

Interpreter-Assisted Investigative Interviews: Needs, Challenges and Quality

“In pursuit of interpretation service Quality”: This study examined how factors such as planning and preparation, rapport-building, interruption, cognitive load, language/culture and gender affect interpreter-assisted investigative interviews.



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**A submission in partial fulfilment of the requirements of the University of
Derby for the Award of the degree of Doctor of Philosophy.**

July, 2021

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List of Abbreviations

Abbreviation	Meaning
APP	Authorised Professional Practices
ALS	Applied Language Solutions
BAME	Black, Asian and Minority Ethnic
BBC	British Broadcasting Corporation
CIRS	Crime Reporting Information System
CI	Cognitive Interview
CM	Conversation Management
DTCA	Deductive Thematic Content Analysis
ECtHR	European Court of Human Rights
EU	European Union
FTQ	Free Text Question
GTAM	Grounded Theory Analysis Method
GLM	Generalised Linear Model
HRC	Human Rights Committee
ITA	Inductive Thematic Analysis
ILEA	International Law Enforcement Agency
LEP	Less English Proficient
LMPC	Listening and Analysis Efforts, Short-term memory Efforts, Speech Production and Coordination Efforts.
LogLin	Log Linear Model
MPS	Metropolitan Police Services
MCQ	Multiple Choice Question
MoJ	Ministry of Justice
NAJIT	National Association of Judiciary Interpreters and Translators
NRPSI	National Register of Professional Service Interpreters
PAC	Public Account Committee
PCC	Police Chiefs Council

PCC	Police and Crime Commissioners
PEACE	Planning and Preparation, Engage and Explain, Account, Closure and Evaluation
P &P	Planning and Preparation
PPC	Posterior Parietal Cortex
SIO	Senior Investigating Officer
SSA	Study Space Analysis
TCA	Thematic Content Analysis
ITCA	Inductive Thematic Content Analysis
UN	United Nation
ICCPR	International Customary Law on Civil and Political Rights
IACP	International Association of Chiefs Police
IMIBP	Interpreter Mediated Interview Best Practice
IIS	Investigative Interview Session
IIT	Investigative Interviewing Training
ILEA	International Law Enforcement Agency
VSTM	Visual Short-Term Memory
WM	Working Memory

Preface

This research work is solely carried out by me, and I am responsible for all of the different chapters and sections of the submitted thesis.

Acknowledgement

I want to take this opportunity to express my gratitude to God Almighty for providing me with the chance and strength to complete the PhD. I would also like to express my heartfelt gratitude to my current Director of Study, Professor Kate Moss, for believing in me to conduct this research, for her inspirational encouragement and unwavering support. I am grateful for her time and ideas in making my PhD experience productive and fascinating. Particularly her enthusiasm and drive for me, despite the difficulties inherent in pursuing my PhD during the COVID-19 era. I want to express my gratitude to my present supervisory team, Professor Philip Hodgson, and Professor Qile He, for their support, attention, enthusiasm and commitment. Professor Ken Pease and Professors Dave Walsh were my initial Director of Study before they both left the University of Derby. I am eternally grateful for their inspiration, motivation, and support throughout my PhD quest.

Additionally, I would like to express my gratitude to the International Law Enforcement Agency (ILEA) for providing me with the information necessary for my research. Furthermore, I would like to express my appreciation to the Association of Police and Court Interpreters for contributing to this research. I have had significant assistance from others along the process, particularly the four interpreters in the Yoruba and Chichewa languages; the two expert translators; the four Assessors and others. Similarly, I would like to express my gratitude to Pastor Tokunbo Ibikunle and Bishop Pangani Thipa for pushing and encouraging members of the Black, Asian, and Minority Ethnic (BAME) community to complete my questionnaire despite COVID-19's concerns. Additionally, I would like to express my gratitude to the police forces in England and Wales for contributing to the cost of police interpretation services. I want to express my appreciation to Inspector Gurmit of the Nottinghamshire police, Mark Flint-Freel, and Shaun Ostle for their insights on how front-line police officers deal with language barriers during police activities.

Finally, I would like to express my gratitude to my gorgeous wife, Ibronke Hannah Amurun, for her encouragement, support, and love throughout my PhD quest. Furthermore, I want to express my appreciation to my children, brothers, sisters, and friends for your prayers and encouragement. In particular, I would like to express my gratitude to my friends Rotimi Obasa and Dr Rashid Minhas for their encouragement, support, and raising of my spirit throughout my PhD path.

Abstract

This thesis researches the yet to be fully explored dynamic of interpretation services needs and interpretation service optimisation (i.e., interview and interpretation quality assurance). The research began with an exploratory analysis of factors affecting interpreter-assisted investigative interviews and then took a subtle experimental swipe at factors affecting intelligibility and informativeness of translation. Recognition of the importance of the context in which interpretation currently takes place led to the addition of a wider range of approaches. This informed a broad review of relevant literature. The empirical work is presented as follows. First, is a Study Space Analysis (SSA) of policy-relevant research, which provides a base for determining the adequacy and depth of the existing body of knowledge. The results show that interpretation service needs and planning appear mildly or infrequently researched, and there exists little or no studies investigating police diversity effects on interpretation service needs. Also, studies investigating cognitive load, language and gender effects on interpreting accuracy are sparse. Finally, this study shows that the literature focuses on interpretation as a service for offenders rather than for victims and witnesses. The implications of this for social harmony are discussed.

The second study concerns the optics of a police service that does not resemble the population policed. In a convenience sample of 104 ethnic minority individuals, the descriptive and thematic analysis indicates that police diversity tends to improve trust and impact the need for interpretation service. These findings bring to the fore the benign potency of language education. The third study explores the opinions of 66 International Law Enforcement Agency (ILEA) investigators and 40 interpreters on factors affecting investigative interviews involving the assistance of interpreters. Using descriptive and thematic analysis, it was shown that investigators plan only occasionally with interpreters. The seldom planning practise is found to occur because of investigator's role perception of interpreters and individualistic culture of investigators. Additionally, interpreter presence is observed to impact rapport building, and the effect of interruption is manageable with the right skills and experience combination.

The fourth study uses a complex design to determine factors relevant to the intelligibility and informativeness of translations of witness accounts of a sample of audio depictions of non-violent offences. The study employed 240 aggregated ratings from 4 volunteer assessors of 60 textual interpretation of 15mins, 10mins and 5mins witness accounts using Tiselius (2009) 6-points Intelligibility and informativeness scale. Log-linear analysis revealed a surprising lack of consensus of assessments of intelligibility and informativeness across assessors, but

judgements of informativeness relative to intelligibility within individual assessors appear coherent and consistent. Length of audio was not associated with intelligibility or informativeness. A small exploratory follow up to the study investigated what seemed to make translations unintelligible. The next study mapped the opinions of a sample of 51 expert interpreters with a range of experience about the perception of their work and its challenges. This shows consistency with existing literature and studies investigated in the thesis except for opinions on the role of police diversity which is found to increase trust and interpretation service needs.

Chapter 1: Introduction

1.0 Background

The biblical story of the Tower of Babel (Genesis 11:1-9) appears to be an attempt to explain the existence of diverse human languages. In Genesis 11 verse 4, the Babylonians wanted to make a name for themselves by building a mighty city and a tower "with its top in the heavens". God disrupted the work by confusing the workers' language that they could no longer understand one another. The city was never completed, and people were dispersed over the face of the earth. God's inferred intention was that humans did not aspire to power beyond what he intended. The present thesis' significance is that God's chosen tactic to sow discord was to make it difficult for people to communicate with each other. God chose his tactic well. Conflicts of many kinds slowed from the lack of a common language and the misunderstandings flowing from that lack. If it were a matter of matching language to a shared underlying cognitive framework, the interpretation task would be difficult enough. However, the discipline of psycholinguistics has shown the complex ways in which language helps shape the cognitive underpinning itself (Traxler, 2012). The writer became increasingly aware of the complexity of his chosen topic as he progressed. The thesis only seeks to supply a few pieces of a vast and complex jigsaw. The thesis therefore explores factors influencing the quality of interpreter assisted investigative interview, accuracy (i.e. intelligibility and informativeness) of interpretation service provided post investigative interview and how societal decision to use of interpretation service is impacted by police diversity via the nature of ethnic minority trust in UK criminal justice system (CJS) and police institution.

1.1 Motivation and Justification

Researches have demonstrated that interpretation service is needed to guarantee fairness and social justice (Adrine, 2009; CFI, 2008; Davis, Hon. Lynn, & et al., 2004; Kahaner, 2009; Laster, 1990; Stone, 2018), protect fundamental human rights (Trechsel, 2005), improve rapport building (Bull, 2010), ease communication (Bull, 2010), remove or mitigate language barriers (Jungner, Tiselius, Blomgren, Lützén, & Pergert, 2019), and prevent coerced confession and consequential wrongful detention (Berk-Seligson, 2009). In brief and for diverse reasons, an interpretation service becomes an essential component in providing justice for all by enabling effective communication across language barriers. To facilitate equity in the justice system, any person who appears not to speak nor understand the language of the street, interview room and the courtroom must be provided interpretation services. The provision of interpretation service is to bridge any communication gap attributable to the

complexity and variability of speech and the underlying meanings it seeks to convey. As the heading of this section suggests, the motivation for undertaking the research reported here is the recognition that competent interpretation is necessary for the realisation of a just society.

The need for an efficient and readily accessible interpretation service is undoubtedly recognised by police forces within the U.K., with a long-standing national registration system and a more recent framework agreement for interpretation services (Justice Committee, 2013). However, the issue of interpretation quality must be embedded within a broader context. Put crudely, an effective interpretation service is irrelevant if a citizen does not trust the police service, the visible front line of the CJS. According to Holdaway (1996), several factors such as occupational culture, indiscriminate use of stop and search rules, crime and arrest, are *casus belli* to the break-down of trust and confidence in the police force. Arguably, the cause of justice may be advanced more by making the police service mirror the public's ethnicity and linguistic competence (See also Holdaway 1991). A perfect interpretation service in a society that is too distrustful to contact the Police is like a hospital where patients admit to being ill but refuse to seek medical assistance owing to lack of trust. This tension in the writer's mind as to the most critical research to conduct accounts for elements of both the broader perspective of police trust (which makes the interpreter service relevant) and how to make interpretation services as good as possible.

The need for interpretation services arises because of language problems. The language problem itself is caused by limited English proficiency for victims, witnesses, and suspects, who most likely are of ethnic minority origin. It is easy to confuse ethnicity and linguistic competence in English, especially given the influx of white immigrants from Eastern Europe given freedom of labour movement across the European Union. However, a rough idea may be given on the issue. Ethnicity extends to instances of diversity in colour, culture, language, norms, signs and symbols.

On the other hand, linguistic competence involves language fluency, thematic awareness, and proficiency in writing and verbal language usage. Linguistic competence through training and re-training of a police officer may fail to instil trust and confidence in the Police. Language training is likely to fail because trained police officers lack the target language's cultural and symbolic uniqueness. The U.S. Department of Army warns that linguistic proficiency-based training usually takes a long time and may sometimes be insufficient in questioning witnesses, victims, and suspects in their language (Department of Defense, 2012; Russano et al., 2014; U. S. Department of the Army, 2006). Trust and confidence are facilitated when the police institution represents the cultural and ethnicity

mixed of those it seeks to protect. Therefore, it is crucial to have people from diverse ethnicities with linguistic competence in the Police. While recognising how far the British police service has to go to achieve its goals in this respect, it is fair to note that an immigrant from countries with more repressive policing traditions will not be well disposed to British policing because of what they have experienced in their country of origin (Pryce, 2016; Pryce, Johnson, & Maguire, 2016).

On the extent of diversity within the police force in recent times, ethnic minority representation remains below the 1999 target of 7%. The Black, Asian and Minority Ethnic (BAME) representation did not match up with the total ethnic minority workforce or population in England and Wales. As of 2016, national statistics from the Home Office revealed that; of the estimated 14% BAME in England and Wales, only 6% are in the police force (Home Office, 2016). The provision of a competent interpretation service will enhance and hopefully increase trust in the Police. It will nonetheless be mistaken if one concludes that an increase in the population of people lacking fluency in English spurs up demand for interpretation services. The intervening factor is trust.

The key consideration in understanding the relationship between demand for interpretation services and their provision lies, in the writer's experience and opinion, in the differing circumstances in which someone lacking fluency in English comes into contact with the CJS. There are three relevant roles, a victim of, witness to and suspected perpetrator of a crime. Increasing trust in criminal justice agencies, most of all, the police service, would be associated with an increased demand for professional interpretation services by victims and witnesses to a crime. There has been excessive attention in the literature to investigative suspects' interviews in the writer's view (c.f. Bull, Valentine, & Williamson, 2009; Milne & Bull, 2003). When the Metropolitan Police Service was established in 1829, it was based on the so-called Peelian principles, named after Sir Robert Peel, the Home Secretary. In particular (1 and 7), two of these principles are relevant to the present discussion. Extracts from these are set out below because they emphasise the Police's preventive role and the public's identity.

1. To prevent crime and disorder, as an alternative to their repression by military force and severity of legal punishment.
7. To maintain at all times a relationship with the public that gives reality to the historical tradition that the Police are the public and that the public is the Police, the Police being also members of the public who are paid to give full-time attention to duties which are incumbent on every citizen in the interests of community welfare and existence.

If there were no increase in demand for interpretation services from victims and witnesses, it would cause concern. If an increase in demand for interpretation services came primarily from Police dealing with suspected offenders, that would also cause concern. In short, the writer hopes for increasing demand for interpretation services from witnesses, and most of all, from victims of crime. Such an increase would indicate diminished mistrust of the Police, and providing an excellent interpretation service to these groups would be a mode of enhancing that trust. Meanwhile, there are yet to be any related studies in interpretation or policing studies exploring the impact of trust-building through a diversified police force on the need for interpretation service.

Having argued that there is a continuing need for interpretation services, the practical question concerns how to organise these optimally. Walsh and Bull (2010) found that more effective planning and preparation before undertaking an interview were associated with increased information yield. Surprisingly, many existing pieces of literature are preoccupied with investigating the nature and practice of planning and preparation (Clarke, Milne, & Bull, 2011; Scott, Tudor-Owen, Pedretti, & Bull, 2015; Walsh & Bull, 2011), and the constrain to planning - such as time pressure (Roskes, Elliot, Nijstad, & De-Dreu, 2013; Walsh & Milne, 2007), workload (Cherryman & Bull, 2001; Clarke & Milne, 2001; Griffiths, 2008; Soukara, Bull, & Vrij, 2002), and busy schedule (Walsh & Milne, 2007). Except for Walsh and Bull (2010) who investigate the effect of investigator planning on interview outcome using interview transcripts, little or no attention has been given to joint pre-interview planning with an interpreter on interview outcome. Also, rapport-building has been acknowledged as a critical factor during interviews, as it allows a working relationship to build during investigative interviews (Oxburgh, Walsh, & Milne, 2011). Research investigating the impact of interpreter presence on rapport building abound (see Driskell, Blickensderfer, & Salas, 2013; Ewens, Vrij, Leal, & Mann, 2016; Goodman-Delahunty & Howes, 2017). Nevertheless, these researchers tend to prefer investigators samples and have often observed little or a negative effect of interpreter presence. In an interpreter assisted interview settings, recent study by Houston, Russano, and Ricks (2017) found substantial reduction in interviewee negative response to questioning by investigators when interpreters appear to; i.) build rapport with interviewee before the interview, and ii.) sit beside (i.e. triangular positioning) and not behind the interviewee during interview. Furthermore, Gillie and Broadbent (1989) found that when interpreting is being disrupted when the primary task of interpreting, it will hinder the recall's performance and accuracy when gathering and translating lengthy information (Boser & La Rooy, 2017; Leanza, Boivin, & Rosenberg, 2010; Mason, 2007). However, these studies

relied on recorded interview excerpts, transcripts, videos and interviewee samples and are more concerned with exploring the interruption practice, linkage with interview strategies, and the nature of interruption usage. Except for Mason (2007) research investigating the cost of interruption with a sample of 12 digital recorded interview sessions, no study, to the best of the researcher knowledge, has considered the effect of interruption on interview outcome, triangulating investigators and interpreters samples. The unanimous and sparse findings on the interpreter's presence, interruption, and joint planning effects on rapport and interview outcome prompt the writer to replicate this study in a new investigator and interpreter sample at the International Law Enforcement Agency (ILEA).

Besides the challenge created by interpreter presence, action and inactions are the quality problems induced by variability in interpreters' identity (i.e. gender and culture/language) and cognitive capability. In lab experiments, Todd and Marois (2004) identify cognitive load as a barrier to interpreting. Hale (2014) found that interpreters from disparate cultural backgrounds may confront difficulties conveying the source message into the target message accurately due to cross-cultural differences. Robins and Yan (2015) further observed regional differences in brain volume between males and females. Men appear to have greater relative grey matter volume in the amygdala, hypothalamus, and medial frontal cortex. The lessons from these studies point out that; cognitive difficulties, disparate cultural background and volumetric differences between male and female interpreters are likely to impact or disturb interpretation accuracy. Until recently, however, the majority of the researches (Angelelli, 2004; Christoffels, De-Groot, & Kroll, 2006; Dong, 2018; Hadziabdic, 2011; Halpern, 2012; Hyde, 2014; Imberti, 2007; Jongh, 1991; Lee, 2009; Lee, 2011; Morgan, 2012; Scollon & Scollon, 2001; Wati, 2017; Zambrano-Paff, 2011) investigating the impact of these factors on interpretation accuracy have been dominated by scholars in the field of simultaneous or conference interpreting, court interpreting, immigration and naturalisation, brain research, clinical psychology, healthcare and business context with deaf professionals or Less English proficient (LEP) individuals. Interestingly, very few studies (e.g., Wadensjö, 2013) had taken the initiative to extend the investigation into interpreted mediated police interviews. Therefore, the thesis contributes to the existing literature by investigating how cognitive difficulty, language, and gender difference impact interpretation accuracy in face-to-face police investigative interviews.

1.2 Structure of the Thesis

There are many contexts in which conflicts may arise from misunderstandings due to language differences. One of the contexts in which such conflicts play out is in criminal justice.

This thesis addresses some of the factors influencing victim, witness and alleged perpetrator comprehensibility and interpretations. It should be noted beforehand that the distinction between translation and interpretation is a little blurred. Still, translations primarily refer to written or digital material, not in real-time. Therefore, it does not permit real-time clarification of meaning. In the following chapter, a conceptual and empirical review of research and literature on the societal need for interpretation service and its optimisation interpretation service is conducted to successfully place this thesis within the existing theoretical, conceptual and empirical frame of reference. Chapter three of the thesis discusses research methodology, focusing on explaining the epistemology, methodology and methods guiding the analysis and result to be presented in the thesis. A series of chapters (i.e. Chapter four to chapter eight) analyse and present the result of a depth and gap analysis using study space analysis (SSA) techniques (chapter four), police diversity influence on the societal need for interpretation service (chapter five), issues affecting interpretation service process optimisation (chapter six) using the thematic content analysis (TCA) in a sample of International Law Enforcement Agency (ILEA) investigators and interpreters. There follow experimental studies that identify variables influencing the intelligibility and informativeness of interpretations services (Chapter seven). Next is a triangulation study (chapter eight) which applied the grounded theory analysis method (GTAM). Chapter nine of the thesis discussed the result of chapters five to eight in relation to its theoretical and practical implication for the evolution of interpretation research and applicability to the different contexts of interpretation service usage. The last chapter (i.e. chapter ten) provides a concluding remark while also highlighting methodological mistakes or limitations and to what extent the thesis has contributed to the advancement of knowledge on interpretation service needs, usage and optimisation.

Chapter 2: Literature Review

2.1 Introduction

Low English proficiency (LEP) in court and face-to-face investigative interviews has been linked to the incidence of coerced or false confession, wrongful conviction, injustice and unfair treatments (Adrine, 2009; Berk-Seligson, 2009; Davis et al., 2004; Dueñas-González et al., 1991; Jongh, 2012; Laster, 1990; Laster & Taylor, 1994). The proportion of people with LEP and language service needs has increased with the changing demographic and language mix of many famous cities in the U.S. and U.K. (Dueñas-González et al., 1991; Jongh, 2012). This discounts the need for interpretation needs for victims of and witnesses to crimes. Meanwhile, scholarly writing (e.g., Laster, 1990) has shown that qualified interpreters are a critical tactical strategy to achieve fairness and social justice for all. The ethnic mix of the justice system (Bird, 1990; Holdaway, 1991) and the nature of an investigative interview (Certoma, 1990) are other criteria. Within the interpreter assisted investigative interview context, pre-interview process (i.e., planning and preparation) and interpretation specifics such as; interpreter presence, position and interruptions, have been observed to impact the nature of investigative interview discussion and goals (Ewens et al., 2016; Mason, 2007; Scott et al., 2015). Furthermore, the need for a transparent and quality interpretation service with witnesses, victims and suspects, has been echoed in recent U.K. parliament committee review and inquiry into the nature of interpretation service provision contracts in the UK (e.g. Justice Committee, 2013; National Audit Office, 2012; Public Account Committee, 2012).

The discussion that follows is designed to explore in more detail scholastic conceptualisation, rationalisation and explanation on societal and investigative interview need for interpretation service within the sphere of offenders' right protection, as well as the wider interpretation service context as it applied to witness and victims of hate crime. The second part of the literature review attempts to understand generic literary issues peculiar to optimising the interpretation service process. The section focuses on pertinent interpretation service processes such as; planning and preparation, rapport building and interpreter interruption. The third part of the review pertains to more specifics interpretation service components that aid in providing evidential credibility and power to victims, witnesses or plaintiffs, and defenders in an investigative interview or a mediate court discussion. The section reviews the scholarly conceptualisation of interpretation service quality and its assessments before examining salient factors identified by previous literature to affect interpretation quality and how these factors

affect interpretation. The final part of the chapter attempts to provide a brief summary of the literature review perspective and provide a peep into what the reader should expect next.

2.2 Societal Need for Interpretation Services

Attempts to organise nations collectively are of relatively recent origin. The attempt is fuelled by ease of communication between nations and the increasing toll on human life as war weapons became more lethal and destructive. The League of Nations, established after World War 1, and the United Nations after World War 2, provided an infrastructure for global attempts to secure human rights. March 23, 1976, marked the beginning of protecting individuals' civil and political rights worldwide, irrespective of colour, race, gender, and culture (Human Right Committee, 1984; ICCPR, March 23, 1976; RSICC, 1990). A cardinal component of the convention is codified in article 14 of ICCPR, highlighting the need to protect individual rights to a fair and public hearing in court (including all crime-linked actions that go before any court appearance). In the light of the above, interpreters were used in England and Wales at every investigation and judicial process – i.e., during exchanges with the victim, witnesses, and if a suspect is identified, arrested, questioned and charged, and after that, in interviews, on bail or remand and all formal stages up to and including the conviction and sentencing stage (Judicial Committee., 2013). It should be understood in everything that follows that the right to interpretation services applies equally to victims, witnesses and suspects. It is unthinkable that the right should be denied to any of these participants in the justice process.

The provision of an interpretation service before 2011 allowed police officers and prosecutors in the U.K. to make a direct phone call to registered interpreters through the development and use of a national register of professional service interpreters- NRPSI (J.C., 2013). Ministry of Justice (MoJ) in 2011- citing structural issues with the national register arrangements, opted for a 4-year renewable language service framework agreement with a privately owned translation company, i.e., Applied Language Solutions, part of Capita Information Technology Solution (popularly called ALS-Capita). The agreement failed to proceed as envisaged because there were instances of a boycott or collapse of court proceedings in protest at low wage rates by many experienced interpreters (Bowcott, 2013) - now £12¹ less than the amount paid in the wake of the framework agreements. Trials had to be postponed or justice delayed and even denied (Bowcott, 2016). Waves of boycotts and the exodus of

¹ The wage rate is reported to be £30 prior or at the inception of the outsourcing arrangement or the language service framework agreement in 2011. See Staton, 2019.

experienced interpreters to other professions or markets constrained civil, tribunal and criminal court agencies' choice-making ability, as well as that of police officers concerning interpretation quality. Police officers on the street who typically send interpretation requests to their forces through smartphones were also limited to the available information. As reported by commentators (e.g., Staton, 2019), the situation led to a loss of interpreting quality because qualification requirements were relaxed. Relax of qualification requirement encourages an influx of less experienced interpreters to take over more complex interpreting jobs (Staton, 2019). At the risk of overstressing the point, while the problem came to a head in the court process, one can only guess what happened to distressed victims and witnesses denied a translation service at this time.

Despite instances of a mass boycott of court proceedings and loss of interpreting quality, the annual cost of servicing the interpreting framework agreement remains high relative to the social and economic benefit (Davies, 2016; Easton, 2006). The use of bilingual and multilingual officers as ad-hoc interpreters was also not feasible because the population of bilingual officers in the Police was disproportionately small, relative to the degree of diversity in some popular U.K. cities - e.g., London, and the prison population. For example, in 2014, Mayfield report that out of a total of 2000 employees of Cambridgeshire constabulary (police officer inclusive), only 50 designated as support officers were bilinguals or multilingual (Mayfield, 2014). Bilingual police officer usage as an ad-hoc interpreter was also constrained by concern for interpreting quality and accuracy, which may not be guaranteed (Berk-Seligson, 2009; Colin & Morris, 2008; National Association of Judiciary Interpreters and Translators, 2006).

In an interview with BBC correspondents (See Manchester Evening News, 2019), Sir Peter Fahy hinted at the need to recruit more bilingual officers to help the Police overcome cultural hurdles such as the language barriers that made communication difficult. Scholars (Colin & Morris, 2008) and professional interpreting associations (e.g. the National Association of Judiciary Interpreters and Translators, 2006) agree that bilingual officers may be used at the initial stage of the investigation of police activities in a foreign language if their language skills have been previously tested. The thesis argues that, besides cultural or language barriers reduction with the use of bilingual officers, bilingual officers with source language proficiency can be used on the street to filter genuine interpretation needs before requesting an interpretation service, leading to more transparency of the interpretation process and encouraging trust-building. Therefore, in light of the discussion, the thesis touches on how having more/fewer bilingual officers impacts an interpreter's need. It is concluded that a police

force with the right language skills combination that matches the population to be policed is desirable for many reasons. The more diverse the population to be policed, the less likely any on-street encounter will be between people sharing a language. That said, the probability that a citizen knows a police officer who shares their language, the more open communication between citizens and Police.

The rest of the chapters explore varying perspectives to understand the needs for interpretation services. It begins with the idealised arguments that the law is fair and just, except for the legal problem of language such as injustice, coerced confession, wrongful conviction, language, communication difficulties ²³ and a less discussed hate crime issue. An often-cited cause of change in interpretation service needs by renowned scholars (e.g. Dueñas-González et al., 1991; Jongh, 2012) includes globalisation, migration, and the increased demand for interpreter services. The discussion is accompanied by a review of international, continental and domestic laws guaranteeing the right and access to an interpreter for non-English speakers or persons of limited English proficiency (LEP). The third discussion focuses on this study's thesis by exploring yet another less discussed driver of interpretation service linked with the extent of police diversity. The discussion explored the extent of British police diversity and the structure, practice, trend, and cost of interpretation service in the UK's CJS. The last chunk of the discussion emphasises the imperative of police diversity towards enhancing ethnic minority trust and confidence in the Police, increasing demand for interpretation service, guaranteeing the right to be heard and legal fairness, and ensuring timely delivery of justice. It also discussed the possibility of a reduction in use

2.2.1 Social Justice and the Need for Interpretation Services

Legal justice, which is associated with the notion of fairness, the right to be heard, and equality before the law (ICCPR, 23 March 1976), is essential in ensuring that moral and social justice is upheld and seen to be upheld (Sullivan, 1975). The call for a competent interpreter during police investigative interviews or court proceedings is due to the neo-classical notion of tactically achieving legal fairness and social justice when language problems for non-English speakers are resolved. Legal fairness and social justice are tactically achieved because the use of a qualified interpreter is only a small piece of the "right to be heard" (Laster, 1990, p. 28). Other essential pieces of social justice and legal fairness include the ethnic composition

² Based on the fact that two-third of the world population are bi- or multi-lingual's and one-third are monolinguals (See Sadlak, 2000).

³ Anderson 2005 estimate the number of languages in 193 countries of the world to be 6000.

of the justice system, the legal discussion involved, and the usefulness of the adversarial system. The section examines experts' predictions and arguments on the need for a competent interpreter in U.S. and U.K. courts, as well as the investigative interview process. The focus is on social and legal justice issues such as wrongful/unwarranted detention, excessive jail term, coerced confession, inequalities, and communication difficulty. The extreme social and legal injustice created by racialisation and handling of hate crime cases reported by the ethnic minority in the U.K. and how competent interpreters can provide equal access to hate crime victims is elaborated.

The usefulness of interpreters, no matter how one looks, cannot be overemphasised. Interpreter mediation in an investigative interview as a participant (Bellioti, 1986, 1991), a conduit to social justice (Downey, 1981; Gobbo, 1983), or a "tactical piece" of the "right to be heard" (Laster, 1990, p. 28) is needed to ensure that person with no understanding of language use in a discussion can comprehend and communicate effectively. It is argued that the need to engage qualified interpreters who can surmount cross-cultural language is essential for the fair treatment of non-English speakers (Jungner, Tiselius, Blomgren, Lütznén, & Pergert, 2019). Fair treatment is achieved because interpretation services help ease communication and provide common ground for meaningful interaction and discussion among persons with language difficulties. Jungner et al. (2019) further noted that the language barrier is best alleviated by using well-trained and expert interpreters.

Historical evidence in the UK, US and Australia (Adrine, 2009; Berk-Seligson, 2009; Coldrey, 1987; Dueñas-González et al., 1991; Jupp J., 1986; Koch, 1985) pointed to the occurrence of unwarranted detention, arrest, conspiracy, coercion and injustice towards a person with difficulty in communicating in English or any other language adopted by the judicial system of a country. Therefore, it is not a coincidence that over the years, the need for interpretation service had evolved from a mere language barrier-breaking phenomenon to a means for ensuring fairness, equity, and social justice to linguistic deficient individuals. Berk-Seligson (2009), perhaps self-evidently, asserts that due process enabling self-expression is germane to achieving fairness and equality in the justice system. It is, therefore, more critical for a non-English speaker or a less English proficient person to have access to an interpreter during police questioning than relying solely on the right to an interpreter provided by the law (Laster, 1990; Laster & Taylor, 1994).

The questioning of victims, witnesses, and (when applicable) defendants are the raw material from which justice arrives. The investigative process is a feed-forward to any court proceedings to provide evidence. Lack of access to a competent interpreter at this stage is an

invitation to a possible misrepresentation of interviewee facts and statements. The effect may make or mar the courts' conclusion or resolve other alternative dispute management mechanisms. Therefore, having access to an interpreter during questioning ensures the validity of evidence and represents what the interviewee (i.e., the witness, victim or suspect) intended, void of possible window dressing and misrepresentation or (to the maximum extent taking into account honest error) misinterpretation. Berk-Seligson (2009) demonstrated that besides multiple confessions and faulty interrogation strategies, lack of access to a good interpreter by a person who does not speak or understand English is likely to cause coerced confessions. Where the interviewee is the victim of crime, failure to achieve redress will induce scepticism about the justice system's fairness. Berk-Seligson (2009) asserts that access to an interpreter during an investigation is more critical to ensure justice is done fairly, equitably and publicly seen to be done fairly. Justice will be fair because evidence to be submitted to court requires validation by a qualified and competent interpreter, without which the rule of evidence may become irrelevant (See Code C of PACE Act 1984). Adrine (2009) noted that for any system built on fundamental human rights and fairness, protection of non-English speakers by providing access to an interpreter and not presuming a-priori understanding of the court language would enhance transparency and fairness of such a system.

Merrills and Robertson (2001) identified the interpreter's presence as vital to eliminating any seen and unseen inequality in the justice system. Trechsel (2005), writing exclusively about the interviewing of suspects in a civil context, contended that an interpreter may not only be needed to eliminate inequality in the justice system but also to "open doors of communication between the defendant and the judge" (p. 329). According to Trechsel, eliminating inequality is a secondary goal required after communication between a judge and suspect has been facilitated. Spencer (2005) clarified that Trechsel's view is an abstraction that is more likely in civil cases. Kahaner (2009) also asserted the need for interpreters to eliminate inequality by ensuring the fair administration of the justice system, thereby protecting the right of non-English speakers. Notwithstanding, the diverge perspective to explaining the need for interpretation services, comment 13 of UN Human Rights Committee (HRC) contends that, the right is to alleviate language difficulties which "may constitute a major obstacle to the right of defence." (CCPR, 1984, p. 4)

What is the scale of the need for interpretation services in England and Wales? As has been repeatedly stressed, the relevant literature on investigative interviews focuses on the suspect. However, for every perpetrator of a crime (excluding the so-called 'victimless' crimes), there is at least one victim and a variable number of witnesses whose experiences must be

captured in an investigative interview. Indeed, suspects represent the tip of the iceberg in terms of the need for interpretation services. Recent statistics on hate crime in the UK and US have shown that people of ethnic minority descent are more likely to be racially abused. The likelihood is because out of the total hate crime incidence recorded in 2018 by the Metropolitan Police Services (MPS) using the Crime Reporting Information system (CIRS) database of MPS, 84% are related to the identity and ethnicity of the victims (i.e., race induced hate crime). The remaining 16% is shared between religion, disabilities, and sex strand of hate crime (Walters & Krasodonski-Jones, 2018). Walters and colleague further stated that from the 84% race-related hate crime incidences, 86% of the victims are from a non-white ethnic background, while only 34% of the offenders are persons of a non-white background. To reduce hate crime in the UK, scholars have put forward suggestions aimed at helping victims of hate crime increase their proclivity to report a crime to the police.

However, due to the lack of trust in the police (Vergani & Navarro, 2020) willingness to enforce hate crime laws (Bell, 2002), and ability to handle hate crime issues and punish offenders, very few victims of hate crime report to the Police (Antjoule, 2016; APPG, 2019; Christmann & Wong, 2010; Zaykowski, 2010). Victims most times care about; success of court proceedings, police seriousness, police ability, certainty of classifying events as a crime (i.e., hate crime legislative clarity), and prosecution difficulty (Chahal & Kusminder, 2017; Chakraborti, Garland, & Hardy, 2014; Chakraborti & Hardy, 2017; Sharrock, Pullerits, Piggott, Edwards, & DeMarco, 2018) as a motivation for reporting hate crime to the police. Beneath hate crime reporting barriers rhetoric's is the issue of cultural and linguistic complexity, which is likely to guide victims' willingness to report hate crime incidents, in combination with hate crime legislation and police effectiveness perception. Victims are more likely to consider the ease of communication and in the word of Vergani and Navarro "how to make a complaint" (2020, p. 5) as a prerequisite for reporting to the Police or other prosecuting agencies (Chakraborti, 2018). It is apparent that if victims of hate crime are unable to communicate in the language understood by the Police, they may be more than ever unwilling to report to the Police even when encouraged to do so (Center for Hate Studies, 2017; Chakraborti, 2017; Fundamental Right Agency, 2016; Sharrock et al., 2018). The unwillingness is partly because, ethnic minority victims of hate crime in the UK who are monolingual are likely to have difficulty communicating proficiently in a language other than their native language (Vergani & Navarro, 2020). More aptly, not all ethnic minority victims of hate crime are expected to be bi- or multilingual or proficient in English. Increase in ethnic minority likelihood to reporting hate crime to the police is therefore more likely when the police force

is diverse enough to improve trust than when it's not. This is because, feelings of belongingness and representativeness is more likely to be present for a diverse police force. Hence, increase in hate crime reporting ought to enhance or improve communication, interpretation service usage and boost victim's trust in the police.

2.2.2 Migration and the Right to Interpretation Assistance

The demand for interpretation services has continued to grow and become more critical because of the ever-increasing effect of globalisation of the world political, social and economic landscape and the economic and environmental induced impact of migration. The effects of migration induced demographic, language and changes, and increasing demand for interpretation service have been discussed - although in passing, in court interpretation books (Dueñas-González et al., 1991; Jongh, 2012). The section touches on some of this discussion and other issues associated with migration's pull and push factors. The socio-cultural, socio-economic and demographic impact of migration and how this increases the need for interpretation service is established. Finally, the section reviews articles and chapters on international and national laws to buttress non-English speakers' right to qualified interpreters.

In England and Wales, many urban cities and towns (for example, London, Manchester) are becoming more diverse, multicultural and multilingual due to the influx of migrants, refugees and asylum seekers (e.g., the Syrian Refugee crisis) from the EU and non-EU countries (Colin & Morris, 2008). These urban cities are also becoming diverse in ethnic composition. The diversity has disproportionately increased the scope and population of persons considered as those with protected status (e.g., physically impaired, children, women) to include ethnic minorities who may be witnesses, victims, and offenders across England and Wales. The dramatic change in demographic, language, social and political landscape of most urban UK cities are due to factors such as political unrest, climate change, land grabbing, forced impoverishment, discrimination, economic turbulence pushing migrant out of their home to seek greener pasture. In addition, migrants are also attracted to other countries because of pull factors such as educational opportunities, good infrastructure, better health, welfare and employment opportunities (Castelli, 2018; Giulietti, 2014; Simpson, 2017; Sultana & Fatima, 2017; Thet, 2012). Migration and demographic changes also result from personal choices for changing environments without push or pull factors (UNMA, 2021). Over the years, the push and pull factors have driven many individuals from non-EU countries relative to EU countries to migrate to the UK. The official estimates show that between 1991 and 2018 - except for 2014 and 2015, when the gap becomes relatively slim (Wadsworth et al., 2018), non-EU

migrants outnumbered migrants from EU countries significantly (Kierans, 2020). According to Kierans (2020), the latest estimate for 2018 suggests that 62% of 527,000 foreigners in the UK are from non-EU countries. Earlier estimation indicates that in 2011, most non-EU migrants are from countries such as India, Pakistan and China (Pettinger, 2019). The expected absorption of around 20,000 Syrian refugees over five years (Wadsworth et al., 2018) indicates migration pressure from non-EU and Commonwealth countries.

The impact of migration on the UK economy is pronounced (Coleman & Rowthorn, 2004). Meanwhile, apart from the economic impact of migration to the UK, the UK's demographic, cultural, legal, social and political mix and landscapes have also been affected (Los et al., 2017; Lowe, 2020; Renwick, 2017; Sobolewskam & Ford, 2019). Sobolewskam and Ford (2019, p. 143) warn of a possible "**British Culture War**" expected to occur in the "wake of Brexit" as a result of cultural and ideological landscape changes on the issue of "migration and diversity", which is likely to generate a "heated debate". Globalisation and migration-induced language, cultural and demographic diversity, and persistent increasing interpreter shortages have led to an increasing need for qualified interpreters in courts, hospitals and conferences to ensure equal access and adequate care is provided (Dueñas-González et al., 1991). Dueñas-González and colleagues attributed the growth in demand for interpretation services in civil and criminal cases across the US and other parts of the world (added emphasis) to the changing demographic, socio-cultural, and linguistic landscape. Interestingly, the number of non-English speakers who are victims of hate crimes or are involved in criminal or civil offences as suspects, offenders, witnesses, or victims increased sporadically (Colin & Morris, 2008).

This increase, when compared with ethnic composition of police force as discussed in Section 2.2.3.1 implies a mismatch between available bilingual officers serving on the street go-between personnel and the number of ethnic minorities in need of interpretation service. This phenomenon is readily observable in many UK cities, with London becoming the most demographically and culturally diverse of any other UK city. Dueñas-González et al. (1991) enunciate the effect of expansive growth in Hispanic and Asian people and language diversity in the home on demand for interpretation services. The inevitable consequence is a corresponding shortage of court interpreters. The right to an interpreter in England and Wales (i.e., Code C of PACE Act 1984) does not evolve in the isolation of other customary inter/supra-national and regional laws and judicial precedents. The right is traceable to regional and international efforts to guarantee all humans' civic and political rights irrespective of race, sex, ethnicity, and colour.

The UN General Assembly of 35-member states in 1966 (initially) ratified an international customary law on civil and political rights (ICCPR) which became effective in March 1976. As of May 2012, the ratification has hit a milestone of between 167 and 170 member states (Council of Europe, 2017; Hoag, 2011). This law became the reference point for all regional, continental and national laws on interpreters. Article 14(1) and 14(3) clauses (f) of ICCPR specifically guarantee equal right of all persons "in the determination of the criminal charge against him, or his rights and obligation...." in a court judicial proceeding and access to an interpreter to a person accused of a criminal offence respectively (ICCPR, March 23, 1976, p. 176). Carefully reviewing Article 14(3) of ICCPR, the right of a detained suspect or defendant to a qualified interpreter, is boldly stated and explicit. This is notwithstanding the fact that the article might have implicitly includes right of other parties (i.e., suspects, victims or witnesses) who may not speak nor understand the language of the court to interpretation service and fairness of the judicial process (Stone, 2018). Paragraph 3 of Article 14 emphasises explicitly a person's entitlements against which criminal charges have been issued in courts or tribunals. Among these entitlements is the right to an interpreting service at no cost (free of charge) if he/she is deemed not to "understand nor speak the language used in court" as stipulated in clause f par—3 of article 14 (ICCPR, March 23, 1976, p. 177). However, the article was not explicit on the extent to which rights and access to a qualified interpreter can be extended to witnesses and victims of crime. Instead, the article only served as a nuance and helpful base for national courts, who often implement international law and declaration of supranational committees. With respect to the right of witness and victims to a qualified interpreter, national courts in UK and EU appear to rely on the well-developed and advanced European Court of Human Rights (ECtHR) case laws. The ECtHR interpret article 6 of the European Convention on Human Rights (ECHR) and extend the maximum right to a qualified interpreter in article 14 of ICCPR (Council of Europe, 1953), to witnesses and victims of crimes.

In the UK's CJS, the Code C of the Police Criminal Evidence Act (PACE) of 1984 (as amended) regulates Police operational, procedural and structural conducts and specifies detention, treatment and questioning code of practice for the police force or officers (Code C, 1984/November 2016). Chapter (Chap.) 13, Paragraph (Par.) 1 of Code C specifies the class of persons who must be provided with a qualified interpreter to interpret essential documents as deemed appropriate by a Chief Officer. The class includes (a) a detained suspect, (b) a suspect not detained but has been cautioned, does not speak nor understand English, and c.) a person who has hearing or speech challenges. In addition, Chapter 13, par. 2 and 5 of Code C

emphasises an interpreter's physical presence. Therefore, the physical presence means that failure to provide a suspect deemed less English proficient (i.e., LEP) or unable to speak or understand English will invalidate any evidence gathered against such suspects.

Unlike article 14(3) of the ICCPR, Chapter 13 of Code C of PACE Act 1984 explicitly mandates a qualified interpreter to a witness and victim. The right to a qualified interpreter for witnesses and victims is stated in Note 1A of Chapter 1. It was clarified that anyone who voluntarily comes to the police station to assist in an investigation should be offered the same right to a qualified interpreter as the suspect. Note 1B of Code C identified those that qualify for the same right to includes witnesses, victims, those who receive admission before volunteering to act as an appropriate person and any other person who may assist with the investigation. Per note 1B, it becomes imperative that the service of an interpreter or a legal adviser be provided to a witness or victim just the same way it is provided to a suspect. The case of *R. v Van Axel and Wezer* (1991), where the trial judge emphasises the importance of interpretation in court proceedings involving non-English speakers, is a good example.

2.2.3 Police Diversity and UK Interpretation Service

Bird (1990) claims that to guarantee equal access and the right to be heard, the composition of the justice system is also an essential consideration in combination with the provision of a competent interpreter. This section argues that increasing police diversity is related to increased demand for or expenditure on interpretation services. There are three sub-sections that allowed for a structured discussion. The first section explores the historical trend in British police diversity. Contextualising interpretation services in the UK, the structure, practice, and cost of interpretation services by 11 selected police forces in the UK are reported and the implication discussed. The third sub-section concludes by evaluating current interpretation services issues in the UK regarding the quality and cost of interpretation as commented by the UK parliament committee and news agency commentators.

2.2.3.1 Diversity of the British Police

Despite rapid change in demographic, language, and cultural mix of many UK and EU urban cities (Colin & Morris, 2008), the justice system and, more specifically, the police workforce rarely reflect this change (Bury et al., 2018; Wright et al., 2013). In the wake of Brexit, when a British culture war is postulated to occur (Sobolewskam & Ford, 2019), the police reflection of the community its serves are expected to be far from desirable. The British police force populations far back as the beginning of January 1990 is arguably a white dominated workforce with the proportion of ethnic minority officers estimated to be 1.035%

(or 1,306 ethnic minority police officers) of the total police workforce (Holdaway, 1991a). This percentage represents a less than 1% increase in ethnic minority officer representation more than two decades ago (i.e., between the late 1960s and 1980s), and this marginal increase is attributed to several programmes, reports, and conferences inaugurated by the Home Office in 1976, 1982 and 1986 and other efforts before this period.

The Home Office efforts in 1976, according to Holdaway (1991a), only managed to produce thirty-two (32) applications from ethnic minority applicants, with none leading to an appointment into the Police. The 1982 Home Office reports respond to the Scarman Enquiry report in the aftermath of the London riots of 1981. This report appealed to a few police forces' consciences (e.g., the West Midland and Leicestershire forces). They initiated recruitment awareness campaigns and education access programmes for potential ethnic minority applicants. The 1986 conference organised by the Minister of State, Douglas Hogg, in response to the 1985 urban riots in the UK, was to encourage police service to develop new recruitments and engagements initiatives and set up a policy of action and direction for the Police. The conference is also an opportunity to inform participating forces of the Home Office decision to monitor all police forces recruitment procedures. Unfortunately, Douglas Hogg stopped making the central government responsible for the main recruiting policy, programmes and initiatives. Obviously, despite the efforts, white police officer disproportionate representation in British remains apparent because the likelihood of having a black or Asian officer responding to a public complaint and distress notification remains an illusion (Holdaway, 1991a).

Between 1997 and 1999, when census and police diversity data seemed to be in low supply, ethnic minority representation in the British Police jumped from 1.035% in 1990 to 2% in 1997 (Berman, 2013; Bhugowandeen, 2013). There was a likelihood that the growth remained stable in 1998 and 1999 (Home Affairs Committee, 2016) or improved slightly during this period (added emphasis). The jumps represent the lag effect of the Home Office's latest efforts to organise conferences and programmes for the police forces in 1986. Even though the jump is an improvement in police diversity attributable to Home Office efforts, the gain was soon offset by a 1.5% growth in ethnic minority population and ethnic workforce from 5% and 7.5% in 1990 to 6.5% and 9.5%, respectively, in 1999. The death of Stephen Lawrence in 1993, Sir William MacPherson's Inquiry in 1999 and the Home Office Action plan of 1999 set the stage for increased recruitment of ethnic minorities in the year 2000 onwards. In 2003, police diversity increased to 0.9% from 2% in 1997/1999 to 2.9%. Since 2003, the proportion of ethnic minorities in the Police has increased within the range of 0.2% and 0.40% annually until

2012. In 2012, ethnic minority representation in the police reached 5%, and in 2015, ethnic minority increased by 0.5% to 5.5% when the ethnic workforce and overall ethnic minority population in England and Wales expanded from 6.5% and 9.5% in 1999 to 14% and 11.4%, respectively (Home Affairs Committee, 2016). The period between 2016 and 2020 also saw a steady growth of between 6% and 7% ethnic minority police officers in the UK, while ethnic minority and the workforce population continue to grow geometrically. The pattern growth in ethnic minority police officer population relative to the total British police workforce from 1990-2020 is reported in Table 2. 1.

Table 2. 1: Police Officers Ethnic Diversity (1990-2020)

Year	Total Police Staff Strengths	Number of Ethnic Minority Police Officers	*%
1990	NA	1306	1.035
1997-1999	NA	NA	2
2003	132,509	3,868	2.9%
2004	138,468	4,594	3.3%
2005	141,059	4,971	3.50%
2006	141,523	5,236	3.7%
2007	141,892	5,519	3.9%
2008	141,859	5,793	4.1%
2009	143,770	6,290	4.4%
2010	143,734	6,642	4.6%
2011	139,110	6,615	4.8%
2012	132,242	6,664	5%
2013	127,623	6,537	5%
2014	125,785	6,715	5%
2015	124,739	6,982	6%
2016	121,655	7,218	6%
2017	120,516	7,562	6%
2018	119,357	7,850	7%
2019	120,023	8,329	7%
2020	125,709	9,174	7%

* Percentage is taken directly from journal sources cited below even when number of ethnic minority officers is not disclosed and total annual police staff strength is unknown for 1990 and 1997 to 1999.

Source 1: Allen and ZAYED (2021, p. 10) – 2012 to 2020

Source 2: Berman (2013, p. 7) - 1997, and 2003 to 2020

Source 3: Home Affairs Committee (2016, p. 3) - 1999

Source 3: Holdaway (1991a, p. 365)- 1990

From the above presentation, police diversity is better off in 2020 than in 2007 and 4.1% more than in 2003. Meanwhile, ethnic populations between 2003 and 2020 surged. The implication is that every gain in terms of ethnic minority representation in the police force is rendered meaningless or reverted by continued growth in the ethnic minority population in the UK. Clare Davis noted that if the growth pattern in Table 2 continues, it will take at least 100 years to achieve the British Police's desired level of ethnic minority representation. According to Silverstone and Walker (2020), even though the police diversity drive can be said to have achieved some representation milestones, the police force is far from being described as a diverse police force. In the wake of Brexit, changes in demographic, language and cultural mix are expected to be near or less than zero, as migration law is tightening and mobility constraints for EU migrants are imposed (Coleman, 2016). Except for a significant proportion of EU migrant residents in the UK who may likely remain in the wake of Brexit by documentation (Falkingham & CPC, 2016)), the justice system is expected to be less diverse because non-EU migrants are less likely to be absorbed into the justice system.

