Others not listed? (specify) _____	|___|___|	|___|___|	|___|___

Section 6: Treatment and Service needs[9]

	Please tick the relevant answers for each question……	a. Are you currently engaged with this kind of services?	b. If you are, are you satisfied with the service you are getting?	c. Do you need help or additional help in this area?
6.1.	Drug treatment/recovery services	☐ No ☐ Yes	☐ No ☐ Yes	☐ No ☐ Yes
6.2.	Alcohol treatment/recovery services	☐ No ☐ Yes	☐ No ☐ Yes	☐ No ☐ Yes
6.3.	Gambling treatment/recovery services	☐ No ☐ Yes	☐ No ☐ Yes	☐ No ☐ Yes
6.4.	Criminal Justice/Probation Services	☐ No ☐ Yes	☐ No ☐ Yes	☐ No ☐ Yes
6.5.	Mental health services	☐ No ☐ Yes	☐ No ☐ Yes	☐ No ☐ Yes
6.6.	Housing support	☐ No ☐ Yes	☐ No ☐ Yes	☐ No ☐ Yes
6.7.	Employment services	☐ No ☐ Yes	☐ No ☐ Yes	☐ No ☐ Yes
6.8.	Primary healthcare services (GP, medical services)	☐ No ☐ Yes	☐ No ☐ Yes	☐ No ☐ Yes
6.9.	Family relationships	☐ No ☐ Yes	☐ No ☐ Yes	☐ No ☐ Yes
6.10.	Other specialist help or support (please specify):	☐ No ☐ Yes	☐ No ☐ Yes	☐ No ☐ Yes

[9] [9] Best, D (2016) REC-CAP: Self-Administered Tool. Helena Kennedy Center for International Justice, Sheffield Hallam University (Substance Use Section).

Section 7: Systems and Services Experience (unvalidated questions)

Section A Please write your answer in the box provided….		Answer
7.	How old were you when you first started drinking or using substances?	
7.	How old were you when you first engaged in treatment services for substance use ?	
7.	How old were you when you first engaged with the criminal justice system (arrest, jail, prison, etc.)?	
7.	How old were you when you first started gambling in any form?	
7.	How old were you when you were first told you may have a gambling problem?	

Section B Please tick your response in the box provided….		YES	NO
7.6	In any previous contact with the courts, the police, prison or probation, were you ever assessed or screened for at-risk or disordered gambling ?		
If yes, please provide more details			
7.7	In the course of your substance use treatment history, were you ever assessed or screened for at-risk or disordered gambling?		
If yes, please provide more details			
7.9	Were you ever asked if gambling had been a problem for you by any other services or professionals (GP, Mental Health, etc.) ?		
If yes, please provide more details			
7.10	Would it have been beneficial for you have been assessed or screened for gambling as a standard part of the health and/or criminal justice assessment or screening processes?		

7.11 Additional comments on experience of substance use, criminal offending and gambling:

University of Derby
College of Business, Law and Criminology
Research Form ID Number: ETH1920-324

Appendix 3: Ethics

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Sponsor License No: QGN14R294

Dear Rebecca,
ETH1920-3240

Thank you for submitting your application to the College of Business, Law and Social Sciences Research Ethics
Committee, which has now been reviewed and considered.

The outcome of your application is:
approved.

Feedback on your application is available here.
If any changes to the study described in the application are necessary, you must notify the Committee and may be required to make a resubmission of the application.

On behalf of the Committee, we wish you the best of luck with your study.

Yours sincerely
Eleni Spitieri