2.2.3.2 British Police Interpretation Service: Structure, Practise, Trends and Cost

In the UK, the interpreting service is used by many of the public institutions, including the "National Health Service (NHS), Ministry of Justice (MOJ), the police force, HM Prison Service, National Probation Service, Criminal Prosecution Service and central and local government" (Davies, 2016, p. 32). In 2011, the Conservative-led government announced and outsourced interpreting services to a private agency to reduce cost. A recent press release by the Police Chiefs Council - PCC (appended as Annex A1), supplied to the writer before the PCC issued it with permission⁴, described the current provision of interpreting services as been orchestrated through a managed commercial service. For every potential interpreter, the PCC sample their past interpretations and check their quality. Interpreters failing such checks would be removed from the approved list. The press release distinguished interpretation services from translation services and the special arrangements made for document translations and interpretations of particular sensitivity, for example, in counter-terrorism contexts. The press release revealed that on-street interpretation services were available to front line officers

⁴ Thanks are due to Ms Vivian Zuball. Business Manager at Greater Manchester Police, who is also responsible for the provision of interpreter services to the force.

through their smartphones. A selection of a language of choice enabled access to a relevant interpreter so that non-speakers could communicate with the Police conveniently. The request comes at a cost charged to the forces concerned rather than an individual police officer. The cost makes the system vulnerable as some forces may be reluctant to request or rationalise interpretation requests. It was equally clear that Greater Manchester Police Business Manager Ms Zuball ensured that the Greater Manchester force would deny no legitimate language request. Ms Zuball was not aware of any case where interpreter competence became an issue in appeal proceedings.

Paragraphs 13.2 and 13.5 of Code C on mandatory provision of a qualified interpreter for witnesses (or victims) with verbal or writing deficiency in English language during court or during face-to-face police investigative interview are strict. However, the trends in the UK, Australia, and US point to a possible police aversiveness and reluctance to use an interpreter (Berk-Seligson, 2009; Colin & Morris, 2008; Wakefield, 2014). The outsourcing arrangement in 2011 seems to have changed the trends in the last ten years. In the United Kingdom, the police arranged "for a professional interpreter for suspects or witnesses... judged to lack sufficient English language skills to be interviewed, compared to the United States, where bilingual police officers are still seen to conduct interviews in Spanish and act as interpreters" (Mulayim et al., 2015, p. 29).

Table 2. 2: Estimated Annual Interpreter Cost for 11 Police Force in Five Years

		Annual Expenditure on Interpreting Service				
		2015/2016 [£.00]	2016/2017 [£.00]	2017/2018 [£.00]	2018/2019 [£.00]	2019/2020 [£.00]
S/N.	Forces					
1	Leicestershire Police	319,394	345,652	303,388	340,503	417,717
2	Merseyside Police	203,891	203,425	157,346	182,675	219,055
3	South Wales Police	280,984	304,437	289,366	320,597	341,463
4	Surrey Police	203,168	206,045	211,554	212,385	198,988
5	Derbyshire Police	253,092	269,103	191,585	392,355	211,568

6	Scotland Police	1,004	1,006	874	700	735
7	Cumbria Police	18,229	24,918	31,272	31,243	28,125
8	West Midlands Police	-	-	989,322	966,133	910,862
9	Essex Police	386,136	273,459	278,710	252,502	342,377
10	Bedfordshire Police	268,703	245,865	182,827	189,585	202,667
11	Cambridgeshire Police	379,234	314,784	246,107	288,339	359,656
	Total	2,313,835	2,188,693	2,882,353	3,177,016	3,233,213
	% Change		-5.4084299	31.692877	10.222987	1.7688804

Note:

- Value not available or missing; All Value are in Pounds (except stated otherwise;

As shown in Table 2.2, the cost of providing and maintaining interpretation services on the aggregate seems to be on the rise, owing partly to an increased demand for interpretation services by non-English speakers. Except for the need to ensure interpretation services quality, the cost implication does not compare with the benefits of having a fair justice system where all rights are protected irrespective of language or cultural differences. Whether or not the population of non-English speakers in England and Wales increases due to migration or fall or remains the same, demand for interpretation service is more likely to continue the upward swing if ethnic minority trust in the police force is enhanced. Police diversity is an avenue to build community trust and confidence in the Police. As rightly noted by Holdaway (1996), a society with an improved trust in the Police is associated with the likelihood of more bilingualism because police diversity is a vital chunk towards the achievement of the goal of the Race Relation Act 1968

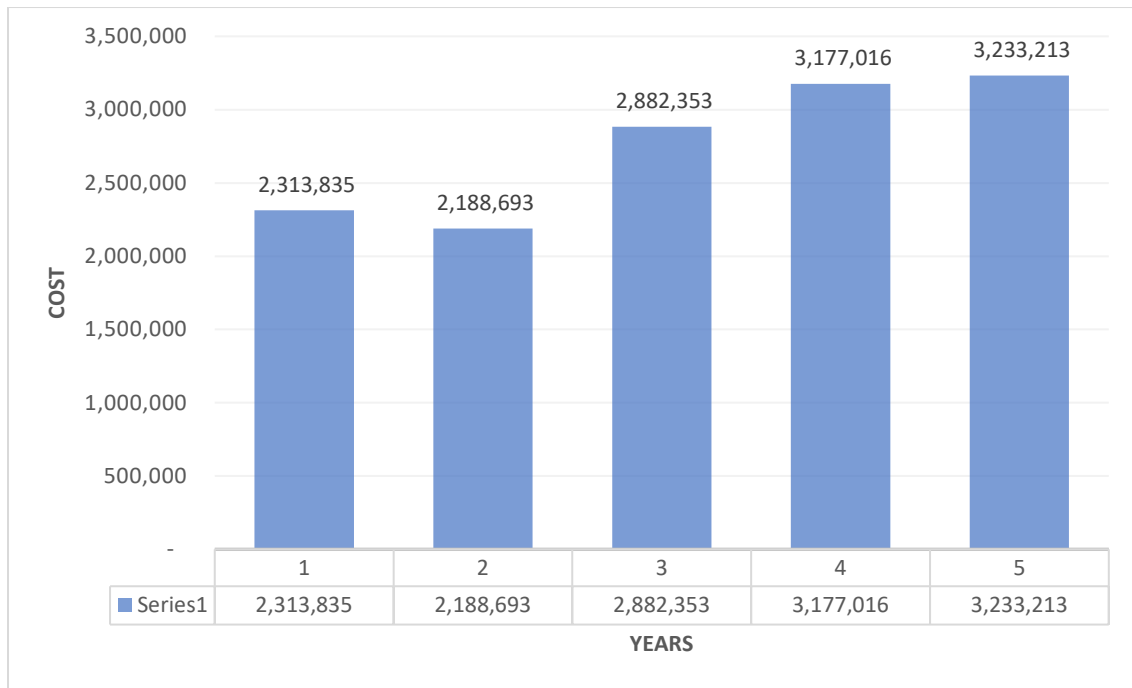
To buttress the argument above, Table 2.2 provides an overview of annual expenditure by 11 police forces in England, Wales and Scotland, excluding the Great Manchester Police

and some other police forces for five years, starting from 2015/2016 to 2019/2020.⁵ Data reported in Table 2.2 indicates that annual expenditure on interpreting service increase in 2015/2016 through 2016/2017 for many of the forces except Merseyside, Essex, West Midlands, Bedfordshire, Leicester and Cambridgeshire Police with a reduction in their annual expenditure. Between 2017/2018 and 2019/2020, many erstwhile forces with a reduction in their annual expenditure witness an increase. Some others who initially increase in the earlier years witness a decrease (or further increase). Annual estimates of interpreting service expenditures for all the 11 police forces revealed a relatively stable gradual increase in expenditure from as low as £2.1 million and as high as £3.22 million. For the most recent years, the total interpreter cost equal £3.23 million and multiplying this value gives a national value of a whopping £11.445 million (£11.218 million with BTP included)⁶.

Figure 2. 1: Five years Pattern of Interpretation Service Cost

⁵ The Data were made available courtesy of a request sent to the 11 police forces official emails.

⁶ The approach to providing a rough national estimate was as follows. It was established that the responding forces represented some 28% of national police officer strength (or 29% with British Transport Police (BTP)) included (Allen & Audickas, 2020). The cost in the most recent year for which information was gathered from participating forces suggested a cost to those forces of some £3.2 million. Multiplying up to gain a national figure yields a rough estimate of £11. 445 million (or 11.218million with BTP) in the most recent year for which data were available.



Based on Figure 2.1, expenditure only managed to contrast in 2016/2017, after which it takes an upward turn with no hope of returning any sooner. The contraction in aggregate expenditure on interpreting service in 2016/2017 coincides with when the official data on the proportion of bilingual's officers of minority origin in England and Wales remains constants (at 6%) between 2014 and 2017. As the proportion increase between 2018 and 2020 to 7%, aggregate expenditure on interpretation services also increases, as shown in Table 2.2 and Figure 2.1 or the total row of Table 2.2 comparatively. These observed trends in the available data show the extent to which it may be postulated that police diversity increases expenditure on interpretation service via increased demand or request for interpretation services. The increased request for language service is a signpost of improved trust and confidence in British Police. The forces demographic and staffing diversity imply that the need for interpretation is likely to vary according to the level of trust and confidence in a specific force. The variability is corroborated by the difference in expenditure patterns by many police forces survey and reported in Table 2.2.

2.2.3.3 Interpretation Service Issues in UK's CJS

The outsourcing arrangement, otherwise called the "framework agreement", was introduced to complement the existing national registration arrangement in 2011 without necessarily facing the old system (Justice Committee, 2013). As expected, interpreting service supply surged, but a crash in qualification pre-requisite, rates of pay, and a jump in interpreting

expenditure (no thanks to instances of no appearance by the contracted interpreters) berated the outsourcing arrangements' expected efficiency (Bowcott, 2013, 2016; Staton, 2019; Wood, 2013). Ever since the BBC reports of 2006 on the rising cost of interpreting services, interpreting cost has been seen as imperative but justifiably unnecessary. As a result, the Home Office and Secretary of State for Housing, Communities and Local Government have commenced reviewing language services across government agencies (Easton, 2006). Speaking on behalf of the House Committee on Public Account (PAC) on December 12, 2012, the chairperson, Rt. Hon, Margaret Hodges described the whole outsourcing arrangement as an excellent example of "how not to contracts public service" (Public Account Committee, 2012, p. 1). Honourable Hodges further expressed her disapproval as she dubbed the outsourcing framework of 2011 a "chaos". In a similar tone, the chair of the Justice Committee, Rt. Honourable Sir Alan Beith, in a commissioned report presented to the parliaments in February 2013, berated the MOJ (i.e., ministry of justice) handling of the outsourcing process, describing it as not falling short of a "shambolic" exercise (Justice Committee, 2013; Woods, 2013).

In another twist of events, Sir Alan Beith explained that the MOJ as a government institution lacks an adequate understanding of what the court needs. In addition, the MOJ is not quick enough to respond to professional interpreters' warning signals, safeguarding against an eventual collapse of court interpreting service (Woods, 2013). This implies that the outsourcing arrangement, which replaces the registered public interpreting service framework (Office for Criminal Justice Reform, 2007), is not void of issues and identified shortcomings (Justice Committee, 2013; National Audit Office, 2012; Professional Interpreters Alliance, 2012). However, the outsourcing arrangement has successfully been able to centralise and reduced the wage rate. On the other hand, it has failed to attract quality interpreting service and often led to a denial or delay of justice with its cost implication consequences.

The dominant opinion held by many public space commentators is that the outsourcing proposal has only successfully attracted more inexperienced linguistics than experience ones (Baksi, 2013; Justice Committee, 2013; Professional Interpreters Alliance, 2012; Public Account Committee, 2012; Staton, 2019). The opinion is valid because the pay rate per unit of service pegged at £30 before the outsourcing arrangements had been reduced to £18 at the commencement of the outsourcing arrangements (Staton, 2019). This situation made many experienced interpreters with good and vast years of expertise and professionalism boycott court proceedings and prefer to rather sojourn for better-paying jobs elsewhere in other industry sectors and outside the shores of the United Kingdom (Bowcott, 2016). Massive

exodus and boycott of court proceedings by experienced interpreters led to many court cases being adjourned or delayed (Bowcott, 2013, 2016). As a result of the adjournment and delay, valuable time and taxpayer resources are wastefully expended (own emphasis). It becomes expedient therefore that in order to reduce incidence of delay, adjournments and resource wastage, bilingual officer with proper knowledge of witness and victim language should be drafted to conduct on the street communication and interaction with English language deficient individuals.

2.2.4 Trust and Interpretation Service Usage: The Role of Police Diversity

This section builds on the previous discussion emphasising the imperative of police diversity to increase interpretation services demand. It is the last bite to explore an unpopular but alternative perspective to buttress how ethnic minority use of interpretation service can be enhanced and encourage. The section explores the role of police diversity in enhancing ethnic minority trust and confidence in the Police. Recent efforts at ensuring the diversity of the Police and other judicial institutions are noted in passing. The section further explains how improved trust in the police enhances public cooperation with the Police in terms of willingness to report a crime and the perception of the seriousness of the crime, hence increasing the demand for interpretation services. The section also clarifies the naïve but true notion that having more ethnic minorities or bilingual officers in the Police will reduce the need for interpretation services and provide a synopsis of the study background.

2.2.4.1 *Diversity Imperative*

Beyond the need for an interpreter to respond to societal issues such as communication difficulty, distrust, and injustice is the imperative of police diversity. A diverse police workforce is needed to increase trust and confidence and deal with linguistic and cultural issues relating to crime seriousness perceptual differential between host and migrant communities (Los et al., 2017) and ethnic minority reluctance to report crimes. Los et al. (2017) discovered that Asian immigrants in the UK are less likely to report heinous crimes, such as murder, homicide, drug trafficking, terrorism and hate crime to the police (own emphasis). However, they are more likely to report crimes relating to vehicle and property theft that they perceive as severe to the police. Ethnic minority perception of crime seriousness and of the police force's ability to handle cases reported relatively is likely to influence the decision as to whether a crime should be reported or useful information should be provided to the Police or not. Because ethnic minority crime seriousness perception is likely to influence proclivity to report crimes to the Police, existing police diversity should be improved upon. The diversity can be achieved by drafting bilingual officers with the right language proficiency to interface or serve as the

go-between the police and the public. The use of bilingual officers ensures that unbiased, coherent and accurate information is elicited from victims and witnesses of crimes. However, distrust and scepticism is not only the prerogative of the ethnic minority individual alone, police institution and new recruit also have concern for trusting ethnic minorities. Miles-Johnson and Pickering (2018) observed that for a sample of Australian bilingual police officers, scepticism towards person of diverse group (e.g. religion, gender and ethnicity) is likely to increase marginally after the completion of social awareness training organised by Australia police institution. Hence enhancing police institution diversity is either way likely to reduce ethnic minority and police officer scepticism and distrust of one another.

The good news is there is renewed effort in recent times to improve the ethnic mix of the police force and the entire judicial system. Colin and Morris (2008) report on the plan of the central government department responsible for the police service or national police institution (i.e., the Home Office) to recruit more police officers that are bilingual and train existing staff on bilingualism. They assert that the plan will be more advantageous if recruited or trained bilingual officers are not meant to replace expert interpreters. In an interview with Sir Peter Fahy (Chief Constable of the Greater Manchester Police), he reiterated the goal of building a diverse police force to remove the language barrier and enhance communication to improve race relations with the police (Manchester Evening News, 2019).

Holdaway (1996) noted that an improvements in race relation and reduction in UK police institution (or ethnic minority) scepticism and suspicion of the ethnic minority (or police institution), suggest a possible increase in recruitment of ethnic minority into the police (See also Holdaway, 1991a; Holdaway, 1991b). Drawing on the Allport contact hypothesis, Bradford et al. (2019) found that trust in the police seem to be high for a particular diverse group when police workforce population is dominated by such group. Brandford and colleagues further observe lower crime rate in a society with high level of trust in the police. As such, it was concluded that trust in the police is socially and geographically constructed. An increase recruitment of bilinguals and competent ethnic minority officers into the police implies ease of on the street communication and interaction with ethnic minority and enforce a restricted role on the bilingual officers as a frontline; investigators, interrogators, detectives and interpreters. The argument is consistent with the conception of a bilingual police officer's role in the capacity of a "bilingual investigator and interpreter" that is to be restricted and caveated (National Association of Judiciary Interpreters and Translators, 2006, p. 2). The constrained use implies that bilingual police officers can be used for general on the street business that requires the use of an interpreter and at the same time serve as a filter to determine

who need an interpreting service. The thesis argued that when more bilingual officers are recruited or trained, the police force workforce will not only be a reflection of the community they protect but won their trust and admiration. Therefore, police diversity will increase the demand for interpretation service, improve interpretation quality, achieve legal fairness and social justice, provide equal access to justice, and timely delivery of justice.

2.2.4.2 Trust in the Police and Use of Interpretation Service

The thesis argued that a more diverse police workforce ought to increase trust between ethnic minorities and the Police, thereby increasing interpretation service usage. An increased interpretation service usage is based on the notion that trust is a critical determinants of ethnic minority individual decision to use interpreters (Edwards, Alexander, & Temple, 2006; c.f. Edwards, Temple, & Alexander, 2005; Stoutland, 2001). When the police force reflects the society it seeks to protect by encouraging diversity and recruitment of competent members of ethnic minority, trust is created between the minority communities and the Police (Holdaway, 1991a). Trust is necessitated because, ethnic minority scepticism about police institutions bias (Holdaway, 1996), handling of cases, fear of victimisation, reprisal, scapegoating and targeted hostility (Center for Hate Studies, 2017; Chakraborti, 2017; Fundamental Right Agency, 2016; Sharrock et al., 2018) has affect ethnic minority perception of crime seriousness and proclivity to report a crime to the Police. A diverse police force therefore, is likely to increase demand for interpretation service because ethnic minority trust and confidence will increase and reduced, scepticism translating into more cases being reported. An increase in reported cases will then translate into increase demand for interpretation services by an ethnic minority.

According to the neo-classical view of Laster (1990) on the need for interpretation, an increase in demand for interpretation service is a signpost to the fact that a non-English speaker may enjoy some degree of legal fairness, equality and the right to a fair hearing. These rights may, however, be more strengthening with the presence of an ethnically diverse police force. Bird (1990) work asserted that the diversity of the justice systems as a whole' provides a additional layer that guarantees the right to be heard for witnesses, victims, and suspects in addition to the provision of interpretation service. More so, valuable time can be used more productively when trained bilingual officers can provide interpreting services on the street, pending when expert interpreters' service would be required or requested.

Furthermore, the quality of interpreting service will also be improved because the marginal drop-in interpreting service request occasioned by bilingual officers' use means that experience, skills, and qualifications for an interpreter can now be reviewed and standardised further. The standardisation ensures that the interpreting service provider contacts those

qualified on behalf of Police and Crime Commissioners (PCC) since many inexperienced interpreters may find it hard to cope with the reviewed experience, skills and qualification standards. Therefore, engaging professional interpreters in the core area of investigation enhances specialisation and sharpens interpreters' skills on core investigative tasks, responsibilities, and tactics.

Although recruiting or training more bilingual officers is useful as on the spot interrogators and detectives are likely to be more effective and privy to valuable and intelligent information from non-English speaking witnesses and victims. Their role as bilingual officers is restricted, and having a bilingual officer does not necessarily replace the need for a competent and qualified interpreter. The role, according to the NAJIT, is restricted in that "if the officer's foreign language skills were previously tested and documented, bilingual officers could conduct police business in a foreign language in emergencies where no exchange of sensitive information is requested" (Berk-Seligson, 2009, p. 13). The restricted role is based on bilingual officers' low level of training in interpretation service. Bilingual officers' involvement beyond the restricted boundary, therefore, creates an unpleasant speech situation. The speech situation manifests in the form of "coerced confession" and "poor handling of interaction" (National Association of Judiciary Interpreters and Translators, 2006, p. 2). The consequence of which is "prejudicial" for "defendants in courts" (Berk-Seligson, 2009, pp. 1–13). The argument is also echoed by Colin and Morris (2008, p. 28) arguments that bilingual police officers with only "language ability" and no "interpreting skill" should not be used as replacements for "competent interpreters". According to Collins and Colleague, this is likely to introduce a weak link into the legal system with a subtle effect on the legal proceeding, such as "misleading a witness" (Colin & Morris, 2008, p. 23). Jungner et al. (2019) noted that the use of relatives, colleagues and even children to perform the role of an interpreter might at best be successful in establishing communication, but less effective in reducing interpretation error, while also failing in many instances to enhance interviewee cooperation and involvements in an interview. It is ill-advised to use bilingual officers or colleagues in place of an expert interpreter in sensitive investigative interview cases. Therefore, bilingual police officers are expected to reduce the demand for an expert interpreter on the street cops alone and increase requests for quality interpreters from the ethnic minority community due to enhanced trust and confidence in the police force. The increase in public demand for interpretation services is expected to make irrelevant any temporal decrease in demand for interpretation by street cops.

The discussion above concerns police investigative interviews (i.e., those interviews with victims and witnesses as part of the criminal justice process). These form a small minority

of the occasions on which the Police use interpretation services. In addition to the need for interpretation service for victims and witnesses emphasised in the above discussion, optimising interpretation service processes towards the success of an investigative interview and minimising undesirable outcomes is essential for a fair and equitable justice system. The discussion that follows reviews theoretical and empirical literature and explores scholarly arguments on issues that may impact interpreter assisted investigative interview processes optimisation, such as planning and preparation, rapport building, and interpreter interruption.

2.3 Interpreter Assisted Investigative Interview Process Optimisation

Investigators in an investigative interview rarely have time to plan and prepare for an interview due to time constraints, job pressure, and organisational culture (Roskes, Elliot, Nijstad, & De-Dreu, 2013) Alison, Doran, Long, Power & Humphrey (2013). Lack of joint pre-interview planning and preparation with an interpreter to enable a proper grasp of the goal and objective of the interview has been linked to; failure of some investigative interviews prior to their commencement, destabilisation, forgetfulness, and cases of repeated interview (Roberts, 2012) Zulawski and Sturmanzalz (2012). The presence of an interpreter in an investigative may make or mar interview outcome (Aranguri et al., 2006; Driskell et al., 2013; Goodman-Delahunty & Howes, 2017; Houston et al., 2017). The presence of an interpreter may enhance rapport if it helps to bridge the investigator-suspect relationship and may be dangerous if engagement needs to achieve rapport is obstructed. Investigative interviews are often characterised by turn-taking, free call and interruption. This is due to the need for an interpreter to produce interpreted renditions of the primary speaker's statement or respond immediately to an issued statement (Böser, 2013; Wadensjö, 1995). Frequent interruption, nonetheless, is inimical to the goal of investigation to detect cues to deceit and elicit accurate information in a criminal proceeding (Mason, 2007). Interpreter interruptions are reported as being responsible for: concealment of information, recall difficulty and disruption of information flow (Mason, 2007; Milne & Bull, 1999; Roy, 2000). Based on literature from criminal psychology, linguistic, policing and group dynamics, the present study examined i) whether interpreter interruption and presence in investigative interview affect interview outcome (e.g. information yield, recall difficulty, cue to deceit) and rapport building respectively, and ii) the nature or impact of pre-interview planning on interview outcome based on a perception survey of ILEA investigators and interpreters.

2.3.1 Planning and Preparation

Planning is an essential attribute of interviews, while interview processes are keys to any investigation. Planning is referred to as getting ready mentally and strategically for an effective interview situation (CTI, 2017). On the other hand, preparation is the act of readiness of an interpreter prior to an interview, which includes the location for an interview to be held, the readiness of the environment, as well as technical and administrative substance or materials (Rachlew, 2017). Rachlew (2017) noted that planning could help create a welcoming atmosphere and ask the right questions and in the right situation. Elsewhere, Walsh and Bull (2010) found that effective planning and preparation before undertaking an interview is associated with the outcome of information gathered and quality of interview.

It is argued that due to over-busy and sometimes overloaded schedules of officers, they do not have time to plan and prepare before conducting interviews that has something to do with investigations (CTI, 2017). Following the implementation of investigative interviewing, officers have found that they, in fact, save time through proper planning (Roberts *et al.*, 2012). Roberts *et al.* (2012) established that effective preparations decrease the likelihood of having to re-interview victims, witnesses and/or suspects. The authors asserted that preparation as part of a professional interview also reduces the resource-draining endeavour of prosecuting cases – only to be dismissed by the courts – due to low evidential value or technicalities. Planning emphasises the significance of the planning process prior to the interview commencement so that clear aims and objectives of the investigative processes are established; topics of interest could be identified, questions designed and the location of the interviews, timing and recording procedure are considered (Abbe & Brandon, 2012).

According to CTI (2017), essential elements of good planning concerning investigative interviews includes (i) obtaining as much background information as possible on the incident under investigation, including all relevant information on the person to be interviewed; (ii) understanding the rationale of the interview based on an investigation plan, recognising all the relevant and competing hypotheses to be explored, including the possibility that the suspect is innocent; (iii) assessing what additional information is needed and how it can be best obtained; (iv) following the legislation and associated guidelines and rules; and (iv) preparing for the mechanisms to be used (extracting exhibits, logistics, venue, equipment functioning, seating arrangement, lawyers, interpreters, and so on). An investigative interview planning is a complex tool, comprising many moving and important attributes needed to ensure a smooth running of the interview (Mendez, 2016). This is because the essence of an investigation is acquiring relevant evidence, usually the most available source, which comes from people. It is

postulated that once the facts have been collected and reviewed, one could plan ahead by drafting a series of general questions related to the case at hand. Although every investigative interview is unique, each interview seems to typically include a few standard questions. Therefore, in order to save time, the interviewer should develop a template that includes these commonly asked questions to have control over the interview itself.

Effective planning can make the investigative interviewer succeed to have relevant case requirements before the interview to be perfectly ready for interviews. Zulawski and Sturmanzalz (2012) observed that organising investigative interviews without appropriate planning by the investigators prior to the interview may destabilise the interview room and experience forgetfulness of important legal evidence when the need arises. Therefore, adequate planning may involve the capacity of the investigators to prepare and structure the interview questions prior to the commencement of the interview, as well as exercising their readiness to be present before the interview coupled with confirmation of necessary documents for use (Shawyer, Milne & Bull, 2009).

Researchers observed that time pressure had become a key factor that affects planning and preparation for effective investigation (Roskes, Elliot, Nijstad, & De Dreu, 2013). This implies that time is a very important indicator that could determine the outcome of the investigation. Recently, Alison, Doran, Long, Power & Humphrey (2013) observed that attitude to planning could be associated with issues of organisational culture and the investigators' interview philosophy as well as their planning capacity, which might predispose investigators for a successful investigation. The above position is reiterated by Kim et al. (2018) in a new sample of Korean investigators while comparing the role of time pressure to believe and organisational culture factors. Kim and colleague clarifies that, time pressure have a weak role in determining the proclivity of investigators to plan and prepare prior to an interview. Instead the Kim and Colleagues just like Alison and colleagues noted that the believe system and the organisation culture of investigators are pronouncedly more responsible for low planning attitude and interest. That being the case, early and effective prior planning could generate a positive result, whereas late planning or the wrong approach to planning can sabotage the efficiency of the investigations. Accordingly, it is believed that prior planning, time pressure, perception of the investigator and attitudes to the investigation could promote or mar the successful investigative process and negatively affect interviews (Roskes, Elliot, Nijstad & De Dreu, 2013).

Presumably, investigators or interviewers are supposed to be closer to the interpreter than the interviewee in terms of relationship, simply because the interviewee is probably an

accused person or a victim in the investigations. Thus, there are several reasons that the investigator may find it difficult to plan with an interpreter towards investigative interview successfully towards achieving the accuracy of interpretation. Of course, it is a known fact that interpreters play crucial roles to bridge the communication gap between cultural differences through communications (Zhang, 2015). However, this role does not predicate events or occurrences during interview processes exactly as investigators and interpreters may perceive it. That is why Admin (2010) stated that dynamics of oral interpretation, intercultural communication awareness and language form an understanding of the environment and the communication accuracy targets for effective investigation might hinder mutual interactions between interpreters and investigators. Maybe that is one of the reasons it is usually observed that investigators are usually in opposing views with the interpreters, especially when the investigators expect friendly body language from the interpreter before and after interviews. These laxities are capable of not supporting the unity between the interpreter and the investigators in order for them to plan the execution of the investigation or interview together.

Further, Chen (2010) articulated that the interpreters' responsibility to convey the meaning of language interpretation with a high degree of flexibility and objectivity and the inflexible characteristics of interpretation decision itself can inhibit connivance between the interpreters and investigators to create an uncompromising situation among them. The authors iterated that interpretation speed, time and behavioural expectations of the investigators from the interpreter that may be against the well-established codes of ethics of the interpreter can generate disarray between them. These cogent reasons may make either the interpreter or the investigator susceptible to damaging their professional integrity that would disrupt the accuracy of the investigations. This is because investigative interviews require face-to-face interaction. The unpredictable conversation topics that usually arise during interviews and differences in cultural information could negatively expose them and hinder their mutual planning potential.

No matter how novel is some of the research on planning and preparation discussed earlier, there appear to be no consideration of interpreters assisted interview context nor was the study interested in exploring the impact of planning behaviour by investigators with or without interpreters on interview outcomes. The thesis in chapter 6, therefore bridges the gap in literatures by exploring the nature, beliefs and impact of planning's in a sample of both investigators and interpreters so as to extend the findings to the context of interpreter assisted interview.

2.3.2 Rapport-building during interpreter-assisted interviews

Rapport is referred to as a harmonious, positive relationship that tends to be productive between an interviewer and interviewee (Evans, Houston & Meissner, 2012; Walsh & Bull, 2012). It refers to the most critical element of investigative interviewing (Walsh & Bull, 2012). Researchers echoed it as one of the effective primary ways to obtain accurate and reliable information and for the efficient conduct of interviews (Driskell, Blickensderfer & Salas, 2013). The technique tends to encourage a conversation that will engage the interpreter and interviewee in a conversation to establish rapport. Therefore, it can be argued that engaging a professional interpreter during investigative interviews is a common behaviour that can positively impact productive interview outcomes. At the onset of the interview, interviewees must perhaps be informed why they have been brought in for questioning and of the formalities that apply. CTI (2017) recognised that victims must be aware of the interview because being interviewed can make people nervous. It further suggests that interviewers shall not work towards a pretend friendship with interviewees but should endeavour to engage the interviewee in a cooperative and relaxed relationship in order to create an avenue for rapport building. The type of harmonious relationship could help stimulate memory and communication to sustain smooth interactions throughout the interview.

Tickle-Degnen and Rosenthal (1990) hypothesised a theoretical model to conceptualise components of rapport building in terms of mutual attention, positivity and coordination. The authors highlighted that mutual attentiveness deals with consistency in shared interest and concentration demonstrated via a deep sense of participation. Mutual attentiveness is linked with joint concentration, such as mutual gazing, which can create a cohesive interaction. Abbe and Brandon (2013) argued that shared understanding is a significant mental component where the interviewee and interviewer would possess a joint mental form of the intention and procedure of the interview. Of course, mutual insight can be displayed in varieties such as introductions, elucidation of the concern, and regulations for interaction.

Secondly, the positivity component of rapport building suggests feelings of mutual friendliness and care. Positivity is associated with an emotional impact that demonstrates the agreement and level of involvement. Bernieri and Gillis (2001) stated that rapport building is positive when it tends to display fruitful concern among individuals and help support reciprocal attention and agreement. When positive rapport is built or developed between investigators and interviewees during an investigative interview, it helps discover the truth, which can

promote the accuracy of the interpreting. It has been argued that if interviewees sense that there is a cordial rapport between them and interviewers, they desire to speak more openly (St Yves, 2006). Conversely, when they feel that their relationship with the interviewers is unprotected, they tend to control their level of interaction and conceal information regarding the interviews. Thirdly, the coordination component involves the equilibrium and harmonious relationship between the accomplices. As such, rapport building by coordination entails a mutual pattern of response among people regarding their speech, body movement or postural mimicry that is capable of proliferating equilibrium between parties (Kieckhafer, 2014).

Establishing rapport between interviewer and interviewee is very important because it tends to facilitate effective discussions and cooperation that could help investigators gain interviewees' trust to make room for relationship-building easily and promote a more productive interpersonal relationship experience among them (Bull & Soukara, 2010; Vallano & Schreiber Compo, 2011; Abbe & Brandon, 2012). Research has established that a considerable proportion of guilty offenders are ready to provide an accurate account and even confess right away, while others are undecided when summoned for interviewing (Mayfield, 2016). Officers applying an aggressive, hostile or insulting approach run the risk of making the suspect not cooperate and not provide any information. In contrast, it has been revealed that applying rapport techniques during such investigative interviewing - may encourage guilty offenders to cooperate and provide information or even confess (Vallano & Schreiber Compo, 2011).

Investigators with high intellectual capacity have recognised the negative impact of interpreters on rapport building (Soufan, 2011). Further, the US Department of Defence field manual on intelligence collection reprimanded that a third person may negatively impact the establishment of rapport (Driskell, Blickensderfer & Salas, 2013). This situation is not different in medical setting involving patient visit and communication with a physician via interpreters where speech are reduced, reviewed, small talks and personal trust eliminated (Aranguri, Davidson, & Ramirez, 2006; Wiener & Rivera, 2004). Tribe and Lane (2009) citing an earlier study (i.e., Tribe and Sanders 2003) shows that interviewee may be less comfortable with the presence of interpreter for fear of information leaking out to the community members and confidentiality and privacy of their information jeopardise. Kosny et al. (2014) observed that mental health patient are less likely to perceive interview positively, when interpreters attitude and approach appears inappropriate and sometimes overtly formal with a lot of repetition.

Elsewhere, Driskell *et al.* (2013) examined how introducing a third party would affect rapport in police interviews and found no difference in rapport when compared to interviews

conducted by one or two interviewers. This has explained the challenging role of an interpreter as fundamentally different from that of an interviewer. The interpreter's role is not to question or interrogate interviewees but to aid communication by bridging the barrier between two people who do not speak the same language (Ewens, Vrij, Leal & Mann, 2016). Snook, Brooks and Bull (2015) in a survey with sex offenders of 100 imprisoned men in Canada, observed that during interviews with the suspect, the interviewer has a particular responsibility to assess whether the suspect is vulnerable and to explain the right to silence, the right to legal counsel, as well as other rights of the suspect, understandably and candidly. The authors iterated that police services where investigative interviewing has become standard practice report a significant decrease in disputes between lawyers and police – almost to the level of being non-existent.

Rapport building that concerns people who are suspects, victims and/or witnesses are recognised parties of the interaction during investigative interviews (Criminal Justice System, 2011). They are virtually included among the statutory members of the interviews as enunciated by interview guidelines and practitioners' training internationally (Scottish Executive, 2011; Criminal Justice System, 2011). Nevertheless, research on rapport building has been surprisingly sparse in this context (Marche & Salmon, 2013). These findings have established rapport building as a technique that could facilitate effective communicative relationships and improve the interaction between interpreters, interviewers, and interviewees during investigative interviews. Therefore, with a highlight of the humanitarian effectiveness style of interviewing that habitually involves using supportive interview techniques with some aspects of empathy and respect, there is a need for rapport building during and after interviews (Vanderhallen, Vervaeke, & Holmberg, 2011).

The process of establishing rapport may require the interviewees and interviewers to classically take time to get to know each other before the actual phase of the interview. This tends to occur in question and answer sessions, assessments of more formal interactions in the process of establishing rapport among the people (Criminal Justice System, 2011). The purposes of the rapport phase may be to allow the interviewee to comfortably relate with the interviewer to safeguard the interviews and allow the interviewer access to the interviewee's language capability (Criminal Justice System, 2011; Scottish Executive, 2011). The rapport phase is used to climb interviewee's communicative approach to the interview, for example, the use of open questions or sometimes through the practice of recall that is assumed to reduce their anxiety of social support (Brubacher, Roberts, & Powell, 2011; Hershkowitz, 2011; Roberts, Brubacher, & Powell, 2011). An investigative interview that is conducted with mutual

interpersonal interaction freedom could achieve accuracy and build rapport among interpreters, interviewers and interviewees (Scottish Executive, 2011). Alison et al. (2014) document the effectiveness of rapport building based investigation techniques over an accusatorial approach during interview with high stake target or interviewee who are threat to national and global security (See also Goodman-Delahunty & Howes, 2017). Researches conducted by Kassin et al. (2007) and Russano et al. (2014) with police and military intelligence personnel provide support for the use of rapport based interview techniques when dealing with high stake targets. The current study suggests that rapport building involves the capacity of the interpreter to engage the interviewee to recall a neutral event unrelated to the event that is occurring during investigations.

Houston et al. (2017) demonstrates that rapport building session between interpreters and interviewee before an investigative interview and the positioning of the interpreters during the interview impact the extent to which interviewee respond negatively during a formal investigative interview. More importantly, interviewee or target are found to respond more positively and less negatively whenever good relationship and rapport exist prior to the interview between interpreter and interviewee as well as when interpreter is position in a triangular position beside the interviewee, rather than behind interviewee or between investigators and interviewee. Therefore, it can be argued that the ability and capacity of the interpreter to build effective rapport during the investigative interview process may help such an interpreter surmount all forms of interruption that may negatively impact the investigation.

It is also noted that interviewer or investigators may engage in building rapport prior to the interview using a similar free recall and questioning technique that are to be utilised during a subsequent formal investigative interviews' session (Collins, Doherty-Sneddon & Doherty, 2014). The statement above suggest that the use of an open rapport approach is usually respected in the face-to-face investigative interview by practitioners such as; the police, military, intelligence personnel and investigators. This interview practice could give both the interviewer and interviewee opportunities to rehearse the communication styles that will be adopted during the substantive interview for understanding and language clarity (Brubacher *et al.*, 2011; Roberts *et al.*, 2011). However, some criminal justice practitioners usually use the open method to build rapport without prejudicing others. This has been suggested as an effective technique during training programmes, especially in the UK (Collins, 2012; Marchant, 2013). La Rooy, Lamb and Memon (2010) reported that the open approach to the rapport building phase in a survey indicated that 60 per cent of Scottish criminal justice practitioners never put such technique into practice, and 26.7 per cent use it rarely. The

cognitive benefits of this method are severally introduced, which are not being put into practice during various criminal investigations (Brubacher *et al.*, 2011). While the benefits of rapport-based interviews are clear, less is known about their viability when the assistance of interpreters is required (Abbe and Brandon 2014). Very few research efforts have been directed at exploring rapport building, development and maintenance within face-to-face interpreter-assisted interview context (Abbe and Brandon 2013, 2014, Russano et al. 2014).

As rightly disclosed by Goodman-Delahunty and Howes (2017, p. 2) “it is unclear how and to what extent interpreters help or hinder interviewers’ efforts to establish and maintain rapport with interviewees” from the perspective of both the interview practitioners themselves and interpreters. As pioneering, intuitive and pace setting as the research of Houston and colleagues (2017) is, they failed to settle the issue of whose duty it is to build rapport. Interpreter appear still unsure as to whether they should assist in building rapport and when the assistance should occur. The existing PEACE model saddled investigators with the role of building rapps and many interpreters are expected to act neutral and impartial. The neutral and impartiality expectation from interpreters as a conduit of communication during interview, nonetheless appear inconsistent with any form of cooperation by interpreter with interviewee or target. Chapter 6 of the thesis explore the perception of investigators and interpreters on the utility of interpreter placements during interview and interpreters-interviewee pre-interview rapport building on subsequent interview outcome and quality.

2.3.3 Interview Interruption During Interpreter-Assisted interviews

The widespread of travel and migration in today's society are often the case why investigators and interviewees are not sharing the same source (first) language and vice versa (Beattie, 2011). However, the investigators or interviewers likely may have little or no understanding of the interviewee's mother's tongue and/or second language (Ewens, Srij, Leal & Mann, 2016). Thus, the investigator's ineptitude at communicating with the interviewee's first language might result from interviewing inaccuracy due to language compatibility. This would make the investigators conduct the interview in a language that is recognised as foreign due to the fact that the first language, which is the language of the interviewees, is not the same as that of the interviewers. This would call for the consideration of the interview to be conducted with the aid of an interpreter in the interviewee's first language that may as well violate the interaction processes and mutual understanding between them. This may enunciate momentous interruption to disrupt the effectiveness, integrity and credibility of the interviews.

Basically, interruptions are frequently expected to occur in interactions that involve interviewers, interpreters and interviewees during investigative interviews. It can be argued that interruption could serve as a mechanism to take a turn that may lead to different perceptions of the person that is interrupted and the interrupter's interpersonal engagements, attitudes and involvement during investigative interviews. Scheglo (2011) acknowledged that an interruption connotes a starting up of some intervention by one person while another's turn is in progress, often including not letting them finish. An overlap is regarded as one of the interruption procedures, which refers to the fact that more than one person is talking at a time. However, interruption does not necessarily imply overlap (Scheglo, 2011). Interruptions represent a violation of the basic turn-taking rules and a possible way of claiming the right turn during interpreter-assisted interviews (Beattie, 2011). In order to communicate with different agents through conversation in human-agent and/or agent-agent interactions, it is pertinent to reconsider some useful phenomena, such as interruptions that are frequently occurring phenomena between human beings as regards to investigative interviews (Crook, Smith, Cavazza, Pulman, Moore & Boye, 2010). It is fundamental to recognise the concept of interruption to be associated with dominance in interpersonal communications, but in recent times, a more impartial philosophy has resurfaced, which distinguishes between two strategies that are based on the contents such as disruptive and cooperative interruptions (Murata, 2014; Youngquist, 2018). At the same time, different kinds of interruptions could be distinct from the original organisational philosophy of taking turns, considering the amount of simultaneous speech and utterance completeness (Murata, 2014).

Even though interruption is desirable due to its ability to assist interpreter in managing large information as a chunk of smaller unit. Gillie and Broadbent (1989) shows that factors such as; processing complexity, interruption-main task similarity and interruption length are likely to be responsible for the disruptiveness of interruption as a techniques for managing too much of an information, with processing complexity and similarities of main task to interruption task as the most significant factors causing disruption of interruption usage. Notably, different interruption types and strategies that impact the way in which interactants are perceived regarding their mutual interpersonal attitude and interaction-related aspects are engagement and involvement (Beattie, 2011). Human-agent interaction is often modelled on human-human interaction hypotheses; therefore, interruption procedures may have similar effects in human-agent interaction (Cassell, 2010). For example, the way a user's interrupt discuss while interacting with a conversational agent might provide a guide to interpersonal attitudes (i.e. the dominance and friendliness), and engagements (the coordination and

cooperation necessary for interaction) of the user (Sidner, Lee, Kidd, Lesh, & Rich, 2013; Glas & Pelachaud, 2015). Studies showed that an agent's turn-taking behaviour influences human's impressions of it in terms of interpersonal attitude and personality (Maat, Truong, & Heylen, 2010). However, it is believed that interrupting behaviour is never a sign of power, disturbance and/or disengagement; rather, it may contribute to the interplay between different interruption types and strategies that might reveal effects on the perceived attitudes (friendliness and dominance), engagement and involvement of an interrupter. For example, a cooperative interruption strategy might be perceived as an indicator of increased friendliness and engagement that tend to determine the harmonious relationship between the interviewers and interviewees (Glas & Pelachaud, 2015).

In most cases, when there is a convergence of the interview, the interviewee and interviewer at the centre of investigative interviews may experience interruption. The interactions at that point require the involvement of all, in terms of communication, attitude and behaviours that may regenerate cooperative relationships or disengagement among them (Sidner, Lee, Kidd, Lesh, & Rich, 2013). Again, the dynamism of the interpreter to exhibit a high level of language professionalism in order to overcome interruption during the interview situation is pertinent. However, interpreting in a face-to-face condition requires the observation of speaking protocols that when the interpreter has finished what has been interpreted before, another speaker emerges in order to achieve accuracy of the investigation (Viezzi, 2012). The observation of the protocols as a mechanism in the interview discussion will help communication be organised in segments that tend to vary considerably in length to avoid interruptions that will negatively impact the investigative interviews (Viezzi, 2012). According to the US Navy Field, the interpreter who listens to the entire phrase, sentence, or paragraph before translating is capable of targeting near to accuracy and can overcome interruption (Department of the Army, 2016). It is also stated that there is no preferential consideration for any party involved in the investigative interview process so that one can interrupt to the detriment of others (Soufan, 2011).

It is suggested that for interviewees to speak using their first language, they tend to be more reasonable in communication and understanding than those who are less proficient in that target language. Thus, these interviewees tend to have a larger vocabulary and can better express themselves efficiently compared to those who speak in a foreign language (Ullman, 2011). Again, those that are using a foreign language to speak may easily want to interrupt to chip in words at a certain point of discussion just because they notice that others are not conversant with the language of expression, which of course may create rancour during the

investigative interviews process (Huang, 2010). It noted that foreign-language speakers are somewhat cognitively demanding (Evans, Michael, Meissner, & Brandon, 2013). For this reason, the interviewees usually chose to provide a shorter statement and less detail. It is established that speakers of foreign languages have less to talk about because they need to actively inhibit neural control mechanisms that are capable of making them respond in their first language (Huang, 2010).

When an interpreter is admitted into the interview process, it gives the interviewees authority to communicate with the use of their first language and provide a rule in order to inhibit interruption. However, the introduction of an interpreter disrupts the flow of conversation, and those speaking through an interpreter are likely to provide fewer details than interviewees speaking in their first language, thereby control interruption during interviews (Evans, Michael, Meissner, & Brandon, 2013). Researches indicate that interruptions lead to annoyance and anxiety, and annoyed interviewees may volunteer less information (Bull, 2010; Fisher, 2010). It is postulated that interruptions may make memory retrieval more difficult, which would result in less information being reported to inhibit the interview accuracy during an investigation. Besides, interviews with interpreters can take longer, and the flow of information exchange is slow yet minimises interruptions (Bull & Soukara, 2010). Mason (2007) clarifies that in a court settings, interruption may affects the quality and final output of interpretation by introducing alien information not in the original material, thereby altering the fidelity of the interpretation to the original materials. Böser (2013) also noted that the use of interruption creates a mismatch between the goal of allowing a free recall session as against account elicitation, and the interpretation strategies agreed upon between the interpreter and the interviewer (or investigators). More so, it is observed that interruption of interviewee during face-to-face interview is more likely to be profoundly orchestrated more when an interpreter is used to assist practitioners such as; a physician during medical consultation, than when the interview involves only the interviewer or investigators i.e. a dyadic interaction (Leanza, Boivin, & Rosenberg, 2010).

Murata (2014) noted that interruptions had been often considered power displays (dominance), while the presence of a greater impartial philosophy has emerged. The author enunciated that this view has led to the identification of two broad types of interruptions, often referred to as intrusive and cooperative. The terms intrusive interruption in interaction imply an attitude or stance of the participants that are non-power and/or disconfirming (Goldberg, 2010). Murata (2014) established a distinction that cooperative interruptions are attitudes intending to help the speaker to coordinate the process and/or content of the ongoing

conversation (which is associated with this study), while intrusive interruptions are posing threats to the current speaker's territory and disrupting the process and/or content of the ongoing conversation. Researchers identified different sub-strategies (cooperative/disruptive) such as agreement, showing concurrence, compliance, understanding or support; assistance, providing the current speaker with a word, phrase, sentence or idea to aid in completing utterances and clarification (Bull & Soukara, 2010; Murata, 2014). It could be a process of having the current speaker clarify or explain previously elicited pieces of information that the listener is unclear about.

Rhodes, Fletcher, Blumenfield-Kouchner and Jacobs (2018) suggested that two situations have happened that inhibit individual inability to function communicatively, which is somewhat referred to as disruption in communication. The authors mentioned that these two situations are malfunctions in articulation and difficulty in understanding the particular speaker. Of course, these prevailing situations may be cognitively instigated that can cause the interpreter and the interviewee to become dumfounded in extreme cases during the interview questioning period. Seeber (2011) posited that the human brain is the centre of information processing, which coordinates activities such as thinking, perception, language and emotions. The authors maintained that this human brain processed information in the memory that is divided in terms of long-term and short-term memories that help the effective articulation and fluency. When these memories are bombarded with much information, it tends to become overloaded to experience disruption to exhibit malfunction. This functioning difficulty can impact interactions and language repertoires of individuals, including that of interpreters towards effective interpretation. Researches (Cafaro, Glas, & Pelachaud, 2016; Cutrell, Czerwinski, & Horvitz, 2001; Eyrolle & Cellier, 2000; Foroughi, Malihi, & Boehm-Davis, 2016; Nelson & Goodmon, 2003; Youngquist, 2009) has shown that interruption is likely to impact the line of thought, error rate, working memory capacity and performance, interpersonal attitude, engagements, perception of interpersonal dominance and work activity.

Seeber and Kerzel (2011) observed a high effect of working memory on interpretation fluency. The authors enunciated that processed information in the short-term memory, usually reserved on working memory, can promote fluency amounting to 51 per cent to disrupt communication if experience overload. This exposes the importance of human memory in interactions and how that could disrupt face to face interaction if it is not functional. Baddeley (1986), in his working memory model, claimed short-term memory is involved in carrying out the temporary preservation of information humans need to perform different mental tasks, such as cognitive operations and daily thinking tasks. The working memory is limited by the processing of new

information (Seeber, 2011). As such, the interpreters might cope with their own cognitive load by stopping or pausing the interviewee (while they were giving an account to the interviewer) in order for them to interpret that witness account accurately. However, such interruptions could disrupt interviewees' recall, as memory retrieval (at the most detailed level) involves concentration. Meanwhile, optimising the interpretation process depends on the extent to which the bottom-line goal of interpretation quality is achieved.

Even though Böser (2013) study unlike that of Mason (2007) is conducted in the context of a face-to-face investigative interview, the result was based on objective judgements of the researchers via a discuss or content analysis techniques. The experience and perception of real-world interpreters and investigators was in no way sought directly, despite the fact that this expert and professionals are the actual participants who knows better about issues affecting the interpreter assisted interview. More so, the study setting is purely experimental in nature and may have reveal one among many realities of interruption usage and effects which are likely to be discovered through a field study or perception mapping of actual parties to an investigative interview. The last part of chapter 6 therefore explore how difficult is interruption, it nature and disruptive effects on memory recall and interview outcomes. The review now turns to explore factors that impacted the likelihood of a quality interpreter's service from both the perspective of what it means to achieve translation and as well as interpretation quality.

2.4 Interpretation Service Quality Optimisation

This section of the chapter switches from the context of interpretation to the quality of interpretation in this section. Included in this thesis are a number of literature reviews pertaining to interpreter-assisted investigative interviews material within the context of an organisational framework that is already extensively covered elsewhere in the thesis. The empirical study that follows the literature review deals with a specific subset of the topics that have been discussed in the literature review. The objective of a conventional one-on-one interview between witnesses, victims, and investigators is to successfully influence the interviewee's decision-making process prior to or during the interrogation to extract accurate and comprehensive information (Bull et al., 2009). However, the optimization of the decision-making process is altered in the setting of an interpreter-mediated investigative interview. In this situation, investigators must rely on the competency and knowledge of translators to influence the decision-making process of non-English speakers. This has an effect on non-English speakers' likelihood of voluntary information disclosure and the degree to which such

information is transmitted appropriately and correctly. As shown by Hale et al. (2017), Behm (2014), and Zambrano-Paff (2011), the effect of interpretation on non-English witnesses and victim's statements is discernible on credibility assessment and linguistic power of witnesses and victims in courtroom discussion or proceeding. The effect may make or mar the conclusion and verdict of the court process or a police investigation. Therefore, interpretation quality must be at its highest level possible, and that interpretation achieves cultural equivalence of the target language. Interpretation quality refers to replicating meaning, syntax, colloquialism and semantics of the source language in the target language. Its goal is to ensure that the pragmatic and semantic meaning of the source language is captured in the target language. It is also concerned with the extent of cultural equivalence of the interpreted target language to the source material. In what follows, the target language is taken to be English.

Even though an investigative interview aims to elicit complete and accurate information, for non-English speakers, the objective of an investigative interview is best achieved only when the quality and accuracy of the interpretation service is guaranteed. However, the achievement of interpretation service quality cannot be limited to using the proper interpretation tactics and procedures such as; appropriate interruption, note-taking, and chuchotage (i.e. whispering of a message to witness or interviewee from one language to another) alone. It is expedient to control proactively for limiting factors- within and external to interpreters likely to alter the quality level of interpretation. These limiting factors include, but are not limited to language; complexity as against simplicity, foreignness as against familiarities, differentiation as against similarity (Brislin, 1970; Miller & Beebe-Center, 1958; Nida, 1964; Sinaiko & Brislin, 1973, 1990; Spilka, 1968; Treisman A., 1965), colloquialism and idioms usage (Guillemin, 1995) which makes, speedy and easy translation pretty tricky. Brislin (1970) observed that the content, complexity, language and interaction of content and language strongly affect interpretation quality.

Other proximate factors impacting interpretation quality are yet to be explored by these studies or in the context of interpreter assisted investigation interviews. These factors deal with the configuration of human cognitive capacity, impacting human information processing speed, load, and cognitive abilities (Halpern, 2012; Todd & Marois, 2004). As the most extensive breathing configuration on earth (Timarová et al., 2014), human memory is constrained in its processing, working or short, and extended memory capacity. Researches (Seeber, 2011; Seeber & Kerzel, 2011; Todd & Marois, 2004) have demonstrated that the ability of the working memory or the visual short term memory (i.e. VSTM) of Todd and

Marois (2004) to recall or represent in detail, the whole gamut of what it easily perceived of the natural world is a function of the activities in the posterior parietal cortex (PPC). The PPC activities represent chunk of information (Miller, 1956) stored in the visual short-term memory (VSTM) – i.e. the recall repertoire. Activities on the PPC consists of several interrelated components, for example, auditory, storage, recall, language processing (encoding in a source language and decoding in target language), articulation and verbal task which are required contemporaneously – as in simultaneous interpreting, or sequentially (i.e. during consecutive interpreting session). The higher the activities on the PPC, the lower the chunk of information represented in the VSTM (Todd & Marois, 2004), which, in turn, negatively affect accuracy. Higher PPC activities create cognitive difficulty, i.e., disturbance to the intellectual, physical condition in a low recall, analytical capability, insight, verbal communication (Effiong, 2019). The difficulty is because the VSTM is limited in its capacity to store a chunk of information beyond a certain threshold. So, therefore, the information or activities overload and processing limitation of PPC imply a likelihood of a cognitive load, which creates cognitive difficulty and limits the volume of information retained in the VSTM.

In addition to human memory information processing limitation, language or cultural attrition (forgetfulness) and complexity of the source language is likely to affect the extent to which an interpreter delivers a quality interpretation. For example, suppose interpreters are deficient in symbols, signs, rituals, customs, norms, and gestures of the source or target language, providing accurate interpretation in a target language (Hale, 2014; Migration/Refugee Review Tribunal, 2011) be hard to achieve. The notion that interpreters who speak the same language with the speaker (witness/interviewee and interviewer) may not be deficient in source language culture arises from the popular notion that; people who speak a similar language are likely to have near-identical or exact culture (Scollon & Scollon, 2001). Hale (2014) argued that people have access to many cultures, which allow for the possibility of cross-cultural differences in people who speak the same language and live in the same environment. Nevertheless, subcultures within cultures shared only by others of the same educational level, socio-economic status, occupation, sex, age group could experience differences in language expressions (Migration/Refugee Review Tribunal, 2011). Prior research (Jongh, 1991; Lee, 2009; Zambrano-Paff, 2011) in the United States and Australia have emphasised the importance of the right choice of linguistic mechanism and cultural expertise in ensuring interpreting quality and reducing the negative effect of non-disclosure on witness chance of getting a fair hearing. To ameliorate the adverse effect of cultural differences

on interpreting quality, Wati (2017) advocates using cultural filtering to extract complex semantic components in the source language that cannot be accommodated in the target language.

Notwithstanding the impact of language and length of interpretation on interpretation accuracy, gender is one characteristic that causes a division of the human race into two universally acceptable groupings towards performing their respective social roles (Effiong, 2019). Uyanga and Effiong (2017) offered that gender characteristics are most commonly associated with males and females. In sociology and related fields, gender is a social construct and not a biological sexual difference (Halpern, 2012). Moghaddas (2013) observed that gender differences are mental and physical distinctions between males and females. Effiong (2019) asserted that psychologically, gender differences are usually differences in the presumption of psychological functioning and behaviours of both sexes (male and female) and virtually might be due to complex interplay of biological, developmental and cultural factors. The author stated that these differences are attributable to mental health, cognitive capacities, personality and predisposition towards the assigned responsibilities and tasks. Research on the gender difference in intelligence or cognitive capability is controversially debated (Halpern, 2012). In mathematics, men are regarded as better at the top extreme but are worse at the lower extreme than women (Halpern, 2012). In verbal, short writing, and auditory or listening task, women perform than men (Bridgeman & Morgan, 1996; College Board, 2009). Women are less prone to hearing loss than men in their younger and older adulthood age (Al-Mana et al., 2008; McFadden, 2008; Pratt et al., 2009). Although there is a big difference, a related line of study (e.g. Hyde, 2014) revealed that while males and females differ greatly in mathematics and verbal abilities, they are far more similar than they are different. Thus, gender differences only emerge in certain contexts. For a logical flow of thought, the background is in two parts. The first part focuses on interpreting service excellence with specific illumination on quality and accuracy of interpretation. The second parts explore factors or mechanism impacting interpretation quality during an investigative interview session with a witness and victims—some of the coping mechanisms adopted by interpreters successfully overcome the challenges posed by these factors.

2.4.1 Interpretation Service Excellence Assessment

Because interpreter performance or end product in interpreted rendition is an essential part of credibility assessments and evidence power of victims and witnesses in the CJS, explicit consideration of excellence of the interpretation becomes indispensable to guarantee fairness

and equality to victims and witnesses. In arriving at a verdict, judges are not expected to receive interpretation at face value but are to subjectively judge the accuracy or cultural equivalence of the interpretation relative to the original statements taken by police or during court interrogation (Hermans, 2013). Interpretation equivalence across cultures denotes the extent to which “word, scale and the normative structure” of an interpretation is appropriate for the target culture from which the interpretation is derived (Arnold & Matus, 2000, p. 122). Equivalence consists of linguistic, item and scale, normative, technical and clinical equivalence (See Arnold & Matus, 2000 for Description). However, because equivalence is a complex task to achieve (Hermans, 2013), scholars have employed the notion of resemblance or similarities to capture the extent of an interpretation service equivalent to the original. Accurate interpretation, on the other hand, according to the pragmatic description of Yule (1996), refers to the extent to which the interpretation is a resemblance of the syntax-preposition, truth condition (semantics) and intended meaning of the original (spoken or unspoken). It is therefore imperative that interpretation capture a whole lot of the content of the original. The original’s content captured by the interpretation includes the culture, syntax, norms, real-life experience and possibilities, and appropriate sequential events as intended in the original. Providing an interpretation that accurately depicts the original information is necessary to provide legal resemblance and similarities, thereby saving witnesses, offenders, and victims from any linguistic accrued disadvantages (Zambrano-Paff, 2011).

To formally evaluate interpretation excellence, equivalence is a crucial measure in research (Arnold & Matus, 2000). Equivalence focuses on the extent to which the interpretation replicates the meaning expressed in the original material. It is the basis on which interpretation quality is indirectly judged (Brislin, 1970). Therefore, interpretation quality is an informal evaluation of how interpretation replicates the original meanings. Quality of translation (and by extension, interpretation) has been measured from varied perspectives. For example, Miller and Beebe-Center (1958), more than half a century ago, measured quality as a subjective rating of the whole meaning of interpretation as a whole relative to the source or original language. Pfafflin (1965) noted that the quality of translation and, by extension, interpretation is judged based on reading comprehension and sentence clarity observable from the interpretation. Carroll (1966) shows that interpretation quality is subjectively measured by rating a unit of meaning in a translation based on fidelity (less use of foreign or alien words and minor omission of essential words) and intelligibility – the extent to which the intended meaning of the translation is culturally close to the source language position. The author suggests that

objective measures of quality such as word counts complement the subjective measures and may not guarantee quality interpretation. Brislin (1970) and Sinaiko and Brislin (1973) clarified that a community of equivalence criteria may be more productive than a single equivalence criterion or focusing on a unit of meaning with a unit of meaning scale in assessing interpretation quality (See also Sinaiko & Brislin, 1990). The authors observed that translation or interpretation quality assessment is a comparative analysis of the association and overlap of meaning error discover by monolinguals and bilingual raters and the translators' ability to provide judgement, perform a translated task and use similar signs and answer when asked about the content of the target and the source or back-translated language. The judgmental ability assesses the level of interpretation quality, and while the performance ability gauges the impacts (Sinaiko & Brislin, 1990). The performance testing of interpretation quality of Brislin (1970) and Sinaiko and Brislin (1990) is similar conceptually to normative equivalence forms of cultural equivalence, while the testing of the judgement of quality overlaps with the item and scale equivalence in Arnold and Matus (2000). The technical and linguistic equivalence of Arnold and Matus (2000) appeal to the error in meaning association or overlap aspects of back translation approaches tested previously (Sinaiko & Brislin, 1973, 1990).

Apparently, in conference interpreting, Pöchhacker (2001) noted that the quality of interpretation could be viewed in terms of the interpreters and users' expectations. However, user quality expectation seems to be more fruitful and tends to vary from user to user and aid in uncovering variability in the speaker's characters and the character of the person who listens to the interpretation. The author clarified that interpretation quality could be measured in terms of; "accurate rendition", "adequate target language expression", "equivalent intended effect" and "successful communicative interaction", which range from the lexico-semantic core ("accurate rendition" and "adequate target language expression") to the socio-pragmatic sphere of interaction - "equivalent intended effect" and "successful communication" (Pöchhacker, 2001, p. 413).

From the interpreter's assessment of quality by interpretation teacher or educationist, Lee (2008) reviews few research pieces on how best to measure interpretation qualities. The author proposes measuring interpretation quality based on target "language quality, delivery and accuracy" (Lee, 2008, p. 168). Notwithstanding the avalanche of quality measures proposed in core interpretation studies, Tiselius (2009a; Tiselius, 2013) prefer the adaption of translation quality measures of Carroll (1966) to operationalise interpretation quality conference interpreting settings. Therefore, the current study follows in the footsteps of Tiselius

by adopting the Carrol scale of informativeness and intelligibility as applied by Tiselius. Achievement of an equivalent or quality interpretation of original may be a herculean task if specific socio-cultural, syntactic, technical and semantic, linguistic, contextual issues are not guided. The discussion that follows discusses some factors that are likely to affect interpretation quality, particularly contextual factors in face-to-face interpretation service.

2.4.2 Factors Affecting Interpretation Quality

Each time the interpreter is invited to provide a verbal rendition of a spoken statement in L1 to L2. Specific intrinsic factors impacted his/her ability to provide an accurate and adequate rendition of L1 in L2. Earlier research in linguistic, neuro-psychology and mental health literature (Brislin, 1970; Hilmioglu, 2015; Miller & Beebe-Center, 1956; Nida, 1964; Sinaiko & Brislin, 1970; Sinaiko & Brislin, 1973; Spilka, 1968; Treisman, 1965) observed that translation (or interpretation) language simplicity, familiarities and similarities make for fast, speedy and easy translation. Brislin (1970) specifically found that content, complexity, language and interaction of content and language strongly impacted interpretation quality. Logically, therefore, the more complexity inherent in the source material language, the more there will be information or cognitive load that negatively impacted interpretation or its sister concept of translation and made it difficult to achieve quality translation. Weeks et al. (2007), based on the arguments put forward by earlier researches (Guillemin, 1995), agree that differences in colloquialism, syntax, idioms usage between the source and target language may make interpretation difficult for monolinguals.

Beneath the information or cognitive load problem created by language, complexity is the intrinsic impact of; psycho-linguistic ability (Traxler, 2012), neurophysiological and biological characteristics of interpreters configuration of an interpreter. Similarly, because language represents a conduit of cultural communication (Wati 2017) and interpretation (or more formally translation), cultural equivalence of the source culture in the target language is sought. Therefore, as demonstrated by researchers in linguistic studies (Carbaugh, 2005; Hale, 2014; Scollon & Scollon, 2001; Wati, 2017; Weatherall et al., 2007), cultural impacts are essential for interpretation quality which may be societally induced and external to the interpreter himself. Other external factors that seem likely to affect interpretation quality are training, experience, skills, and supervision of interpreters and interpreter assisted interviews. According to Traxler (2012), the psycho-linguistic factors concern articulation, perception and processing in L1 and L2 language during an investigative interview session, while the biological factors include the effect of attrition in LI language in an attempt to learn L2

language. The neuro-physiological components deal with the configuration and capacity of human memory in terms of information processing capability, and the biological components concern the neuro-physiological makeup or differential across human sexes. The list of factors affecting interpretation or translation is exhaustive and could not be covered in its entirety in this thesis (See Wong and Shen, 1999 for an exhaustive list). The discussion that follows expands on each of the three interpretation quality impacting factors discussed above in terms of the impacting process, critical challenges posed by these factors and the coping mechanism adopted by researchers to overcome these factors that are likely to impact interpretation quality.

2.4.2.1 Information Length and Interpretation Service Quality

2.4.2.1.1 Information Length, Brain Limitation and Interpretation Quality

The human brain looks to be the most complex composite breathing structure known on the planet, and a brain component called the cerebral cortex is critical for human beings' memory, attention, perceptual awareness, thinking, language, and consciousness (Timarova, Cenkova, Maylaerts, Hertog, Szmalec, & Duyck, 2014). According to Conway, Cowan, Bunting, Theriault, and Minkoff (2012), the hippocampus portion of the brain is essential for memory function, particularly the transfer of short-term memory to long-term memory and the regulation of spatial memory and behaviour. In comparison, long-term memory can keep information for an extended period, but short-term memory is almost entirely dependent on sound and, to a lesser extent, acts as an imaging system for storing information. Wang et al. (2007) discovered that when subjects switched from source language 1 to language 2, a distinct portion of the brain was active, including the prefrontal or frontal cortex, the cingulum, and caudate in the centre.

An additional interpretation session or witness account may be related to an increase in PPC activities in face-to-face interviews when an interpreter is used. Stress on the cerebral, pre-frontal, or frontal cortex, the cingulum, and caudate create cognitive difficulties, all of which may impair accurate representation or recall of reality based on the VSTM stored information chunk (Miller, 1956b; Todd & Marois, 2004). This information chunk is estimated to be around the number 7 at a go by Miller (1956a). According to Todd and Marois (2004) the parietal parental cortex (PPC) imposed a restriction on the volume of information that the VSTM or the working memory can retain. The impact of which affect our remembrance and recall capability which according to Bartlett (1995) is a function of hereditary transmission of intelligence and psychological tendencies in social group from generation to generation. That

is recall capability is based on inherited intelligence and psychological tendencies which are likely to be context dependents and offer varying experience (Banyard & Grayson, 1996).

Cognitive difficulties lead to lack of concentration, attention, and detail. Cognitive problems are a collection of perplexing intellectual and physical conditions that primarily impair cognitive capacities such as; information processing, recollection, insight, analytic reasoning, and vocal communication (Effiong, 2019). Memon, Meissner, and Fraser (2010) characterized cognitive impairments as causing difficulties with attention and focus, working memory, verbatim interpretation, reasoning and analytical skills, and social interaction ineptitude. It is proposed that cognitive problems might result in communication challenges, impairing interpreters' accuracy during practical investigative interpretation. These changes in the way humans communicate may negatively affect the translators' accuracy during investigative interviews. Cognitive impairments are generally associated with ageing and may have an underlying pathogenic effect on the brain (Rosen, 2017). The state of brain dysfunction results in language communication deficits in interpreters, which can have a detrimental effect on the interpretation's accuracy.

The working memory and the VSTM are interchangeable concepts in this thesis, conveying the same meaning and concepts. It is hypothesised that working memory frequently serves as a notebook for instantaneous recall of the information processed at any given time and has been recognised in some instances as the brain's information station. The recall capability is because short term memory is capable of recalling, storing, and processing a limited amount of information in mind (about seven items or less) energetically and freely for a bit of period, on average 10 to 15 seconds or at times up to one minute (Signorelli, Haarmann & Obler, 2011). For instance, during interpretation, the brain stores the starting point of sentences and interprets the remaining portions, which is the duty of the short-term memory (Kopke & Nespoulous, 2006). Another example of short-term memory is temporarily remembering knowledge to complete a task or recall a credible argument, in addition to when someone speaks and then stops before interpreting (Timarova, Cenkova, Maylaerts, Hertog, Szmalec & Duyck, 2014). These findings highlight the interpreter's complicated function, as they must retain knowledge in one language (when the interviewee provides a lengthy narrative) then orally translate it into another language using short-term or working memory.

The capacity of investigators to acquire meaningful and accurate information from victims and witnesses is critical to overcoming investigative interview obstacles and ensuring

the efficacy of criminal prosecutions (Daro, 2014). Thus, before practical interpretation can occur during an interpreter-assisted interview, one could argue that the interpreter must possess the listening, perceiving, thinking, and assimilation capacities necessary to accumulate words, phrases, or sentences proficiently within a specified time or minute (s). This capacity is most likely due to the interpreter's task being a mental presentation of knowledge and communication in a foreign language. By contrast, language speaking manifests cognitive processes that facilitate verbalising or articulating knowledge during investigative interviews (Kopke & Nespoulous, 2006). Additionally, the investigative interview is a cognitive transactional activity that can result in good interpersonal relations between parties with a balanced disposition throughout the inquiry (Conway, Cowan, Bunting, Therriault & Minkoff, 2012). Thus, the current study shows that a cognitive interview is a meeting of cognitive dialogue to elicit pertinent information that can aid in inquiry accuracy.

The cognitive interview is a systematic way of interviewing case witnesses that elicits more pertinent information without sacrificing accuracy. The cognitive interview (CI) has been defined as a face-to-face interview arrangement that combines theoretical underpinnings of social dynamics, cognition, and language communication with derived interviewing techniques (Dando, Wilcock, Behnke & Milne, 2011). As the cognitive interview encompasses a broad and practical range of investigative tasks, including recalling crimes, accidents, health-related experiences, and prior decisions, interviewees range from young children to young adults to older adults, and nationalities include those from the United States, the United Kingdom, Australia, and Germany (2010, Fisher). Memon, Meissner, and Fraser (2010) reported that approximately 100 laboratories and three (3) field studies in criminal investigations have demonstrated that cognitive difficulties assist in eliciting significantly more damaging information, which harms the standard accuracy of investigative interviews.

Mental obstacles are eliminated directly using scientific principles of memory and communication theory to facilitate the actual implementation of investigative interviews or facilitate the actual implementation of investigative interviews (Dando et al., 2011). Memon, Meissner, and Fraser (2010) claimed that when no cognitive impairments are present, the CI produces considerably more information than traditional question-and-answer interviews without compromising accuracy. Thus, it is maintained that investigative interviews are cognitive since they entail mental processes such as skills. Perhaps these procedures are facilitated by the interpreter's good working memory until mental problems come in. Working memory appears to be a composite cognitive component of memory tasked with retaining

knowledge during the interview process (Cowan, 2001). Face-to-face interpretation, which involves the oral conversion of continual verbal discourse in the present instant, places a premium on the interpreter's working memory (WM). Effectiveness is because a functional memory allows for the preservation and retention of words, phrases, and sentences. It is explicitly stated that interpretation requires short-term retention of words and their inherent sense of meaning in the source and target languages, whereas processes rely on information comprehension, message conversion, and creation (Signorelli, Haarmann & Obler, 2011). Daro (2014) demonstrated that when working memory is not a problem, it plays a significant role in face-to-face interpreting with several expectations to enhance investigative interpreters' abilities and influence the broader practice. Numerous studies have investigated the notion of an interpreter advantage in working memory (WM) utilizing various activities and materials when the memory encounters difficulties and does not encounter difficulty (Cowan, 2001).

Kopke and Nespoulous (2006) described the difficulties encountered by an interpreter when a delay occurred during recall tasks. These tasks typically involved listening to or interpreting a list of words, possibly 12 to 16 words in length, while replicating nonsense notes back before recalling in the opposite direction. In this study, the authors found that interpreter recognition did not improve. Additionally, the authors reported that participants listened to a short inventory of four to twelve words and retained the information when paired with a phonological (verse) or exploratory semantic grouping. The test reviewed above evaluated the verbal working memory's holding capacity, or possibly the ability to keep words and their meanings appropriately in a sensitive scenario of convenience. While interpreters are beneficial in certain instances, working memory was never consistently obtained in most investigations, leading one to hypothesize why such an advantage was never consistently attained (Daro, 2014). It should be emphasised that just because specialized interpreters can cope with response issues during recall, then non-interpreters does not imply they will not encounter cognitive challenges during interpretation.

The rationale for this available information may help explain why specialized interpreters are likely to exhibit an advantage when word storage is evaluated using word span rather than investigative recall (Christoffels, de Groot, & Kroll, 2006). When an individual's or interviewee's cognitive abilities are impaired or perturbed by any circumstance, including language communication, it tends to impair their memory and perceptual acuity, impairing effective responses to cues and providing the information required in investigative interviews. Thus, such experiences may affect the interpreter's ability to retain lengthy material in the

memory, which is likely to impair the interpreter's ability to communicate appropriately during an investigative interview. As a result, it is hypothesised that when an interpreter encounters small or more significant cognitive problems, errors in the interpretation increase. Conversely, when there is no interruption caused by verbal cues or any other component of the delay situation, the interpreter may exhibit interpreting accuracy to facilitate tasks' efficient fulfilment. Thus, this scenario is likely to benefit the interpreter's accuracy and the investigation or prompt the development of a coping strategy to help improve work performance.

2.4.2.1.2 Coping Mechanism used

Sincero (2012) defined coping psychologically as frequently shifting cognitive and behavioural efforts to regulate explicit internal and external difficulties. It refers to an individual's behaviour that aims to moderate the possibility of escaping from painful events or perplexing problems. According to the author, coping strategies are ways in which persistent internal or external anxiety is managed or regulated, adapted to the experience. Individuals, including the translator, encounter stressful conditions in cognitive, emotional, physical, and social endeavours and encounter cognitive problems.

The interpreter's role is distinct from that of others, including the interviewer. It is believed that having an interpreter present during the interview eliminates language barriers and establishes a beneficial mechanism between the interviewer and the interviewee. Naturally, a face-to-face interview involves a high level of cognitive activity that frequently necessitates the interpreter's listening, analysis, comprehension, and interpreting, editing, and reproducing abilities in real-time in reaction to utterances (Ryan, Gannon-Slater & Culbertson, 2012). It should be emphasised that interpreting is a cognitively demanding activity that requires an individual to perform appropriately and efficiently. Working memory training is one technique that translators might use to overcome cognitive problems. The translator might overcome cognitive problems caused by communication delays and any other conditions posed by the interviewer or interviewees using cognitive performance improvement. Morrison and Chein (2010) noted that training-related improvements in working memory competence across various research populations demonstrate that cognitive training emancipates mental performance, alleviating difficulties interpreting performance and accuracy during investigative interviews.

Eminent researchers in interpreting have expressed their interest in the inherent method of uninterrupted interpretation and how this process becomes so stressful, affecting the interpreter's ability to cope (Seeber 2011; Seeber & Kerzel, 2011). The translator's stressful experiences can be mitigated if the interpreter possesses a robust cognitive ability for superior performance and utilizes effort models as a strategy for overcoming cognitive problems during investigative interviews. Gile (1995) created a model dubbed effort models (LMPC) in which the letters 'L' stood for Listening and Analysis Efforts, 'M' for short-term memory Efforts, 'P' for Speech production and 'C' for Coordination Efforts. According to the author, this concept explains why the interpreter requires a certain amount of cognitive capacity that is only available in limited supply. The constraint is that an interpreter with a limited number of cognitive resources to manipulate is insufficient to meet the profession's needs; hence, they demand more to overcome minimum cognitive problems. Thus, this increased cognitive energy can be used to cope with stress caused by communication interference, interruption, and cognitive problems, among other things.

Researchers (Salkind, 2008; Bontempo & Napier, 2011) have recognised that the cognitive turn in interpretation research has identified linguistic and cognitive competence as a critical factor determining the accomplishment of interpreters' future and fundamental rudiments of ability, as well as the ability to comprehend latent means of professional attainment (Salkind, 2008). However, a new trend in interpretation services has arisen that aids the interpreter in stressful interpreting situations. This trend is referred to as a psycho-affective shift in interpreting (Korpala, 2016). It possesses the following characteristics: motivation, anxiety, or stress conflicts during exercise translation (Rosiers, Eyckmans & Bauwens, 2011; Bontempo & Napier, 2011). Copying techniques is a necessary talent for analyzing and handling psychological effects such as emotional stability logically. Emotions are a soft talent that may either enhance or detract from one's performance. Positive emotion may function in short-term memory, improving the individual's capacity to retain and retrieve helpful knowledge when the situation requires it. Apart from the interpreter's linguistic and communication expertise, emotional intelligence can aid the interpreter in bridging the language divide between interviewer and interviewee. As emotions aid in stabilising short-term memory, the capacity to recall, retain, and process a specific amount of information in the mind energetically and joyfully generally ranges between 10 and 15 seconds or is consistent at times (Signorelli, Haarmann & Obler, 2011). The consistency implies that emotional stability has a solid connection to the brain and can help the brain work more effectively. The

hypothesis is that when the interpreter's mood is stable, the brain can retain information even over the extended account of the interpreter-assisted interview performance. According to Kopke and Nespoulous (2006), the characteristics of understanding and interpreting sentences begin with the storage of word phrases in the brain, allowing other parts of it to be interpreted, as a role that is successfully performed by the short-term memory when the interpreter's emotional state is stable. Multitasking activities are a necessary component of emotional stability.

Short-term memory is incapable of temporarily retaining a large amount of information to complete a task or recall when there is a credible argument unless the prevailing emotional state is stable enough to support such activities before practical interpretation can occur (Timarova et al., 2014). As a result, an emotionally stable interpreter is more equipped to deal with the task and the dynamics of translating than an emotionally unstable interpreter. The coping skill is necessary since interpreting is a job requiring focus, cognitive and emotional stability to execute correctly, particularly during investigative interviews. Thus, it is said that a lack of emotional stability may contribute to cognitive problems, destabilising the interpreter's professional performance during investigative interviews. On the other hand, an interpreter with calm emotions can convey the story properly to the interviewer without encountering cognitive problems.

Bontempo and Napier (2011) showed that emotional stability is a predictor of interpreters' working performance accuracy, contributing to cognitive and linguistic dysfunction. On the other hand, Timarova and Salaets (2011) argued that soft skills like motivation, learning styles, pressure resistance, and mental or cognitive flexibility might serve as coping strategies that help interpreters revive and improve their job efficiency. Efficiency increase indicates that interpreters can adequately interpret the account when their placement enables them to withstand intrapersonal and interpersonal pressures as well as interpreting pressure. Interpreters will also typically display a high degree of cognitive flexibility and will likely deal with whatever subtlety there is in the investigative interviews. However, when they are emotionally unstable, whether as a consequence of cognitive issues or linguistic difficulties, such interpreters may struggle to provide accurate interpretations, therefore jeopardizing the effectiveness of the interviews (Verment, & Hommel, 2010). However, the literature on working memory (WM) training is adamantly maintained within a body of research that specifically planned cognitive drills referred to as cognitive exercise models can improve academic performance (Keizer, Verment, & Hommel, 2010; Chein & Morrison,

2010). As a result, interpreters who demonstrate good mental functioning are better equipped to deal with long accounts during interpreter-assisted interviews than those who do not.

Additionally, other writers have demonstrated that cognitive performance and development via training boost attention, mental information processing speed, effective retention, and neurofeedback, all of which are necessary for the accuracy of interpretation and investigating interviews (Tang & Posner, 2009; Keizer, Verment, & Hommel, 2010). As a result, interpreters who often demonstrate qualitative mental information processing techniques when interpreting are experts at displaying coping mechanisms that can assist in overcoming cognitive problems. Naturally, with appropriate recall capacity and spontaneous response to signals, such an interpreter might efficiently cope with the stress associated with cognitive and work problems. However, such an interpreter must have undergone cognitive training to properly implant the interpreter's function to provide efficient interpretation capabilities.

2.4.2.1.3 Effective Training of Interpreters to Overcome Cognitive Difficulties

Should provide interviewees adequate interpretation training so that they know the dynamics of the interview the same way interviewers do (Tourangeau & Bradburn, 2010). It is most probable that the interview is being held because when the interpreter and interviewee do not understand how to translate, it will result in problems for the rest of the interview question procedure. While these challenges may include neglecting to consider pertinent issues, not being able to concentrate, and as a result, being perplexed due to the presence of confounding inquiries, among others (Bradburn, 2014). Misunderstandings during the interpreting process may lead to problems with the rest of the interview procedure.

PEACE training is a strategy for teaching suspects, victims, and witnesses to develop appropriate and practical questioning skills while keeping ethical principles. In addition, as the primary purpose of PEACE was not just for police officers but also other law enforcement agencies such as the Inland Revenue, the Benefits Agency, and others, it was not simply built for them, but for them as well. The PEACE approach included two different interview models to help interviewers overcome their anxiety and increase interviewee memory. Furthermore, as of 1992, it looks as though police forces have utilized PEACE methods in several nations (Milne & Bull, 2013). For example, in Scotland, a method known as PRICE (which stands for 'Preparation, Planning, Recruitment, and Equipment') may be helpful.

In England and Wales, the senior investigating officer's responsibility is to ensure good interpreting services are provided (SIO). As a requirement of the PACE framework, PACE-Mandated interpreters have been mandated to hold anyone who refuses to disclose the necessary information during interpreter-assisted interviews. The NPIA/ACPO/NPIA (2012) "European Cross-Border Investigation" protocol for interpreters offers an overall structure for the interpreting service. Information on the APP Authorised Professional Practices (APP) is accessible on the College of Policing's website, located under the heading of Authorized Professional Practices (APP) (CoP, 2014). The accessibility results from the increasing requirement to translate services and comply with the national language arrangements set by HO (2014). Professionalism in interpreting legal services in interviews and during court hearings is critical for sustaining the CJS. Unique advice and operational protocols on dealing with interpreters were created by several police agencies (Constabulary, 2010; London Metropolitan Police Service, 2017). This type of training develops communication skills in interviewers to allow them to conduct efficient investigative interviews.

However, interpreters are presently not accepted as an essential investigative ability. Some police forces have held seminars on the availability of interpreters, although the IACP⁷ does not compel it (Mayfield & Vanterpool, 2016). The lack of advice on efficient communication via an interpreter is now a problem in PEACE training. Cambridgeshire is the only police force in England and Wales that has followed rigorous rules for dealing with interpreters for the past decade, and this has not changed (Mayfield & Vanterpool, 2016). Recent research by Hales and Filipovic (2016) has revealed the many obstacles non-English speakers have while working with an English-speaking judicial system. It was determined that there is only so much interpretation help that can be provided upon arrest and court proceedings. According to Hales and Filipović (2016), interpreters should be provided with clear direction in their work and be provided with "adequate training" on their use. In contrast, legal professionals do not get training that prepares them to speak with a legal professional through an interpreter, and it is thus presently unknown if investigators need to possess these abilities.

In Mayfield (2016), training throughout the interviewee statement-taking procedure was studied and targeted at the London Metropolitan Police as the research subject. The sample group included 20 out of 46 respondents who had just completed DPS or DPI diploma

⁷ International Association of Chiefs of Police (IACP)

programs. Percentage analysis is used as a form of a statistical tool by the author. According to the results, half (i.e. 45% replies) and massive 77.5% (107% responses) of the research and interpreters' sample respectively are excluded from the training. According to the study, practitioners base their learning almost exclusively on hands-on experience and obtain an accuracy rate comparable to that of the interpreters. The interpreter should know rules, procedures, interviewing techniques, and strategies and understand police language (Goodman-Delahunty et al., 2015).

Training translators on the language and mechanics of interviews is critical in order to prevent gaps in comprehension. Thus, it became apparent when using new and misunderstood terminology during interview questions caused comprehension issues and thereby affected the interpretation (Tourangeau et al., 2010). For example, various interpretations of words, called lexical ambiguities, might lead to comprehension issues (Bradburn, 2014). The implication is that language training for interpreters is necessary for professionals to assist them in overcoming linguistic challenges. In addition, a crucial competency is retrieval, which explains how interpreters recover material once interviewees understand it. Retrieval is the ability to remember and recall information from the long-term memory (i.e., the memory that has been stored) to the short-term memory (i.e., working memory) when doing interviews. A recall is a process of recalling; cueing can recall memories, retrieve the memories, and remember the memories to bring the memories to mind (Schwarz, 2017). For those seeking pertinent information, the interpretation of various interview questions, questions and answers, and other interview survey materials and feelings or pictures may serve as retrieval signals that can aid access interviewees' memory for correctly articulated information (Bradburn, 2014). The activation might occur when the interpreter's semantic memory is prepared to accept and interpret incoming information. Questions that must be given thought to while developing interview questions include: First, questions should be evaluated to ensure appropriate interviews. Then, specific responsibilities should be taken into consideration, including the words, location, type, and assessment pattern in order to formulate questions in such a manner that guarantees answers during interviewees' use of various cognitive tasks towards integrating essential aspects of what the memory will be retrieving (Schwarz, 2017). These consist of comprehensively assessing the essential aspects and the complete information or knowledge required to formulate logical conclusions about any memory gaps that are returned and synthesise the obtained information (Tourangeau et al., 2010). Most studies believe that these evaluation methods are relevant, whether they test information, behaviours, or attitudes

(Groves, Fowler, Couper, Lepkowski, Singer & Tourangeau, 2009; Bradburn, 2014). While the focus of the interview should be on assessing the knowledge and ability to overcome cognitive problems, the most crucial question is whether the interviewee can gather relevant information correctly. Training must be appropriate in order for participants to have cognitive flexibility for successful research participation. Interpreters who have had training in speaking more generally may find that they perform better during interpreter-assisted interviews.

Learning about the mind and psychology of persuasive replies is essential for the interpreter, helping them comprehend persuasion methods better and respond more favourably to questions. Decreasing task complexity in questions might lead to more accurate replies during self-report, according to Krosnick and Presser (2010). Once the candidate has prepared for a decision, they will likely choose to answer and communicate (Tourangeau et al., 2010). Interpreters who are well-trained in language and communication can help overcome obstacles caused by cognitive disabilities or the interviewees' neglect to disrupt the interviews. Interpreters' practical training may have a good or negative influence on their accuracy in the use of language and their capability to participate in interpreter-assisted interviews.

"Cognitive training might be implemented to improve mental ability to support interpreter-assisted interviews, according to recent research that shows that organized training has positive results" (Morrison & Chein, 2010). Concentration, focus, mental processing speed, multi-tasking ability, and fast feedback have all been claimed to go along with mental enhancement training (Dux, Tombu, Harrison, Rogers, Tong & Marois, 2009; Keizer, Verment & Hommel, 2010). Many cognitive training programs provide varied pathways to improved cognition, and recent research demonstrated that not every method will lead to broader improvements (Owen et al., 2010). The researchers' Connors, Rosenquist, Arnett, Moore, and Hume (2008) proposed that most programs designed to help interpreters improve their reliance to enable articulatory rehearsal better effectively increase accuracy. When participants are trained to withhold information during interpreter-assisted interviews, their short-term memory might indicate withholding information and allow the interpreter to convey lengthy narratives.

An important observation from the reviewed literature and discussion earlier in the chapter is that the memory is only capable of receiving, processing and remembering a limited information length due to constrained on the activities that can be carried out in the PPC of the brain at a time. Premise on this argument, the thesis argued that the length of an interview material has an implication for the interpretation service quality. Surprisingly, within the

domain of translation and interpretation studies with specific reference to war mediation, investigative interview, community interview and conference and court interpreting, there appear to be little or no study at all to best of the researchers knowledge with interest in exploring the impact of material length influenced cognitive load and difficulty on interpretation service quality.

2.4.2.2 *Language Attrition, Complexity and Interpretation Adequacy*

2.4.2.2.1 *Language and Cultural Barriers*

In their paper entitled "Language is Employed to Maintain and Communicate Culture and Cultural Bind", Abbasi et al. (2012) claimed that language is used to preserve and pass on culture and cultural heritage. A person's self-identity is based on their language. Language is undoubtedly a key driver for allowing interviewees, interviewers, and interpreters to communicate in a relaxed, expressive, and fluid way. Imberti (2007) said that language is the most effective negotiator that enables people to interact and communicate. Language helps individuals to find significance in their lives. The research found that language usage impacts the ordinary lives of individuals by restricting social interactions in which language translators (such as legal and police officers) are employed (Henderson, 2005).

Cultural differences in communication methods may limit the ability to interpret and conduct interpreter-assisted interviews because it is necessary to understand and speak the native language. An inaccurate interpretation of interpretation is likely to be impeded if the interpreter lacks sufficient linguistic versatility and proficiency (Imberti, 2007). Owen et al. (2010) found no transfer effects in interpretation tasks that involved over 11,000 participants. The absence of transfer effect results in tasks that have already been accomplished and are not worth improving, eliminating different duties. In other words, an interpreter who is fluent in a language, articulations, and correct expression, in addition to being well-versed in the appropriate tone of voice to convey information fluently, can provide an accurate interpretation. Culture is more inclusive, describing several variations that go beyond ethnicity (Avruch, 2017). The concept of culture has many definitions depending on the context. According to Wilson (2009), culture is the total individuals' habits, and behaviours developed and learned within group contexts and passed from one age group to another. In the beginning, culture meant nourishing the soul or mind; it includes social norms such as courting or nurturing behaviours and fabricated objects such as equipment, dress, and shelter, as well as institutions and ideals (Ruth et al., 2010). Thus, culture is a complex phenomenon that incorporates such qualities as knowledge, belief, ability, rule, ethics, and tradition, among

many other factors (Ruth et al., 2010). With its inherent tendency to naturally intermingle and familiarize different cultures, culture helps explain cross-cultural integration and intercultural integration. In order to make sure the interviewee's ideas are accurately represented, the interpreter connects the two of them to allow the interpretation to be accurate.

Notable disparities in ethnicity may not be the source of intercultural communication issues (Mattila, 2013). Most information in clear verbal communication is used to communicate thoughts, feelings, and ideas as clearly as possible in mainstream culture (Avruch, 2017). This research defines "culture" as community members' common behaviours and practices and learned through time. Communication difficulties can arise from cultural and linguistic barriers, making it difficult for interpreters, interviewers, and interviewees to effectively collaborate and prevent the interviews' goals from being realized.

2.4.2.2.2 Cross-Cultural Differences and Message Conversion

According to Hale (2014), a kaleidoscope of discussion ensues when various organizations meet to debate the phenomenon of cross-cultural inequalities in interpreter-assisted interviews. In addition, the author reported that in Canada, the term 'cultural interpreting' is utilised, but in Spain and Italy, the term 'cultural mediation' is used, suggesting that interpreters perform the function of cultural mediators correctly. Of course, interpreters are thoughtless conduits, just engaged in exchanging words between two languages (Morris, 2008). Individuals with various cultural backgrounds may find it challenging to transfer communications from one language to another if they are not exposed to cross-cultural differences. Cross-cultural disparities varied from pragmatic-linguistic distinctions in a conversational speech to socio-pragmatic distinctions in utterances (Hale, 2014). As a result, interpreters are frequently confused about how to react and the appropriate behaviours when confronted. However, research on the influence of cross-cultural variations on community interpreting indicates that interpreters' approaches to cross-cultural misconceptions are inconsistent (Felberg & Skaaden, 2012; Hale, 2014).

Illusory cross-cultural differences attributed to communication difficulties between speakers of different languages, including those caused by poor communication skills and the incompetence or unethical behaviour of some interpreters, as well as the inability of other service providers to utilize interpreting services, all contribute to a general misperception of the role of interpreters (Hale, 2011). These critical discrepancies in linguistic communication and abilities and unethical behaviour may positively or negatively affect the interpreters'

accuracy. Felberg and Skaaden (2012) advised against using cross-cultural differences to explain various forms of misunderstanding between speakers of different languages. As a follow-up to empirical data in medical interpreting, the research claimed that utilizing culture as a cover for certain practitioners' ineptitude rather than exposing communication issues may muddy the line between interpreters' and professionals' areas of expertise (Felberg & Skaaden, 2012).

Cross-cultural differences may cause the interpreter to act inconsistently with their code of ethics, compromising the veracity of the interpretation and interviews. As the AUSIT Code of Ethics and Code of Conduct (2012) demonstrate, the interpreter should use their professional competencies to faithfully and accurately interpret between the parties, without skipping any aspect of the interpretation or adding anything that the parties did not say interpreter-assisted interviews. Thus, regardless of the cultural and linguistic obstacles that impact translators' message conversion, they should guarantee that the principles of impartiality, fidelity, correctness, and completeness are followed while creating engaging interview reports. These actions can facilitate the effective and quick collection of information necessary for a thorough investigative interview report if carried out honestly.

Treisman (1965) in a study of factors such as ; redundancy (or information content) and familiarity in foreign language relative to native language and how they could impact on accuracy of simultaneous translation and repeating back of foreign and native language disclose that high information content with minor redundancy and familiarity produce less satisfactory response in terms of simultaneous translation and shadowing effectiveness. The implication of the disclosure is that; in addition to the effect of language familiarity, cognitive issues caused by the degree of information content in a passage is like to affects translation or any form of conversion of language. Spilka (1968) in a study of the mental status schedule (MSS) from English to French language discovered that the difficulty inherent in conceptualising what constitute a quality translation, the nature of meaning, cultural and linguistic uniqueness of the target language, similarity of interpretation response, grammatical, lexical and syntactic difference in language are some of the difficulties encounter in translating MSS from English language to French language. To overcome this issue, Spilka suggest the use of alteration, addition and subtraction at the basic level and the use of borrowing, copying, literal translation, transposing, modulating, replacement and adjustments at the sentence unit level. Brislin (1970) and Sinaiko and Brislin (1970) explore the impact of language content, complexity and the interaction thereof on the translation accuracy of ninety-four (94) bilinguals

from university of Guam saddled with the responsibility of translating 6 English essay each from English to Kusaien and back to English language. The study shows that; interpreting quality and equivalence is measurable and are significantly impacted by the language content and language complexity. Loftus and Palmer (1974) in a related research outside the domain of translation observed that the choice of verb preference for questioning participants strongly affect the witness response to be produced by the memory.

Felberg and Skaaden (2012) discovered that most interpreters could properly transmit verbal and non-verbal messages and their tone of voice during message conversion without distorting the communication's content. However, they frequently struggle with the clarity of verbal expressions and gestures, which typically have a distinct or unique meaning within the speakers' cultural context and may be traced back to linguistic and cultural differences. Due to the prevalent belief that everyone who speaks the same language has the same culture, these apparent conflicts during an interpreter-assisted interview might influence criminal investigations (Scollon & Scollon, 2001). Hale (2010) stated that having exposure to various cultures enables cross-cultural differences amongst persons who share a common language and environment. Nonetheless, subcultures within cultures shared solely by people with the same educational level, socioeconomic position, occupation, sex, and age group may exhibit linguistic expression variations (Migration/Refugee Review Tribunal, 2011). While this concept implies that culture is segmented into multiple distinct strata and that people may share some subcultures, the similarity of linguistic expressions among these persons may have a beneficial influence on whether or not investigative interviews are conducted. The barriers associated with cross-cultural differences may be reduced if the interpreter adapts to speaking slowly and clearly, being patient when requesting clarifications, frequently checking for understanding before proceeding, and refraining from using idioms to convey a message(s) between interviewees and interviewers during interviews. The decline is most likely because efforts to encourage participation in one group that ensures homogeneity in all aspects of their communicative life, as well as exclusion from other groups, may result in cross-cultural disputes (Bondi, 2014). Possibly, some cultural behaviours or attitudes are so widely accepted within a speech group that some generalisation can be tried to facilitate mutual understanding and communication. As a result, Carbaugh (2005) asserted that some categories are symbolic occurrences that convey information about people's feelings of action when they come together and how they make things; who they are and their connection. The author reiterated that their attitudes toward people, their actions and possessions, and their relationship with their

environment are critical to accomplishing their goals). Nonetheless, the interpreter's primary objective is to ensure accuracy throughout the interpretation process to ensure that interpreter-assisted interviews are valuable and successful.

2.4.2.2.3 Key Challenges Faced by Interpreters

Interpretation is a process of linguistic communication that transforms one form of language into another; and effective communication methods between the interchange of various cultures across nations (Zhao, 2013). However, it may be an extremely challenging profession to interpret. In understanding processes, several obstacles are often faced (Zhang, 2015). First, the problem requires explicitly some behavioural arrangements, such as listening to the source language, analysing the message, and rebuilding it to satisfy the requirements of the destination language. In addition, Zhang (2015) said that interpreters might not access dictionaries or refer to the communications conversion document's interpretation. Therefore, the interpreters should strive to be trained persons or professionals in interpretation to achieve successful interpretation (Chen, 2010). During an interview with interpreters, interpreters' problems are the lack of linguistic uses and cultural richness in their source and destination. Zhang (2015) has shown that both the original language and the target language, and the solid cultural affinities, may be almost exact interpreters with solid command. The author further pointed out that translators should try to contend with many vocabularies, express flexibly and communicate them with multicultural awareness dynamics to overcome these problems. Since it is not simply a single translation but also a sort of cross-cultural dialogue, there are many obstacles to interpretation. (French version, 2010). Another issue could be to understand languages of interpretation in terms of their vocabulary and grammatical structures. Time is the issue for the interpreters. They, therefore, have no free time to evaluate and cannot resort to any source of information throughout the interpretation process, given the requirements of practice (Zhang, 2015). The conversion of this communication depends on the language requirements the interpreter must master and familiarize with environmental cultures and source and target language (Zhang, 2015).

The literature reviewed in context of cultural and language impact on translation or interpretation quality (or excellence) have all in one way or the other demonstrate the effect of culturally embedded language – or pattern of communication on quality of translation or response to a question. The researches are however inadequate for the field of face-to-face interpreter assisted investigative interview as there were very sparse research specifically design the impact of culturally embedded language on interpretation service quality. The

research is needed to provide an equivalent empirical base for demonstrating that; culturally embedded language complexity, similarity, familiarity has an implication for interpretation service quality of face-to-face interpreters assisted investigative interview.

2.4.3.3 Gender Difference, Feminism and Interpretation Quality

2.4.3.3.1 Biological and Physiological Difference in Gender

Modern study (Fausto-Sterling, 2012; Halpern, 2012) aims to differentiate the gender of conduct and analyse any ethical problems since such conduct might trace the interplay of nature and the notion of nurture. Investigations have examined the interaction of biology and environment, and still, gender disparities in cognitive capabilities of men and women were determined (Halpern, 2012). Studies of the general intelligence across various scientists indicated that women scored better verbally while men performed better visuospatially (Baumeister, 2010; Timmers et al., 2013). Research advised that general intelligence (g) variables such as fluid and crystallised intelligence be classed as verbal, perceptive, and visuospatial realms since women succeed in oral and perceptive tasks in this context, while their males exceed visuospatial activities (Baumeister, 2010).

Several studies on sex differences have been widely examined (Brown, 2012; De-Beauvoir et al., 2011). There are notable variations between male and female physical, mental, behavioural and other characteristics. It has been claimed by Isangedighi (2017) that women in every culture are likely to perform better than men in verbal fluency and vocabulary. In articulation and grammatical correction, the author reiterated that women are likewise ahead of men. The authors showed that women generally score higher in oral fluency in studies, including examining academic achievement in maths and physics. The brain comprises several distinct structures and coordinates the intellectual roles of human beings in several different activities. Based on the post-mortem finding that shows the male brain is 9% to 13% larger than that of females (Witelson et al. 2016), male and female brains must be different (weight or volume), but if taken along body size, the difference becomes irrelevant. In a specific study, men's brains have some advantages over women's brains concerning information accumulation (Lenroot & Giedd, 2010; Sale et al., 2014). Thus, collecting information about individual brain diversity is essential because of intelligence requirements in people's lives.

In brain lobes and cognitive areas, including the hippocampus, amygdala and neocortex, there are substantial gender variations. At the same time, empirical results have

demonstrated that the anatomy, neuroanatomical makeup and stress activity of men and women hippocampi differ significantly (Chrisler & McCreary, 2010). Robins and Yan (2015) have claimed that these brain areas play an essential part in visually processing microscopically different language storage and memory. The author claimed that, in women and their more enormous volume, the frontier and time areas of the cortex appear to be organized in a more precise way. In contrast, the compactness of temporal neocortex synapses is naturally more significant in men than in women. These fewer synapses are associated with an increase in the specialisation in the time cortex, which helps women quickly absorb their language, which has to do with their superior linguistic work overall (Alonso-Nanclares et al., 2018).

2.4.3.3.2 Gender Difference in Communication

A recent study evaluated the characteristics of men and women in using language for two distinct types of communication (Timmers et al., 2013). In the initial stage of life between men and women, linguistic communications demonstrate gender differences. Basow and Rubenfeld (2004), while investigating homogeneous and heterogeneous persons concerning gender interpersonal interactions between children and adults, discovered that some characters belong to each identification by gender. Females do better in verbal activities, especially ones that require memory (Linn & Petersen, 1985). In the previous commissure that links the temporal poles and mass intermediates, the midsagittal and fibre numbers are likewise related to the thalamus, which is similarly more prominent in women (Trofimova, 2012). Pearlson (2015) found that differences were much more significant in the females in both key speech-related regions of Broca in the dorsolateral prefrontal cortex, Wernicke. The author also noted that in the region of Broca, females tend to possess 23% and in the area of Wernicke, 13% more volumes than males. Perhaps in general, this dimension of results makes it easier for women to retain communication records than for men and be excellent for oral conversations.

Isangedighi (2012) stated that female brains are spoken in both parts of the frontal brain, whereas males prefer to process their language area on the left. Therefore, women may have an edge in communication and the interplay of language over men with one side of the hemisphere through these experiences. Level brain imaging studies show that neurons on both sides engage the brain during the hearing process, whereas on one side of the brain in males, the neurons are activated (Phillips et al., 2001). Moreover, women generally utilize both sides of their brains in communication activities involving complete phrases, whereas males can use one, even when using single words (Kansaku & Kitazawa, 2001). Women tend to perform higher than males in close encounters to create understanding and empathy towards the optimal

social functioning of relationship-oriented communication and partnerships. As a result, Basow and Rubinfeld (2004) have determined that intercultural communication practices are based on their forms. Research has indicated that language linked areas of the brain are more difficult for women to function than men during language activities, and both genders rely on various brain sections in carrying out communication tasks (Isangedighi, 2012; Robins & Yan, 2015).

Morgan (2012) said that designated interpreters, whether male or female, should grasp the dynamics of interpreting to overcome the supposed gender disparities of an interpreter-based approach. Some scientists have pointed out that male and female interpreters represent a mere conduit or a translator that uses their interpretative abilities to predominate in the perspective of service consumers, particularly in the legal area (Böser, 2013; ImPLI, 2012). Researchers in small groups often find that men talk extensively, are more skilled and informed in mixed-sex discussion groups and have a more substantial effect than women (Ridgeway & Smith-Lovin, 1999). The influence is related to situational communication in political contexts, although female interpreters can outwit men in informal communication, including face-to-face engagement. Most likely because face-to-face interpretation needs the capacity to speak, demonstrate fluency and understanding of language perfection, particularly during the study interview interpretation. Good planning and preparation, word choice, traits of personality and quality of interpretation obtained from professionals are, of course, (Hadziabdic, 2011).

2.4.3.3.3 Gender Variability in Translation

Unlike the biological, physiological, and communication differences in gender prevalence discussed in the above section, the differences in translation across gender appear not to be straightforward. This is because it is also possible and more logical to attribute the difference in translation to other underlying factors not specific to a particular gender classification. The idea behind a potential difference in male versus female interpreter interpretation of an original text is traceable to early feminism conceptualisation of translation as described in “Gender and the metaphoric of Translation” article written by Chamberlin (1988) and the predominant societal ethical and moral expectation of acceptable woman conduct, roles and functions in the society. The notion of gender difference in translation or any other form of message conversion from one language to another is not new, as it has interested linguistic scholars since the 1970s (Dogancay-Aktuna, and Kanuşli, 1996:25).

The classic view of translation or interpretation in the seventeenth to the nineteenth century, according to Chamberlin (1988), sees interpretation as the feminine (women) version of the masculine (men) original. The description believes that interpretation must be “*les belles infidel*”, i.e. it should be beautiful and faithful just like a woman. Interestingly, an early conception of difference in language use and translation between men and women in day to day conversation by the individual with no scientific research expertise or experience had stereotypical attribute politeness in language use to be of the female gender, as against been male gender (Hilmioglu, 2015). In many cultures worldwide today, society assigns the responsibility of being polite to women more than men. As such, women often appear the politer of the two genders during most conversations and societal interactions. The societal, ethical standard of having women been politer has helped shape parenting and upbringing of female children, teenagers, and adults in society. In some societies, the parent often warns their female adolescent to avoid male personalities such as stubbornness and rudeness. In the writer’s experience, it is observed that parent often warn their girl child to be aware of their feminist role in society and stop acting more like boys. In a similar vein, parents also advise a boy child not to be too soft or polite in conversation like a girl child to avoid being cheated by society. The ethical standards of polite female genders have shaped growing adolescent patterns of behaviour and attitude in the society where they are likely to be more violent if they are male and polite if they are female. In other words, if a man prefers to use a language that is more likely for women to use, in some social environments, it is not very unlikely for that man not to be mocked or insulted since he embraces a characteristic that belongs to women or vice versa.

Another lens through which gender difference in the use of language during translation and interpretation is the impact of ideological variability across a person of different sexual orientation. Interpreter who appears to align ideologically to a particular gender (i.e. male and female) and sexual orientation is less likely to look for external equivalents that could hurt or shame the speaker or the recipients. The alignment is possible because people of different gender are more likely to differ in the way they perceive, think and view male, female and different sexual orientations such as; bisexuals, homosexuals (e.g. gay and lesbianism) and heterosexualism. A female or male interpreter who is straight and is opposed to the idea of homosexuality either in the form of gay or lesbianism is more likely to choose a choice of word that differs from its formal use to bring listener attention to his opposition of this group by insulting members of this group. Furthermore, the male interpreter with a patriarchal society

background and a view of women as secondary those expected to perform the secondary role is more likely to present original text or speech from a powerful woman in a less powerful tone and is likely to emphasise the woman has been worse than she is original. Therefore, if these people who have strong opinions about gender happen to be translators, their work may differ from the original text since there are different points of view and ideologies.

Similar to the notion of politeness of women, White (2003) expound on the possibility of a difference in translation due to difference in language usage and conversational style between male and female gender. The author noted that females are more interactive in their approach and tend to use indirect suggestive questions to couch their command statements. On the other hand, men are direct in the use of command and have no room for couching their intention in a suggestive question nor become more interactive with the party to which they communicate. The author further demonstrates that the difference in speech style during translation or any other formal communication exercise is more intuitively due to divergence in interaction as against the question of the power differential between male and female, which affect how they interpret words or message. It is shown that “for women, this includes the payoff of connection and solidarity. Often evaluated with men’s language as the norm, misunderstanding of women’s speech intentions is common” (White 2003:15). Albeit, the anecdotal perception of a difference in translation or interpretation across gender analysis of social science textual material. A number of linguistic scholars (Dogancay-Aktuna, and Kanuşli, 1996; Hilmioglu, 2015; Karadeniz, 2014) have observed a rather blurred thin line or difference between translation or interpretation male or female gender. It is argued that it “is not only the structure of utterances but the identities of the interlocutors and the characteristics of the discourse situation that makes certain linguistic structures politer and more sociocultural acceptable in a given context” (Dogancay-Aktuna, and Kanuşli, 1996:15). In the word of Dongancay-Aktuna and colleagues, social status and the power of the interlocutors or speakers-not gender, impacted the degree to which embarrassing information is conveyed to the listener. Hilmioglu (2015) discovered that the impact of gender on translation may not be particular but attributed to other factors such as; religion, ideology and the economy. Despite the observed closeness in interpretation or translation by men versus women, Karadeniz (2014) contend that interpretation or any form of speech conversion from one language to another is likely to affect a number of factors that include the gender of the interpreter or translator. White (2003) suggests that difference in translation between sexes, even though not apparent is likely to exist

due to differences in the conversational style of women, which is more indirect and interactive relative to that of men, which is more direct and aimed at passing information.

Away from the field of translation studies, the only available study in the context of interpretation service Morgan (2012) assess the impact of gender based conversational style and power adopted by a deaf professional and designated interpreters when mediating between a physically impaired supervisor with hearing challenges and his subordinate in an organisational context on the response from the subordinate. The author through a personal experience with the impaired supervisor the conversational style embedded within the framework of a particular gender have a greater implication of affecting subordinate obedience to the command been issued.

Regrettably, despite all the extant research on gender effect in translation studies and designated interpretation service for the deaf, there appear to be little or no study at all in the context of the criminal justice system nor in a face-to-face police investigative interview with witness and victims of violent and non-violent crime and civil disobedience. The thesis in the last part of chapter 7 is therefore design with the goal of providing body of knowledge on the role of gender on interpretation service quality, power and outcome.

Chapter 3: Research Methodology

3.0 Introduction

In this thesis, a pragmatic epistemology that favoured a mixed-method approach is contrasted with procedures that are exclusively qualitative or quantitative. The mixed-method approach employs qualitative techniques such as study space analysis, thematic content analysis, and grounded theory analysis in all but study 4 in chapter 7, which employs a quantitative methodology. The section that follows discusses the writers' ontological perspective (i.e., their beliefs and assumptions), which serves to underpin the authors' methodological or study design. Finally, the last section discusses the specifics of the research methodologies used, including the research participants and procedure, the research tools used, the analytical procedures employed, and the ethical considerations taken.

3.1 Epistemology

Epistemology is a term that refers to a researcher's beliefs and assumptions (i.e. ontology) that shape and guides their perspective of the universe. It is concerned with the researcher's worldview and approach to acquiring knowledge about a certain phenomenon. Epistemology enquires whether truth should be sought scientifically based on what exists and is real or whether it should be built from society perceptions and outlooks (Sanders and Wilkins, 2010). As such, philosophical debates about epistemology have centred on what constitutes knowledge and how it should be acquired. The natural science approach to information acquisition has dominated the study of social phenomena. However, in recent years, a number of relatively new disciplines, like social science, have arisen with an emphasis on the role of human conduct in justifying the world's truths. In these terms, social research has been compared to the natural sciences, which significantly influenced the early development of social research (Gilbert, 199; May 2011; Hughes and Sharrock, 1997, amongst others). Today, however, there is substantial debate within the social sciences concerning the extent to which the world may be seen similarly to the natural world, with some arguing that specialised techniques of inquiry are required to examine the social world better adequately. The two dominant ideologies in this argument are positivism and interpretivism.

Positivism

Positivism is the notion that the social world can and should be investigated in the same way as the natural sciences, for example, through experiments, with an emphasis on rigour and precision. At its core, this approach is based on the concept that knowledge is founded on the observation of occurrences as facts. Explanations are understood through the development of

general laws or law-like generalisations, with an emphasis on theory testing. As a result, quantitative research procedures informed by such a perspective and methodology tend to emphasise the collection of data in an 'objective' manner and imply detachment between the researcher and the respondents. Subsequent examination of acquired data is based on statistical testing of selected hypotheses. As a result, the approach emphasises quantitative methods of measurement such as experiments, questionnaire surveys, and content analysis (Burke, 2009; Hale et al., 2005; Henn et al., 2006; Tierney, 2010).

Interpretivism

In comparison to the natural world, the interpretive school of thought opposes the positivist concept of an objective reality, arguing that people's subjective understanding is more important when analysing the social world (Hughes and Sharrock, 1997; Noaks and Wincup, 2004). Interpretivism entails the use of qualitative research methodologies and induction to examine facts subjectively. Gorman and MacIntosh (2015) argue that data are frequently influenced by both the participant's and researcher's interpretations and hence cannot be generalised, which contradicts positivism. Thus, interpretivism is not objective; rather, it is impacted by subjective opinions about the phenomenon being studied. As a result, an empathetic perspective is adopted based on the premise that human consciousness enables us to formulate responses to situations based on our interpretations and thoughts; consequently, emphasis should be placed on comprehending concepts such as the intentions, purposes, and values of those performing the action. As a result, the procedures connected with this approach encourage the use of methods such as participant observation, in-depth interviews, focus groups, open-ended questionnaires, life history collection, storytelling, and personal documentation analysis, to mention a few. Unlike the positivist approach, these methods foster a sense of collaboration between the researcher and respondent, albeit with an emphasis on reliability and objectivity.

Mid of the Road Paradigms

According to Vandenbroucke, "facts and theories will always be intimately intertwined" (Shabir, 2020, p. 74). At the cutting edge of scientific advancement, "subjectivity is inescapable" (Vandenbroucke, 1998, p. 16). According to Elstein (1979), subjectivity can be a strength in research. For instance, while science requires a critical attitude, elements of subjectivity such as theoretical commitments, expertise, and pre-existing understanding about a phenomenon are critical for making sound judgments and producing reliable knowledge. However, the rigorous application of positivist or interpretivist approaches to collecting information about a phenomenon may not be entirely complete without complementarity.

Thus, a third family of paradigms has gained attention in recent years as an alternate method of information acquisition. The paradigm incorporated positivism and interpretivism epistemologies to investigate or acquire knowledge about a certain occurrence. The paradigm encompasses post-positivist, pragmatic, pneumatic, and other emerging middle-of-the-road perspectives. The thesis employs a mixed-method approach based on pragmatist epistemology.

3.2 Research Design/Methodology

In other to adhere to the pragmatic ontology of this thesis, a mixed-method approach is adopted. This entails quantitative assessment of the factors or parameters affecting the quality performance of interpretation services discussed in the literature review, qualitative exploration of subjective issues relating to the societal need for interpretation services, and optimisation of the interpretation service process to meet the investigative interview objectives (Creswell, 2004). Other methods for studying subjective difficulties in interpretation services include questionnaires (McClung & Collins, 2007), archival interview data or case studies (Jongh 2012, Boser, 2013 Mason, 2007), interviews, and theme literature reviews. In addition, we conducted a case study, a content analysis, and a focus group analysis. However, the questionnaire approach delivers the most useful response in this thesis because it enables the combination of multiple choice and free text questions at a lower cost than the interview method and avoids the confidentiality difficulties connected with archival interview data. The quantitative section of the thesis comprises mock interpretation studies conducted with human interpreters and machine translation engines such as Google Translate. As a result, the thesis adopts a survey research technique that involves administering questionnaires to participants and implementing mock quasi-interpretation experiments that are analysed using statistical and quantitative content analysis tools.

3.3 Methods

In line with the epistemological and research design, the thesis uses different data sources, approaches and procedures, instruments, and analytical strategies to guide the research. More specifically, the thesis combined material from participant's survey, literature review, real-time mock interpretation experiments and machine-aided translation of source material. The rest of the discussion illustrates the data collection procedure, instruments and analytical strategy applied to each of the result chapters succeeding this chapter (i.e. chapter 4, 5, 6, 7 and 8).

3.3.1 Study 1 Sample, Procedure and Research Instruments.

Sample and Data Collection Procedure

Studies sample in the Study space analysis (SSA) is aggregated from an online search of five databases, i.e., Google Scholar, PROQUEST, PubMed, ScienceDirect, University of Derby Library and PsycINFO, between January and May 2019. The search generated over four hundred and fifty (450+) journals, books, reports, grey literature, and publications. On December 30, 2019, the search was repeated in combination with a manual search of text as appropriate. The goal is to update the study sample and, to an extent, expand the scope of study coverage. The repeated efforts generate an additional two hundred and ninety-six (296) studies. The thesis also conducts a manual online search for specific books recommended or found through a referenced list. Overall, the efforts produce over seven hundred (700+) published and unpublished studies. However, not all the seven hundred (700+) scholarly writings in articles, books and thesis are found to be relevant or appropriate for the narrow objective of the studies. To filter away the irrelevant, the writer scans and reviews the abstract, preface or introduction section of each of the seven hundred (700+) literature. This exercise removed more than 350 studies that appear irrelevant, more general and do not focus on the specifics of interpretation services. So, therefore, the SSA sample is reduced to fewer than three hundred (300) pieces of literature. From fewer than the three hundred (300) studies, the inclusion criteria that follow are used to filter studies with no link to the issues or topic of interest.

Inclusion Criteria:

For any articles, reports, and unpublished thesis to be included:

1. It must include studies on Interpreter's effects in bilingual communication in different contexts, such as police interrogation, court, asylum hearing, medical/therapeutic consultation, and conference interpreting.
2. The study must consider the need for interpretation, rapport building, planning and preparation, interruptions, cognitive difficulty, gender and cultural variability.
3. The study to be included must be published or translated into English.
4. For a study where source documents are not retrievable, the abstract, preface or introduction section must be available; otherwise, such studies are excluded.
5. It may include facts, expert opinion and empirically tested evidence on interpreter effect in a bilingual interview.

6. Studies that do not consider criteria (2) are excluded.

Table 3. 1: Number of Studies in the SSA

	Issues	Article Count	% Count
SSA Categories :			
SSA1	Need for Interpreter	17	15.3153
SSA2	P&P	12	10.8108
SSA3	Rapport	28	25.2252
SSA4	Interruption	18	16.2162
SSA4	Cognitive Difficulty	22	19.8198
SSA6	Gender	4	3.6036
SSA6	Culture and Language	10	9.00901
Total		111	100

The criteria reduce the total SSA study sample to hundred-eleven (111) articles. The sample includes seventeen (17) articles on the need for interpretation, twelve (12) and twenty-eight (28) articles on planning and rapport building, eighteen (18) on interruptions: There are twenty-two (22), four (4), and ten (10) articles on cognitive load, gender, culture-language effects on interpreting accuracy. Table 3.1 provide further details on the distribution of the studies included for each of the seven issues.

Research Instruments

Studies included in the SSA are based on an online or internet search of five databases, i.e., Google Scholar, PROQUEST, PubMed, ScienceDirect, PsycINFO and University of Derby library, between January and May 2019. The search terms for interpretation needs include "need for an interpreter" paired with "court", "police", "interpreting". For planning and rapport building, the search terms are; "rapport", "interview planning", "interview preparation" paired with "investigative interview", "Interpreter assisted interview", "interpreters' presence or Interpreter". Interpreter's interruption search terms include; "interruption" interruptions effect" paired with "interview", "investigative interview" "interpreter's" "communication" and "interaction". For cognitive load, the search terms are; "cognitive load" "accuracy", "expertise", "performance", paired with "interpreters, "interpreter assisted interview". Gender

and cultural search terms includes; "gender" "language", "culture", paired with "accuracy", "performance", "quality" and, "interpreters accuracy".

Data Analysis Procedure

The procedure for data analysis is basically the study space analysis which uses frequency analysis of study counts and other statistical approach. More information on the SSA procedure adopted for the thesis is discussed as follow;

Study Space Analysis⁸

A qualitative thematic review of related literature is conducted with a study space analysis (SSA) of hundred-eleven (111) articles on (i) the need for interpretation services, (ii) planning and preparation, (iii) rapport building, (iv) interpreter interruption, (v) cognitive difficulty, (vi) gender, and (vii) culture or language. For each of the issues, dependent and independent variables are identified by the researcher. The procedure involves identifying the goal and objective of each study as the dependent variable (DV) and factors that influence the goals as the independent variables (IV). In addition, variables common to all studies in each of the seven (7) SSA's, (i.e. the cross-sectional variable- CsV) are also identified. The CsV variables relate to the ecology, i.e., study settings and methodological characteristics (e.g., instruments and analytical strategy) of each study in the SSA. The CsV are derived based on the PISCA mnemonics that stands for; population (P), instruments (I), Settings (S), Context (C) and Analytical strategy (A). The design of the SSA matrix is as follows:

- i.) The DV is listed across the top against DV, IV and CsV as primary rows on the side. This implies a DV*DV, DV*IV and DV*CV matrix. This approach is based on SSA's matrix adaptation from related studies (Waterhouse, 2016; Waterhouse et al., 2020).
- ii.) Frequency count in numbers and percentage is entered for each cell of the DV, IV, and the CsV Matrix.

3.3.2 Study 2 Sample, Research Instruments, and Procedure

Sample

Study 2 in chapter 5 of the thesis, sampled the perception and opinion of hundred and four (104) ethnic minority participants through online mailing and questionnaire distribution platforms. Furthermore, the participants were recruited based on a single criterion, i.e., the

⁸ [A version of this chapter has been submitted for publication in the Journal of Police and Criminal Psychology.](#)

participants must be from the BAME classification in England and Wales. So, purposive sampling techniques described the sampling approach adopted in the thesis.

Table 3. 2: Gender Distribution of Ethnic Minority Participants

	Frequency	Percent	Valid Percent	Cumulative Percent
Categories:				
Male	53	50.96	50.96	50.96
Female	49	47.12	47.12	98.08
Other	2	1.92	1.92	100
Total	104	100	100	

As shown in table 3.2, 51% (n=53) are male participants, 47% (n=49) are female, while 2% (n=2) are neither male or female. As such, the ethnic minority population is gender sensitive and equally distributed.

Research Instruments

In order to map the participant's attitude to a career in the police, their perceptions and opinions on the role of police workforce diversity as a trust and confidence enhancement frontier were explored. The thesis developed a set of ten (10) systematically structured multiple-choice questions (MCQ), supported by five (5) free text questions (FTQ), which are included as follow up (or a sub-question) to the multiple-choice question. The FTQ aims to provide more in-depth insight and clarity of thoughts on the MCQ. The questionnaire was designed and distributed through an online platform using the mailing list of the participants. Participation was voluntary as participants were required to give their consent before mailing the questionnaire to them.

Data Collection Procedure

A total of hundred and four (104) ethnic minority participants were recruited for the thesis to map their perception and attitude towards a career in the police force and how police diversity is likely to enhance trust and increase the use of interpretation services by ethnic minorities in England and Wales. The thesis was designed to recruit participants from public spaces - e.g., supermarket, garden, playing ground, cinema, BAME community centres and places of worship (i.e., churches and mosques) in Derbyshire, UK – and online mailing platform. The latter option (i.e., online mailing platform) is chosen in line with the COVID-19 protocol and public gathering restriction (See Cabinet Office, 2021; Joint Committee on Human Rights, 2019).

Data Analysis Procedure

The survey responses consist of a series of multiple-choice questions (i.e., MCQ), and free text Questions (i.e., FTQ). The MCQ response constrained freedom of speech and limited participants to a predefined response bound. The FTQ response, on the other hand, allows for freedom of expression or opinion as participants were not provided with a predefined answer. Instead, participants will have to provide the answer themselves.

Frequency Analysis of MCQ Response⁹

The MCQ responses are quantified and coded into a small nominal, binary or ordinal group that allows for the application of descriptive methods. Quantitative data from the MCQ items is analysed after coding into categorical numerical values using simple frequency and cross-tabulation techniques.

Inductive thematic qualitative content analysis of FTQ Response¹⁰

The thesis analyses this FTQ data using two methods entrenched in the critical realist ontology and the grounded theory framework. The method is often referred to in qualitative literature as "inductive thematic qualitative content analysis (hereafter iTCA) and the grounded theory analysis methods (GTAM). The method differs from its deductive use in mainstream content analysis because it allows the theme to be derived from the data itself rather than using some theoretically or empirically justified prior categories. The approach is useful for refining existing theory about a domain of study and providing a basis for a quantitative study using multiple-choice questions. However, the deductive based approach does allow for the interpretivism and constructivism orientation with no room for critical realism or refinement of existing theories. The qualitative data generated from the FTQ items were analysed based on the grounded theory method (GTM).

Inductive Thematic Content Analysis (iTCA)

The iTCA is similar to the grounded theory analysis method but differs because it is bounded by theory (Braun & Clarke, 2006; Bryant, 2017), while GTAM is not. Simply stated, the method moves from review of the literature to empirical analysis rather than in the opposite direction of moving from empirical analysis to theory that is synonymous with GTA. The iTCA extract information based on the data-driven theme and does not restrict itself to the use of pre-

⁹ The Frequency analysis is computer using the descriptive analysis components of MAXQDA computer aided software for Qualitative Data Analysis

¹⁰ All the iTCA steps or stages are carried out in MAXQDA computer aided software for Qualitative Data Analysis.

existing categories while coding data as in the deductive variant of the methods (Braun & Clarke, 2006). Instead, it seeks to validate and extends the pre-existing theoretical categories while exploring data for hidden theme based on an unsupervised learning framework. The deductive thematic Analysis (DTA) is what Drisko and Maschi (2016) otherwise refers to as the contemporary qualitative contents analysis (QCA). iTCA is an under-develop early form of QCA or thematic context analysis (TCA), which even though is preceded by a theoretical review, explore the data for hidden pattern and do not attempt to build theory (QCA/TCA) (Smith, 1992), nor use axial coding techniques as in the GTAM (Bryant, 2017). The steps used in applying the iTCA are adapted from Braun & Clarke, (2006) with little modification. The adaptation culminates in a 4-step procedure to fit the purpose of the thesis, and this is discussed as follows:

Step 1: The procedure begins with reading through the textual responses to identifying sets of unique thematic classes or grouping prevalent in the free text data and assigning them to data-driven thematic codes headings. The thematic code headings are short descriptions of the phrases observed in the text. The coding is guided by researchers' experience and familiarity with the word used in the study context.

Step 2: The next steps involve reading through the free-text responses the second time and then assign each clause, phrase or sentence cluster to a thematic code heading developed in step 1 above. The rule of assignment is as follows:

- a. More than one theme from the same participants is counted as a separate occurrence or frequency, and the theme mentioned twice by the same participants is counted as 1. Thus, for example, if participant 1 mentions discrimination, inferiority, and other concepts, each theme/concept has one occurrence from participant 1.
- b. If different participants I.D. mentioned a theme twice, each participant's I.D. will generate one occurrence for each theme. For example, if participant 1 mentions discrimination twice using a different word or expression, and participant 10 also do the same, the thesis counts discrimination as having two frequencies of occurrence (and not as one frequency). A caveat to this rule is if the different participants' I.D. refers to the same personal identifiers using the usernames entered at the time of question administration and filling. If this happens, the different participants' I.D. is counted as one frequency to eliminate redundancy and replicate the sample.

- c. However, where the participants repeat a specific theme twice even though worded differently, the theme's occurrence is counted as one even though it appears to be 2.

Step 3: The third step involves tabulating a theme's frequency as described in step 2(a-c) above.

Step 4: Step 3 is further collapse where necessary, especially when there is an instance of thematic overlapped as judged subjectively by the writer.

3.3.3 Study 3 Samples, Research Instrument, and Procedures

Sample

Study 3 in Chapter 6 of the thesis surveyed the opinion of international law enforcement agency investigators and interpreters. The investigators sample is labelled as "Group A " and the interpreters sample labelled "group B". Group A sample consists of sixty-six (66) professional investigators drawn from diverse backgrounds, including police, lawyers, judges and others. Just like the interpreter's sample, they were surveyed in a 2-stage purposive and snowball sampling approach.

Table 3. 3: Gender Distribution of International Agency Investigators Sample

	Frequency	Percent	Valid Percent	Cumulative Percent
Categories:				
Male	38	57.6	57.6	57.6
Female	28	42.4	42.4	100
Total	66	100	100	

Table 3.3. report on the gender distribution of international law enforcement agency investigators that participated in the study. It could be inferred from the table that the investigators' sample consists of 58% (n=38) male and 42% (n=28) female. This suggests that although the gender distribution may be seen as close or equally distributed, male investigators are 16% (n=10) more than female investigators.

In addition to the sample of investigators, the thesis sampled forty (40) expert interpreters (i.e. Group B sample), and their informed consents were sought prior to sending an invitation to participate in the survey.

Table 3. 4: Gender Distribution of International Agency Interpreters Participants

	Frequency	Percent	Valid Percent	Cumulative Percent
Categories:				
Male	36	90	90	90
Female	4	10	10	100
Total	40	100	100	

As shown in Table 3.4, the gender of interpreters is asymmetrically distributed. That is, male interpreters were the majority, with 90% (n=36) of the interpreters identifying as male and only 10% (i.e. n=4) are female. Further discussion on each of the populations surveyed, the procedure adopted in the survey and the sample size is explained further as follows.

Table 3. 5: Place of International Agency Interpreters Residents

	Frequency	Percent	Valid Percent	Cumulative Percent
Countries:				
The Netherland	5	12.5	18.5	18.5
United Kingdom	9	22.5	33.4	51.9
Uganda	10	25	37	88.9
Tanzania/ Norway	1	2.5	3.7	92.6
Kenya/ Germany	1	2.5	3.7	96.3
Rwanda	1	2.5	3.7	100
Valid Total	27	67.5	100	
Missing	13	32.5		
Grand Total	40	100		

In terms of interpreters' location, Table 3.5 shows that most interpreters are residents in Uganda, UK, and the Netherlands, with Uganda coming up as the most highly represented location with 25% (n=10) participants. UK and Netherland have 23% (n=9) and 13%(n=5) of participants' representation in the sample.

Research Instruments

Two set of questionnaire instruments is designed and assigned specifically to a particular participants group. Details of the questionnaire instruments is provided as follow below;

Interpreter Related Questions

Participants in the interpreters' sample (i.e. Group B) sample were asked twenty (20) semi-structured questions that were both open- and closed-ended. The first seven (7) questions related to interpreter demographic information such as sex, country of residence, language combination, year of experience elsewhere or with ILEA as interpreters, and participation in an investigative interview (II) with ILEA or elsewhere. Other questions include interpreters' training on II, participation in ad-hoc preparation for II, accuracy, interruption difficulty and its description, rapport building, misconceived ideas about roles, cultural factors, preferred sitting position and disagreements, past positive experience and additional information.

Investigators Related Questions

Group A participants, who consist of investigators, were assigned nearly twice the set of questions assigned to interpreters. This is because perceptions regarding certain research objectives are best elicited from expert investigators. More so, some of the interpreter responses to the core objectives questions require some degree of cross-validation. In total, the investigator's sample was asked a total of thirty-six (36) questions. Some of the questions, although reworded, overlap with those from the Interpreter's questionnaire sets. For example, the first six (6) questions include demographic information such as investigators' gender, last held position pre-ILEA career, year of experience as investigators with ILEA, number of interviews conducted with or without interpreters. Other unique sets of questions designed exclusively for investigators include the nature of the training received on investigative interviews and use of interpreters, location of the training, scope and limit of interpreters' role in planning and preparation stage of investigative interview. The questions also consist of perception regarding the interpreter's contribution to rapport building, information flow disruption, accuracy, degree of disruption and the most difficult aspect of II. Finally, questions on; cultural effects, degree of freedom granted to interpreters in choosing a sitting position and the preferred choice of interpreters sitting location by investigators are also asked.

Data Collection Procedure

The investigators sampling procedure involves sending an invitation to email addresses obtained from the international law enforcement agency (ILEA), introducing the subject of

enquiry and the need for such study and soliciting participation. The procedure generated 66 investigators who were interested in participating in the study. Thus, the investigators formed sample 2 for the current study. In terms of gender representation, both female and male investigators are nearly equally represented with 42.4% and 57.6% representation, respectively. The primary sampling strategy is purposive because we, at the initial time, focused on investigators and the interpreter's population. Convenient sampling involved sending a web questionnaire to the participant, whom we have access to their email addresses to request their consent and voluntary participation in the research as a prerequisite component of the ethical consideration.

The interpreter's sample were surveyed in a 2-stage purposive and/or convenient based sampling. In the first stage, access to the database of interpreters' email who at one time or the other have attended conferences and seminars in which the researcher was present or not was solicited. The email database is then used in the second stage to do two things: (i) introduce the research topic while masking the objective to avoid bias when answering, (ii) invite interpreters to participate in the survey. Closed-ended questions with few open-ended questions were issued to each of the participants in the interpreter sample. The response is a mix of nominal and dichotomous word choice, and participants were expected only to choose one that best fit their descriptions of the phenomenon under study. Participants are also allowed to respond to certain questions without a constraint on their responses. To prevent attrition, the questionnaire is designed with simple wording. In such a way, participants can only proceed to the next question when the preceding question has been successfully answered.

Data Analysis Procedure

The result of study 3 is analysed using similar approach and analytical tools as in study 2. The approach consist of a frequency analysis of the MCQ response and the inductive thematic analysis of the FTQ responses¹¹.

3.3.4 Study 4 Research Instrument, Sample and Procedure

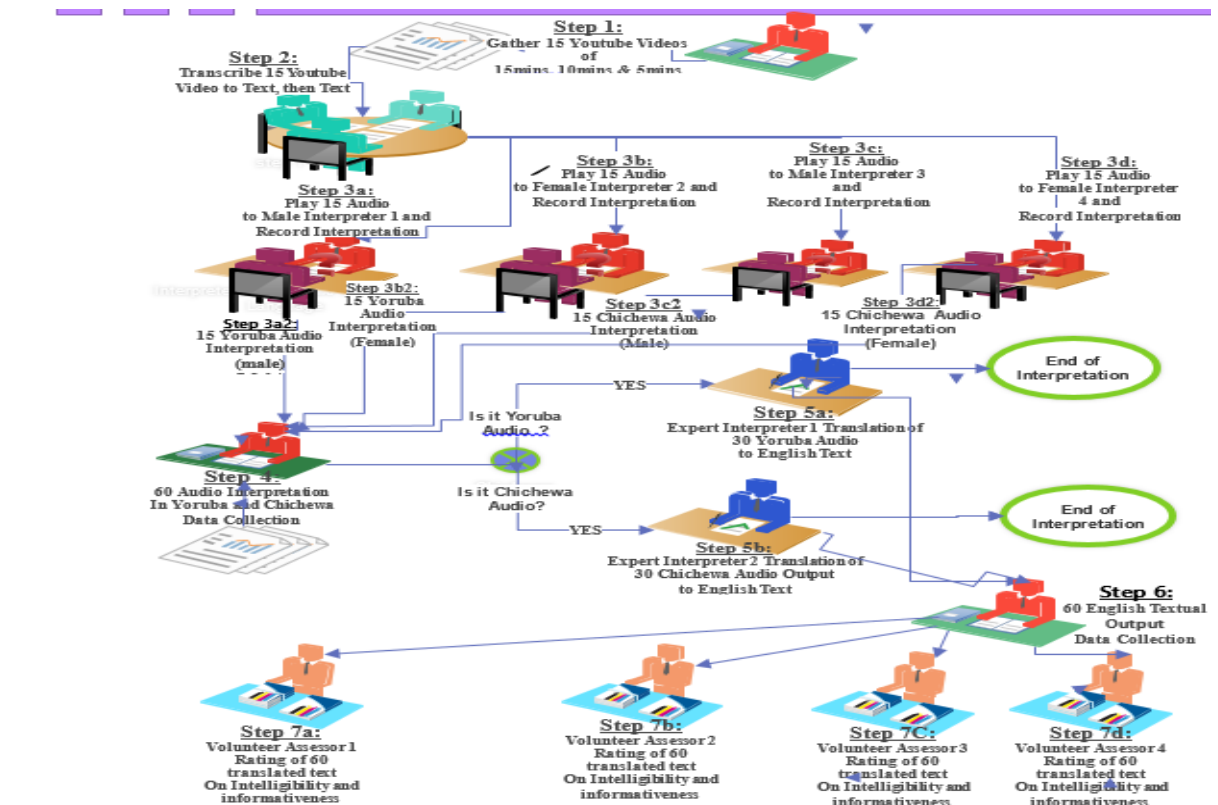
Sample

Study 4 reported in chapter 7 of thesis is based on a mock experiment with sample of interpreters and investigators. The mock experiment involves a live interpretation session using four less experienced interpreters and an offsite back-translation and evaluation process involving two highly experienced interpreters and four volunteer assessors. In addition, the

¹¹ Analysis is conducted using the MAXQDA computer aided software for descriptive and Qualitative data analysis.

mock experiments also conduct a machine translation session for a few of the text materials used for the study.

Figure 3. 1: Interpretation and Rating Flow Chart



Source: EdrawMax Adapted Design 2021

Figure 3.3 provides an overview of the interpretation and evaluation process flowchart applied to the mock experiments. The discussion that follows immediately after the figure explores in more detail the approaches and participants involved in the mock experiments. There are four (4) interpreters with the first language (L1) in Yoruba (Nigeria) and Chichewa (Malawi). Their second language (L2) is English. The four (4) interpreters consist of 2 males and females selected from each L1 cluster. Therefore, the interpreters of each language were one male and one female (a total of two males and two females). These four interpreters are non-specialist's bilinguals but are educated individuals with a university degree recruited to interpret. The study also recruited two (2) expert interpreters, with proven proficiency in Yoruba Translation and the other proficient in the Chichewa language, recruited to back-translate or transcribe. The four layman interpreters have recorded audio interpretations of Chichewa and Yoruba back to English. The two expert interpreters are university graduates with years of experience providing interpretation services in the two languages. They were recruited via recommendation from friends from the home country of the expert interpreters.

Their services are solicited because they are experts in translating African languages to English.

Research Instruments

1. Video, Witness Account (Excerpt)

1.1: Firstly, five video clips of 15 minutes (in English) from previous crimes in the U.K. were selected for use. These video clips are used because they are real non-violence crimes and are of types common in the U.K. The five videos of the 15 minutes are as follows: The first crime relates to a love scam involving Rosalie, an Australian lady, who met Ben Wolford online and developed a relationship with him. Ben real name was Bidemi Bakare, and he resides in Kuala Lumpur, but he was initially from Nigerian. Ben scammed Rosalie \$90 000 of her entire life savings and arrested her later on. The second video relates to Daniel Jarvis, who pretended to be quadriplegic for two years and had fraudulently claimed more than £75 000 for disability benefits from the U.K. government. He was investigated and caught on few occasions. The following crime relating to double-dipping fraud is the third video clip. This crime is linked to a man called Khalid Hussain. He is a Belgian citizen who was claiming benefits in Belgium and the United Kingdom. Khalid had swindled the United Kingdom's government around £25 000 over the years. U.K. police investigated and established that he resides in Belgium and claimed benefits in Belgium and the United Kingdom. The fourth video is about a fraudulent lady called Angel. She used the name Angel Jackson and Angel Duffy to commit her fraudulent activities. As Angel Jackson, she deceived the council into paying her rent, claiming she was a disabled single mum and, in the process, had defrauded the council of over a hundred thousand pounds sterling (£100 000). As Angel Duffy, she is fit and well and owns two properties. She played the U.K. benefits system to receive thousands of pounds in housing benefits over the years. The fifth video is a case of a Pakistani student apprehended at Heathrow Airport for using a bogus document. He used bogus documents to extend his student visa, and he was not attending college. He violated U.K. laws by working more than 20 hours on a student visa.

1.2: Each of the five 15mins video recordings was of a length that allowed for an audio recording of 15 minutes.

1.3 In addition to the five 15mins videos, the study gathered five 10mins videos and another five 5mins videos recording. They were of length that allows for an audio recording of

10mins and 5mins respectively. See Appendix below for details for the complete textual video clips of 15, 10 and 5 minutes.

1.4 These videos were transcribed into text.

1.5. Then, audio recordings of each text were made to ensure accuracy and avoid unconscious bias during the experiment. The audio recordings served as the basis for the various languages translations from (Yoruba and Chichewa) and back to English. Comparing the final English version with the original version provided the basis for assessing intelligibility and informativeness by assessors who accessed both original and final (back and forth translated) versions.

Data Collection Procedure

Human Interpretation Procedure

The study uses interpretation and back-translation procedure sequentially in a 2 Stage Process. Detail of each stage of the process provided as follow;

Stage 1 Interpretation: An invitation was extended to the four interpreters with few years of experience via phone calls and emails. Hence the study dubbed this set of interpreters as the "layman interpreters". An audio recording session is organised for each layman interpreter sequentially. One at a time, each layman interpreter was required to listen first to 15 audio recordings of the original material in the English language and then attempt to verbally communicate the contents of the 15 recordings in Yoruba (a Nigerian language) or Chichewa (a Malawian language), depending on the native or first language of the layman interpreter. There were 30 audio recordings in the Yoruba language and another 30 audio recordings in the Chichewa language. Thus, the two layman Yoruba interpreters produce 15 recordings each ($2*15=30$), while the 2 Chichewa interpreters also do the same. In total, stage 1 produce 60 audio recordings in the target or first language of the interpreters.

Stage 2- Back Translation: 2 expert interpreters with proficiency in Yoruba–English or Chichewa–English translation were sent invitations. The 60 audio recordings in Chichewa and Yoruba languages, (i.e. 30 audio each per language) were distributed to the two expert interpreters. Each expert interpreter is required to back-translate the 30 audio interpretations recorded in Stage 1 to English text. As such, stage 2 translation produce 60 texts subjectively assessed for intelligibility in the following research stage.

Machine Translation Procedure

As opposed to human interpretation, the thesis conducts a comparative machine translation of each original text material in English to Yoruba and then back to English. The popular google translator web interface was used to convert a specific text from English to Yoruba and back to English. The source material includes fifteen (15) minutes of the text of 2000 words. There were 1,300 words in the ten (10) minutes transcripts and 600 words in the five (5) minutes.

Quality Assessment Criteria and Procedure

Assessment Criteria

In an endeavour to provide a scientifically verified framework for evaluating the quality of written documents and material text as a unit of Analysis, Carroll (1966) proposed two new logical dimensions of translation quality. The two-dimension form part of other logically possible measures of translation quality presented by the discussant at the annual meeting of the language processing advisory committee. Carol refers to these two dimensions as subjective measures that differ from a mechanical or objective measure of translation quality: word count, "legibility and completeness of graphic, "and others. The two subjective logical dimensions of translation quality include (i) Fidelity or accuracy and (ii) Intelligibility of translation. To adapt Carroll (1966) translation quality dimension meant for written text to spoken or verbal discussion context, Tiselius (2009b) replaced the term fidelity with a new name called "informativeness" but still retained the original meaning of fidelity for informativeness

Criteria 1: Intelligibility

The intelligibility measure of translation quality gauge the extent to which a translated documents read like the "source documents, "normal, well-edited and understandable" in the same way one will understand the source document (Carroll, 1966, p. 57). Intelligibility is a conservative translation accuracy measure that focuses only on the similarities and matches between the original and the translated even when the words are precisely equivalents or additional information. For intelligibility, the more the translated document read like the original, the better is the level of translation intelligibility as a measure of translation or interpretation accuracy. Hence a higher value indicates that the material is more intelligible, while a low score indicates less intelligible

Criteria 2: Informativeness

On the other hand, informativeness, otherwise known as fidelity, measures the degree of truthfulness of the translated document in terms of "low distortion, addition and omission" (Carroll, 1966, p. 57). It differs from intelligibility in that it focuses more on the sentence as a unit of analysis. It does not allow for the importation of foreign words and exclusion of any word which may add, remove or distort the original information. It implies, therefore, that; informativeness is a stricter form of translation accuracy than intelligibility. To achieve informativeness, the interpretation copy of the document must sound and feel like the "original, normal well-edited and understandable" relative to the source documents of the translation with an additional condition that no additional information is introduced nor any of the information excluded. Hence, for informativeness, the lower the distortion in meaning, additional information, and omitted information, the better the interpretation quality. Therefore, a lower value is expected for informativeness to indicate very few omission additions and distortion in the translated document.

Assessment Procedure

The writer gave out two (2) types of text material to the assessors to assess the quality of interpretation. The first text material is a 15 non-violent crime original story snippet transcribed from the video and audio to text. The second text material contains four sets of 15 back-translated story snippets to and from another language (Yoruba or Chichewa). In short, the second text material contained 60 back-translated English text snippets, categorised into four (4) interpreters' group of 15 text snippets per group. The task is to compare the contents of the original text to back-translated text.

Figure 3. 2: Interpretation Quality Grading or Scoring Scale

Table 3. Scale of intelligibility on grading sheet

1. Totally unintelligible	2. Generally unintelligible	3. Seems intelligible	4. General idea intelligible	5. Generally intelligible	6. Completely intelligible
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Table 4. Scale of informativeness on grading sheet

0. Original contains less information than rendition.	1. Without any new information.	2. No new information, strengthens the intended meaning.	3. Minor changes in meaning .	4. Gives some new information.	5. Original explains and improves.	6. Only new information.
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Sources: Tiselius (2009; 2013)

Task 1: To rate each of the back-translated text snippets on the extent to which they achieve semantic and pragmatic similarity with the original text by assigning numbers 1-6, using the grading sheet for intelligibility in table 3, Figure 3.4 as a guide. For example, if the original text says that 'the bicycle damaged beyond repairs' and the back translation says, 'the bicycle is damage and repaired'. A lower intelligibility score below three (3) is assigned because the intended meaning of not repairing the bicycle indicates a repaired bicycle in back-translated text.

Task 2: To rate each of the back-translated text snippets on the magnitude of word or meaning omission, addition, substitution and modification, using the grading sheet for informativeness in Figure 3.4 as a guide. For example, if the original text said, 'the car was blue', and the back-translated text said, 'the car was red' or 'the car has colour', the substitution of blue for red is a loss of informativeness. A higher score than three is assigned to indicate infidelity.

Data Analysis Procedure

Human Interpretation Experiments Analysis

The study gathered 60 intelligibility and informativeness rating, respectively, from each of the four (4) assessors. The implication is that a total of 240 ratings of intelligibility and 240 ratings of informativeness is available as data for analysis. The study investigates the quality of data collected to substantiate the 240 assessors rating. The discussion that follows enunciate the data quality check substantive or inferential analysis procedure applied to this study.

Data Quality

An important measure of data quality in translation research is reliability, which aims to gauge the degree of rater's convergence, divergence, and consistency. The reliability of replicability, reproducibility, and consistency between items or the measuring scale is concerned (Bollen, 1989). In the case of the assessor, or rather, it measures the extent to which there is consistency between each assessor rating of intelligibility and informativeness for the four assessors rating. Two general forms of reliability are possible for raters, i.e., between assessor reliability and inter-rater reliability, i.e., individual assessor consistency.

(i) Between Assessor Consistency Assessments

For each 240 intelligibility and informativeness rating, the study applied the Spearman Rank correlation (ρ) method to measure the degree of agreement and rating consistency between the four volunteer assessors. In simple terms, the rank correlation between each

assessor's ratings of individual interpretation quality dimensions, i.e., the intelligibility or informativeness rating. A number indicates high consistency near 1, and low consistency is indicated by a value closer to 0. Using the probability estimates, a value less than 0.05 or 5% indicates strong agreement among volunteer assessors, and a value greater than 0.05 or 5% suggests disagreements or inconsistency.

ii) Within Assessor Consistency Assessments

For within consistency assessment, the study applies two approaches. The first approach explores the associational consistency of quality rating by each assessor and the other the logical consistency of the rating. Within consistency occur when there is a moderate or robust association and logical consistency. In this study, associational consistency measures the correlation between each assessor rating of the two interpretation quality dimensions. Logical consistency emphasised the possibility of having instances of intelligibility rating been higher or equal to informativeness in many cases.

The associational consistency is measured using the spearman correlation (ρ), and the logical consistency is determined by tabulating the difference in intelligibility and informativeness rating by a single assessor under three (3) difference conditions. The three conditions are whether intelligibility is (i) greater, or (ii) equal, or (iii) less than informativeness. The decision rule for associational consistency is similar to the decision rule specified under the between consistency assessments. The decision rule for logical consistency is that conditions (i.) and (ii) should be more than (iii.) in the table. Put more succinctly, the larger the number of cases that rate informativeness less or equal to intelligibility, the higher the logical consistency.

Log-linear Analysis

The study used hierarchical log-linear regression frameworks to examine factors affecting interpretation quality. This framework provided the more generic framework for analysing categorical data with a rank scale, and the distance between the scales is approximately measurable (Von-Eye & Mun, 2013). Furthermore, the log-linear model (hereafter Log-Lin) can be generalised to other models: the logit, logistic, and generalised linear model (GLM). The Log-Lin model is selected because the intelligibility and informativeness rating in this study possess magnitude difference and the distance between each relative point on the scale is determinable. For example, a score of 6 is 1x higher than the

score of 5 and 2x higher than the score of 4. In addition, the log-linear modelling framework is more appropriate for this study based on the following facts.

1. Log-linear is the general framework within which one can derive other extensions such as; the generalised linear model (GLM) and logistic model. GLM and logistic model can be expressed as a log-linear model and not the other way. In short, log-linear modelling allows for ease of modification of the model to suit various problems and research applications.
2. The log-lin approach is not overly simplistic and tends to achieve some robust specification accuracy
3. It avoids the overdispersion problems with logit or logistic linear regression modelling frameworks and produces an equivalent result to logit or logistic when overdispersion is absent.
4. It is more appropriate than analysis of variance (ANOVA) when the data lack interval and zero-point but possess magnitude (Von-Eye & Mun, 2013, p. 3).

Machine Translation Analysis

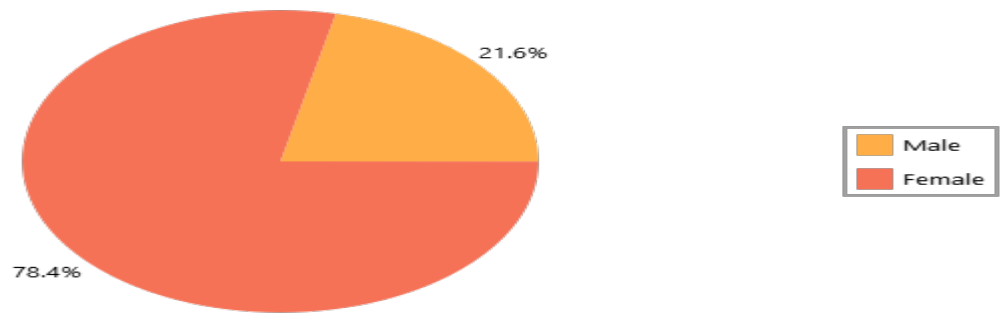
The thesis analyses the length of final transcripts from the google translator engine to see what fraction of the original was retained. In addition, the thesis also estimates the proportion reduction in the final transcript relative to the original text material. For example, if the final translated transcript is 500 words long and the original, which is fifteen minutes long, contains 2000 words, the proportional decrease is 0.75 [i.e., $1 - (500/2000)$]. If the finished transcript included 500 words and the original contained 1300 words in 10 minutes, the proportional decrease would be 0.62 [i.e., $1 - (500/1300)$].

3.3.5 Study 5 Sample, Research Instruments, and Procedure

Sample and Data Collection Procedure

The validation study in Chapter 8 surveyed the opinion of registered and professionally certified interpreters in the U.K. This research surveyed professional interpreters (N=51) recruited across different ethnicities, with most of them (78 %) been female and residents of the United Kingdom. Thirty-three nested questions were sent through an electronic questionnaire platform to a U.K. sample of expert interpreters. As shown in Figure 3.1, the participants consist of 40 (78%) female interpreters and 11 (22%) male interpreters.

Figure 3. 3: UK Expert Interpreters Gender Distribution



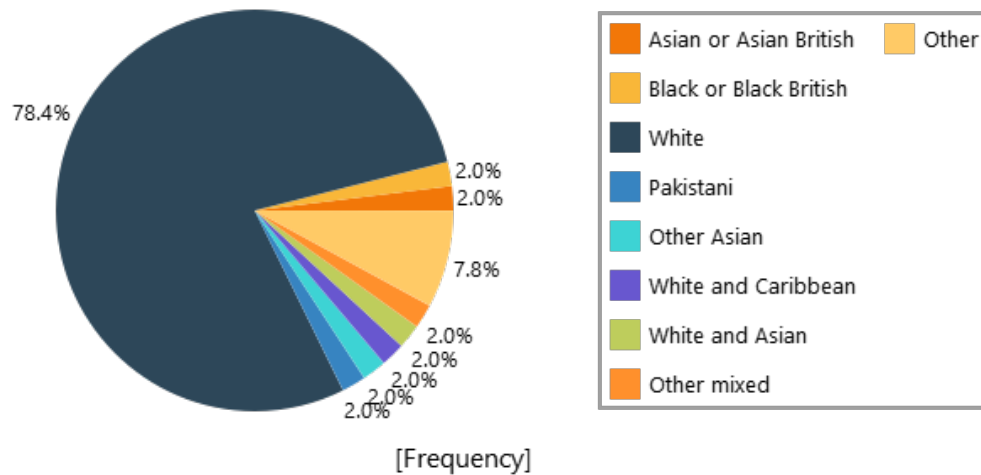
Source: Own Computation 2021

Furthermore, nearly all the female interpreters (n=40, 78%) are of white ethnic background, as shown in Table 3.6 and figure 3.2. However, the male participants are distributed between Asian, Black, Pakistan, the Caribbean, and mixed ethnicity.

Table 3. 6: UK Expert Interpreters Ethnicity

	Frequency	Percent	Valid Percent	Cumulative Percent
Ethnicity Categories:				
Asian or Asian British	1	2	2	2
Black or Black British	1	2	2	3.9
White	40	78.4	78.4	82.4
Pakistani	1	2	2	84.3
Other Asian	1	2	2	86.3
White and Caribbean	1	2	2	88.2
White and Asian	1	2	2	90.2
Other mixed	1	2	2	92.2
Other	4	7.8	7.8	100
TOTAL	51	100	100	

Figure 3. 4: Participants Ethnicity Pie Chart



The average years of experience for the 51 participants is between eight (8) and ten (10) years with a standardised variance of 6.5.

The study recruited 51 participants from a population of professional interpreters via their email addresses using a purposive sampling technique. The online questionnaire platform sent a hyperlink to the professional interpreters' email addresses via Qualtrics online survey platform. As such, the questionnaire distribution and administration is conducted through mailing and online questionnaire filling. Participants were allowed to skip a question if they did not wish or know how to respond. Although this practice often creates missing value, attrition or dropout will be reduced by not forcing participants to answer a question before proceeding to the next question, making the approach desirable. The response consists of a close-ended dichotomous combination (i.e., yes and no, ordinal and nominal choice responses). Participants were also allowed to express themselves in their voice or words, and the responses were stored in textual form. The study automatically converts responses to the dichotomous, ordinal, or nominal questions into numeric quantities by the Qualtrics web application and the response data saved in a statistical package for social science (SPSS) data file extension.

Research Instruments

This questionnaire consists of 32 question items combined with both multiple-choice questioning approach to free text questioning approach. The first six questions (1, 2, 3, 4a, 4b, and 5) elicited data on the participants' demographic characteristics (See Appendix). Subsequently, the other 26 questions elicited a response on the interpreter's perception regarding seven (7) critical issues in the interpreter's assisted investigative interview (IAII), depth of experience in IAII, and possible challenges encountered during these years.

Data Analysis Procedure

The MTQ response in study 5 is analysed using the frequencing analysis techniques as in study two (2) and three (3) (i.e. chapter 5 and 6). On the contrary in study 5, instead of using the iTCA techniques, the writer opted for grounded theory analysis method (GTAM) to explore the FTQ or open ended questions response from the questionnaire instruments in study 5 (i.e. chapter 8). The discussion that follows provide a brief overview of the GTAM, its appropriateness for the study and the thesis in general

Overview of Grounded Theory Analysis Method (GTAM)

GTA methodology is an exploratory data analysis approach in the class of latent factor analysis not bound by theory. It is a systematic process of theorising from data. GTM does not constraint itself to pre-existing theory; instead, GTM developed a theoretical or data-bound theory that best explains the phenomenon under study (Braun & Clarke, 2006; Charmaz & Belgrave, 2012). It is a more general or generalised method because other qualitative techniques often take something from GTM, which they dilute. For example, GTA is by nature inductive and sometimes abductive, just like the early variant of content analysis known as the inductive thematic content analysis, i.e., iTCA (Smith, 1992). On the other hand, GTM is interactive, inductive, and iterative and comparative (Charmaz & Belgrave, 2012). The difference between iTCA and GTM is that the latter develop theory from data and have a prescriptive procedure and techniques. iTCA is a dilution of inductiveness with theory with no prescription but to explore data for hidden patterns. Instead, GTAM developed a theoretical or data-bound theory that best explains the phenomenon under study. In GTAM, extensive literature review always comes after an empirical study to avoid earlier literature bias. These features make the current study more suitable for GTAM. However, this study does not purport to follow a strict GTAM approach since some prescriptions are not followed, except that there is no literature review before the empirical analysis. It is at the crossroads of GTAM and iTCA, but more tilted towards GTAM because of the ex-post literature in the discussion section. A similar 4-step procedure as in the iTCA is applied for the GTAM with little modification:

Justification of Grounded Theory Analysis Method.

GTM alternative is the content analysis - (quantitative -QnCA or qualitative QualCA), with an earlier variant of QualCA giving rise to a loosely defined inductive thematic contents analysis (Smith, 1992). These alternative approaches are used to gauge participants' perceptions regarding variables and conditions developed from theory and empirical evidence using deductive thematic content analysis (dTCA). However, this alternative is likely to

introduce some degree of bias, as some possible logical information not captured by conceptual, theoretical and empirical evidence may be left out. On the other hand, the open-ended questions adopted in combination with some close-ended questions helps introduce new information. More significantly, the present study reduces any possible bias by not restricting the participants' perceptions and limiting any researcher bias introduced into the study. Furthermore, the GTAM result is free from research bias, as the current researcher has no interpreting experience except for learned knowledge of the domain of study.

Because this study is a triangulation study with no literature review done beforehand, the GTAM is more appropriate. This is because GTAM, unlike the inductive thematic content analysis (iTCA), relied on the constructivist philosophy to arrive at a theory of phenomenon and events. GTAM is a more general or generalised form of iTCA (Charmaz & Belgrave, 2012) that allow for working outside existing theory rather than exploring a theme to validate the existing theory. It provides new insight and enriches the literature. GTAM is used to analyse the FTQ response study based on the data-driven emerging theme inferred from the data rather than a bounded theory. The study coded each participant's response into a distinct class or group to which it shared semantic or thematic similarities. The class or grouping is data-driven rather than patriotism. The simple frequency analysis is applied as appropriate to understand the underlying factors or interventions affecting interpreters' effectiveness and interview outcomes in face-to-face investigative interviews.

3.4 Ethical Consideration

For the survey participants in chapter 5, 6 and 8 (i.e. study 2, 3 and 5) which includes individuals of black, Asians and other ethnic minority (BAME), expert investigators and expert interpreters, ethical clearance is obtained from the University of Derby prior to the commencement of the research. Furthermore, a generic email was sent to all investigators and interpreters – whose email addresses are accessible. The content of the mail requests their formal participation via a link to an online questionnaire designed using Qualtrics survey facilities and inform them of their right to opt-out of the survey whenever they wish. Questionnaires for the investigators were written in English, while the questionnaires for the interpreters were sent in either French or English, depending on the first language of the interpreter.

The experimental study in chapter 7 (i.e. study 4) includes volunteered interpreters, expert interpreter solicited and assessors. In line with Derby University ethical guidelines, the

writer collects the interpreters' informed consent in written or verbal form (available upon request) before the experiments. The study tagged each interpreter with an identification number in line with the GDPR ethical guidelines on storing personal data. The study uses I.D. for identification purposes, and real names excluded, even though the writer may be aware. The current study attached the I.D. to the consent form to manage the identity of each interpreter. The only personal information collected in this study relate to gender and source language or culture proficiency linked to the interpreters' I.D.

Chapter 4: Depth and Gap Analysis with Study Space Analysis Techniques¹²

4.1 Introduction

In court and traditional face-to-face investigative interviews, Low English proficiency (LEP) has been linked to the incidence of coerced or false confession, wrongful conviction, injustice, and unfair treatments (Adrine, 2009; Berk-Seligson, 2009; Davis, Hon. Lynn, & et al., 2004; Dueñas-González, Vásquez, & Mikkelson, 1991; Jongh, 2012; Laster, 1990; Laster & Taylor, 1994). The proportion of people with LEP and language service needs has increased with the changing demographic and language mix of many famous cities in the U.S. and U.K. (Dueñas-González et al., 1991; Jongh, 2012). This discounts the need for interpretation needs for victims of and witnesses to a crime. Qualified interpreters have been advocated as a critical tactical strategy (Laster, 1990). The ethnic mix of the justice system (Bird, 1990; Holdaway, 1991a) and the nature of an investigative interview (Certoma, 1990) are other criteria for improved race relations and a fair justice system. Within the interpreter assisted investigative interview context, pre-interview activities (i.e. planning and preparation) and interpretation characteristics such as interpreter presence, position and interruptions, have been observed to impact the nature of investigative interview discussion and goals (Ewens, Vrij, Leal, & Mann, 2016; Mason, 2007; Scott, Tudor-Owen, Pedretti, & Bull, 2015). Furthermore, the need for a transparent and quality interpretation service with witnesses, victims and suspects, has been echoed in a recent UK parliament committee that reviewed and inquired into the nature of interpretation service provision contracts in the UK (e.g. Justice Committee, 2013; National Audit Office, 2012; Public Account Committee, 2012). In combination with recent evidence from research on issues with existing interpretation services, this inquiry has necessitated policy change in interpretation service practice.

To provide a robust base for policy change, Malpass et al. (2008) noted that research on which change should be based must be adequate, respectable, and have vastly overwhelming agreements. Research-based adequacy and respectability are determined through a critical or systematic review of existing and available bodies of knowledge replicability and diversity (Malpass et al., 2008; Meissner, 2021). Meissner (2021) clarifies that the maturity of any field of inquiry to influence policy change is likely to be evidenced in the conduct of a review of related literature, either as: SSA, a critical or narrative review (author's emphasis), systematic reviews, or meta-analysis. The investigative interview field, which has been around for over 20 years now, has reached such a period in its development

(Meissner, 2021; Memon, Meissner, & Fraser, 2010; Walsh, Oxburgh, & Amurun, 2020). Therefore, there is no gainsaying that the interpreted assisted investigative interview subfield deserves some form of review.

In the formal cognitive police investigative interview, several review efforts apply SSA and other review approaches (Brubacher, Poole, & Dickinson, 2015; Meissner, 2021; Memon et al., 2010; Vallano & Compo, 2015; Waterhouse, Ridley, Bull, & Wilcock, 2020). More than ten years ago, the reviewed efforts were also visible in interpreter-assisted interviews between patients and doctors (Bauer & Alegria, 2010; Wallin & Ahlstrom, 2006). Pursell and McCrae opined that to "regularly review research is vital for updating evidence-based practice", and if "a review was published less than a year ago, there may be little value in conducting another review on the same treatment and outcome" (Pursell & McCrae, 2020, p. 21). Little or no comprehensive literature reviews exist in the context of a court or face-to-face interpreter-assisted investigative interview to map the depth and sufficiency of research into interpretation service needs, optimization, and efficiency (i.e., interpretation quality). Therefore, this chapter uses SSA to examine the depth, breadth, and concentration of the seven key issues/variables of interest to place the current study in the context of the existing body of literature. These issues include the need for interpretation service, planning and preparation, rapport building, interpreter interruption, cognitive difficulty due to interpretation span, language, and gender.

SSA is a way of merging and evaluating published research on a subject and thus determining whether the research is sufficiently applicable to practice to warrant changes. SSA looks not at the statistical robustness of interventions on outcomes but topic coverage, breadth, and relation to the associated field of practice (Malpass *et al.*, 2008). This procedure's benefits include detecting if critical variables or conditions have been explored and determining whether a topic has sufficiently progressed to warrant evidence-based policy changes. SSA is not new to the investigative interview field, as demonstrated by many previous SSA efforts enumerated earlier. What is new is the dearth of SSA's review within face-to-face interpreter-assisted investigative interview context. SSA is not full proof because it focuses on measuring previous research adequacy and depth, ignoring its significance in a meta-analysis and chronology as in systematic or any other related review. Nevertheless, because SSA uses a research corpus' adequacy for policy change, it is adopted for this research.

4.2 Need for Interpreters SSA Result

The need for interpreters SSA corpus consists of seventeen (17) books and journal articles. The studies in the SSA explore the role of seven (7) intervention or independent

variables on eight core dependent variables. The seven intervention or independent variables consist of: i.) Demographic change, ii.) Social-cultural change, iii.) ethnic growth, iv.) Language change, v.) Trust, vi.) Police diversity and vii.) need for interpretation.

Outcomes

Eight (8) dependents variables are investigated under the need for interpretation services on SSA corpus, and they include: i.) equality, ii) social-justice, iii) fair trial, iv.) Enhancing medical claims frequency, iv.) easing communication, v.) reducing coercive confession and wrongful conviction, vi) barrier to care, vii) rapport building, and viii) best practice. Of the 17 articles, 88.24% (n=16) explore the need for interpretation services as a response to societal ills. More precisely, 60% (n=10) of the 16 studies explore the use of interpretation services as a tool to guarantee equality, social justice, and fair trial. Most contributions (for example, Duenas-Gonzalez 1991; Kahaner 2009; Berk-Seligson, 2009) focus on the societal consequences of interpretation service provision. A little more than a quarter of the 16 studies (i.e., 40%, n=6) investigated the impact of interpretation service on enhancing medical claims frequency, easing communication, reducing coercive confession and wrongful conviction, a barrier to care, rapport building, and best practice. It is observed that 5.88% (n=1) of the total studies (i.e., 17 articles) in need of interpretation service, SSA corpus uniquely explores the effect of foreign language growth on interpretation service usage, even though two (2) other articles explore the role of demographic and social change. Interestingly, efforts at investigating police diversity effects are [sic] linked to race relation and fair trials (Bird, 1990; Holdaway, 1991a) and no attempt at exploring the role of harmonious race relation (or trust-building) on the need for interpretation service. Thus, the vacuum exists despite the apparent role of improved trust on ethnic minority tendencies to report crime and request interpretation services.

Need for Interpreters Ecological Validity

Are the studies conducted in a possible ideal real-life situation? The study observed from the SSA matrix (See Table 2.4.1b in the appendix) that more than two-thirds (90%, n=18) of the SSA studies are conducted in court or police settings. The study corpus consists primarily of ethnic minorities, immigrant and non-English speakers in court, police, and medical settings. It is also interesting to note that only a quarter of the study, i.e., 25% (n=6), uses original material (e.g., archived case file) or adopt field study through a questionnaire, interview, and direct observation to map expert opinion. Two-thirds (75%, n=14) of the studies use existing

research findings, standards, guides, and publications to justify the need for interpretation service.

In summary, on the need for interpretation services, SSA achieved some level of ecological validity because of the use of case files, legal gazettes, questionnaires, and interviews. However, there seem to be very few real-life mock or stage experiments or field studies to investigate an interpreter's need. Besides, thematic content analysis and case study seem to dominate the SSA with 70% (n=14) and 15% (n=3) representation in SSA. Therefore, more field studies observing court cases with or without interpreters and case snippets in a mock study scenario must be adopted to strengthen internal or ecological validity.

4.3 Planning and preparation of SSA Result

As per the SSA studies on pre-interview briefing and planning, a moderate body of knowledge is observed (i.e., n=12). Six interventions are explored, and they include: i) Solo planning effects, ii) investigator planning orientation/ perception, iii) investigators skill effects, iv) training and supervision effects, v) role trust and emotion conflicts, and vi) resources and cultural restriction effects. Studies (Baldwin, 1993; Cherryman & Bull, 2001; Scott, Tudor-Owen, Pedretti, & Bull, 2015; Walsh & Bull, 2011) exploring planning frequency and investigator planning orientation seem to dominate with at least 42% (n=5) representation in the total sample. Effects of investigators' skill on planning behaviour appear as the second most researched strand by a quarter (25%, n=3) of SSA studies, e.g., Walsh and Milne (2007) and Clarke and Milne (2001).

Outcomes:

The six independent variables are explored on four outcomes: i.) planning behaviour, ii.) planning frequency/volume, iii.) interview success, and iv.) planning performance. The frequency distribution of the outcomes reveals equal attention by researchers to investigate the antecedent, moderator, and outcome of planning. However, there is a less comparative analysis of joint planning's effect versus no planning or mono planning on interview success, information elicitation, and rapport building.

Planning and Preparation Ecological Validity

Investigators and other investigative interview personalities (e.g., trainers, supervisors, and legal advisors' population) seem to have attracted more interest, considering that 54% (n=7) of the sample have investigated this population. The problem of observing this population in a natural investigative interview setting or staged experiment has necessitated the use of a cross-sectional survey by an overwhelming majority (i.e., 83%, n=10) of the

sample in planning SSA corpus. Only 1 article (i.e., 7.7% of the sample) combined interpreters and/or judges' samples, and 1 article used undergraduate students as crime suspect sample. Therefore, studies in this SSA corpus appear very low in ecological validity because research rarely modelled practical situations. Very few studies in the SSA compared the effect of (i) joint interpreter- investigator's planning, (ii) no planning and (iii) investigators only planning on interview outcomes.

4.4 Rapport Building SSA Result

Rapport building is a vital ingredient in eliciting accurate information (Ewens et al., 2014; Vrij, Hope, & Fisher, 2014) and has attracted an enormous study mass. In the SSA, 28 articles were reviewed. The articles focus on 12 independent or intervention variables. These variables include i) rapport indicators, ii) discourse or interview type, iii) sitting position and iv) rapport continuum, v) rapport skills and tactics, vi) interview type, vii) rapport determinants, viii) persuasion approaches, ix) rapport dimension, x) feedback, xi) rapport induce turncoat, and xii) interpreter-target pre-interview rapport. Items (i) to (iv) of the 12 independent variables are the most studied with a near equal representation of 19% (n=6), 16% (n=5), 13% (n=4) and 13% (n=4), respectively. On the other hand, items (v) to (vii) are sparsely studied with 9.7%, 6.5% and 6.5% representation in the SSA, respectively. Meanwhile, items (viii) to (xii) rarely have more than one article, suggesting that they are the least studied intervention. Dimension x) feedback, xi) rapport induces turncoat, and xii) interpreter-target pre-interview rapport are rarely explored.

Outcomes:

Ten (10) dependent variables groups were visible in the rapport SSA corpus. They include i.) resistance, ii.) information volume, iii.) quality and outcome dynamics, iv.) recall and anxiety, and v.) confession variants, vi.) rapport development, vii) positive evaluation, viii.) information accuracy/relevance, ix.) pre-interview prep talks and emotional cue, x.) disclosure and cooperation. Variables (vi.) to (x.) are investigated by 25%, 21%, 14%, 10% and 10% (or n=7, 6, 4, 3 and 3) rapport SSA corpus respectively and variable (i.) to (v.) with a single study each and form 20% (n=5) of rapport SSA corpus (i.e., 4%, n=1 each).

Rapport Building Ecological Validity

A substantial proportion (i.e., 79%, n=22) of studies in rapport SSA corpus are conducted in investigative interview settings. Less than a quarter, i.e., 14% (n=4) and 7% (n=2), originated from mental and clinical health settings, respectively, e.g., Tribe and Lane (2009); Wiener and Rivera (2004). However, it is interesting to note that most (i.e., 79%,

n=22) of the studies in rapport SSA corpus do not involve interpreters. Only 21% (n=6) of studies in the corpus involve interpreters. Rapport building SSA appears mostly distributed between survey and experimental studies with a frequency of 43% (n=12) and 36% (n=10), respectively. Field studies and direct observation was rarely done, and they occupy 21% (n=6) of rapport SSA studies.

Questionnaire and interview instruments are substantially used by 65% (n=18) of rapport SSA studies, while interview transcript database and mock videos are used by 21% (n=6) and 14% (n=4), respectively. Thus, studies from SSA on rapport building may have achieved some level of ecological validity; however, they appear to suffer internal validity as there are few studies in the context of bilingual or interpreter-assisted interviews. Therefore, we advocate a need for more field studies on both interpreters and investigators in an actual rapport building session to map the interpreter versus investigator role boundary in an investigative interview.

4.5 Interpreter's Interruption and Recall Capacity

Studies on discourse interruption are sparsely investigated within interpreter assisted interview domain (except for Böser, 2013; Mason, 2007; Wadensjö, 1998/2013). Eighteen (18) articles formed the interruption SSA corpus. Eight (8) independent variables were studied, including i.) interrupting behaviours, ii.) Discourse segmentation, iii.) demographic difference, iv.) interpreters' status, v.) cultural, vi.) contextual cue, vii.) memory capacity, and viii) goal encoding. Variables (i.) to (iii.) appear as the most investigated with 39% (n=7), 17% (n=3) and 17% (n=3) representation respectively. The other five variables, i.e., (iv) to (viii), share the remaining 27% (n=6) of the interruption SSA corpus with at least one study each.

Outcomes

Eleven (11) independent variables groups are observed in the interruption SSA corpus. These include i) task time and recovery speed, ii) interruption or resistance, iii) frequency and rendition maintenance, iv) retrieval cue, v) accuracy, vi) miscommunication, vii.) error likelihood, viii) interruption usage, ix) cross-cultural interruption, x) power/dominance and xi.) discourse attitude, or engagements. Variables i) and iii) appeared the most studied area with 22% (n=4) and 17% (n=3) representation in interruption SSA respectively, while variables ii) and iv.) to xi) have at least one study each.

Interruption Ecological Validity.

Most of the interruption SSA studies, i.e., 72% (n=13), are in the human-machine and machine-machine interaction domain. Surprisingly, few studies, i.e., 28%, (n=5) of

interruption SSA corpus (Böser, 2013; Leanza, Boivin, & Rosenberg, 2010; Mason, 2007; Nakane, 2007; Wadensjö, 1998/2013) focus on interpreter mediated discussion. More than half (i.e., 56%, n=10) of interruption SSA studies are conducted under experimental conditions, and slightly more than a quarter, i.e., 28% (n=5), uses archival data. Field and survey research is conducted by 17% (n=3) of interruption SSA study corpus—the low representation signpost prevalence of scientific or positivist orientation. More than a quarter (i.e., 39%, n=7) of the interruption SSA studies are undergraduate students, while 22% (n=4) of the SSA corpus used interview transcripts. Nearly two-thirds (i.e., 74%, n=13) of interruption SSA scholars appear to adopt statistical strategies such as frequency analysis and ANOVA, while only 26% (n=5) uses qualitative thematic content analysis.

As such, ecological validity may have partly been achieved, although we may prefer to label the achievements as "higher internal validity". Nevertheless, there is a dearth of research in interpreter assisted investigation context, threatening the external validity vis-à-vis ecological validity of these studies. Therefore, we advocate a shift toward more field, observational and perceptual studies to improve this stream of research ecological validity within interpreting assisted investigative interview context.

4.6 Cognitive Difficulty and Interpreter Quality SSA Result

Memory and cognitive capacity have been reported to impact the extent of accuracy, retrieval, and recall in the linguistics discipline (Babcock, Capizzi, Arbula, & Vallesi, 2017; Dong, 2018). Twenty-two (22) articles are included in the cognitive difficulty SSA. Eight (8) independent variables are of core interest to researchers in cognitive difficulty SSA. The variables include i.) interpreters characteristics, ii) training, iii) interpreters' status and skills, iv) articulations, v) verbal memory capacity, vi) proficiency and coordination, vii) developments path, and viii) language difficulty. Variables (i) to (iii) dominate cognitive difficulty SSA with 45% (n=10), 23% (n=5) and 14%, (n=3) representation respectively. The remaining articles (i.e., 18% (n=4)) of cognitive difficulty SSA are shared between variables iv) to viii) with one study each.

Outcomes

In the cognitive difficulty SSA corpus, eight (8) dependent variables groups are extracted from the 22 articles in the SSA. They consist of i) recall capability ii) accuracy and quality, iii) performance and information collection, iv) short memory capacity and articulation control, v) the extent of informativeness and intelligibility, vi) interpreters processing capacity, and vii) cognitive load induced dilation (i.e. stress level). Variables (i) to (iv) are investigated

by 46% (n=10), 41% (n=9), 23% (n=5), and 32% (n=7) of the 22 articles concurrently. Variables (v) and (vi) are investigated by two (2) articles each and variable vii) by one article.

Cognitive Difficulty Ecological Validity

Within cognitive difficulty SSA, no face-to-face interpreter assisted investigative interview study existed. It is observed that undergraduate linguistics students (Dong, 2018; Tzou et al., 2011) and expert interpreters (Yenkimaleki & Van-Heuven, 2016) are the most sample population in cognitive difficulty SSA by 59% (n=13) and 55% (n=12) of the 22 articles concurrently. The SSA also shows that untrained bilingual students, inexperienced professional interpreters, and non-bilingual students are used to a lesser extent by 41% (n=9 of 22), 14% (n=3 of 22) and 9% (n=2 of 22) of the articles concurrently. The concurrency implies an overlap in articles usage of the population as many of the articles use more than one type of population.

We observed that most of the 22 articles (i.e., 86% n=19) are experimental to model conference interpreting environments and interpreting processes in general. More than half (i.e., 63% (n=12)) of the experimental articles used recorded audio-visual material, one-ninth (i.e., 11% (n=2)) used pen and paper, less than a quarter (i.e., 21% (n=4)) used a visual display, and another 21% (n=4) of the 19 experimental studies used questionnaire or interview instruments. Statistical analysis dominates the cognitive difficulty of SSA, with nearly 79% (n=15) of the 19 experimental studies adopting this approach.

Besides, the quasi-experimental approach, e.g., archival data, is predominant in the SSA at a lesser degree relative to pure experiment studies with 13% (n=3) representation in cognitive difficulty SSA samples. The archival data include interview transcripts -text, audio, and video. No article from court, police, medical or therapeutic, and immigration settings are found. Little or no articles instance implies a need for an urgent investigation into this field of study to validate a previously conclusion before a policy change. Cognitive difficulty SSA is rich in internal validity but possess relatively little external validity. Methods and data triangulation is therefore suggested to consolidate the validity of existing discovery.

4.7 Cultural Difference in Interpreter Accuracy

Ten articles are included in the cultural difference SSA, and the articles focused on five independent variables. The independent variables include i) cultural difficulty, ii) cultural behaviour, iii) cultural proficiency, iv) intervention, and v) semantic category. Intervention i) is investigated by exactly half (i.e., 50%, n=5) of cultural difference SSA articles, intervention ii) is investigated less by 20% (n=2) of the cultural difference SSA articles. Intervention iii)

to v) have at most one study each, representing 30% (n=3) of the cultural difference SSA articles.

Outcomes:

The cultural difference SSA corpus investigates eight dependent variables: i.) interpretation effectiveness, accuracy, and completeness, ii.) pragma or sociolinguistic failure, iii.) distortion and communication breakdown, iv.) usage frequency, v.) cultural difference, vi.) interpretation flow, vii.) role perception and viii.) fairness. Outcomes i) and ii) are investigated more with 27% (n=3) and 18% (n=2) representation respectively. Outcomes iii) to viii) have only one study each. There is no study interested in explaining how the difference in cultural semantics, symbols, and signs could mar interpretation accuracy.

Cultural Ecological Validity:

In cultural difference SSA, nearly two quarters (40%, n=4) of the articles demonstrate cultural issues affecting intelligence, law enforcement, and courtroom settings. The academic setting is the second most used setting (i.e., 30%, n=3). More than half (83%, n=9) of the studies are descriptive in nature. Analytical review and qualitative thematic content analysis are applied by 46% (n=6) and 31% (n=4) representation in the SSA, respectively. This study's context overwhelmingly involves a cross-sectional survey of publications and journal articles followed by archival interview materials by 73% (n=8) and 18% (n=2) of the SSA articles, respectively. The use of graduate/undergraduate, video interview, doctor/physicians, expert interpreters, end-users of interpreter material and textual document samples is rarely considered. For the few studies that used video interview samples or sample expert interpreter's opinion and some archive materials samples, statistical techniques such as ANOVA are applied chiefly (i.e., by 23%, n=3). Additionally, it is observed that a single article (n=1) is interested in field studies with no experimental studies.

In a nutshell, ecological validity seems to be threatened in this specific SSA since researchers rarely considered simulating the effect of language, symbols, signs, and semantic differential or conflicts across culture on the interpreter's accuracy using actual investigative interview settings court proceedings. Field and experimental studies are needed to effectively provide more in-depth insight into the nature of cultural differences and the most effective way to control their deleterious effects.

4.8 Gender Difference in Interpreter Accuracy

Gender difference explanation of variability in interpreters' accuracy appears to be at the infant stage. Most of the contribution has been from clinical psychology (e.g., Hadziabdic

& Hjelm, 2013; Halpern, 2012) and organisational literature (Morgan, 2012). Four (4) articles are sampled in gender SSA, and the four articles are majorly interested in three (3) independent variables, which include i.) male vs female dichotomy effects, ii.) feminist interpreting, and iii.) gender differential. Variable i) is the most investigated area of research (Hadziabdic, 2011; Hadziabdic & Hjelm, 2013) with 50% (n=2) representation, and variable ii) to iii) has only one study each (See Halpern, 2012; Morgan, 2012).

Outcomes

Three (3) independent variables are considered in the gender SSA corpus, and they consist of: i) interaction success, ii) deaf management success, and iii) cognitive abilities. Variable i) is investigated by 50% (n=2) of the total SSA sample, and intervention ii) and iii) have one (1) study each.

Gender Ecological Validity

Memory capacity (or accuracy) differential between male and female sexual orientation has interested researchers in neuroscience, clinical, and cognitive psychology (See Halpern, 2012). However, it was recently that scholars (Hadziabdic, 2011; Hadziabdic & Hjelm, 2013; Morgan, 2012) in investigative interview context are beginning to pursue this line of research as an explanation for the observed difference in interpreter accuracy. Notwithstanding the fact that cognitive load, experience, expertise, and skills effects are also investigated. The reviewed studies in the SSA have explored this issue using expert interpreters, untrained bilinguals or family interpreters, supervisors, and managers. Most studies (i.e., 50%, n=2) are exploratory, with just one study (25%, n=1) comparing male interpreter accuracy to female interpreter accuracy. We also observe a preference for phenomenography techniques, i.e., reporting what is observed by 50% (n=2) of the SSA sample. More importantly, all studies in the SSA tend to combine analytical strategy in making an inference.

Despite the use of different interpreting experience levels, two areas can be improved—the first deals with observed weakness in the number of studies that have been conducted. Thus, more research is still needed before a body of knowledge can be accumulated, and afterwards, a policy change can be initiated. Secondly, we found little evidence on the use of field and experimental studies. These tools are critically needed to elucidate working memory differentials in males and females in an interpreter-assisted investigative interview.

Chapter 5: Interpretation Service in the Society

5.1 Introduction

The literature review chapter shows the extent to which societal need for interpretation service is explored in terms of why interpretation service is needed and why interpretation service usage changes. It is established in the literature that the CJS sought after interpretation service so that equal access will be provided to non-English speaking offenders, thereby facilitating communication and guaranteeing the justice system's fairness (Bird 1990). This chapter argues that apart from the impact of migration, socio-political and demographic characteristics on the need for interpretation service, trust and good race relations through a diverse police force are likely to impact the need for interpretation service. The chapter adopts the Holdaway race relation hypotheses (Holdaway, 1990 1991) to argue that police diversity would lead to an increase in interpretation service needs. The chapter's argument is premised on the assumption that a good race relation between the BAME and the police will indicate that the police institution is more tolerant of ethnic minority people. That will enable the ethnic minority trust to increase witness and victim willingness to report criminal cases and societal injustice issues to the police. This implies that the chapter explores the extent to which migration, trust in the police and police diversity, impacts the use of interpretation service from opinion surveys of potential end-users of interpretation service, mostly ethnic minorities.

Because of the prevalence of interpretation services issues in the UK's CJS, as discussed in the literature review chapter, the chapter explores a small piece of the complex jigsaw by investigating participant's perception of factors militating against their interest in a police career. Overall, the chapter is a small piece of studies aimed at mapping participants' perception of interpretation service need from trust, police diversity, and migration. As an add-on to the main thesis, the writer also explores the disparage and subjective feelings of the ethnic minority towards the police. The rest of the chapter's discussion is divided into two parts in accordance with the type of survey question used to elicit information from participants. The first part presents the result on the close-ended questions and the second part on the free-text data.

5.2 Descriptive Analysis of MCQ Survey Data

5.2.1 Participants Characteristics

Participants' characteristics such as ethnicity and age - excluding personal identifiers, e.g., address and name are reported in Tables 5.1 and 5.2. Because the information about participants' ethnicity is rather too scanty to be analysed or interpreted separately (see Table

5.1), ethnic information is analysed as a whole rather than a unique cluster of BAME's. In addition, participants' age is analysed in their respective categories or groups (see Table 5.2). The result in Table 5.1 revealed that more than two-thirds of the participants (i.e., 87.5% (n=87)) are African, Asian, Asian British and Black British. Few participants (i.e., 12.5% (n=13)) belong to the other undefined category. The discovery indicates that the sample reflects an approximate representation of the ethnic minority community in England and Wales, even though there is a possibility of leaving out another ethnic minority such as the Caribbean's and Spanish.

Table 5. 1: Ethnic Distribution of BAME Participants

Ethnicity	Frequency	Percent	Valid Percent	Cumulative Percent
African	39	37.5	37.5	37.5
Asian/Asian British	24	23.1	23.1	60.6
Black/Black British	28	26.9	26.9	87.5
Other	13	12.5	12.5	100
Total	104	100	100	

In terms of the gender distribution, the thesis also observed (see Table 3.2 in chapter 3) a situation of gender equality with male respondents constituting slightly more than half, i.e., 50.96% (n=53) of the total surveyed participants and female respondents slightly lower than half of the total participants with 47.12% (n=49) representations. Remarkably, few participants (i.e., 1.92% (n=2)) failed to provide their gender information. Therefore, the sample for the thesis gender balance with both male and female interpreters was adequately represented.

Finally, Table 5.2 revealed participants' distribution to consist of majorly advanced adults (between the age of 40 to 52 years), constituting 41.33% (n=43) of the total participants, succeeded or followed by young adults between the age of 31 and 39 years constituting 23% (n=24) of the total participants. The third most represented population with a headcount of 20 participants (or 19%) is young elders between 53 and 60 years. The table also shows that there are few elderly, teenagers and youth population. The age distribution suggests that most of the participants recruited for the survey are well experienced, knowledgeable on societal issues that affect ethnic minority- police relationships in England and Wales around them.

Table 5. 2: Age Demographics of BAME Participants

	Frequency	Percent	Valid Percent	Cumulative Percent
Age Range:				
40-46	24	23.08	23.08	23.08
47-52	22	21.15	21.15	44.23
31-39	21	20.19	20.19	64.42
53-60	20	19.23	19.23	83.65
18-25	6	5.77	5.77	89.42
Over 60	6	5.77	5.77	95.19
26-30	5	4.81	4.81	100
Total	104	100	100	

5.2.2 Attitude towards Career in the Police and Experience

Ethnic minority attitude towards a career in the police has been a source of research interest to measure the attractiveness and image building progress of the police force (COP, n.d.; COP, 2018; Mossman, Mayhew, Rowe, & Jordan, 2008; Polk, 1995; Rosenbaum, Schuck, Costello, Hawkins, & Ring, 2005; Rossler, 2019). The thesis conducts a likelihood mapping of participants intention for (or consideration of) a career in the police. The likelihood mapping is supplemented with an investigation into the application rate with or without any prior consideration or intention.

Table 5. 3: Likelihood Mapping of Police Career Consideration and Intention by BAME

	Frequency	Percent	Valid Percent	Cumulative Percent
Categories:				
No	78	75	75	75
Yes	26	25	25	100
Total	104	100	100	

Table 5.3 reports the likelihood of mapping participants' intention or consideration of a career in the police. The result based on the cumulative percentage frequency distribution implies a negative likelihood of an intention or a consideration of a police career. Only a quarter of the participants surveyed (i.e., 25% (n=26)) have considered a police career. Two-thirds of the participants (i.e., 75% (n=78)) indicate not to have considered nor intend to join the police force as a career path. The result suggests that the police force is yet to attract sufficient qualified ethnic minority individuals to the police workforce due to the breakdown of trust and the stereotypical mindset of ethnic minorities about the police force being a racialised and white-dominated institution.

Table 5. 4: Likelihood Mapping of BAME Propensity to Apply

	Frequency	Percent	Valid Percent	Cumulative Percent
Categories:				
No	76	73.1	93.8	93.8
Yes	5	4.8	6.2	100
Valid Total	81	77.9	100	
Missing	23	22.1		
Grand Total	104	100		

Beyond mere consideration and intention is mapping the effectiveness of recruitment adverts to stimulate qualified ethnic minority individuals into submitting an application for employment with the police employment agency. Table 5.4 reports the likelihood of mapping participants' propensity to submit employment applications based on earlier intention or consideration. In line with earlier observation in Table 5.3 of an absence of intention or consideration of a police career by two-third of the participants, nearly the same proportion of participants (i.e., 73% (n=76)) did not submit nor applied for a position or employment in the police. The result however suggests that only a handful of participants i.e., 5% (or n=5) submit applications. In comparison, a whopping 81.76% (N=21) preferred to remain anonymous about whether they apply or not. Regrettably a good chunk of the participants i.e., 22% (n=23) appear not to be willing to divulge information as to their involvements with the police force. Overall, the propensity to apply for a police job by an ethnic minority person is relatively lower than a

police career's intention or consideration. The lower propensity indicates that participants are less likely to apply for a police job even when they consider a police career.

5.2.3 The role of Ethnic Mix, Senior Police Officers, Peer Pressure

The attitude of a person of ethnic minority origin in terms of considering a police career and actual submission of an application for advertised or referees police job posting has been demonstrated based on participants' perceptual mapping to be disproportionately low and negative. Notwithstanding the role, recruitment experience can dissuade interest or actual application into a police force. Therefore, the thesis conducts a perceptual mapping of participants' opinions regarding three possible remote reasons for not considering or applying to the police force. The first reason investigated was the police force's current ethnic topography/composition, which is reported in Table 5.5. Other reasons are reported in Tables 5.6 and 5.7. Participant's perceptual mapping regarding the role of current ethnic composition as the possible reason for not considering nor applying to join the police force is reported in Table 5.5. It will be seen that in Table 5.5, only 17.3% (n=18) answered with a definite no. In contrast, more than a quarter (i.e., 39.4% (n=41)) of the participants answered in the affirmative and close to half of the participants (i.e., 43.3% (n=45)) slightly believe that ethnic composition may likely affect intention, consideration and actual application to join the police force – although not with certainty.

Table 5. 5: Perceptual Mapping of Ethnic Composition Effect on Application to the Police

	Frequency	Percent	Valid Percent	Cumulative Percent
Responses:				
Maybe	45	43.27	43.27	43.27
Yes	41	39.42	39.42	82.69
No	18	17.31	17.31	100
Total	104	100	100	

The second possible reason is the absence of more senior ethnic minority officers in the police force. Unsurprisingly, responses to the question about the role of the absence of ethnic minorities among senior officers reported in Table 5.6 gave very similar results to that of Table 5.5, with only 10.7% (n=11) of the participants answering with a definite no. Nearly half of the participants were either affirmative (40.8%, n=42) or partially affirmed (48.5%,

n=50) the effect of senior ethnic police officers' absence on consideration, intention or actual application to the police.

Table 5. 6: Mapping of Senior Ethnic Police Officer Presence Effect on Application to the Police

	Frequency	Percent	Valid Percent	Cumulative Percent
Categories:				
Yes	42	40.4	40.8	40.8
Maybe	50	48.1	48.5	89.3
No	11	10.6	10.7	100
Valid Total	103	99	100	
Missing	1	1		
Grand Total	104	100		

The responses to the question on the role of hostility towards the police service by friends and family reported in Table 5.7 was mixed, as 31% (n=32) of the participants answered with a definite No. On the other hand, the thesis observed that 46% (n=48) of the participants affirmed the role of friend's hostility towards the police as a reason for non-consideration or non-submission of application to the police force. Also, nearly a quarter of the participants (i.e., 23%, n=24) neither support nor were against the statements that friends' hostility towards police service by friends influences ethnic minority decision to consider or join the police.

Table 5. 7: Mapping the Effect of Friend Hostility Towards the Application to the Police

	Frequency	Percent	Valid Percent	Cumulative Percent
Categories:				
Yes	24	23.1	23.1	23.1
Maybe	48	46.2	46.2	69.2
No	32	30.8	30.8	100
Total	104	100	100	

5.2.4 Trust, Diversity and Need for Interpretation: The Link

It was fruitful, having investigated the effect of the seemingly proximate and remote reasons for ethnic minority reluctance to consider or apply to join the police force. The thesis investigates how increasing the ethnic mix within the police service enhances trust and confidence in the police. The thesis also examines the effects of migration and diversity within the police force on the need for interpretation. In other not to provide leads to participants on the expected response, the question regarding the effects of ethnic diversity within the police is reverse coded. That is, the statement asserts that increasing ethnic diversity will reduce the need for interpretation service.

Table 5. 8: Trust Enhancement and Ethnic Diversity of the Police

	Frequency	Percent	Valid Percent	Cumulative Percent
Categories:				
Strongly Agree	71	68.3	68.3	68.3
Agree	27	26	26	94.2
Neutral	6	5.8	5.8	100
Total	104	100	100	

Unsurprisingly, it can be seen from Table 5.8 that only 6% (n=6) of the participants are neutral about whether the right ethnic mix in the police will enhance ethnic communities' trust and confidence. However, the majority of the participants (i.e., 94%, n=98) agree that improving the ethnic mix of the police force enhances trust and confidence between the police and ethnic minority community.

Table 5. 9: Migration and Need for Interpretation Services

	Frequency	Percent	Valid Percent	Cumulative Percent
Categories:				
Strongly Agree	31	29.8	29.8	29.8
Agree	35	33.7	33.7	63.5
Neutral	10	9.6	9.6	73.1
Disagree	6	5.8	5.8	78.8
Strongly Disagree	22	21.2	21.2	100
Total	104	100	100	

Interestingly, 63.5% (n=66) of the participants feel that migration induced increase in the number and range of languages translate to an automatic increase in the need for interpretation service, as reported in Table 5.9. On the other hand, more than a quarter of the participants (i.e., 27%, n=28) did not agree with this statement as they answered with a soft or definite disagreement. Surprisingly, a sharp divergence on the impact of participants' perception of ethnic diversity within the police on trust and confidence is observed.

Table 5. 10: Ethnic Diversity in the Police and Need for Interpretation Services

	Frequency	Percent	Valid Percent	Cumulative Percent
Categories:				
Strongly Disagree	46	44.2	44.2	44.2
Agree	36	34.6	34.6	78.8
Neutral	17	16.3	16.3	95.2
Disagree	3	2.9	2.9	98.1
Strongly Disagree	2	1.9	1.9	100
Total	104	100	100	

For example, in Table 5.10, ethnic diversity within the police enhances trust and confidence in the police, which is expected to remove ethnic community reluctance to talk to the police. However, more than two-thirds of the participants (i.e., 78.8%, n=82) perceive that ethnic diversity is likely to reduce the need for interpretation services. On the other hand, less than 5% (i.e., 4.8%, n=5) of the participants have a contrary opinion that ethnic diversity is likely to increase and not reduce the need for interpretation service. The thesis observed that diversity within the police might not necessarily translate into an increase in the need for interpretation services. The negative effect may be right in the case of a naïve worst-case scenario. The negative effect is associated with instances where on the street request for interpretation service is reduced due to an increase in the ethnic mix of the police. Nevertheless, the need for interpretation service will increase overall when police diversity causes an increase in ethnic community trust and confidence in the police. The decrease in the need for interpretation service will not match the increase in the need for interpretation service induced by increased trust and confidence in the police by an ethnic community that is expected.

5.3 Exploratory Analysis of FTQ Survey Data

5.3.1 Ethnic Minority Experience with Police Recruitment Process

In an exploratory fashion, the thesis mapped the experience of the five (5) participants who have submitted applications with the police force at one time or the other. Issues such as positioning, years of application, application outcomes, and post-application feelings were explored.

Table 5. 11: Ethnic Minority Position and Year of Application

ID	Sex	Age	Year	Position
4	Male	31-39	NA	Police Staff
34	Female	40-46	2002	NA
97	Male	53-60	1999	NA
103	Female	40-46	can't remember	NA
9	Female	47-52	1987	NA

A. Year of Application and Roles.

It can be seen from Table 5.11 that two of the three female applicants have applied in the '80s and beyond - as one of them could not remember the year of application. The last female applicants applied to join the police in 2002, while the only male applicant applied to the police in 1999. The result implies that the few participants who applied to the police did so in the late 80s, 90 and early 2000s. However, there is no evidence of an application in recent years.

Table 5. 12: Application Outcome

ID	Sex	Age	Outcome
4	Male	31-39	Un-successful
34	Female	40-46	Marginal Unsuccessful
97	Male	53-60	Marginal Unsuccessful
103	Female	40-46	cannot Proceed
9	Female	47-52	Successful

B. Application Outcomes

Many (i.e., 80%, n=4) of the applications submitted were unsuccessful, and only one applicant in 1987 declared that his/her application was successful, as reported in Table 5.12. Three out

of the four unsuccessful applicants' failure is attributed to luck and ethnic consideration. For example, a participant responds that his/her application was *“Unsuccessful by a slight margin” (Participant 34)*. Another participant revealed that the reason for his/her application failure is that he/she *“failed by 2 marks” (Participants 97)*. Finally, one participant attributed the failure of the application to British citizenship consideration in the screening process. In the words of the participant, *“I was unable to proceed as I am not British” (Participants 103)*.

Emotions

The thesis attempts to gauge applicants' reactions after receiving feedback on their submitted applications. Those whose applications are successful have a feeling of achievement, excitement, and nervousness about what the future holds. The feeling was a mix of unfair treatments, disappointments, self-defeat, or self-confidence loss for those with a failed application. A participant with an unsuccessful application reveals in these words; *“I felt I was the right candidate, but initially I was told that I've passed the exam, but then I received an email stating that the vacancies are full, and they will contact me if I am needed” (Participants 4)*. A second failed application revealed that after receiving feedback on the application, s/he feels so disappointed and depressed even though they initially observed the possibility of not being the right candidate for the job. The applicant declares in these words: *“Felt I was not what Metropolitan police were looking for at the time. Though I apparently excel in several areas during the interview stage, including observation and competency. Unfortunately, I fell short by 3 or 5 questions in the maths test. That was the feedback given. I was completely devastated as serving the community is a natural passion of mine, opportunity to work in an institution that I loved and felt shared the same aspirations would have been fulfilling” (Participants 34)*.

Another applicant felt the same with a partially unsuccessful application who declared that *“I felt very disappointed as I know I had a lot to offer.” (Participants, 97)*. The last unsuccessful applicant took the feedback in good faith and did not attach any hard feeling to the result. The applicant, when asked about the feeling he/she had when talked about the failure of his application, says: *“Okay” (Participants 103)*. Besides, the thesis observed that the only participants with a successful application and acceptance by the police recruitment board felt *“excited and anxious” (Participants 9)*.

The human's need for achievements is linked to excitement and anxiousness due to fear of the police's unknown future. Therefore, disappointment, loss of self-belief, and unfair treatments pervade every unsuccessful application, while they are excited in the spirit when allowed to join the police.

5.3.2 How Ethnic Mix, Role Model, and Peer Influence Put off Applicants.

Following the four (4) step strategy for FTQ data outlined in the method section, the thesis uncovers nineteen (19) thematic data-driven classes prevalent in the FTQ data. The result is reported in Table 5.13a in Appendix A.3. Because there are instances of overlapping themes in the meaning and semantics family, the result in Table 5.13a is collapse into eleven (11) unique thematic reasons (excluding Not applicable, do not know and Not an Issue Category) as reported in Table 5.13b.

Table 5. 13b: Ethnic Mix Mediated Factors

S/N	Themes Cluster	Cases	Frequency	Percent
1	Identity/Support/Role Model/Advise	14, 19, 39, 88	4	6.89655
2	Marginalisation; Negative Impression/Representation Evidence	12, 13, 46; 15, 21, 34, 35, 52, 73, 79, 81, 83, 87, 90, 93, 94, 101, 104	18	31.0345
3	Skills, Experience	11, 45	2	3.44828
4	Inferiority/Slavery Mindset	18,	1	1.72414
5	Stigmatization/Word of Mouth-Friends/Colleague Opinion	14, 92, 96, 97	4	6.89655
6	Stereotypes/Perceived Racism/Discrimination/Profiling	16; 4, 36, 39, 40, 41, 62, 78, 82, 84, 90, 91, 97	13	22.4138
7	Self-Doubt/Trust Issues	29, 30, 42	3	5.17241
8	Citizenship Status	24	1	1.72414
9	Preference/ Choice; Interest	34, 44, 89, 98;	4	6.89655
10	The personality of Recruiter and Transparency	1, 75	2	3.44828
11	Not an Issue/NA/ Don't Know/Not Sure	80; 9, 103;22, 23	5	8.62069
12	Harassment/Bullying	91	1	1.72414
Total			58	100

A. Racialisation Factors and Marginalisation

Based on the participants' responses, the most obvious reason why ethnic minorities are put off from considering a career in the police as depicted in Table 5.13b is marginalisation

and poor ethnic representation in the police. This is supported by racial related factors such as stigmatization, stereotypes, discrimination, prejudice, profiling, harassment, and bullying. The two factors are supported by 31% (n=18) and 22.4% (n=13) of the participants respectively, out of the total response to the twelve (12) themes cluster as depicted in table 5.13b. Some of the participants' excerpts describing the nature of racial related factors and ethnic minority marginalisation or insufficient representation evidence are reported below:

“It’s a common perception that police are institutionally racist” (Participants 4)

Due to reports of ethnic minorities being marginalised in the police force, it can put off potential applicants (Participants 12, 13)

Many young people see the police as corrupt or racist (Participants 16)

..... are ethnic minorities put off by a lack of ethnic minority representation in the Police force? Then I would say yes; that would put me off personally. Most importantly, it’s about those in charge because they’re the guys who set the tone, and if all the superintendents are white, you are more likely not to get heard or misunderstood or dismissed. So, if you are non-white, why would you want to put yourself in the melting pot of all the above? (Participants 90)

“It’s fully known that police forces are normally of the right-wing persuasion, which often means discrimination and racism from that type of politics. They often live in areas where their social surroundings are mostly white and mostly elect right or right-leaning parties in local elections or national elections (Participant 91).

..... institutional racism is another factor (Participant 97).

The under representations of ethnic minorities in the police force does not motivate such groups to apply for the force. They might feel there is a reason why others are not interested (Participant 101).

The police that I come across seem to be all white; therefore, it appears that there might only be a few BAME in the force (Participant 104)

.....no apparent evidence of adequate strong representation or link in with BME community (Participant 34).

Closely related to racial prejudice and discrimination are instances of perceived police harassment, brutality, and bullying, especially with the disproportionate use of stop and search rule and arrest of a person of ethnic minority status. In the words of a participant:

“There’re obviously numerous stories around Police racism, bullying and harassment, and the police force is an institution where practices such as the aforementioned have been traditionally ignored. To be honest, those actions are ignored in most workplaces” (Participant 91).

B. Stigmatisation Ethnic Identity, Social support, and Trust Issues,

The thesis also observed that ethnic minorities are more likely to be discouraged from considering or applying to the police for fear of stigmatisation or rejection from the community members if they do so. The effect of stigmatisation is viewed from three perspectives. These are isolation, rejection by the ethnic community to which one belongs, and the possibility of the dominant tribe to tag ethnic minority as only being able to secure a job due to ethnicity consideration and not qualification or expertise.

Stigmatisation and Fear of Rejection

Not only is my point from before valid, but also when minority ethnics join the police, they are seen as traitors as the police, due to previous actions, are seen as the enemy (Participant 96).

Another Participant speaking in a third person voice observed that an ethnic minority individuals may be reluctant to join the police if they have;

Feeling of isolation from their communities (Participant 97); while the

Fear that people think you got the job because you were black (Participants 92), and

....., the fear of having to deal with rejection and all that comes with it is another factor (Participant 14).

Participants also think that not having someone with the same police identity to provide social support is enough to put off an applicant. We capture some selected thoughts of participants on issues of ethnic identity and social support below;

Ethnic Identity and Social Support

Having individuals of BAME origin in the police means that potential applicants have a source of advice, encouragement, a sense of belonging, and a role model (Participant 88).

Maybe they feel they may not have enough support from peers and might be discriminated against (Participant 39).

If you don't see many of your kind being admitted into a particular job, it becomes worrisome to try with the fear of not being accepted by the majority ethnic group (Participant 14).

I have friends who applied for jobs as police officers (Participants 19)

Issue of trust, transparency, and confidence in the police ability to handle cases involving ethnic minorities and fairness of the screening process resonate in participants' minds. Trust, confidence, and transparency are fundamental reasons why participants may be put off from considering or applying to the police. Some participants feel the police's loss of trust because of bitter experience had always made some of the ethnic minority doubt their innate ability, thereby feeling unqualified or inferior for a career in the police force. The following are original perception of participants on various issues limiting the possibility of considering a career in the police.

Trust and Confidence

“Unsure as I never researched into it, but I can see it being an issue as even in management, BAME feel more comfortable speaking to a BAME member of the management team” (Participants 29).

“Black people have no confidence in the police system” (Participants 30).

“Perception of not fit into the policing in the UK” (Participants 42)

Screening Process Transparency

“It depends on who is handling the application; that is why I said maybe” (Participants 75).

“The recruitment process is not transparent” (Participants 1)

Inferiority Complex

“Because black people always feel inferior by other races, which we should not (Participants 18).

C. Career Attractiveness

It is discovered that the third most frequently cited explanation for ethnic mix consideration before considering or joining the police as a career is the issue of career attractiveness. Some of the participants do not have any reason other than lack of interest in a police career, and as a result, they never give the police career a thought nor attempt to apply. Some of the participants thought are as follow:

“Individual preference...” (Participant 34)

“It doesn’t interest me in any way” (Participant 44).

“Not just interested in policing” (Participant 89).

“Maybe it's simply a personal career choice. It's not for everyone” (Participant 98).

D. Skills, Experience and Citizenship Status

The thesis also discovered that participants' skillset and experience played an essential role in determining the attitude of ethnic minorities towards a career in the police. It is believed that the decision to consider or apply to the police force depends on whether one’s skillsets and expertise are required in the police forces. The perception is accurate for skills that are not related to police jobs. However, police activities are more likely to include several skills, except that the police force's size and budget may mean lesser vacancy and opportunities for some skills that are in high demand.

“Depending on the skills required” (Participants 11)

In addition, the citizenship status of being an immigrant or a UK citizen by birth is perceived as responsible for ethnic minority inability to consider a police as a career. A participants noted that he/she may not consider a career in the police because he/she may

“Not being born in the UK and the BAME in the police force are born and grow up in the UK” (Participants 24)

Some participants see themselves as not considering the police force as a career choice due to experience and encounters with the police force.

“Because of past experiences of bad treatment”. (Participant 45)

In conclusion, police service as a career path appears to be less attractive to individuals of ethnic minority origin. The attractiveness is made worse by the prevalent misconception among

individual of ethnic minority origin about; police recruitments requirements and process, promotion and disciplinary procedure, career prospect of the police for existing ethnic minority police officer, proportion of ethnic minority at the top rank of the police, and the operational practise of police when dealing ethnic minority community. These issues have culminated into feelings of marginalisation, stigmatisation, fear of rejection, self-doubt, scepticism and loss of trust and confidence in the police. The operational practise of the police such as the; stop and search process, is allegedly seen as been disproportionately targeted at individuals of ethnic minority community relative to the white majority.

Chapter 6: Factors Affecting Interpreter Assisted Investigative Interview Optimisation

6.1 Introduction

The previous chapter focus on the extent to which BAME people considered and apply to join police force and how such consideration is likely to impact on the use of interpretation service not only by suspect, but also by witness and victims in a violent or non-violent crime.

The chapter specifically explore issues and role of police diversity in encouraging the wider use of interpretation service by victims and witness to a crime because good race relation and trust in the police. As such, the previous chapter map the opinion of ethnic minority individuals in a selected UK city. This chapter turns to a more obvious specifics of interpretation service in face-to-face investigative interviews, which impacted investigative interview processes, procedure, and outcomes according to the literature review in chapter two. This issue includes the impact of joint interpreters-investigators planning, preparation, rapport building, and interruption during the free recall segments. Scholarly works have shown that interview outcome (e.g., information elicitation, cue to detection, and investigator engagement capability with the interviewee) is impacted by the presence, position and action of an interpreter during the investigative interview session (Evans, Houston & Meissner, 2012; Walsh & Bull, 2012; Houston et al. 2017; Driskell, Blickensderfer & Salas, 2013; Baker et al., 2008; Kosny et al., 2014). Many of the literature, except for Ewens et al. (2014) and Houston et al. (2017) have documented the negative impact of interpreters' mere presence or association with an interview during investigative interviews on investigators ability to detect lies and obtained accurate information from witnesses, victims and offenders. This chapter argues based on the triangulation of investigators and interpreters' perception that even though the engage stage of the PEACE model does not perceive rapport building during an interview to be the role of interpreters, the main actor in an investigative interview (i.e., the investigators) are more likely to perceive pre-interview rapport between interpreters and interviewees as important to the achievements of subsequent rapport during investigative interview. This suggest that interpreter-interviewee rapport building before the interview served as a feedforward to the main rapport building of the engage phase of a formal investigative interview, making rapport building easy and aid in cooperation and accurate information gathering.

Within the context of interpreters' action and presence in an investigative interview, interruption usage during free recall or account phase of the PEACE model has been linked to cases of the infidelity of interpretation (Mason 2007; Boser, 2013), distraction and disruption

to interview line of thought and recall capability. The chapter argues that interruption, even though inimical to the goal of the investigative interview, is necessary for accurate interpretation. The chapter stressed that triangulating between the opinion of interpreters and investigators, interpreters' interruption is disruptive and distractive but indispensable since it may impact the interpreters' ability to provide interpretation service with accuracy. Based on the opinion of participants surveyed, the chapter also shows that with the use of pre-interview clarification and briefing and appropriate experience and skills level, the deleterious impact might be effectively managed.

The work of Walsh and Bull (2011) and Kim et al. (2018) buttress the importance of investigators planning and preparation prior to an interview to the overall investigative interview outcomes (i.e., the ability to gather accurate and complete information). They argue that even though investigators seldom plan for an interview, there exists a clear-cut improvement in investigation whenever interpreters plan. Even though the existing cognitive interview model, as emphasised by the planning phase of the PEACE model, place planning is the sole prerogative of investigators. The chapter argues that frequent planning and preparation by an investigator in consultation with interpreters to brief interpreters on the investigative interview goals, procedure, process, interviewee background, and other salient issues is a useful way to improve accurate and complete information gathering. The argument is premised on a dual participant's opinion that interpreters background knowledge about the interviewee and interview goal prepare interpreters better for the task at hand. In line with a descriptive and deductive thematic content analysis frame of analysis or methods, the rest of the chapters begins with descriptive analysis and reports participant's response to the multiple-choice question, after which the writer then explores the free-text response.

6.2 Descriptive Analysis

6.2.1 Demographic Characteristics

All participants (i.e., selected investigators and interpreters) provided information pertaining to sexual orientation with no missing response. Table 3.4 in chapter 3 shows that 90% of selected interpreters are male, while only 10% are female. For the investigators' samples in Table 3.3 in chapter 3, 58% of participants are male, while 42% are female. The distribution implies that the ILEA investigators population gives equal opportunity to males and females. On the other hand, more male interpreters are often contacted or used in investigative interviews. An explanation for this may be due to more males applying as interpreters to ILEA than females or probably due to low visibility for female interpreters in

ILEA CJS. Another reason may be low interest from female interpreters in a contractual relationship with the ILEA. Out of the total interpreter's sample (See Table 3.5 in Chapter 3), 32% provide no information on their country of residence, while 68% indicate their country of residence. The majority of the valid responses in from the selected interpreters i.e. 23% and 25% of the 68%, stated the United Kingdom and Uganda as the country of origin or residence, respectively. This is followed immediately by participants from Netherland, constituting about 13% of the 68% valid responses. Tanzania/Norway, Kenya/Germany, and Rwanda are equally represented in the remaining 8% of the valid responses.

6.2.2 Professional Attributes

This section on professional attributes explores the participants' prior designation and work experience, years of work experience with international law enforcement agency and elsewhere, training status (i.e., whether trained or untrained), and the type (or forms) of formal training a participants received. The discussion that follows begins with an exploration of the participants designation (or position held) before joining the international law enforcements agency as reported in Table 6.1. Table 6.2, 6.3, and 6.4 explore investigators overall years of experience with an international law enforcement agency, years of active involvement in an investigative interview with an international law enforcement agency, and years of involvement in active investigative interview elsewhere respectively. The last part (in Table 6.5 to Table 6.9) focusses on exploring; the proportion of investigators with investigative interview and interpreters' usage training, as well as the types and focus (or forms) of such trainings.

Participants Work Experience

Table 6. 1: Investigators Prior Experience and Designation

	Frequency	Percent	Valid Percent	Cumulative Percent
Categories:				
Police	10	15.2	15.2	15.2
Investigator/ Detective	20	30.3	30.3	45.5
Lawyer, Judge, Persecutor and human rights	28	42.4	42.4	87.9

Humanitarian worker, UN and Policy	8	12.1	12.1	100
Total	66	100	100	

As indicated in Table 6.1, nearly two-quarters of the participating (i.e., 42%) investigators in the research are lawyers, judges - retired or non-retired -, human rights activists, and prosecutors prior to joining the ILEA or working as investigators elsewhere. After this, immediate clusters of professionals consist of special detectives and investigators, with 30% of the total participants. Humanitarian workers and United Nations officials are the least most represented professional clusters in the sample, constituting 12% of the total sample of participants. Police investigators are the third most represented participants in the survey, constituting 15% of the total participants' sample. As such, our sample is dominated by important professionals in the CJS, civil society, the law enforcement agency, and undercover and special investigative agents. The advantage of covering different investigators is the richness and diversity of the perspective to be provided by participants. This is because professional diversity will allow for a diverse opinion that is not embedded within a single profession but cut across much intellectual domain (e.g., legal domain, law enforcement domain and international relation domain).

Table 6. 2: Overall Investigator Work Experience with ILEA

	Frequency	Percent	Valid Percent	Cumulative Percent
Years of Experience:				
1 – 4	39	59.1	59.1	59.1
5-10	24	36.4	36.4	95.5
11- 15	3	4.5	4.5	100
Total	66	100	100	

The majority of the participating investigators (i.e., more than half) have at least four years of experience, while more than a quarter have at least ten years of experience. On the other hand, less than a quarter of the participants have at least 11 years and not more than 15 years of experience (see Table 6.2).

Table 6. 3: Investigators Interview Experience with ILEA

	Frequency	Percent	Valid Percent	Cumulative Percent
Numbers				
1 – 20	27	40.9	40.9	40.9
21-40	14	21.2	21.2	62.1
41-60	9	13.6	13.6	75.8
61-80	9	13.6	13.6	89.4
81-100	3	4.5	4.5	93.9
over 100	4	6.1	6.1	100
Total	66	100	100	

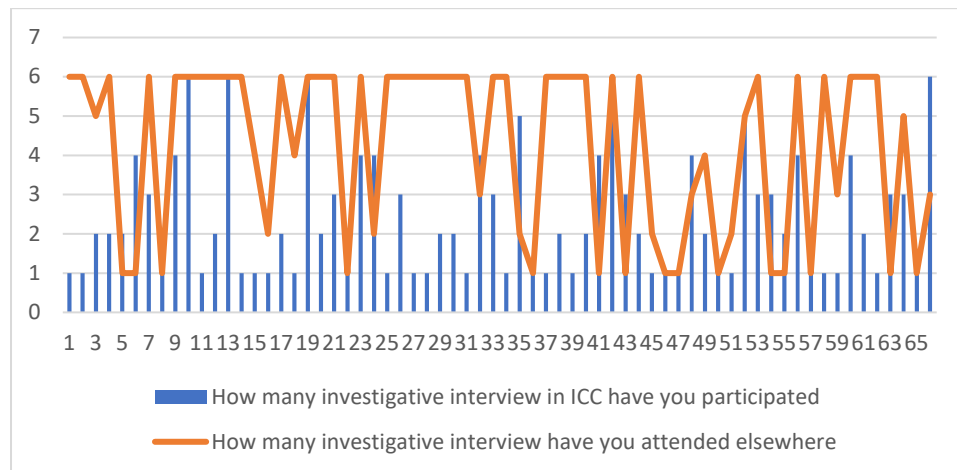
In terms of participation in an investigative interview with ILEA as an investigator (see Table 6.3), more than a quarter and half of the participants (i.e., 41%, n=27) participated in at least one investigative interview session (IIS) and at most twenty with ILEA. Nearly a quarter (i.e., 21%, n=14) of the whole participants have participated in at least twenty-one (21) IIS and forty (40) IIS at most. The remaining quarter and half participants (i.e., 38%, n=25), which can be categorised as the least, have participated in at least forty-one (41) and more than a hundred (100) IIS.

Table 6. 4: Investigator Interview Experience Elsewhere

	Frequency	Percent	Valid Percent	Cumulative Percent
Numbers:				
1 – 20	15	22.7	22.7	22.7
21-40	5	7.6	7.6	30.3
41-60	4	6.1	6.1	36.4
61- 80	3	4.5	4.5	40.9
81-100	3	4.5	4.5	45.5
over 100	36	54.5	54.5	100
Total	66	100	100	

The result of Table 6.4 shows that more than half of the participants (i.e., 54%, n=36) have been involved in more than 100 investigative interview sessions both at the local and municipal police institution and court in the country of origin or country of residence. In addition, 22% (n=15) have been involved in between 1 and 20 investigative interview sessions.

Figure 6. 1: Experience with ILEA Versus Elsewhere



Digging deep into the data through cross-tabulation in Tables 6.3 and 6.4, it appears in Figure 6.1 that many of the participants with at least 41 investigative interviews conducted are also likely to conduct more interviews elsewhere than those with less than 40 investigative interview sessions. The higher the number of interview participation with ILEA, the higher the probability of participating in an interview elsewhere, and vice versa.

Training and Competency

Interpreters and investigators training is an important ingredient needed to enhance interpreter knowledge, skills and competence. This is because an unskilled or incompetent interpreter will provide inaccurate information and evidence for the record. To investigate the extent of interpreter knowledge, skills and competence, both investigators and interpreter's participants were asked if they ever receive training on effective investigative interviewing of suspects, victims or witnesses.

Table 6. 5: Proportion of Interpreters with Investigative Interviewing Training

	Frequency	Percent	Valid Percent	Cumulative Percent
Categories:				
Yes	27	67.5	67.5	67.5
No	13	32.5	32.5	100
Total	40	100	100	

Table 6. 6: Proportion of Investigators with Investigative Interviewing Training

	Frequency	Percent	Valid Percent	Cumulative Percent
Categories:				
Yes	61	92.4	92.4	92.4
No	5	7.6	7.6	100
Total	66	100	100	

The result (in Table 6.5 and 6.6) indicates that the majority, i.e., about 68% (n=27) and 92% (n=61) of ILEA interpreters and investigators, respectively, have undergone investigative interview training (IIT). Only a few investigators (i.e., 8%, n=5) and a quarter and a half of the interpreters (i.e., 33%, n=13) are yet to undergo IIT. The percentage of trained investigators and interpreters is significant enough to suggest that participants are well trained in IIT. The result above clearly shows the essence of training needed for an investigative interview. Because investigators are more directly involved in the investigative process, the importance of training was more apparent in the thesis relative to the proportion of training received by interpreters. Even though the proportion of interpreters who receive investigative training is somewhat significant, it was nowhere a match for the proportion of investigators with training in an investigative interview. It clearly shows the premium placed on training investigators as the coordinators of an investigative interview and the lesser duties of interpreters as assistants or mediators.

Table 6. 7: Types and Nature of Investigators Investigative Interview Training

	Frequency	Percent	Valid Percent	Cumulative Percent
Training Categories:				
Police Training, investigative Interview and Detective Training	11	16.7	18	18
PACE, Cognitive and IIRG Training	37	56.1	60.7	78.7
Others	13	19.7	21.3	100
Valid Total	61	92.4	100	
Missing	5	7.6		
Grand Total	66	100		

Furthermore, the result of Table 6.7 explores the nature, type and forms of investigative interview training acquired by the ILEA investigators. The result reveals that there are few cases of attrition rate when exploring the nature of the training received. More precisely, 8% (n=5) of the investigators withdrawn from answering the question on the nature of their training and a whopping 92% (n=61) responded to the question. Furthermore, 61% (n=37) of the 92% valid responses indicated that they are trained on the PEACE Model, cognitive interview and, to an extent, are familiar with the IIRG Training Module on investigative interviewing. Finally, the result shows that 21% (n=13) of the 92% valid responses receive investigative training from other sources that may not be easily captured under a single interview training type or are outside the realm of investigative interviews. Meanwhile, 18% (n=11) of the 92% valid responses relied on police institutions' organised workshops, conferences and training classes policing, specialised detective capability and investigative interviewing skills. Clearly, the result suggests the need for more training on investigative interviewing for investigators and harmonisation of investigative interview training to ensure standardisation.

Table 6. 8: Proportion of Investigators Trained in Interpreter Usage Best Practice

	Frequency	Percent	Valid Percent	Cumulative Percent
Categories:				
Yes	37	56.1	56.1	56.1
No	29	43.9	43.9	100
Total	66	100	100	

The thesis in Table 6.8 presents the result of an exploration aimed at mapping the proportion of investigators with interpreter mediated interview best practice (IMIBP) training. The result in Table 6.8 shows that more than half (i.e., 56%, n=37) of investigators in the group have undergone training in the interpreter mediated interview best practice (IMIBP). The proportion coincides with the proportion of investigators with training in the PEACE model, cognitive interview and IIRG training module reported in Table 6.7. The result implies that training on the PEACE model and cognitive interview done via the IIRG training module is more likely to facilitate training in IMIBP. In contrast, 44% (n=29) are yet to undergo IMIBP training. The result reiterates the need for more training for investigators in the interpreter's usage and management before and during investigative interview sessions.

Table 6. 9: Types of Interpreter Usage Training by Investigators

	Frequency	Percent	Valid Percent	Cumulative Percent
Training Types:				
1. Basic training working with Interpreter	4	6.1	10.5	10.5
2. Police Training with the Use of Interpreter	3	4.5	7.9	18.4
3. ILEA training with Interpreter	4	6.1	10.5	28.9
4. Other training	7	10.6	18.4	47.4
5. None	20	30.3	52.6	100
Valid Total	38	57.6	100	
Missing	28	42.4		
Total	66	100		

For the 56% (n=37) of investigators with training on IMIBP, as revealed in Table 6.8, Table 6.9 explores the focus and nature of such training and found that close to half of the investigators (i.e., 42%, n=28) did not respond and only 58% (n=38) responded. The 58%

(n=38) response is consistent with the affirmative responses in Table 6.8. This result implies some degree of truth and consistency in participant's perception with a very ignorable bias. On the other hand, 30% (n=20) of the 58% valid responses never engaged in any IMIBP training, while 11% (n=7) are trained in other forms of IMIBP classification not captured in this study. Finally, the result shows that 12% (n= 8) of the 58% valid responses participated in basic and ILEA organised training on the use of interpreters, while 5% (n=3) participated in police training on IMIBP.

6.2.3 Extent of Interpreters Assistance

The investigators and interpreters' opinions were sought in other to investigate the investigators' perceptions on the need for interpreters and interpreters' perceptions on the extent of involvements. This allows for cross-validation of perceptions and actual experiences regarding interpreters' involvement in IIS.

Table 6. 10: Number of Times Investigators uses Interpreters in an Investigative Interview

	Frequency	Percent	Valid Percent	Cumulative Percent
Numbers Range:				
1 -20	38	57.6	57.6	57.6
21-40	11	16.7	16.7	74.2
41-60	11	16.7	16.7	90.9
61-80	3	4.5	4.5	95.5
81-100	3	4.5	4.5	100
Total	66	100	100	

The result of Table 6.10 revealed that more than half (i.e., 58%) of the sample investigators have conducted between 1 and 20 IIS jointly with the interpreters, below one-quarter and a half (i.e., 33%) of the participants in Group B conducted between 21 and 60 IIS jointly with interpreters. Finally, only a handful of the participants (i.e., 9%) have conducted more than 60 IIS jointly with interpreters (Table 6.10). Overall, it can be inferred that more than two-thirds of the participants have conducted at least 1 and 60 IIS jointly with interpreters for the ILEA or other organisations.

Table 6. 11: Numbers of Time Interpreters Actually Participate in an Investigative Interview

	Frequency	Percent	Valid Percent	Cumulative Percent
Numbers Range:				
1 – 10	13	32.5	32.5	32.5
11 -20	9	22.5	22.5	55
21 – 30	5	12.5	12.5	67.5
31 – 40	4	10	10	77.5
41 – 50	2	5	5	82.5
51 above	7	17.5	17.5	100
Total	40	100	100	

Supporting evidence is provided for interpreters in Table 6.11, where the majority or more than half (i.e., 55%, n=22) claimed that they have participated in a minimum of 1 and a maximum of 20 investigative interviews jointly with ILEA. Also, 45% (n=18) have participated in more than 20 and less than 51 investigative interviews jointly with investigators.

6.2.4. Interview Preparation and Planning

In other to investigate the impact of preparation on interview outcomes, such as eliciting accurate or detailed information and true confession, participants were asked whether they ever participated in planning and preparation jointly prior to an investigative interview. Information was specifically elicited from investigators concerning the extent to which an interpreter is involved in planning and preparation and what should be the best practice in planning and preparation. Interpreters were also asked to indicate the frequency of their participation in planning and preparation sessions with investigators prior to an interview. The result is presented as follow:

Frequency of Investigators Joint Planning and Preparation with Interpreters

Participants were asked to disclose whether they were ever planning or preparation prior to conducting an interview with a witness, suspect or interviewee. Investigators were specifically asked how often they invite interpreters to the planning and preparation (P&P) stage of investigative interviews.

Table 6. 12: Frequency of Investigators Joint Plan and Preparation with Interpreter.

	Frequency	Percent	Valid Percent	Cumulative Percent
Categories:				
Yes	19	28.8	28.8	28.8
Sometimes	32	48.5	48.5	77.3
No	15	22.7	22.7	100
Total	66	100	100	

The analysis in Table 6.12 suggests that almost half (i.e., 48%, n=32) of the investigators' participants jointly plan and prepare occasionally with interpreters prior to investigative interviews. A little more than a quarter (i.e., 29%, n=19) frequently plan and prepare jointly with interpreters, while less than a quarter (i.e., 23%, n=10) clearly indicated that they never invite interpreters to P&P prior to an IIS with ILEA. Furthermore, interpreters' opinions are sought to gather first-hand the extent of their involvements in P&P prior to an IIS. The goal is to use this evidence to cross-validate evidence elicited from investigators.

Table 6. 13: Frequency of Interpreters Participation in Joint Planning and Preparation with Investigators

	Frequency	Percent	Valid Percent	Cumulative Percent
Categories:				
Yes	9	22.5	22.5	22.5
No	17	42.5	42.5	65
Sometimes	14	35	35	100
Total	40	100	100	

Contrary to the above self-report evidence by investigators, Table 6.13 reveals that almost half of the participants (43%, n=17) indicated that they have never participated in any P&P prior to an IIS with the ILEA or other organisations. Only 22.5% and 35% are invited often and occasionally, respectively.

6.3 Exploratory Analysis

6.3.1 Joint Planning and Preparation Effect on Interview Optimisation

The result in this section is from an investigation of the nature of joint planning and preparation and justification of its usefulness.

Table 6. 14: Investigators Perception on Nature of Joint Planning and Preparation with Interpreters

	Frequency	Percent	Valid Percent	Cumulative Percent
Themes:				
Informing the interpreter about the subject matter and overview of the interview and any other concern	25	37.9	46.3	46.3
Seek the interpreter advice on cultural issues	1	1.5	1.9	48.1
Explain to the interpreter where to assist during an interview	2	3	3.7	51.9
Provide background information to the interpreter about the profile of the interviewee	18	27.3	33.3	85.2
None	8	12.1	14.8	100
Valid Total	54	81.8	100	
Missing	12	18.2		
Grand Total	66	100		

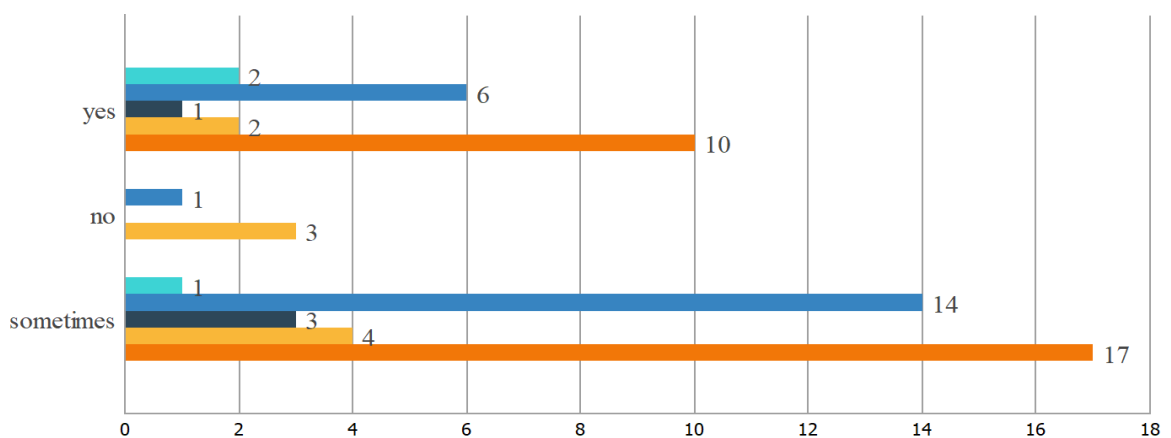
It can be seen from Table 6.14 that 82% (n=54) of the investigators' commented on the nature of joint planning and preparation session with interpreters, while 18% (n=12) refrained from commenting. This proportion surpasses the proportion of investigators who indicated that they frequently or occasionally plan and prepare jointly with interpreters, estimated at 77% (i.e., 48% + 29%) in Table 6.12. The third most frequently cited feature (i.e., "none") for inviting interpreters into P&P is excluded because it does not provide any additional useful information on why interpreters are invited to participate in P&P and may hitherto lead to confusion and contradiction in interpretation. More so, as shown in Table 6.14, almost half (i.e., 46%, n=25) of the 82% valid comments indicate that it is important to involve interpreters in P&P due to interpreter information needs on the subject and interview proceeding and other concerns. Slightly more than a quarter (27%, n=18) of the 82% valid response thinks joint

planning and preparation with an interpreter is needed to provide the interpreter with background information on the interviewee. Thirdly, as indicated by 6% (n=3) of the 82% valid responses, inviting interpreters to participate in a joint planning and preparation session is useful for seeking third party professional advice on cultural issues and inform the interpreter on the sitting position. A total of 6% of the participants aligned with this perception. This implies that 5% of the 23% of investigators in Table 6.12 that do not plan and prepare jointly with interpreters prior to investigative interviews also understand the expected role of an interpreter in planning and preparation, probably due to training received or interaction with those that frequently or occasionally invite interpreters to participate in planning and preparation¹³.

6.3.2 Interpreter Rapport Building Assistance: Conflicting or Complementary to Interview Outcome

The engagement (i.e., E stage of the PEACE model) specifically saddled investigators with the duty of building rapport during an investigative interview. The PEACE model was developed in the context of the face-to-face investigative interview without the assistance of an interpreter. As such, the model explicitly assigned rapport building role to investigators. Meanwhile, researchers have shown that interpreters-interview rapport-building sessions prior to the commencement of an investigative interview lead to a less negative perception of the interview outcome. Meanwhile, the interpreter's engagements with the interviewee during the interview session may conflict with the principle of impartial conduit, affecting detection.

Figure 6. 2: Conflicting and Complementary Role of Interpreters in Rapport Building



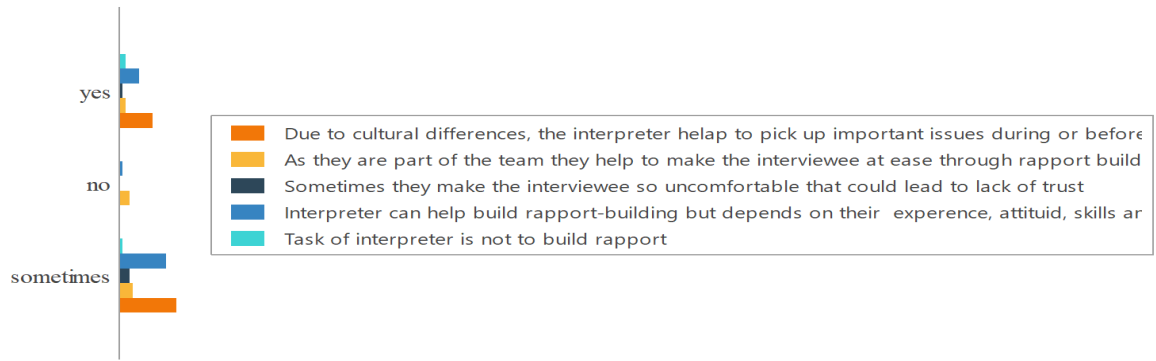


Figure 6.2 shows that many (i.e., 86%, n=57) of investigators perceive the interpreters to help achieve rapport building with the interviewee. In contrast, few investigators (i.e., 11%, n=7) feel averse to interpreter presence and, when they don't, are likely to frown against any formal relationship building with the interviewee. This may impair the neutrality and impartiality of the interpreter. The dissenting voice is indicated with a green or black bar in Figure 6.2, which appear under the yes and sometimes response categories, while the affirmative voice is indicated by the blue, orange and yellow bar in Figure 6.2 and tend to be prevalent in all the three categories. The study also observed that 3% (n=2) of the investigators did not answer this question. But because there is a 97% response rate and only 3% attrition rate, it is apparent that the investigator population is knowledgeable and can identify when rapport is present or lacking during an investigative interview.

Evidence of Interpreter Rapport Building Assistance

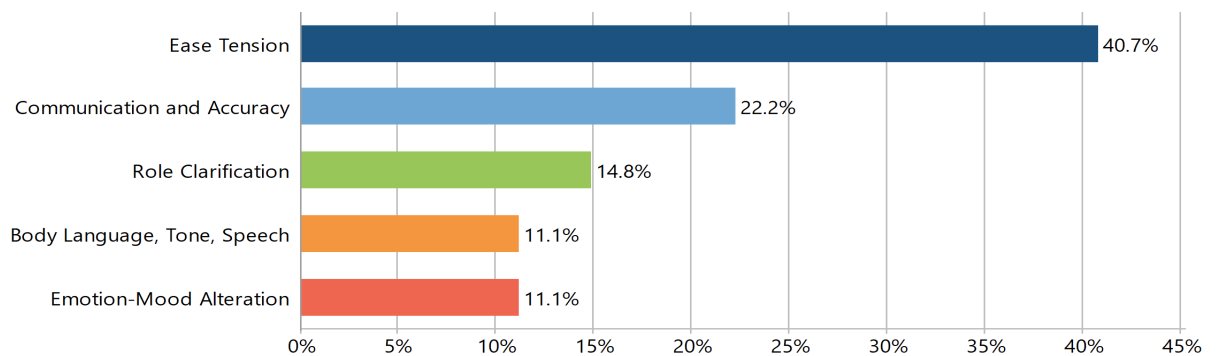
Table 6. 15: Interpreter Participation in Rapport Building

	Frequency	Percent	Valid Percent	Cumulative Percent
Categories				
Yes	26	65.0	68.0	68.0
No	12	30.0	32.0	100
Valid Total	38	95.0	100	
Missing	2	5.0		
TOTAL	40	100.0		

Source: Research Questionnaire

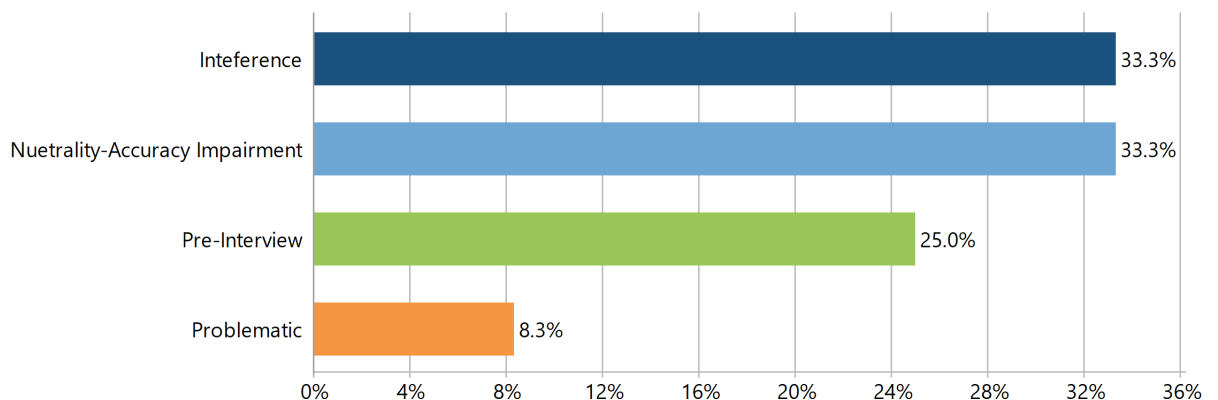
It is clear from Table 6.15 that more than half of the interpreters (i.e., 65%, n=26) assist investigators in building rapport, while only slightly above a quarter (i.e., 30%, n=12) do not. 5% (n=2) of the interpreter sample appear undecided. As such evidence abound that investigators are using interpreters for rapport building purpose as against the strict prescription of the PEACE model which emphasise rapport building as the job of an investigators.

Figure 6. 3: Interpreter Assistance in Rapport Building



Those interpreters who assist in rapport building do so by smoothing the investigation environment by using the right tone, language, posture, gesture, emotion-mood alteration, role clarification, and serving as a dependable conduit of communication (see Figure 6.3).

Figure 6. 4: Why Interpreter Assistance may be Dangerous to Rapport Building



Meanwhile, Figure 6.4 reveals that interpreters are less likely to assist in rapport building due to concern for neutrality and accuracy impairments, role interference, the persistence of good rapport pre-interview by the action of interpreters, avoidance of problematic interviewee. Overall, on average, it appears that 71% of all participants

(investigators and interpreters) support the need for interpreter assistance in building rapport during the investigation, and 20% see rapport building as the duty of investigators, not the interpreter. Rapport building is perceived not to be the duty of interpreters because of the possibility of interfering in the duty of investigators and the effects of familiarity on the neutrality principle of interpreters.

6.3.3 Interruption Difficulty and Effect

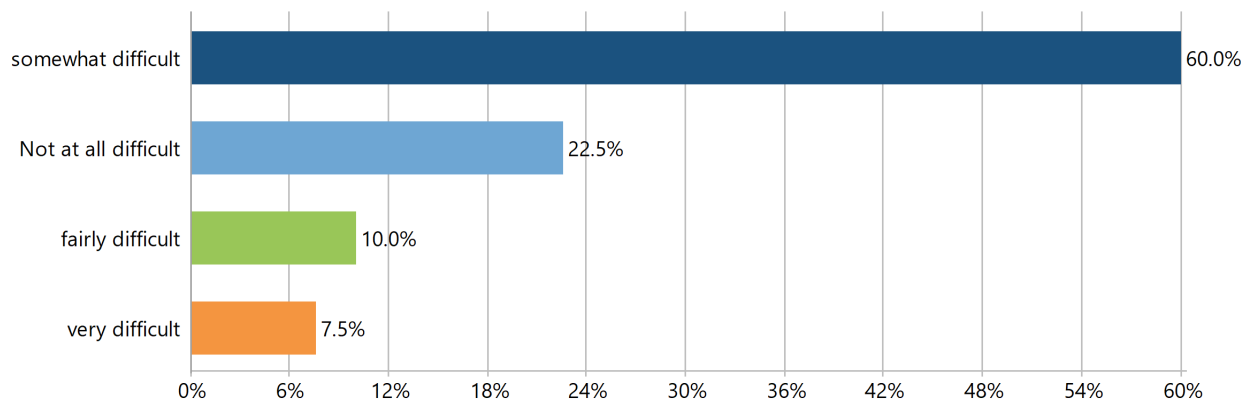
During free recall sessions, when an interviewee is providing crime scene details and information, it is often difficult to pause the interviewee to deliver an interpretation. According to the literature, this is due to recall difficulty and inability to resume the task. The result that follows shows the investigators and interpreters' opinions on several provoking questions. The discussion that follows explore three (3) core issues with the use of interruption in an interpreter assisted investigative interview. The issues explored includes the; i) extent of interruption difficulty, ii.) reason for interruption difficulty, and iii.) degree of disruption caused by interruption.

6.3.3.1 Interruption Difficulty Level

Table 6. 16: Interpreters Perception of Interruption Difficulty Level

	Frequency	Percent	Valid Percent	Cumulative Percent
Level:				
Not at all difficult	12	18.2	18.2	18.2
No concern	15	22.7	22.7	40.9
Could be difficult	25	37.9	37.9	78.8
Fairly difficult	13	19.7	19.7	98.5
Very difficult	1	1.5	1.5	100
Total	66	100	100	

Figure 6. 5: Interpreters Perception of Interruption Difficulty



It is clear from Figure 6.5 and Table 6.16 that more than two-thirds of interpreters (i.e., 77%, n=31) see interruption to be somewhat difficult, fairly difficult and very difficult, while less than a quarter (i.e., 23%, n=9) of the interpreter sample perceive interruption to be easy.

Figure 6. 6: Investigators Perception of Interruption Difficulty

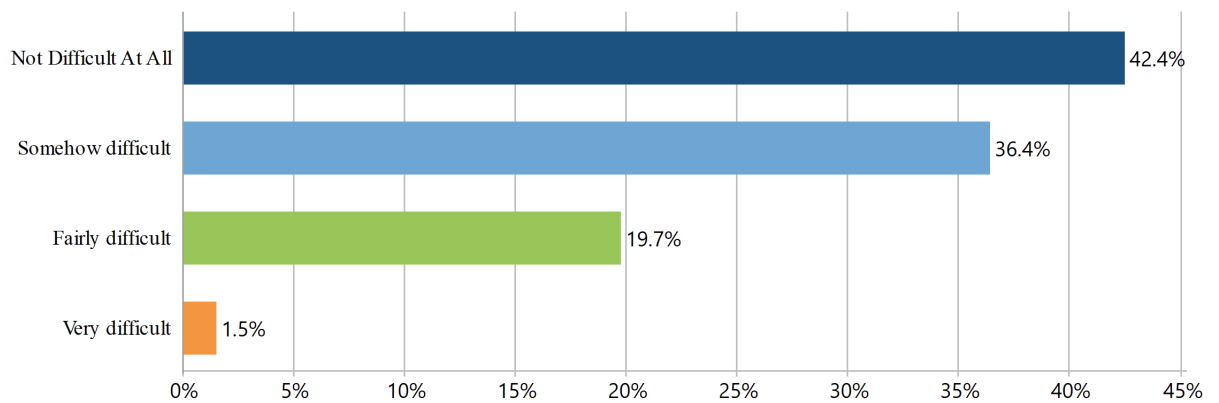


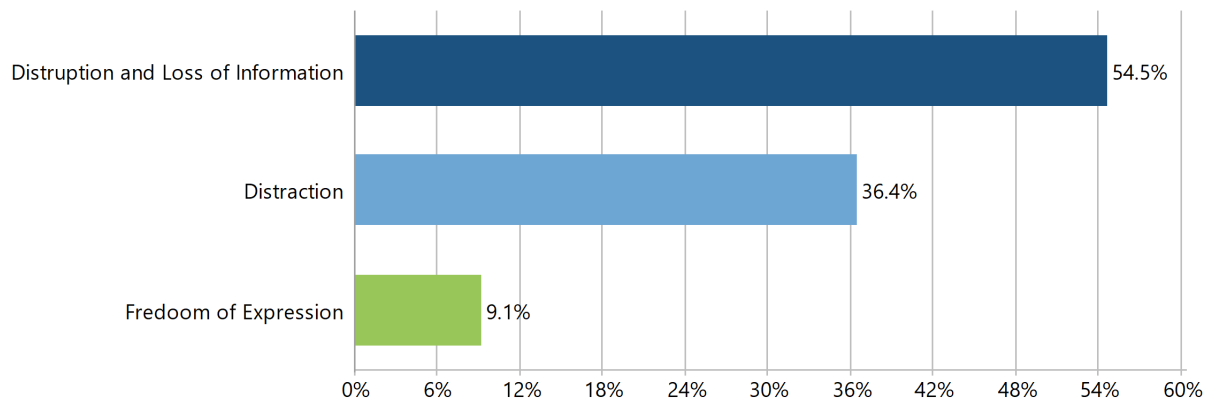
Figure 6.6, however, shows investigators varies slightly from the interpreters' perception of interruption difficulty. For investigators, 42% (n=28) perceive interruption to be easy relative to the 23% easiness perception by interpreters. The remaining 58% (n=38), down from 77% for interpreters, see interruption as fairly, somewhat and very difficult to achieve. Overall on average, it is obvious that 68% (n=72) of all participants believe that interruption difficulty is fairly, mildly and sometimes very difficult depending on the circumstances easy, while 32% (n=34) think interruption is easy and not difficult to achieve.

6.3.3.2 Reason for absence or presence of interruption difficulty

Not all investigators responded to this question, as there were some missing responses. It is observed that only 55 investigators commented, while 11 skipped the comment section.

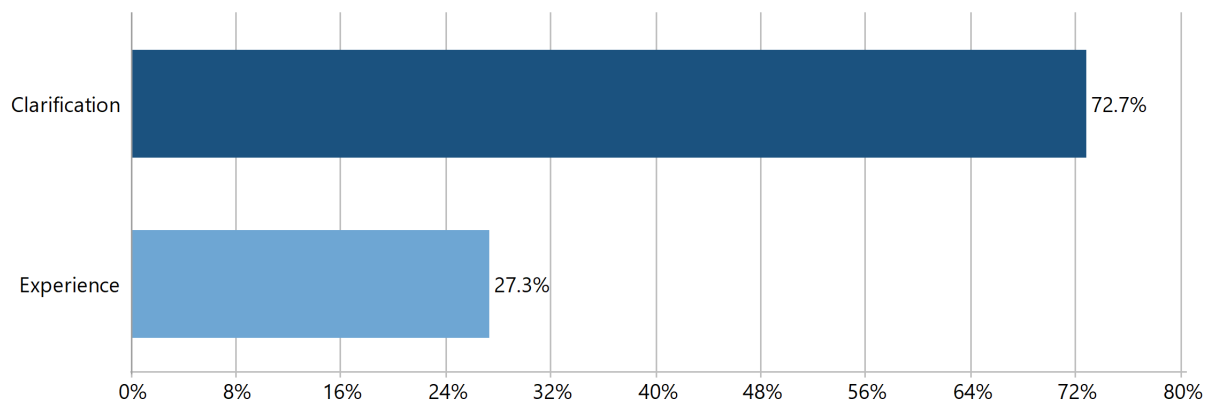
33 (i.e., 60%) of the 55 comments explained reasons for interruption difficulty presence, and 40% (i.e., n=22) focus on reasons for interruption difficulty absence

Figure 6. 7: Investigators Opinion about possible Interruption Difficulty Factors



. It is apparent from Figure 6.7 that interruption may be difficult because it leads to disruption of interviewee flow of thought, which brings about loss of information. When interruption also becomes difficult, it takes away interviewee's freedom of expression when it's haphazardly done while at the same time distract communication between investigators and interviewees.

Figure 6. 8: How to Reduce Interruption Difficulty



Interestingly, in Figure 6.8, two activities are identified as crucial for reducing or preventing interruption difficulty. These activities includes providing the interviewee with procedural clarification on modus operandi and investigator's expectation before the interview and applying experience in determining appropriate usage of interruption.

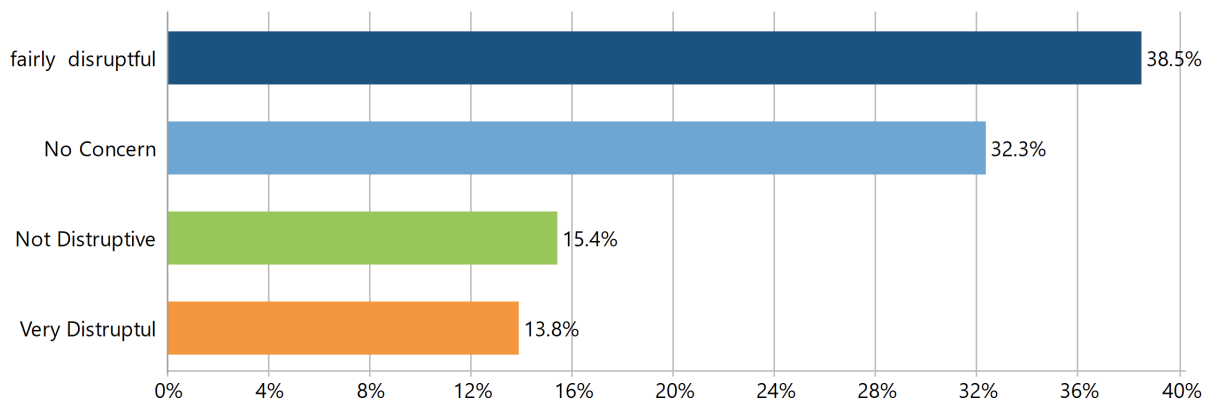
6.3.3.3 Disruptive Effect of Interpreter Interruption

Figure 6.9 shows the extent of disruption caused to the investigative interview process and outcome due to ill-planned interruption by inexperienced interpreters who failed to clarify the interview procedure or efficiently applied interruption during an interview session.

Table 6. 17: Investigators Perception of Interpreters Disruptions to Information flow with the Use of Interruption

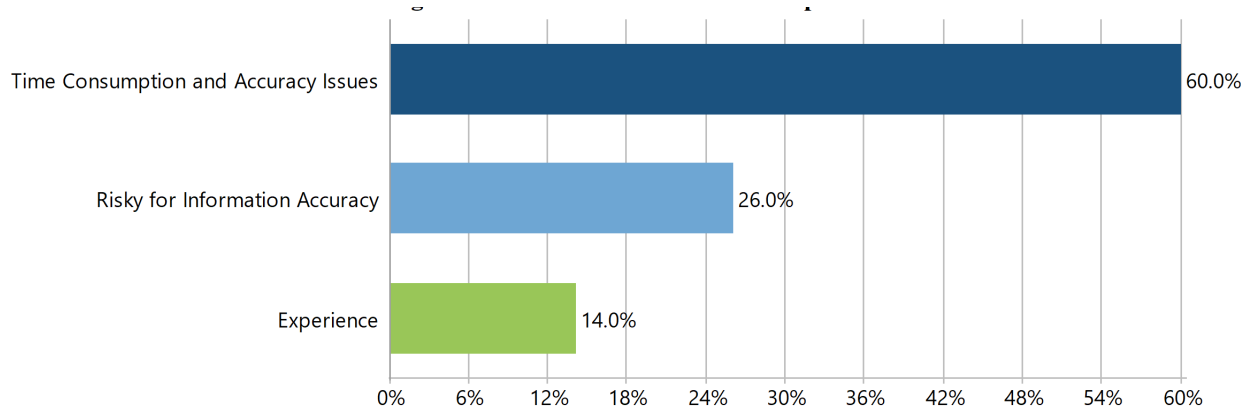
	Frequency	Percent	Valid Percent	Cumulative Percent
Level:				
Not at all disruptive	10	15.2	15.2	15.2
No concern with interpreter during investigative interview	21	31.8	31.8	47
It could be disruptive but never witness	24	36.4	36.4	83.3
fairly disruptive	9	13.6	13.6	97
very disruptive	2	3	3	100
Total	66	100	100	

Figure 6. 9: Investigators Perception of Extent of Interruption Disruption



The result in Figure 6.9 and Table 6.17 shows that interruption is generally agreed to be fairly disruptive to interview flow, outcomes and information elicitation efforts by 39% (n=25) and very disruptive by 14% (n=9) of the investigators sampled. Meanwhile, 15% (n=8) and 32% of the investigators do not perceive interruption as disruptive provided the right skills, experience and procedure are applied.

Figure 6. 10: Investigators Opinion on the Reason for Interview Disruption



The result of Figure 6.10 further shows that many of the investigators (i.e., 60%, n=30) are of the opinion that time resources consumption because of ill devised and incessant pause of speech by interpreters is oftentimes counterproductive to interview outcome. In addition, there is the possibility of a loss of useful and valuable information needed to prosecute an offender or defend a victim of a crime, as argued by 26% (n=13) of investigators that commented. Information inaccuracy and a great deal of experience required to avert disruption are also cited as additional reasons by 14% (n=7) of the investigators.

6.3.3.4 *The Good News about Interruption*

Other than all the issues identified in the discussion so far, interruption is not all that bad. Interruption, according to female investigators with ID numbers 31 and 36 and male investigators with ID numbers 39, 32 and 34, "**...Gives time to think of a response and also it makes the interviewer closer to the interviewee.**" This statement is hydra-headed as it implies many things. On the one hand, the use of interruption is needed to provide interviewees the ample time needed for them to think of their responses. On the other hand, it may also infer the creation of a relaxing atmosphere for interpreters to process information that may have otherwise not been easy to do with large chunks or lengthy information. In addition, the statement could also mean that interruption helps bridge the relationship gap between interviewee and interviewer.

Chapter 7: Factors Impacting Interpretation Service Quality Optimisation

7.1 Introduction

This chapter switches away from optimisation of the interpretation service process involved in investigative interview to the question of how best intrinsic interpretation service quality can be optimised. Quality optimisation of interpretation service is essential because of the impact it has on non-English speakers' likelihood of disclosing information voluntarily and credibility assessment as well as the linguistic power of witnesses and victims in an investigative interview and courtroom discussion (Jongh, 1991; Lee, 2009; Hale et al. 2017; Behm, 2014; Zambrano-Paff, 2011). To ameliorate the adverse effect of cultural differences on interpreting quality, Wati (2017) advocates using cultural filtering to extract complex semantic components in the source language that cannot be accommodated in the target language. Furthermore, linguistics and translation studies imply that complexity as against simplicity, foreignness as against familiarities, differentiation as against similarity (Brislin, 1970; Miller & Beebe-Center, 1958; Nida, 1964; Sinaiko & Brislin, 1973, 1990; Spilka, 1968; Treisman, 1965), colloquialism and idioms usage (Guillemin, 1995) make translation pretty tricky. Brislin (1970) observed that the content, complexity, language and interaction of content and language strongly impacted interpretation quality.

Chapter seven argues that interpretation quality in the context of a face-to-face investigative interview may be evaluated in terms of the degree of intelligibility. That is, the extent of semantic and pragmatic meaning replication of original by the interpretation and information – the extent of faithfulness of the interpretation to the original material. In addition, the chapter explores the impact of material length, language and the interpreter gender and intrinsic characteristic (e.g., training, experience, skills, and ability) on producing quality interpretation. The chapter is in two phases: Phase 1 statistically analyse expert evaluation and rating of human interpretation by four interpreters and back translation by two expert interpreters in relation to the factors, which is likely to attenuate intelligible and informative interpretation. This phase evaluates the data quality and the relational structure of the factors to interpret intelligibility and informativeness. The second phase explores the proportion reduction in machine-translated text in relation to the original text. Below is the result of the first phase, succeeded by the second phase provided alongside an excerpt of the material used in machine translation, the target language output in Yoruba, and the back-translated text in English as an annexe to the chapter.

7.2 Human Interpretation Rating Analysis

The dependent variables are intelligibility and informativeness. The two original scales (Intelligibility and Informativeness) had different ranges (0-7 and 1-6), starting points (0 and 1) and direction of increase, where high scores meant high intelligibility, and high scores meant low informativeness. For analytical convenience, scales were arithmetically converted so that both scored from low to high as the attribute increased, and both had a 1-6 range.

This results section is divided into two parts. In the first, the study checks for data quality. If assessors do not agree in their judgements of the intelligibility and informativeness of the translations, results as to the effect of the independent variables of transcript length, language, and interpreter identity is doubtful. For that reason, the study gives attention to data quality at some length. Then, in the second section of the results, the study discusses such conclusions that can be reached, given the data quality.

7.2.1 Data Quality Result

As noted above, if the scale measures of intelligibility and informativeness are to be relied upon as valid dependent variables, they should have two properties.

1. There should be high levels of assessor agreement in judgements regarding the intelligibility and informativeness of the identical translations.

2. Because it is logically impossible for an interpretation to be informative without being intelligible, seldom, if ever, should there be a higher intelligibility rating than informativeness.

The first task was to establish levels of inter-assessor agreement in judgements of intelligibility and informativeness. After that, the study conducts a test for the relationships between intelligibility and informativeness for each assessor. As a result, each of the four (4) assessors made sixty (60) judgements of intelligibility and sixty (60) judgements of informativeness from the same transcripts. In short, the experimental material came from audios of five incidents of three different lengths (five, ten and fifteen minutes) using two Yoruba interpreters and two Chichewa interpreters. Hence $5 \times 3 \times 2 \times 2 = 60$ English transcripts were generated, all of which the four assessors rated or graded. Simply put, the data were transcripts of event accounts translated to and back from another language (Yoruba or Chichewa). Assessors had access to the original English texts, so informativeness judgements were made relative to the original text. The exercise permits a general assessment of inter-

assessor agreement of the intelligibility and informativeness measures. The level will inform the choice of subsequent analyses of inter-assessor agreement.

The study uses non-parametric analytic tests throughout because intelligibility and informativeness measures are categorical.

Table 7. 1:Correlation between Assessor Judgements of Intelligibility.

	Ass1Intel	Ass2Intel	Ass3Intel	Ass4Intel
Spearman's rho Ass1Intel	--			
Ass2Intel	-.141	--		
Ass3Intel	.258*	.048	--	
Ass4Intel	.146	.045	.370**	--

N = 60; *. Correlation is significant at the 0.05 level; **. Correlation is significant at the 0.01 level.

Table 7.1 below shows the rank correlation coefficients between the judgements of intelligibility made by assessors. It is seen that most correlations did not reach statistical significance. Lack of solid correlation is worrying. If highly educated assessors cannot agree on which transcripts are more or less intelligible, then their judgements of intelligibility and informativeness may appear more subjective and idiosyncratically based on individual assessors' perception. However, Assessor 3's judgements had the highest correlation with assessments made by other assessors. The correlations with the judgements of Assessor 1 and Assessor 4 being statistically significant.

Table 7. 2:Correlation between Assessor Judgements of Informativeness

	Ass1Inform	Ass2Inform	Ass3Inform	Ass4Inform
Spearman's rho Ass1Inform	--			
Ass2Inform	-.037	--		
Ass3Inform	.330**	.218*	--	
Ass4Inform	.208	.069	.218*	--

N = 60; *. Correlation is significant at the 0.05 level; **. Correlation is significant at the 0.01 level.

Table 7.2 shows the inter-assessor correlations for judgements of informativeness. Again, these are generally somewhat higher than for intelligibility. As for intelligibility, Assessor 3's assessments are closer to the judgement of other assessors.

Table 7. 3: Association between Judgements of Intelligibility and Informativeness, Assessor 1

		Ass1Intel	Ass1Inform
Spearman's rho	Ass1Intel	--	
	Ass1Inform	.771**	--

*. Correlation between Variables significant at the 0.05 level (1-tailed).
 **. Correlation between variables significant at the 0.01 level (1-tailed).

Table 7. 4: Association between Judgements of Intelligibility and Informativeness, Assessor 2.

		Ass2Intel	Ass2Inform
Spearman's rho	Ass2Intel	--	
	Ass2Inform	.633**	--

*. Correlation between Variables significant at the 0.05 level (1-tailed).
 **. Correlation between variables significant at the 0.01 level (1-tailed).

Table 7. 5: Association Between Judgements of Intelligibility and Informativeness, Assessor 3

		Ass3Intel	Ass3Inform
Spearman's rho	Ass3Intel	--	
	Ass3Inform	.366**	--

*. Correlation between Variables significant at the 0.05 level (1-tailed).
 **. Correlation between variables significant at the 0.01 level (1-tailed).

Table 7. 6: Association Between Judgements of Intelligibility and Informativeness, Assessor 4

		Ass4Intel	Ass4Inform
Spearman's rho	Ass4Intel	--	
	Ass4Inform	.654**	--

*. Correlation between Variables significant at the 0.05 level (1-tailed).
 **. Correlation between variables significant at the 0.01 level (1-tailed).

Tables 7.3 to 7.6 show the correlations for individual assessors between their judgements of intelligibility and informativeness. There should be an association between an assessor's judgement of intelligibility that will limit how informative it can be. There is a strong

positive association between intelligibility and informativeness judgements for each assessor, as expected. However, the association between the two variables require further exploration. For example, it should not be logically possible for a judgement to be more informative than intelligible. Therefore, the logic test looks at the proportion of each assessor's judgements where the informativeness judgment is equal to or lower than the corresponding judgment of intelligibility.

The study calculates the direction of the difference for each rater. So, for example, if intelligibility scored is four (4) and informativeness is 3, the difference is positive and logical. Furthermore, if intelligibility is four (4) and informativeness is four (4), the ratings are equal, which is also logical. However, if intelligibility is three (3) and informativeness is 4, this is not logical. The vast majority of judgements were logical, as shown in Table 7.7 below. The exciting and arguably important point is that the assessors differed in their proportion of logical judgements. Difference judgements were calculated as above for each assessor separately.

Table 7. 7: The direction of Difference between assessor judgements of intelligibility and informativeness

Assessor	Intel>Inform	Intel=Inform	Intel<Inform
Assessor 1	35	19	6
Assessor 2	60	0	0
Assessor 3	53	4	3
Assessor 4	52	7	1
Total	200	30	10

Together with the earlier results on inter-assessor agreements and intra-assessor agreements, we get the picture of assessors taking different approaches to judging interpretations (which is worrying for real-world judgements of interpretations) but each assessor making internally consistent judgements.

The conclusion from the results on data quality is that;

1. There were depressingly low levels of inter-assessor agreement on judgements of intelligibility and informativeness. Assessor 3 had the highest levels of agreement with other assessors.
2. Even though the inter-rater agreement is disappointing, *within* assessor agreements is consistent.

3. A logic check on the direction of difference between individual assessor judgements of intelligibility and informativeness reassured that all assessors made meaningful judgments of the critical variables.

The implication for further analysis is that although different assessors seemed to apply different criteria in making judgements, they were individually meaningful. However, analyses from this point will be carried out separately for data from all assessors and individual assessors. The justification for this is that if despite their differences, the assessor judgements show the same relationship with the independent variables such as length of transcript, language and interpreter, that relationship is meaningful.

7.2.2 Log-linear Analysis Result

As noted earlier, the variables were all categorical; the study prefers non-parametric statistics such as; Log-linear analysis. The method is an extension of chi-square, which allows the identification of higher-order interactions. Its results can be express as a cross-tabulation measure of association. The variables of interest are language, length of the transcript, interpreter and assessor. The study discards the gender variable because generalisations from one interpreter of each gender in each language appear misleading. There was no gender difference for either intelligibility (Chi-square=8.36, 5df, $p=.138$) or informativeness. See Table 7.8 for Intelligibility and Table 7.9 for informativeness.

Table 7. 8: Main Effects on Intelligibility

Variable	Chi-square	Degrees of Freedom	Two-tailed probability
Assessor	89.15	15	<.001
Interpreter	27.16	15	.027
Language	9.36	5	.095
Length	12.49	10	.254

There is no main effect for transcript duration on intelligibility. So, the study excludes this variable in the attempt to identify higher-level interactions. Assessors varied significantly in intelligibility, with median assessor intelligibility rating varying from 3 to 5 for the same set of transcripts. These are very dramatic assessor differences. As Table 7.8 also shows, interpreters varied significantly in the intelligibility of their output. Median intelligibility score varied between interpreters from 3 to 5, again a very substantial difference in a 1-6 scale.

The language effect suggested a tendency for Chichewa transcripts to be more intelligible than Yoruba transcripts, but the study excludes it from higher-order analysis because it does not reach the conventional level of statistical significance. Its exclusion ensures that the remaining analyses do not lose statistical power of low expected cell counts.

The study carried out all the analyses to this point with simple contingency table analysis. We now address the higher-level interaction between assessor, interpreter, and intelligibility, which is impossible with simple chi-square analysis, though the chi-square statistic is still reported. The effect verges on statistical significance (chi-square = 60.49, 45df, $p=.061$). Although the result falls short of statistical reliability, the suggestion is that particular assessors found the products of particular interpreters more or less intelligible.

The study takes the same approach substituting informativeness for intelligibility. Table 7.9 shows the main effects associated with informativeness.

Table 7. 9: Main effects on informativeness

Variable	Chi-square	Degrees of Freedom	Two-tailed probability
Assessor	150.40	15	<.001
Duration	15.77	10	.106

The result in Table 7.9 shows that only the individual assessor perceptual effects variable had a significant association with the informativeness variable, while the duration variable is not significant at less conservative probability level of 10%. As for intelligibility, assessors varied very substantially in their judgements. Curiously, the ten-minute videos were judged more informative, with a median of 3 compared to 2 for the other two durations. The three-way interaction between assessor, duration and informativeness was not significant (chi-square = 23.80, 30df, $p = .781$).

7.3 Machine Translation Proportional Reduction Analysis

As this thesis began with a restricted view of fundamental study on the translation of interviews, the candidate gradually became aware of broader underlying problems. One is interpretive psychology, which includes a brief recall of what the respondent says and a complicated cognitive process involving decisions on the best way to convey nuances in a foreign language. While many materials for the current thesis have been collected, it was evident that every translation involves what is left out, how it organises what is preserved and

what general information is maintained. The word dominant detail is derived from Sir Frederic Bartlett's old psychological heritage in the 1920s. He proved that content unknown to culture was recalled and transmitted to those who were less foreign from culture. Furthermore, there were always vibrant details.

Beth Loftus has shown the subtle impacts of little word change in assessments in a comparable study tradition (see, for example, Loftus and Palmer 1974). In her famous experimental picture of the event, she showed that the recollections of eye-witness are changed by being exposed to erroneous event information — through leading questions or other types of post-event information. The misinformation effect has been one of the most essential and shared effects in psychology. Loftus' early work has created several hundred follow-up research that examines elements that enhance or impair memory accuracy and study the underlying cognitive systems.

7.3.1 Machine Translation Descriptive Analysis

The first stage was to examine the final transcripts' lengths to see what fraction of the original was retained. The length of the Yoruba transcripts is shown in Table 7.10, and the Chichewa findings are shown in Table 7.11. The letters Y or C denote the language, the letters M or F denote the translator's gender, and the numbers in the left column denote the original audio account.

Table 7. 10:Lengths of transcripts of Yoruba Material

Serial No.	Y15M	Y15F	Y10M	Y10F	Y5M	Y5F
1	426	256	271	453	225	246
2	377	243	245	255	165	356
3	295	359	306	536	254	247
4	357	311	235	386	259	351
5	298	533	276	519	411	272
Mean	350.6	340	267	430	263	294

Table 7. 11: Lengths of transcripts of Chichewa Material

Serial No.	C15M	C15F	C10M	C10F	C5M	C5F
1	796	599	447	368	180	184
2	650	375	504	438	428	209
3	759	282	592	533	345	294
4	340	535	470	438	294	317
5	346	489	423	319	274	301
Mean	578	456	487	419	304	261

The raw results demonstrate the dramatic length reduction between the original text and the final translated version. For instance, the original fifteen-minute narratives' 2000 words were cut to about 500 (578 for the male translator and 456 for the female translator).

7.3.2 Proportion Reduction in Translation Analysis

The preceding tables do not account for the fact that the five, ten, and fifteen-minute audios had a varying quantity of words. The numbers in Tables 7.12 to 7.14 are given as proportional reductions. Thus, if the finished transcript is 500 words long and the original is fifteen minutes long and contains 2000 words, the proportional decrease is .75. If the finished transcript included 500 words and the original contained 1300 words in 10 minutes, the proportional decrease would be $800/1300 = .62$. To summarise, Tables 3-5 demonstrate that, as one might anticipate, the longer the original text, the more it was lost, yet not in proportion to the original length. The extent of the loss was similar for both languages and translator genders.

Table 7. 12: Proportionate Reduction by Length

Duration	Proportionate Reduction
Five Minutes	86
Ten Minutes	80
Fifteen Minutes	78

Table 7. 13: Proportionate Reduction by Language

Language	Proportionate Reduction
Yoruba	75
Chichewa	68

Table 7. 14: Proportionate Reduction by Gender

Gender	Proportionate Reduction
Male	71
Female	72

The intention was to do a qualitative analysis of the finished texts to determine what was lost from the originals, but so much was lost that the assessors' low intelligibility ratings seem comprehensible. The annex 1 that follows contains a sample of final transcripts from one of the five-minute texts. The five-minute text was chosen since it had the lowest proportional decrease, allowing for the most excellent possibility of intelligibility. The reader will notice that the final transcripts do not accurately reflect the sequence of events in the original.

The natural effect is that majority of the original material is lost throughout translating from and to English. Whether this results from the design's unique qualities or whether real-world translations are significantly shorter than the originals is a critical question that might be answered by comparing original texts to machine translations. Although discussing the benefits and drawbacks of machine translation is outside the scope of this thesis, the length problem is critical to address. To demonstrate the point, Annex 1 provides the first 327 words of the five-minute original audio descriptions and the Yoruba translation provided by Google Translate, followed by the English translation from Yoruba. The approach is similar to the technique taken in Study 3 when human interpreters were used. However, compared to human translators, which lose around three-quarters of the material, the Google Translate document loses just eighteen words in total length.

Perhaps this study should be conducted on all the texts utilised in the study? To see which subtleties are lost. The 376-word section utilised here was necessary due to the Google Translates character limit. The issues raised by this supplement to Study 3 will be returned in the thesis discussion section.

Annexe 1

Original Text

The scene of the non-violent crime is the N7 motorway. A police patrol officer with car registration number KE 257 sights a vehicle travelling on the motorway in the wrong direction. The vehicle is a four-door hatch-back and is travelling south on a north-bound road. After sighting the vehicle, the police officer alerted other officers in the area who had to stop the flow of traffic to prevent a head-on collision that might lead to accident fatalities. The officer stressed the importance of stopping the flow of traffic as the first precaution that must be taken when a vehicle violates traffic codes in the manner shown in the video. The officer named John Joe took the next exit on the lane on which he was travelling. The car that violated the traffic code by travelling on the wrong lane in the wrong direction was already parked before John-Joe reached out to the suspect.

John Joe approached the driver and asked what the problem was. The driver was confused in his speech, and John Joe informed him that he would help him drive his car away from the dangerous area in which he was parked. By this time, John Joe had informed other officers in the area about what he had done, and other vehicles were allowed to move, thus restoring the flow of traffic. After parking, John Joe politely informed the driver, who is seen to be elderly and wearing a cotton tee-shirt, that he is driving on the wrong side of the motorway as he is travelling south on a north-bound route. John Joe also checked the vehicle's particulars and discovered that while the driver has a driver's license, the vehicle is uninsured. John Joe informed the driver that he would have to take him to the police station and drove the police-car with the driver sitting as a passenger at the back/front.

Google Translation to Yoruba

Ibi ti eṣe ti kii se iwa-ipa ni opoona N7. Oṣiṣe olopa kan pelu nomba iforukosile oko ayokele KE 257 n fojusi awon oko ti n rin lori opoona ni ona ti ko to. Oko ayokele naa je titiipa ilekun merin ati pada si guusu lori ona opoona ariwa. Lehin ti o rii oko ayokele naa, olopa naa kilo fun awon olopa miiran ni agbegbe ti o ni lati da shisan ti ijabo duro lati le se idiwo ijamba ori kan ti o le ja si awon ijamba ijamba. Oṣiṣe naa tenumọ pataki ti diduro shisan ti ijabo bi isora akoko ti o gbodo mu ni awon oran nibiti oko ti rufin awon koodu isowo ni ona ti o han ninu fidio naa. Oṣiṣe naa ti a npe ni John Joe mu oju-ona ti o tele lori ona ti o nrin. Oko ayokele ti

o ru koodu ijabo nipase ririn-ajo lori ona ti ko to ni itosona ti ko to si ti wa ni iduro tele saaju ki John Joe ti de odo afurasi naa.

John Joe sunmo odo awako naa o beere kini isoro naa. Awako naa dapo ninu oro re ati pe John Joe so fun u pe oun yoo ran oun lowo lati wako oko ayokele re kuro ni agbegbe ti o lewu nibiti o duro si. Ni akoko yii, John Joe ti so fun awon oshese miiran ni agbegbe nipa ohun ti o ti se ati gba awon oko miiran laaye lati gbe nitorinaa mu pada shan ti ijabo pada. Lihin ibuduro, John Joe fi irele so fun awako ti o rii pe o di arugbo ati wo aso owu owu ti o n wako ni ona ti ko to si ti opopona bi o ti nlo si guusu ni ona ariwa. John Joe tun sayewo awon alaye ti oko ayokele o si se awari pe lakoko ti awako naa ni iwe-ase awako kan, oko ayokele ko ni idaniloju. John Joe so fun awako naa pe oun yoo ni lati mu u lo si ago olopa ti o si mu oko olopa pelu awako naa joko bi arinrin-ajo ni

Google Translate back from Yoruba to English

The scene of a non-violent crime is the N7 road. A police officer with vehicle registration number KE 257 is targeting vehicles travelling on the road in the wrong direction. The car is a four-door lock and back south on the north highway. After finding the car, the police warned other police officers in the area who had to stop the flow of traffic to prevent a head-on collision that could lead to a head-on collision. The official emphasized the importance of stopping the flow of traffic as the first precaution to be taken in cases where the vehicle violated the trade codes in the manner shown in the video. The officer named John Joe took the next step on the trail. The car that violated the traffic code by travelling on the wrong lane in the wrong direction was already parked before John Joe arrived at the suspect.

John Joe approached the driver and asked what the problem was. The driver was confused in his speech and John Joe told him that he would help him drive his car out of the dangerous area where he parked. During this time, John Joe has told other workers in the area about what he has done and allowed other vehicles to move to restore the flow of traffic. After the stop, John Joe politely told the driver that he saw him getting old and wearing a cotton swab driving in the wrong direction of the road as he headed south on the north side. John Joe also checked the details of the car and discovered that while the driver had a driver's license, the car was unmarked. John Joe told the driver that he would have to take him to the police station and take the police car with the driver as a passenger in

Chapter 8: Triangulation of Findings on Societal need for Interpretation Service and Interpretation Process and Quality Optimisation

8.1 Introduction

The journey so far in the thesis has been that of conceptual review and empirical exploration of crucial issues on the need for an interpretation service and how best to optimised interpretation quality. The research has thus mapped the perception of ethnic minority individuals, investigators, interpreters and end-users of interpreted service or material (e.g., volunteer assessors). It is interesting to note that the demographic configuration of the sample thus far is asymmetry towards male ethnic minority's individuals, interpreters, and assessors. Even with representative investigators samples of both ethnic minority and white majority, male investigators appear to slightly outnumber female investigators. The concern, therefore, is whether the study thus far uses robust sampling or representativeness bias. Are there the likelihood of gender or ethnic perspective bias that may invalidate the result of this thesis? In the writer's mind, the answer to the above concern is provided by triangulating the objectives and findings of studies 2, 3, 4, and 5 (i.e., chapters 4, 5, 6 and 7) in a new sample of majorly white female interpreters. The study aims to provide ecological validity for the findings in the thesis and dig deep into areas that need further attention or illuminate our understanding of the interpretation service structure, process, and quality assessments.

The chapter is structured as follows: participant's characteristics and attributes such as ethnicity, experience and gender are considered early in the chapter. The section that follows analysed participants' responses to the close-ended or multiple-choice questions using a combination of frequency analysis and bar charts. The last section applied grounded theory analysis to the free text response that was gathered from the participants. The idea is to triangulate the findings of this thesis and enrich the writer's knowledge about issues on the societal need for interpretation service, interpretation process and quality optimisation.

8.2 Descriptive Analysis of Participants Characteristics

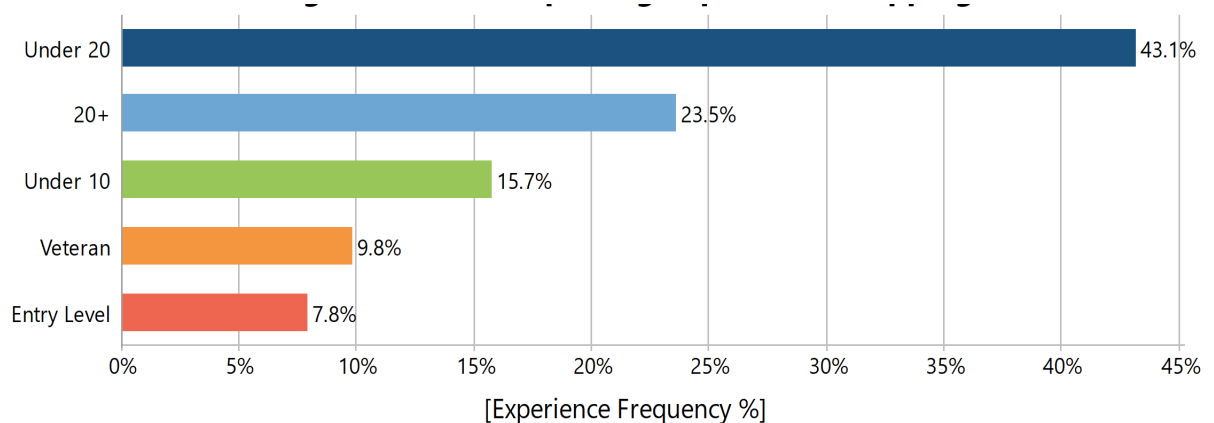
The section explores three (3) relevant characteristics of the research participants. The characteristics include i) interpreting experience, ii.) accredited language, iii.) training type and focus.

Experience and Accreditation

Table 8. 1: Interpreting Experience Distribution

	Frequency	Percent	Valid Percent	Cumulative Percent
Age Categories:				
Under 20	22	43.14	43.14	43.14
Under 10	8	15.69	15.69	82.36
Veteran	5	9.8	9.8	92.16
Entry Level	4	7.84	7.84	100
TOTAL	51	100	100	

Figure 8. 1: Interpreting Experience Mapping



It can be deduced from Table 8.1 and Figure 8.1 that nearly half of the sample (i.e., 43%, n=22) have between 10- and 20-years' experience. Close to a quarter (i.e., 24%, n=12) have more than 20 years but less than 30 years experience as interpreters. There are very few veterans (n=5) interpreters with over 30 years of experience and entry-level (n=4) interpreters with less than five years of experience. One-sixth of the sample (i.e., 16%, n=8) have been interpreters for not less than five years and not more than 10 years.

In addition, to map the extent of participants' experience as interpreters, the thesis explores participants' accredited language and language diversity. The study explores the extent of language diversity in terms of the proportion that are bilinguals versus multilingual. The result is reported in Figure 8.2 and Table 8.2 below.

Figure 8. 2: Most Accredited Language

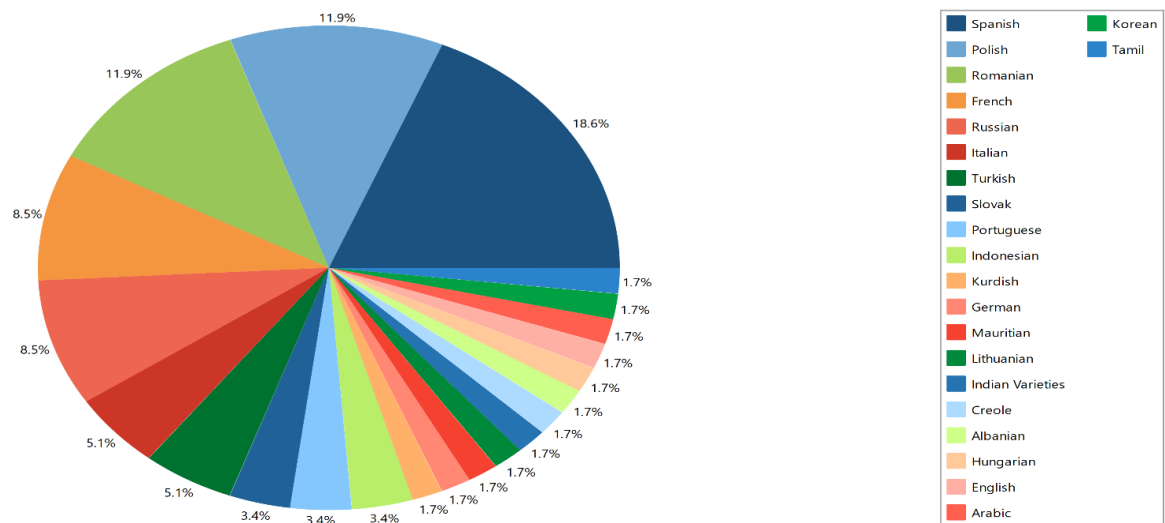
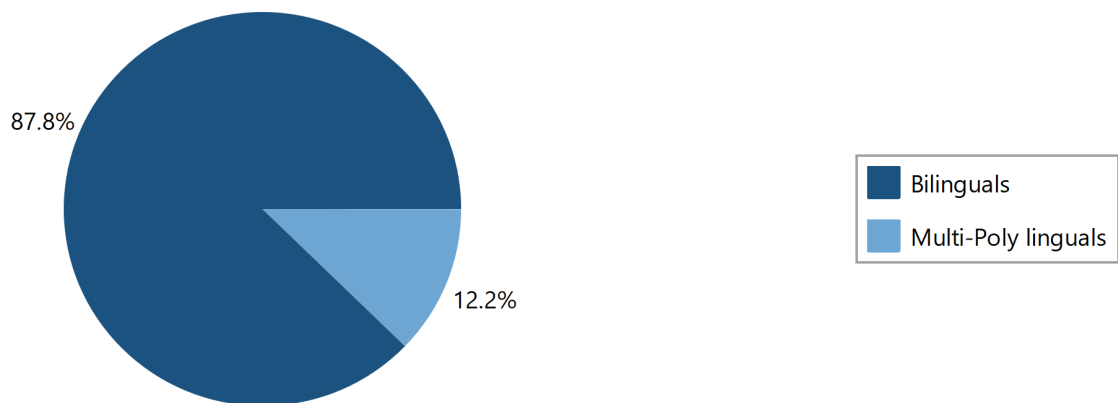


Table 8. 2: Language Diversity Frequency

	Frequency	Percent	Valid Percent	Cumulative Percent
Themes:				
Bilinguals	43	87.76	87.76	87.76
Multi-Poly lingual	6	12.24	12.24	100
TOTAL	49	100	100	

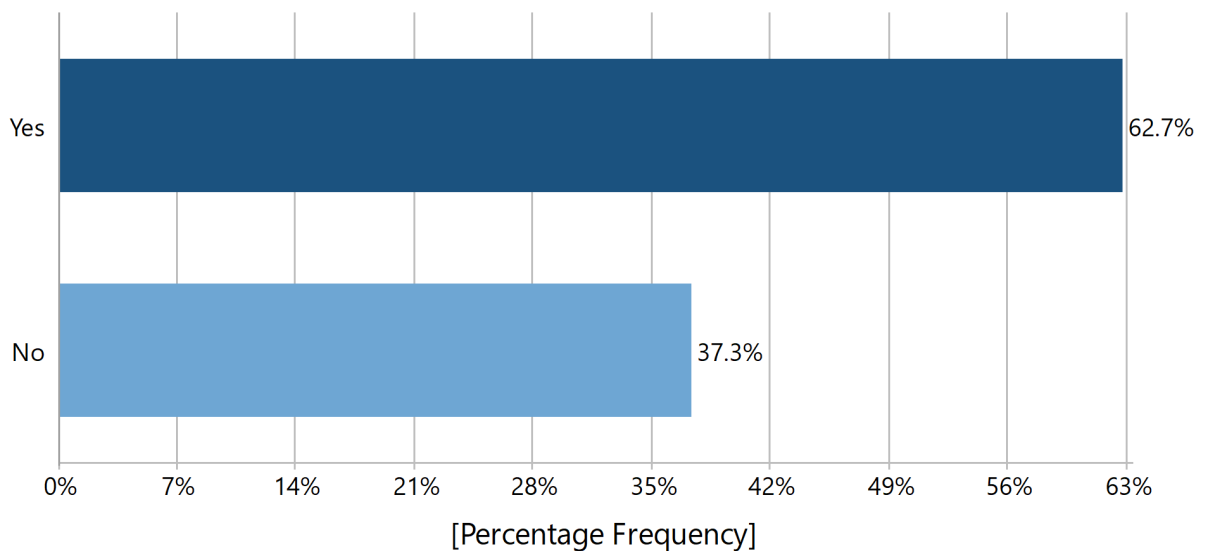
The result suggests that all participating interpreters have English as the target language - except otherwise stated (e.g., for participants 11 who translated from *"English and Spanish to French"*). The result of the pie chart in Figure 8.2 shows twenty-two (22) accredited languages with: i) Spanish, ii) Polish, iii) Romanian, iv) French, and v) Italian appearing as the top five most accredited languages with 19%, 12%, 12%, 8.5% and 8.5% representation respectively. There appears one instance of no accreditation and participants who only indicate only English. The study excludes these two instances from the pie chart presentation.

Figure 8. 3: Degree of Interpreters Language Diversity



Meanwhile, as shown in Figure 8.3, more than two-thirds (i.e., 88%, n=43) of the participants are bilinguals who only translate between two languages, while one-eighth (i.e., 12%, n=6) translate between more than two languages.

Figure 8. 4: Proportion of Trained Interpreters



Furthermore, Figure 8.4 maps the proportion of participants that have attended at least one official training and certification as an interpreter. The figure reveals that less than two-third (i.e., 63%, n=32) of the participants have been trained in one capacity or the other, while more than a quarter (i.e., 37%, n=19) appear to have no formal training even though some may have been on the job for years.

Training Type and Focus

The section explores the proportion of participants with formal training and training type using an FTQ type of questioning. The thesis uncovers seven (7) unique thematic focuses of the interpretation training. These include i) legal terminology, ii) interviewing skill, iii) general interpretation skill, iv) linguistic, v) ethics, vi) stress and work pressure management and vii) conflict resolution. Interestingly, the proportion of participants with no training focus or attending interpreting training was substantial as close to half of the participants (i.e., 43%, n=23). This result for no training focus differs slightly from earlier 37% (n=19) participants with no interpreting training.

Figure 8. 5: Interpreters Training Focus

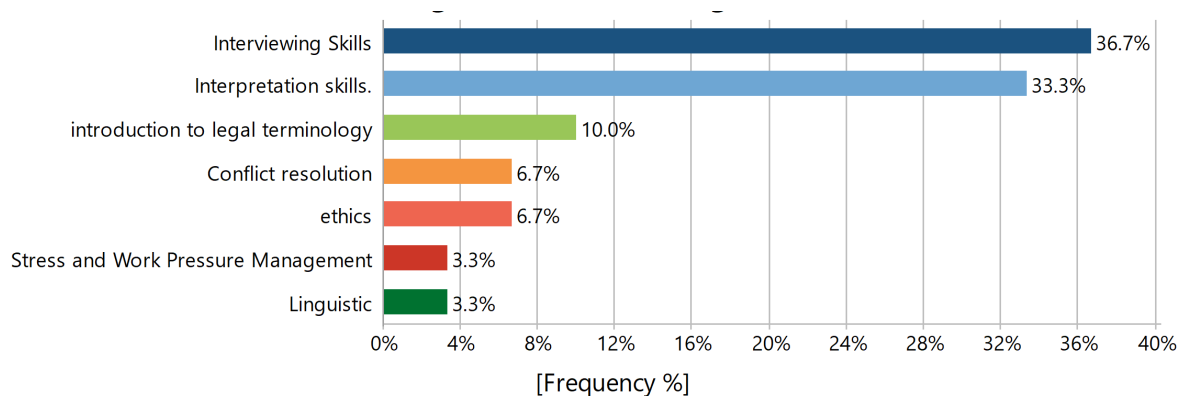
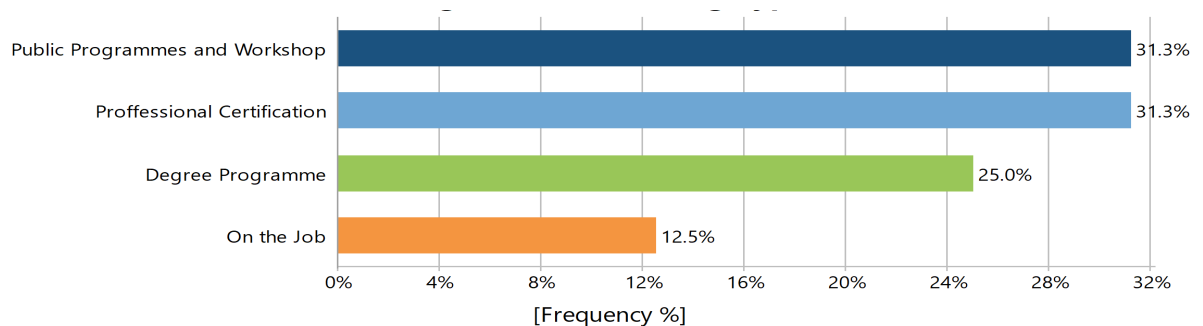


Figure 8.5 reports the distribution of the seven training. It appears from the figure that interviewing and interpreting skills, such as listening skills, seem the most focused training components of interpreting training with 37% (n=11) and 33% (n=10) representation, respectively. In comparison, stress management and linguistic training are minor focus areas with 3% (n=1) representation. Legal terminology, Ethics, and conflict resolution appear as the moderately focused areas of training with 10% (n=3), 7% (n=2) and 7% (n=2) representation, respectively.

Figure 8. 6: Training Type



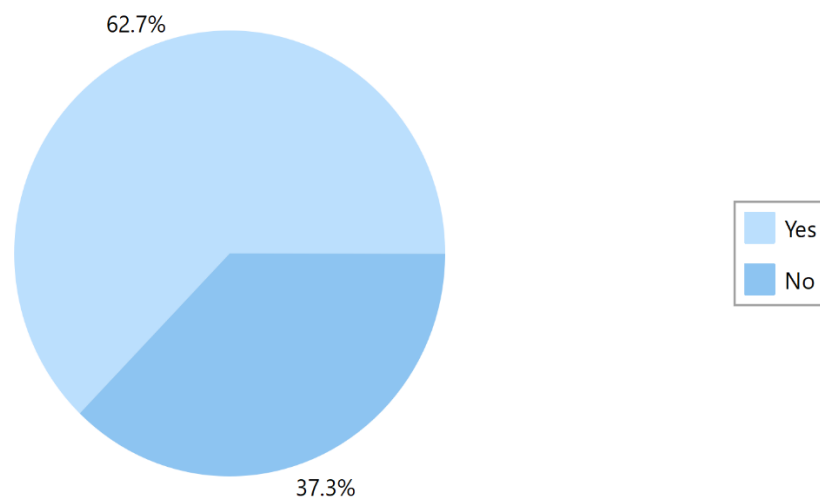
For the training type, the thesis observed in Figure 8.6 that public workshops organised by the police departments such as the Scotland Yard and professional certification bodies such as the OCIA are the most sought training by more than half (i.e., 62%, n=10) of the 16 participants who provided information on the training type. Degree programmes such as diploma and M.A. degree in interpreting and translation is among the most favour training types with 25% (n=4) representation, which is slightly lower than workshop and professional certification. Few participants (i.e., 13%, n=2) train themselves on the job through years of accumulated experience.

8.3 Descriptive Analysis of MCQ Responses

8.3.1 Interpreters Roles Clarity

Before descriptively exploring the core issues of the thesis, the current study dissects the extent of role definition clarity among the participants.

Figure 8. 7: Interpreters Perception of Extent of Role Clarity

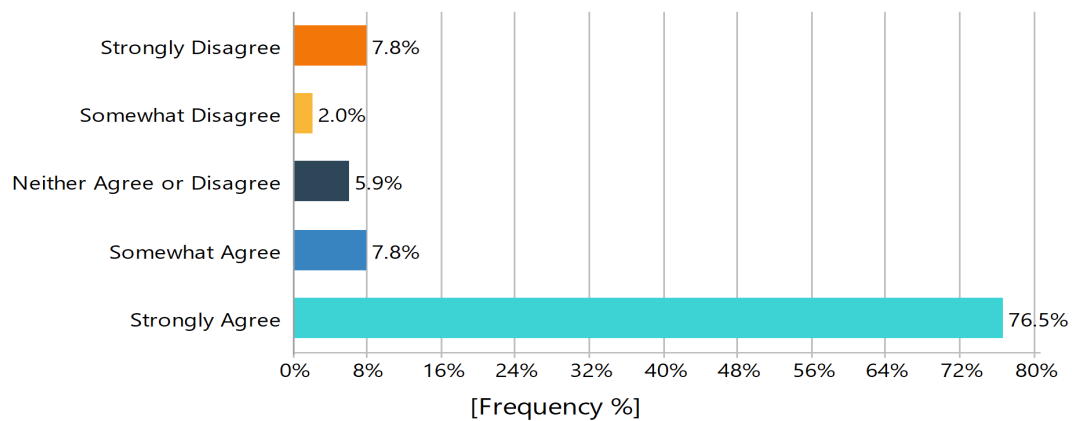


As shown in Figure 8.7, the result shows less than two-third (i.e., 63%, n=32) clarity of interpretation role and one-third (i.e., 37%, n=19) ambiguity of interpretation role perception among participants. The 37% ambiguity indicates issues with participants understanding of their roles as trained interpreters.

8.3.2 Need for an Interpreters

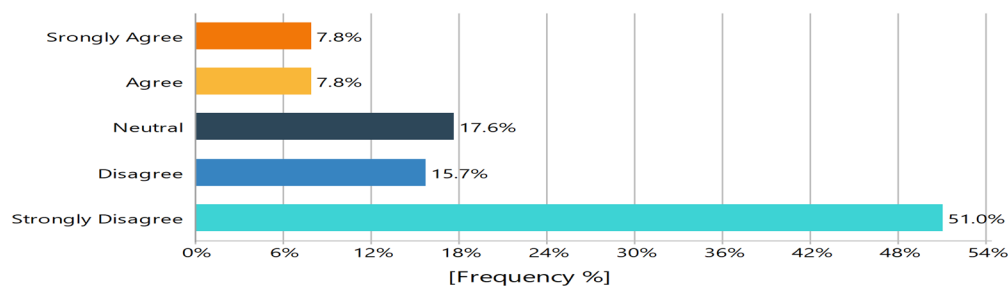
The thesis map participants' perception of cumulative effects of migration and police diversity on interpretation services need by an ethnic minority. Figure 8.8 mapped participants' responses to migration effects, and Figure 8.9 mapped responses to police diversity effects.

Figure 8. 8: Interpreters Perception of Migration Impacts on Interpretation Service Usage



The result of Figure 8.8 shows that 84.31% (n=43) of the participants agree strongly with the statements that increase migration leads to an increase in the need for interpretation services. Only a handful of participants (i.e., 9.8%, n=5) are sceptical about the statements by strongly or mildly disagreeing. Few participants (i.e., 5.88%, n=3) appear indifferent and will not support nor validate the statement.

Figure 8. 9: Interpreters Perception of Migration Impacts on Interpretation Service Usage



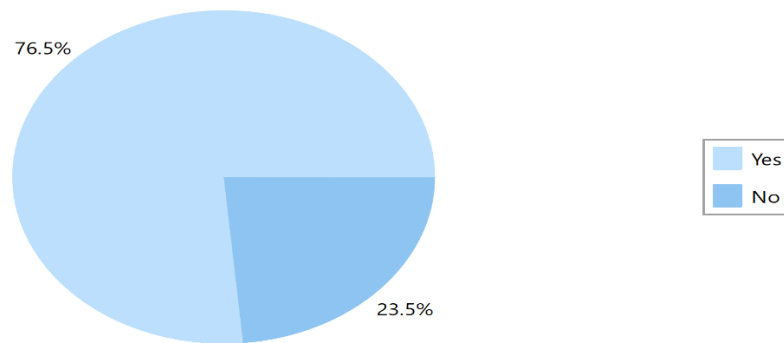
Meanwhile, as shown in Figure 8.9, the agreement level reduces to 16%. Approximately one-sixth of the participants (n=8) compared to two-third for migration agreed on police diversity reducing effects on the need for interpretation. Interestingly, the scepticism about the statement increases by more than 50% from 10% (n=5) for migration effects to 66% (n=34) for police diversity. The proportion of participants willing to stay indifferent also increase by 12% from 6% (n=3) for migration to 18% (n=9) for police diversity effects.

8.3.3 Is there a low Appreciation of Joint Planning?

Low understanding of planning imperative among investigators who often ignore planning due to time, resources, urgency, and sensitivity of the case has been identified as one reason investigators rarely brief or plan with an interpreter before an investigative interview.

The present study investigates participants' perception regarding a low understanding of pre-interview planning imperative in simple, Yes and No close-ended questions.

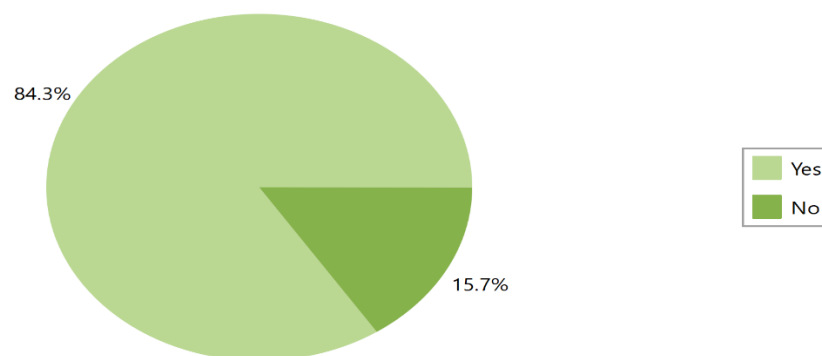
Figure 8. 10: Interpreters Perception on the Extent to which Investigators are Aware of the Essentials of Planning and Preparation



The descriptive analysis of the close-ended question using simple percentage frequency reported in Figure 8.10 implies that most of the participants (i.e., 77%, n=39) believed there is generally a low understanding of the importance of planning and preparation in an investigative interview. Meanwhile, close to a quarter of the participants (i.e., 23%, n=12) disagreed with the statements.

8.3.4 Does rapport beget Voluntary Disclosure?

Figure 8. 11: Interpreters Opinion on the Extent of Rapport Impact on Information Disclosure



The result of Figure 8.11 reveals that 84% (n=43) of the participants perceived rapport building to achieve voluntary information disclosure, and only 16% (n=8) of the participants are pessimistic about the effect of rapport building on voluntary information disclosure.

8.3.5 Are there Interruption Difficulty in an Investigative Interview?

Before mapping participants' perception of interruption effects on interviewee recall, the thesis explores to what extent interruption becomes difficult for interpreters during an

interviewee. The thesis asked how difficult it is for participants to interrupt during an interview or investigation.

Table 8. 3: Interpreter Perception on Interruption Difficulty

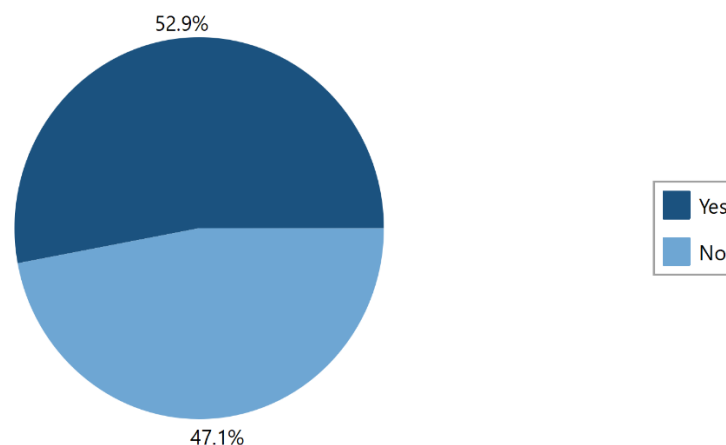
	Frequency	Percent	Valid Percent	Cumulative Percent
Categories:				
Yes	20	39.2	39.2	39.2
No	31	60.8	60.8	100
TOTAL	51	100	100	

The result of Table 8.3 shows that close to two-thirds of the participants (i.e., 61%, n=31) did not perceive any difficulty in interruption, while 39% (n=20) perceived rapport to be problematic during interpreter assisted investigative interviews.

8.3.6 Interruption and Interviewee Memory Recall

The section maps participants' perception of the extent to which interruption during an investigative interview affects witness and victim recall capability during an interview. Interestingly, the thesis found no clear evidence of interruption effect on interviewee memory. In Figure 8.12, the lack of convincing evidence occurs because a little more than half of the participants (i.e., 53%, n=27) believed interruption impacted interviewees' recall ability, while close to half (i.e., 47%, n=24) do not believe in such statement. Therefore, the result implies that even though the possibility exists that interpreters' interruption affects interviewee recall, some participants believed that interruption might not affect recall if adequately initiated.

Figure 8. 12: Interpreters Perception of Interruption Impact on Memory Recall



8.3.7 Is Interpreting Accuracy more likely in 10mins or 15mins?

Figure 8.13 and 8.14 mapped participants' opinions on the likelihood of achieving interpreting accuracy in 10mins or 15mins witness account, respectively.

Figure 8. 13:Interpreter Perception of Accuracy in 10mins Transcripts

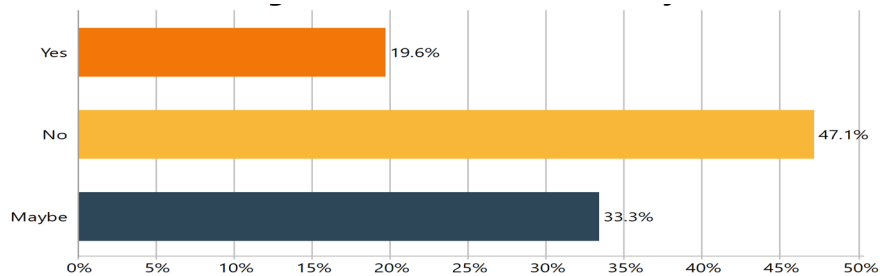
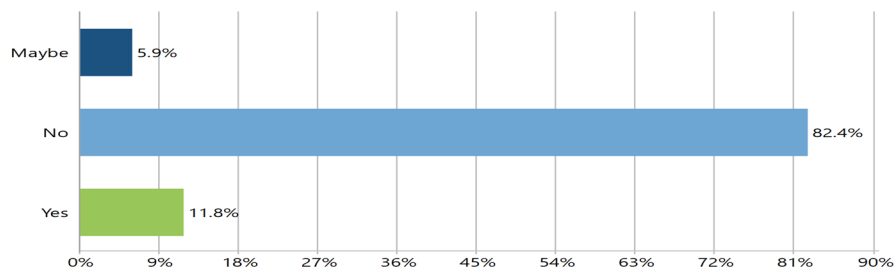


Figure 8. 14:Interpreter Perception of Accuracy in 15mins Transcripts



It is apparent from Figure 8.13 relative to 8.14 that 10mins witness account is likely to be more accurate than 15mins witness accounts. The likelihood in 10mins is possible because scepticism about accuracy indicated by the "no" Bar in Figures 8.13 and 8.14 is lower for 10mins at 47% (n=24) relative to 15mins at 82% (n=42). In contrast, affirmative voices, which is represented by the "yes" and "maybe" bar in Figure 8.13 and 8.14 is higher for 10mins witness account at 20% (n=10) and 33% (n=17) relative to 15mins witness account at 12% (n=6) and 6% (n=3) respectively. In a nutshell, accuracy is more likely in a 10mins witness account rendition than in 15mins witness accounts rendition.

8.3.8 Cultural Barrier differential across language

The section explores whether there are cultural barriers or differences within a language stratum or class and the extent to which the barrier or difference may impact accuracy. Tables 8.4 and 8.5 report the result of the perceptual mapping.

Table 8. 4: Interpreter Perception on Cultural Barrier Difference Across Language

	Frequency	Percent	Valid Percent	Cumulative Percent
Categories:				
No	3	6.1	6.1	6.1
Yes	46	93.9	93.9	100
TOTAL	49	100	100	

The result in Table 8.4 reveals that most participants (i.e., 94%, n=46) perceive cultural barriers across language, and only 6% (n=3) thinks otherwise.

Table 8. 5: Interpreters Perception on Cultural difference in Interpreting Accuracy

	Frequency	Percent	Valid Percent	Cumulative Percent
Categories:				
Yes	36	75	75	75
No	12	25	25	100
TOTAL	48	100	100	

8.3.9 Does Interpreting Accuracy differ between Genders?

Finally, the thesis maps the effect of gender on interpreting accuracy. The goal is to know whether interpreting accuracy is likely to vary based on the sex of interpreters. The question witnessed some drop out as 41% (n=21) did not respond to the question. The result reported in Table 8.6 is based on 59% (n=30) of the initial sample surveyed. Surprisingly against all odds, almost all the participants (i.e., 93%, n=28) who answered the question do not see the gender of interpreters as an issue that hampers interpreting accuracy. Very few participants (i.e., 7%, n=2) agreed that the gender of participants might have some effect on interpreting accuracy, but the proportion is too small to drive any strong arguments. So, no difference in interpreting accuracy among gender is observed.

Table 8. 6: Interpreters Perception on the Gender difference in Interpreting Accuracy

	Frequency	Percent	Valid Percent	Cumulative Percent
Categories:				
No	28	93.3	93.3	93.3
Yes	2	6.7	6.7	100
TOTAL	30	100	100	

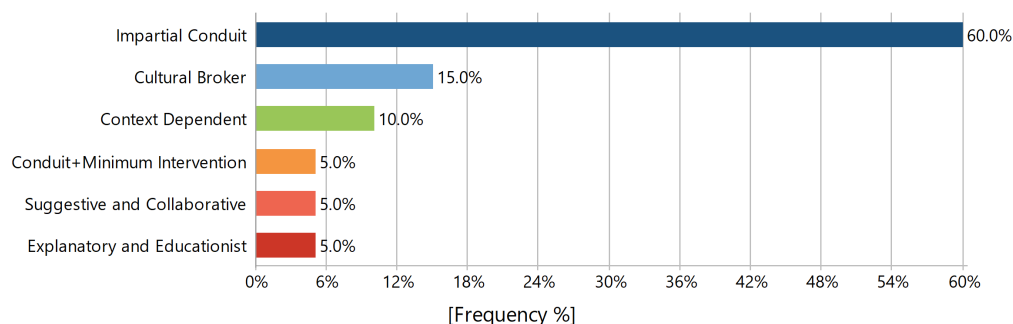
8.4 Perceptual Mapping of FTQ Response

The writer also allows participants expression in their words rather than limiting their thought patterns. This section specifically analysed participants' responses in their words or language to some of the issues analysed.

8.4.1 Roles of Interpreters

In the previous analysis, we observed that the participants perceive that even though some substantial interpreters' role clarity perception persists, perception is multifarious. Based on the ambiguity, the section explores participants' perception of what interpreter roles entail using responses to the FTQ follow up questions. The coding procedure identified nine (9) unique themes made up of fifty-three (53) coded comments. The coded comments are 53 because the writer coded two participants more than once. The nine themes include three (3) thematic categories excluded for not meeting the study's objective. The three categories are i) "missing", ii) "irrelevant" and iii) no roles nodes or thematic categories. More than half (i.e., 55%, n=29) of the response classification is classified as missing, 6% (n=3) is classified as irrelevant and 2% (n=1) as no roles. The perceived interpreter roles result in the remaining 39% (n=21) response classification, as reported in Figure 8.15.

Figure 8. 15: Interpreters Perception of their Role



The result shows that more than half (i.e., 60%, n=12) of the valid coded segments emphasised the interpreter's role as an impartial conduit and conveyer of information. Interpreter as a conduit is expected not to be emotional in their dealing and to remain neutral as possible. The aspect of impartiality also extends to the accuracy, non-isolation, and non-collaboration of interpreters with interviewees. Furthermore, investigators should not use an interpreter to question witnesses, victims, and suspects. However, they should only convey the intended meaning of investigators' questions to the participants as accurately and straightforward as possible with no addition or subtraction. Table 8.7 present the opinion of participants regarding neutrality and the impartial role of interpreters.

Table 8. 7: Quotes on Impartial Conduit Role Perception

-
- I. Go-Between (Participants ID. 2)
 - II. To be each side's voice in the other language (Participants ID. 4)
 - III. To interpret exactly what both parties say accurately and impartially (Participants ID. 8)
 - IV. The interpreter is not the investigator. He or she must not be drawn into the line of questioning other than to interpret what is said (Participants ID. 19)
 - V. ...i.e., impartiality, a clear distinction between the voice of the parties... (Participants ID. 26)
 - VI. Our role is to interpret EVERYTHING that's being said between the parties exactly the way it's being said, making sure to convey the meaning correctly and accurately (Participants ID. 35).
 - VII. Relay the information, stay impartial, and interpret everything said (Participants ID. 41)
 - VIII. In no circumstances should they be left alone with the defendants. No personal conversations should be allowed, and these rules should be made clear at the beginning (Participants ID. 43).
 - IX. To stay neutral. Keep in mind that some participants (prisoners) are dangerous. (Participants ID. 47)
 - X. To interpret in a way that ensures the interview is as close to the same language interview as possible (Participants ID. 48)
 - XI. We know what our duties are, we are bound by strict rules of the code of conduct (51)
 - XII. Accurate conveyer of meaning (Participants ID. 16)
-

The writer observed that interpreters are cultural brokers next to the impartial conduit role as one-seventh of the valid cases (i.e., 15%, n=3) emphasised the importance of the interpreter as a cultural bridge that facilitates communication between two different cultures. The participants noted in their words that the role of interpreters includes:

Table 8. 8: Quotes on Cultural Broker Role Perception

-
- I. To act professionally as in every other situation but using awareness of sociolinguistic and pragmatic aspects of cross-cultural interactions (Participants ID. 36)
 - II. ...while being a cultural broker (Participants ID. 48)
 - III. It would help if we are expected to give any input re- linguistic, cultural so on... (Participants ID. 14)
-

Few of the participants (i.e., 10%, n=2) felt that an interpreter's role tends to change depending on the context of action. Some contexts, such as the legal process, is more restrictive and adversarial than collaborative, while community or conference interpreting is less restrictive and adversarial and more collaborative. The views of the participants are captured in Table 8.9

Table 8. 9: Quotes on Context-Dependent Role Definition

-
- I. It depends on what country you are in. In the U.S., these interviews are clearly defined as legal in nature. However, because they happen outside of the courtroom and in many contexts, they can be more collaborative than adversarial. There can be fuzziness about which professional ethics and roles apply: Legal (with a more restricted role) or Community (with some leeway to monitor and intervene to point out whether parties seem to be understanding) (Participants ID. 16)
 - II. The dilemma of an interpreter in this kind of interview is whether the role is as a classical interpreter, considered interpreting in an adversarial situation, or as a bilingual investigative assistant, interpreting in a non-adversarial situation. Another question is whether it is a conflict of interest to provide services in both types of interviews involving the same parties (Participants ID. 49)
-

The other roles category includes less frequently coded roles with 5% (n=1) coded segments. The category includes suggestive, conduit with minimal intervention and educationist role. Participants believe that the interpreter can suggest and explain what the interpreter role entails to the police, what their role should be, and the role expectation. If both

interpreters and investigators agree, the interview can proceed. Interpreters can intervene when the need arises, but the intervention is expected to be very minimal to overshadow the impartiality or neutrality principle. Below in Table 8.10 are some nuggets in the participants to validate other possible roles of an interpreter.

Table 8. 10: Quotes on Other Roles

I.	As well as being briefed about what the interview is about, interpreters should be given a chance to explain what to expect from interpreting (Participants ID. 43)
II.	It is drummed into us that we are to translate what is being said as it is said (intonation) and to keep interventions to a minimum (Participants ID. 32)
III.	When the role is not clearly defined, for example, if a police officer is unsure how to best proceed, I make suggestions, and if agreed, we proceed (Participants ID. 12)

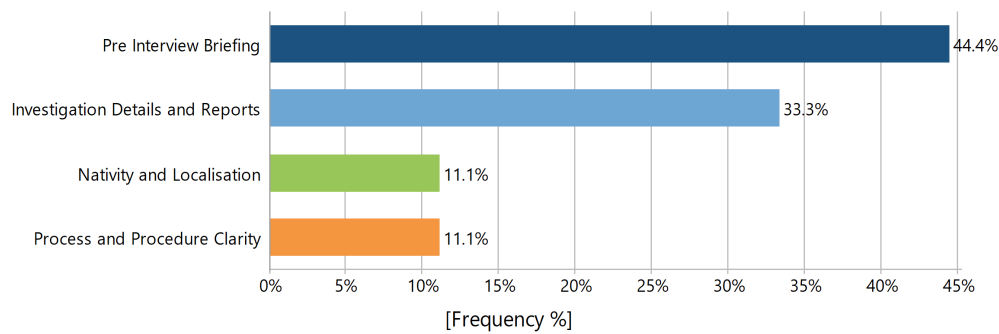
8.4.2 Purpose of Joint Planning and its Optimisation

Attention ascribed to joint planning is meagre in this study because there is a low understanding of planning and preparation imperatives in an investigative interview. Therefore, the thesis further explores the purpose of planning and preparation and how best to optimise planning and preparation interest among investigators. Figure 8.16 reports on planning and preparation, and Figure 8.17 focuses on planning and preparation understanding optimisation among investigators.

i) Purpose of Planning and Preparation

The thesis observes that fifty-one (51) participants' responses consist of fifty-third (53) coded comments classified into seven (7) themes. The seven themes include three categories that do not align with the study objectives. The three themes consist of i) missing, ii) irrelevant, and iii) no joint planning with 72% (n=38), 6% (n=3) and 6% (n=3) representation in the coded comments population, respectively. So, the purpose of planning and preparation is based on four (4) themes in 16% (n=9) of the coded comments (hereafter valid coded comments).

Figure 8. 16: Purpose of Planning



It is observed from Figure 8.16 that briefing appears as the essential purpose of planning as nearly half (i.e., 44%, n=4) of the valid coded segments emphasised pre-interview briefing as the core focus of any joint planning and preparation before an investigative interview. The briefing, according to participants, is meant to discuss the nature, strategy or techniques, technical terms, general issues, and end goal of an investigation with the interpreter. The aim is to empower the interpreter to prepare before an investigative interview session adequately. Participants quote on the pre-interview briefing are shown in Table 8.11.

Table 8. 11: Quotes on Pre-Interview Briefing

-
- I. ...There should be a brief briefing from the officer in charge about the matter, and the interpreter should have the opportunity to get prepared if there are any difficult or specialised terms or knowledge to take into consideration... (Participants ID. 26)
 - II. Advance information is key. The officers have had time to look through the case and prepare, yet the interpreter is expected to turn up and be cognisant of the case and terms immediately (Participants ID. 19)
 - III. Short briefings are the general issues and planning in terms of the interview and its technique (Participants ID. 51)
 - IV. The nature of the interview (Participants ID. 45)
-

One-third of the participants (i.e., 33%, n=3) further emphasised that crucial details of the investigation and investigators' reports or case files may be made available to the interpreters. The goal is to ensure that the interpreters are familiar with the issues before the investigation and plan their strategy well. However, as shown in Table 8.12, participants noted that planning is not the business of an interpreter as planning is the sole responsibility of investigators, and investigators are not under any legal compulsion to provide confidential case details.

Table 8. 12: Quotes on No Joint Planning

I.	There is no joint planning. An interpreter is not an investigator (Participants ID. 40)
II.	From my point of view, there is no "joint planning process" (Participants ID. 26)
III.	the interpreter has no business in the planning process (Participants ID. 26)

When safe or appropriate for investigators to disclose information, it is good to provide the interpreter with access to case reports and details to boost the interpreter's knowledge and performance achievable only through early preparation. Table 8.13 reports participants quote on the need to provide details.

Table 8. 13: Quotes on Details and Case Report

I.	A copy of the police report, names of people and places, relationship between people mentioned. It sometimes helps to know ahead of time what the investigator is looking for (Participants ID. 5)
II.	Disclosure (Participants ID. 17)
III.	Speak about what is coming concerning context. The history of the case. The kind of participants (dangerous?) (Participants ID. 47)

The least practical purpose of pre-interview planning in 11% (n=1) of the valid coded comments is the need for investigation process and procedure clarification. The interpreter needs to be aware of a series of processes that are to be employed by the investigation to allow for goal congruency. In addition, one-ninth of the participants (i.e., 11%, n=1) also felt that the pre-interview planning would also enable investigators to gauge an interpreter's nativity and proficiency in the target source language before actual investigation. Table 8.14 presents a quote from participants on clarity and nativity.

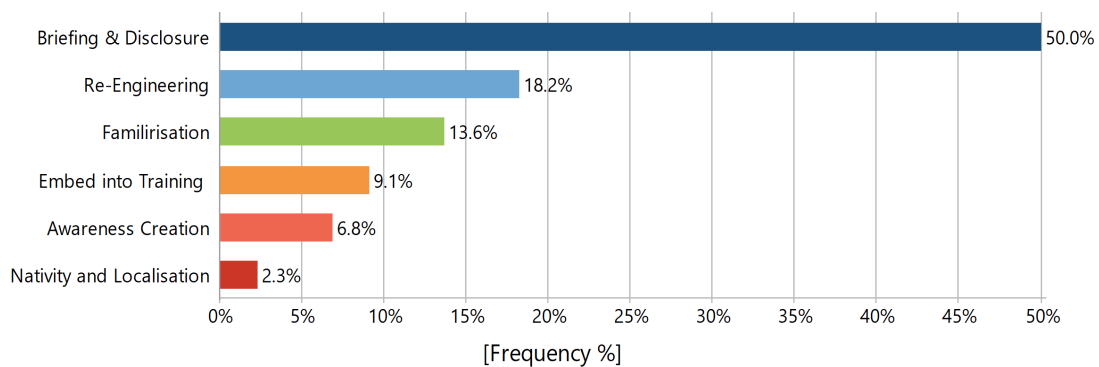
Table 8. 14: Quotes on Process Clarity and Nativity

-
- I. Clear understanding of the way the interview is going to be conducted (Participants ID. 13)
 - II. We have to make sure to have a native speaker interpreter who knows both the culture and legal system of the immigrants and the U.S. Legal system (Participants ID. 7)
-

ii) Optimising Investigator Joint P&P Understanding

For the 51 participants' responses, the GTA analysis uncovered eight unique categories or themes derived from fifty-eight coded comments. However, two of the eight themes, which represent 19% (n=11) and 5% (n=3) of the total coded comments, is excluded because they contain missing and irrelevant information, respectively. So, the result is based on six unique themes, covering 76% (n=44) of the coded segments. Figure 8.17 reports the result of the six unique themes.

Figure 8. 17: How to Optimise Planning and Preparation Optimisation



The writer observed that many participants or valid coded comments emphasised briefing and disclosure as essential for the low understanding of planning imperative in an investigative interview session. These factors appear as the most referenced themes by participants. Half (i.e., 50%, n=22) of the valid coded segments believe that the ability of investigators to de-brief interpreters on case details, history and other aspects may go a long way in reducing the perceived low understanding echoed by many of the participants. The reduction is true because increased briefing before an investigation is an indication that the investigators appreciate the role of interpreters more in ensuring a smooth investigation. Table 8.15 presents some of the snippet quotes from participants.

Table 8. 15: Quotes on Briefing and Disclosure

-
- I. The interpreter should be briefed about the subject matter, any sensitivities, religious, cultural, or even about the case before the start of an interview. Most of the time, I walk in blind or half-blind (Participants ID. 12)
 - II. Briefing What is the goal (achievement) of the investigator from the interview? (Participants ID. 14)
 - III. Interpreters to be put in the picture (Participants ID. 16)
 - IV. ...briefed before an interview (Participants ID. 18)
 - V. Inform the interpreter as much in advance as possible so that he or she can at least think about what terminology may be used (Participants ID. 19)
 - VI. Briefing of the interpreter before the interview (Participants ID. 20)
 - VII. The interpreter could participate in disclosure... (Participants ID. 18)
 - VIII. Give the interpreter more background information (Participants ID. 23)
 - IX. Interpreters need a short briefing, and debriefing is sorely lacking (Participants ID. 25)
 - X. The interpreter can ask for some details of the case, but at the end of the day, the officer is not obliged to disclose anything to the interpreter (Participants ID. 27)
 - XI. Provide the interpreter with relevant information beforehand, meeting them for a few minutes if possible (Participants ID. 33)
 - XII. Give the interpreter the basic circumstances/background of the case before the interviews commence. This is very rare but very helpful. (Participants ID. 35)
 - XIII. Meetings before interviews, also interpreters could be involved in relevant preparation and given some basic information beforehand. (Participants ID. 41)
 - XIV. Police officers and interpreters to discuss matters related to the expectations beforehand. (Participants ID. 50)
-

Innovation and attitudinal change are the second most referenced solution to low understanding, as supported by 18% (n=8) of the valid coded segments. Participants believe that the current investigative interview standard should be revised to make room for compulsory joint planning between investigators and interpreters before an interview. The result encourages investigators to change their attitude towards interpreters and see the interpreter as a profession that should be respected and taken seriously. The result reveals that often, investigators do not see interpreting as a mature or respected profession or at par with their profession. They tend to exclude any unofficial relationship with interpreters and prefer to approach interpreters in terms of their general professional designation. Innovation and

attitudinal change in terms of respect for the interpreting profession, flexibility, personal relationship, role appreciation and clarification, developing a best practice checklist are some of the innovation and attitudinal change driving suggestions posited by participants. Table 8.16 below captured participants' quotes.

Table 8. 16: Quotes on Innovation and Attitudinal Change

I.Usually, interpreters are not considered as serious as solicitors for various reasons. Interpreters are sometimes not called by their name used but as interpreters. (Participants ID. 29)
II.	The situation is improving. The College of Policing is currently revising its guidance on the use of interpreters to include the importance of briefing before the interview. (Participants ID. 3)
III.	...a laminated checklist that officers can carry with them to remind them of best practice protocols when working with an interpreter. (Participants ID. 9)
IV.	More time is needed for preparation. (Participants ID. 22)
V.	My experience has been that the investigator usually does not see the need for joint preparation. In a way, that is good because the investigators are not telling you what they want to hear. On the other hand, I have always felt that it is important for an interpreter to prepare for whatever situation the interpreter is going to be working on. (Participants ID. 10)
VI.	First, the investigator should understand what the role of the interpreter is. A basic understanding of interpreting techniques (just basics), along with interpreting ethics as well, would go a long way. Preparation would also be key, but many times, it is not only insufficient, but it is also non-existent. (Participants ID. 15)
VII.	Regard each other as professionals, do some briefing and some de-briefing but be clear in the respective roles. (Participants ID. 48)
VIII.	...describe role to the officer as well as potential obstacles. (Participants ID. 49)

The study observed that 15% (n=7) of the valid coded segment emphasised the importance of training and awareness creation for both interpreters and investigators. Participants believed that police and investigators training should emphasise how to conduct joint planning with interpreters. The need to increase awareness of the importance of joint planning and preparation for both parties is imperative for solving the low understanding

issues. Quotes from participants on the effect of training and awareness creation are presented in Table 8.17.

Table 8. 17: Quotes on Training and Awareness

I.	Make it part of the "investigator's" training. (Participants ID. 6)
II.	Provide client training to the police departments (don't put this education on the interpreter's shoulder). Education should include how to work effectively with an interpreter, the need to provide information ahead of time for the interpreter to prepare, any legal requirements for language access... (Participants ID. 9)
III.	The solution is cross-training, of course... (Participants ID. 32)
IV.	Educating police officers... (Participants ID. 38)
V.	Better awareness by both sides of what purpose the interview serves and the role each side plays. (Participants ID. 4)
VI.	...Interpreter education so that they understand their role, what they can and should not be asked to do, and what legal liability they carry in police interviews. (Participants ID. 9)
VII.	... There are interpreters who, for personal or other kinds of reasons, might decline in certain situations... (Participants ID. 42)

More so, the participants emphasised the notion of familiarisation with the details of the case through personal efforts. This perception cluster is supported by 14% (n=6) of the total valid coded segments. Familiarisation, according to participants, deals with the interpreter initiating contact with the investigators and requesting a briefing on the case immediately after the case is assigned. Thus, apart from jointly planning with investigators, interpreters must prepare and gather information independently instead of waiting for a planning session invitation from investigators. Table 8.18 captures participants' original views on the aspect of familiarisation in quotes listed below.

Table 8. 18: Quotes on Familiarisation

-
- I. If the interpreter is familiarised with the proceedings, they will be able to help better by choosing the right approach and strategies to work together with the professionals. (Participants ID. 43)
 - II. An interpreter can contact the investigator ahead of the assignment and go over key terms and/or understand the background information on what the case is about before the task. (Participants ID. 6)
 - III. Discussion between the investigator and interpreter... (Participants ID. 29)
 - IV. More preparation. (Participants ID. 30)
 - V. The interpreter could participate in disclosure... (Participants ID. 18)
 - VI. The interpreter should acquire materials relating to the case... (Participants ID. 49)
-

Participants also believed that having interpreters with the proper cultural proficiency and most likely using natives who better understand the cultural rituals, customs, and norms of the source and target language will go a long way in boosting investigators' confidence in interpreters. A boost in confidence will therefore translate into an invitation extended to interpreters during the preparation stage. A participant's quote on the issue of the nativity is presented in Table 8.19.

Table 8. 19: Quotes on Nativity and Localisation

-
- I. We have to make sure and insist on having an Interpreter who speaks and knows the Immigrant culture! Because Immigrants don't know their rights (Participants ID. 49)
-

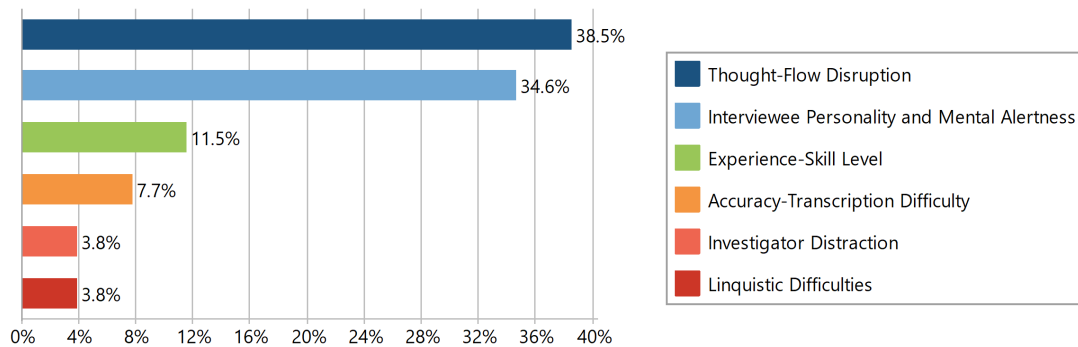
8.4.3 Interruption

The thesis explores the causes of interruption difficulty and management of memory recall defects caused by the interruption effect. The exploration is because interruption difficulty and memory recall defect were established in the former MTQ response analysis as an issue facing the interpreter's assisted investigative interview. The cause of interruption difficulty is reported in Figure 8.18, and memory recall defect management strategy is explored in Figure 8.19.

i) Causes of Interruption Difficulty

The study observed in Figure 8.18 that six (6) factors group, excluding the missing response group, causes interruption difficulty. The missing response group is slightly more than half (i.e., 53%, n=29) of the total coded segments of fifty-five (55). Therefore, the 6-factors group is derived from nearly half (i.e., 47%, n=26) of the 55 coded segments. The study lists the six factors in Figure 8.18 legend in the order of occurrence.

Figure 8. 18: Causes of Interruption Difficulty



The likelihood of interrupting discussion to provide interpreted rendition may also become difficult due to its effect on the thought and flow pattern of the interviewee. For example, 39% (n=10) of the participants believed interrupting the interview may affect the interview flow and may lead to forgetfulness. Sometimes forgetfulness, loss of thought and flow of discussion may aggravate the interview, who may then decline to continue with the interpretation. Participants quote on thought and flow disruption due to interruption is presented in Table 8.20.

Table 8. 20: Quotes on Thought-Flow Process Disruption

-
- II. I don't want to potentially disrupt their thought process. (Participants ID. 48)
 - III. If someone is giving evidence, he or she provides important materials for courts. They should not be stopped unless it is in court or during cross-examination as breaking may hinder fact recollection and obtuse the flow. (Participants ID. 51)
 - IV. You break their flow, and they forget what they wanted to say. You can tell they don't like it, but you need to do it. (Participants ID. 32)
 - V. I don't like interrupting people giving their accounts, as this could mean forgetting what they wanted to say, deciding not to carry on, or getting annoyed. (Participants ID. 35)

- VI. You break the thought, which makes the person forget. (Participants ID. 29)
 - VII. It is hard to pause an emotionally charged account, and it may hinder the interviewee from sharing freely. (Participants ID. 9)
 - VIII. I answered no because you can interrupt the person (by gesture or with words), but if you do interrupt, then the person loses his/her trend of thought and tend to repeat what has already been said and has difficulty in maintaining the flow. (Participants ID. 10)
 - IX. ... others will lose their train of thought or forget what they said. (Participants ID. 11)
 - X. the interruptions break the communication flow, can cause the speaker to lose track of what they are saying... (Participants ID. 9)
 - XI. They lose their flow. (Participants ID. 40)
-

Most of the participants (i.e., 35%, n=9) agreed that the personality of an interpreter in terms of his/her expressiveness, verbosity and nervousness may make interruption very difficult. As interruption becomes difficult, it may lead to confusion and incoherent presentation from the interviewer when asked to resume speech after a pause. In addition, participants believe that traumatised victims and witnesses are more likely to be emotionally charged. When interrupted, an emotionally charged individual is likely to lose the storyline and provide confession that lacks details and chronological order. As such, an interviewee is more likely to respond poorly to questions when asked. Table 8.21 report the perception of participants in their words.

Table 8. 21: Quotes on Emotions and Personality

-
- I. Some people are very voluble. (Participants ID. 2)
 - II. Sometimes they forget that the interpreter is there and tend to talk continuously without waiting. (Participants ID. 6)
 - III. Yes mostly, they go on a tangent. (Participants ID. 38)
 - IV. Distress and emotions have much impact on the interviewee (Participants ID. 41)
 - V. Sometimes an interviewee will continue despite the signal to pause and/or oral interruption. (Participants ID. 49)
 - VI. Because they don't know the interpreting procedure, they become nervous. (Participants ID. 47)
 - VII. As for interviewees, the majority don't know to take breaks and lose the line of the story if prompted. Especially because of the emotional factor, the interviewee's narration is most of the time confusing, not chronologically presented, lacking details

that appear later, mentioning all of a sudden, people or facts that had been omitted earlier but make an important part of the statement. (Participants ID. 42)

VIII. Interviewees often forget where they stopped. (Participants ID. 16)

IX. Refugees/victims of crime can be traumatised, confused, scared. It can be very difficult for them to tell their stories, especially if it triggers a traumatic or PTSD response. (Participants ID. 9)

In Table 8.22, it becomes apparent that interpreters' experience and skill level also determine whether interruption will be difficult or easy to achieve. For example, for an interpreter who is well experienced and has note-taking skills, 12% (n=3) of the participants agreed that interruption might be less problematic if the interpreters listen to the entire speech before rendering interpretation. Participants quotes on the effect of experience and skill level are presented in Table 8.22 below:

Table 8. 22: Quotes on Experience-Skill Level

- I. This takes experience and skill on the part of the interpreter. It is an essential part of what we do. (Participants ID. 3)
- II. But this is where some consecutive notes (as opposed to shorthand) come in handy. They usually allow interpreters the time to listen to the entire answer to a question before they begin to render it in another language. Pen and paper, along with training in notetaking, are what helps in these situations. (Participants ID. 15)
- III. Interpreters should have a solid note-taking technique, so they minimise the number of times they must ask the speaker to pause, and interruptions are coming primarily from the interviewer. (Participants ID. 9)

8% (n=2) of the participants believed that interpreters' interruption might affect the accuracy of the interpretation because interpreters are likely to be obtruding the interviewee line of thoughts when they interrupt to provide interpreted rendition. In addition, a participant can also perceive interruption to affect the ability to transcribe into another language, mainly when the speech is recorded. Quotes on accuracy and transcription difficulty are reported in Table 8.23.

Table 8. 23: Quotes on Accuracy and Transcription Difficulty

- I. The interpreter wants to be accurate and not obtrusive. These are two conflicting interests. (Participants ID. 5)

- II. Often it is being recorded, so many interruptions make a transcript more difficult.
(Participants ID. 8)

Finally, other causes of interruption difficulty, as emphasised by 4% (n=1) of the valid coded comments, include the distractive effects of interruption on investigators' attention and linguistic difficulty inherent in the grammatical structure of languages. Few quotes on this issue are reported in Table 8.24.

Table 8. 24: Quotes on Distraction and Linguistic Difficulty

- I. , however, sometimes, the breaks come according to the English grammatical structure, which is different from other languages and makes interpretation quite awkward. (Participants ID. 42)
- II. The professional might not want it. It can also distract their attention. (Participants ID. 43)

ii) Recall Difficulty Management Strategies

According to the participants, memory recall defects may be manageable by five (5) strategies or themes derived from fifty-seven (57) coded comments. The five memory recall management factors do not include the missing and the irrelevant response groups, consisting of 40% (n=23) and 5% (n=3) of the coded segments. The five memory recall management strategies are from 55% (n= 31) of the coded comments (hereafter, the valid coded comments). Figure 8.19 present the five memory recall management strategies.

Figure 8. 19: Recall Difficulty Management Strategies

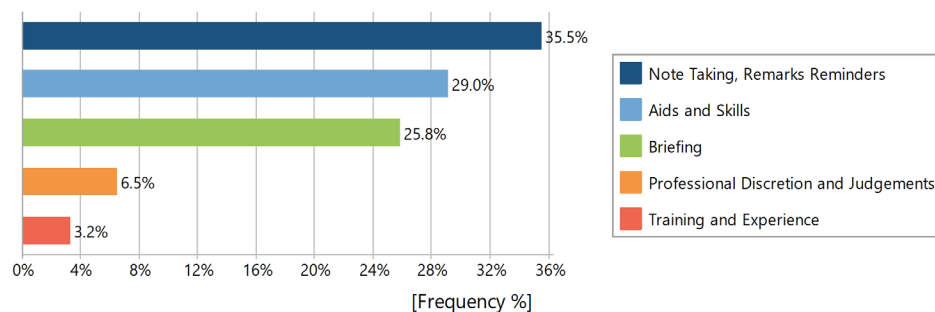


Figure 8.19 shows that 36% (n=11) of the valid coded segments support note-taking effectiveness combined with a remark, gesture, and a reminder to help in aiding interviewee recall capability. As shown by quotes in Table 8.25, participants believe that the ability of interpreters or investigators to remind interviewees of the last statements they made before a pause in speech will go a long way in aiding their recollection.

Table 8. 25: Quotes on Note Taking, Use of Reminder and Remarks

Take notes and let them say it all at once. (Participants ID. 4)

Sometimes the interpreter may need to intervene to remind the interviewee of where they were in the narrative. (Participants ID. 3)

...gentle remark. (Participants ID. 2)

I use my note-taking technique to allow the speaker to speak for longer and ideally bring their thought to a logical end - and then ask for a pause if needed. I've used this technique for years, and it greatly enhances the flow of communication. (Participants ID. 9)

When inviting the interviewee to continue, one can remind them where they left off with permission from the interviewer. (Participants ID. 12)

I would not interrupt. I would use notes. (Participants ID. 15)

I would take full notes of the interviewer's account and obtain permission to remind the interviewee of the train of thought which was interrupted. (Participants ID. 25)

I take notes, and I wait for as long as I can so that I can still provide a quality interpretation. (Participants ID. 32)

Next to notetaking, remarks and reminders, participants, as represented by 29% (n=9) of the valid coded comments, observe that interview aids such as gestures, raising of the hands, simultaneous interpretation, thought caging and chuchotage can be used to aid interviewee memory recall capability. In addition, participants also perceive attentiveness, concentration, explanation, the timing of concept exhaustion, politeness, and encouragement skill sets of interpreters as an essential means of managing interview recall capability. Participants, in their words in Table 8.26, noted that:

Table 8. 26: Quotes on Aids and Skills of Interpreters

- I. For me, being attentive and concentrating on what is being said is most important. (Participants ID.10)
- II. gesture. (Participants ID. 2)
- III. I always hold my hand up if they're going too fast. (Participants ID. 28)
- IV. The best I can, I guess. If I must stop the person giving the account to interpret, I try to briefly explain that if I have to interrupt, this is to convey their account accurately... (Participants ID.35)
- V. I would wait until there is a small pause to ask for clarification and do so swiftly. (Participants ID. 33)

- VI. Interrupt when a concept has been exhausted and when I think the interviewee is going towards a new topic. (Participants ID. 39)
 - VII. Wait until a natural pause occurs and start interpreting. (Participants ID. 50)
 - VIII. ... simultaneous interpreting/chuchotage. (Participants ID. 48)
 - IX. I would ask and encourage them to keep everything they would like to say in their mind whilst I was interpreting what they said up to the point that I interrupted. (Participants ID. 43)
-

Furthermore, 26% (n=8) of the valid coded comments reveal briefing before the interview as the third most crucial memory recall strategy. Participants believed that briefing the interviewee and the officer ahead of an interview session on the possibility of intermittent interruptions, the strategy of the interview, and the need to pause goes a long way in boosting the interviewee coping ability. Therefore, a boost in interviewee coping ability reduces working memory failure or memory loss in the interviewee. Some of the participants' comments concerning briefing are presented in Table 8.27.

Table 8. 27: Quotes on Briefing

-
- I. Warn them about the need to pause beforehand. Ask them to speak in certain intervals from the beginning. (Participants ID. 8)
 - II. ...I would recommend a briefing with the interviewer ahead of the meeting to suggest a strategy where the interviewer takes into account the need for the interpreter to ask for more frequent pauses. (Participants ID. 9)
 - III. Depending on the person, I will try to let him/her know in advance that I might have to interrupt. Or explain this when I interrupt the first time. (Participants ID. 11)
 - IV. ... The person conducting the interview should also set some ground rules for the interviewer... (Participants ID. 15)
 - V. Ask the person to speak in a small chunk at the beginning of the interview. (Participants ID. 22)
 - VI. I usually ask everyone before the interview commence to take this into account. (Participants ID. 35)
 - VII. I think it would help if the interviewee were briefed before the interview that they needed to give space for the interpreter to translate. (Participants ID. 42)

VIII. Talk to an officer and interviewee before an interview and explain they need to stop to allow an Interpreter to interpret. (Participants ID. 51)

Other recall management strategies with 7% (n=2) and 3% (n=1) representation in the valid coded comments include reliance on professional discretion, training, and experience of both the interpreters and the officers. Discretion deals with determining the right speech, time, and which person interruption may be appropriate. Quotes on these strategies are reported in Table 8.28.

Table 8. 28: Quotes on Interpreters Discretion, Training and Experience

It depends. (Participants ID. 5)

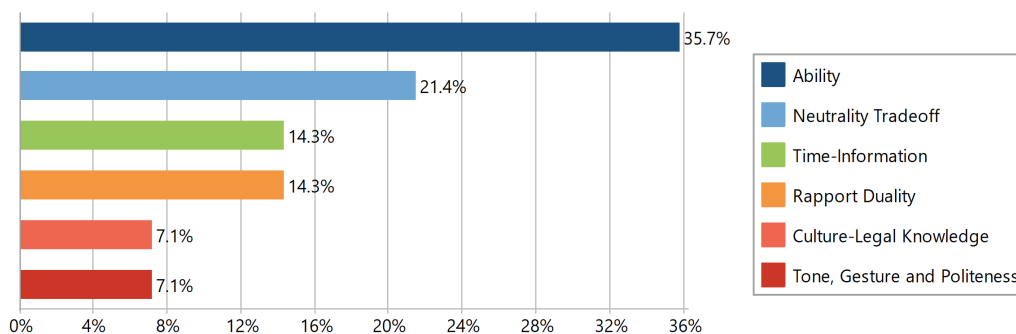
The answer is 'maybe'. The interpreter must judge when and if to interrupt the interviewee based on each case. (Participants ID. 17)

... in the absence of that, the interpreter can only count on their training and experience. (Participants ID. 15)

8.4.4 Rapport Difficulty

Interpreter presence in an investigative interview may not make rapport building difficult with appropriate steps to address underlying issues affecting rapport when an interpreter is present. The study mapped participant opinions on what they think causes rapport difficulty. An analysis of fifty-one (51) coded comments from 51 participants implies nine causes group or themes. The study classified two (2) of the causes group as missing and irrelevant, which consisted of 69% (n=35) and 4% (n=2) of the 51 coded comments, respectively. As such, Figure 8.20. reports the seven (7) causes group derived from 27% (n=14) of the coded comments (hereafter the valid coded comments).

Figure 8. 20: Causes of Rapport Building Difficulty



The thesis observed that 36% (n=5) of the comments believed that, interpreters' ability, training, skills, experience, and working memory capacity significantly determine the success or failure of rapport building efforts. The discovery suggests that, when an interpreter is not experienced nor well trained on the intricacy of rapport building, he/she is likely to find rapport building difficult.

Table 8. 29: Quotes on Ability and Training Depth

It depends on the ability of the interviewer as well as the interpreter. (Participants ID. 49 & 51)

It's not easy for the officer to build rapport if you don't speak the language. (Participants ID. 38)

It depends on the interpreter. Some may concentrate on factual content. (Participants ID. 33)

It is the responsibility of the police force to train their officers in appropriate rapport-building techniques that they use. (Participants ID. 9)

Close to the interpreter's ability is the issue of neutrality and difficulty, as emphasised by 21% (n=3) of the coded segments. According to quotes in Table 8.30, participants believed that building rapport with interviewees might often conflict with the principle of neutrality and impartiality, as some interviewees may want to take advantage of the need to build rapport as a hidden haven to evade judgments. As such, for an interpreter to be neutral at all times, it may be advisable to constrain any friendly conversation, thereby reducing the efficacy of any rapport building efforts.

Table 8. 30: Quotes on Neutrality Difficulty

Because we should not be involved in the investigation in this way. Impartiality (Participants ID. 40)

Because impartiality cannot be compromised. (Participants ID. 18)

You don't know what to expect from everyone. Some defendants appreciate someone who speaks their language, explaining everything to them nicely, but some might want to take advantage of it. (Participants ID. 43)

Furthermore, the third most emphasised causes of rapport building include (i) duality of rapport and ii) time and information issues highlighted by 14% (n=2) coded comments each. The two factors imply that 28% (n=4) of the total valid coded comments emphasised the

rapport duality and time-information issues. Rapport duality deals with the need for parties to build rapport with the other two parties simultaneously. For example, participants feel that the interviewee must maintain rapport with the interviewer and interpreters for a smooth investigative interview session. Similarly, investigators and interpreters must also build rapport with one another while building rapport with the witness or victim. So, the need to satisfy the relationship need for more than one party may affect rapport building. It affects rapport because, as the saying goes, "it is impossible to serve two masters at a time". Participants also felt that lack of understanding by investigators on the role of interpreters coupled with communication difficulty encounter by some interpreters due to language technicality, tone and linguistic or grammatical structure might frustrate any effort to build rapport. Table 8.31 reports some of the participants' quotes.

Table 8. 31: Quotes on Rapport Duality, time and Role and Information

I.	Yes, because an interpreter is seen as another person, not a robot in between. Do you need to build rapport with the interpreter too? Your human instinct may say yes. (Participants ID. 46)
II.	The interpreter is interposed between the police officer and the interviewee. There is, therefore, an additional barrier to overcome. Conversely, the presence of an interpreter speaking the interviewee's language may assist in rapport building. (Participants ID. 3)
III.	Because they are not very informed about the work of interpreters, and they don't have so much time available. (Participants ID. 47)
IV.	Not enough time and uncertainty and not understanding of what is said by other parties (Participants ID. xx)

Other less emphasised issues with at least one (1) or 7% coded comments are the concern for i) tone, gesture, and politeness of interpreters, and ii) culture proficiency and knowledge of interpreter. The concern on the aggregate is 21% (n=3) of the total valid coded comments. Participants perceived a lack of adequate grasp of legal jargon and cultures of the source or target language to affect rapport building because it will not allow interpreters to perform cultural brokerage as expected. According to the quotes in Table 8.32, interpreter politeness in handling issues combined with a kind gesture and tone when lacking interaction disrupts the extent of rapport achievable in an interview session.

Table 8. 32: Quotes on Culture-Legal Knowledge and Politeness

-
- I. It helps both parties to understand the cultural procedures & legal system. (Participants ID. 7)
 - II. If you are referring to the rapport between investigator and suspect/witness, then yes, it is important. In that case, a good interpreter should be able to see that and facilitate that using the same tone and gestures... If you mean a rapport between interpreter and suspect (a topic in interpreting studies), then it's not necessary, but it does help... Simple polite words with a scared witness will help a lot with the overall interaction. (Participants ID. 32)
-

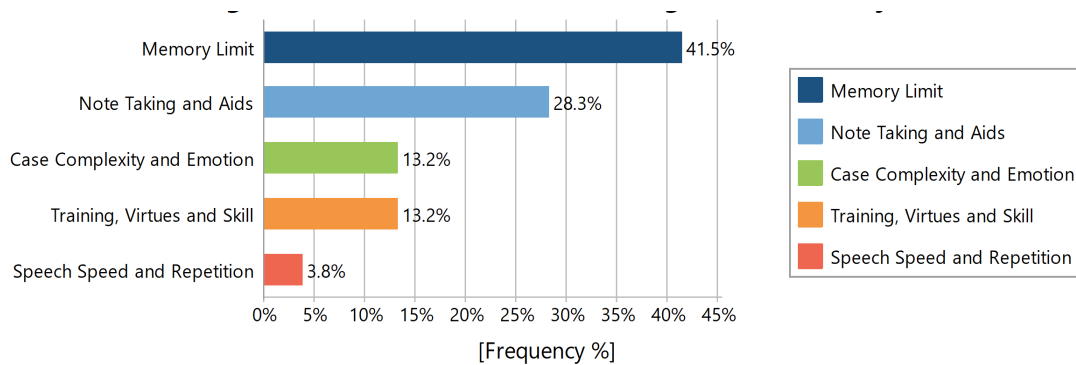
8.4.5 Causes of Cognitive Challenges and Optimal Interpreting Duration

In the MTQ response analysis, the thesis observed that accuracy is higher in 10mins relative to 15mins witness account. Meanwhile, the extent of scepticism about the accuracy of the 10mins witness account is non-ignorable, not to mention the high scepticism in 15mins witness rendition. This section maps participants' opinions on the causes of cognitive challenges in 15mins witness accounts. In addition, the section also maps participants perceptions of the optimal interpreting duration, which is likely to guarantee accuracy. The result of cognitive challenges causes for 15mins witness account is reported in Figure 8.21 and optimal interpreting duration in Figure 8.22.

i) Causes of 15mins Cognitive Difficulty

Analysis of the FTQ responses revealed seven (7) primary coding categories or groups aggregated from sixty-two (62) coded comments. The seven categories include the missing and the irrelevant categories that are 13% (n=8) and 2% (n=1) of the total coded segments. Figure 8.21 excludes these categories in the graphical presentation shown below. Thus, the study derived the five (5) categories of 15mins cognitive difficulty causes from 85% (n=53) of the total coded comments. The 85% (n=53) coded comments are hereafter referred to as the valid coded comments.

Figure 8. 21: Causes of 15mins Cognitive Difficulty



The result presented in Figure 8.21 shows that human memory limit in terms of the capacity of the short-term working memory to hold overload information for a longer time without memory decay as emphasised by 42% (n=22) of the participants as the major causes of cognitive difficulty in 15mins witness accounts. Furthermore, participants observed that 15mins is too long for short working memory to store and retrieve all information accurately, and the likelihood of forgetfulness and omission is high. Table 8.33 presents some participants' quotes on the human memory limit.

Table 8. 33: Quotes on Memory Limits

-
- I. My short-term memory lasts about 30 seconds. If I had to interpret a 10-minute speech turn, I would undoubtedly be summarising. We are not allowed to summarise in investigative interviews. (Participants ID. 3)
 - II. If there's too much information to render, then the content will be shortened and, in some cases, summarised so that the interview will not be interrupted. Some content may get overlooked because the interpreter is rushing to finish the interpretation too. (Participants ID. 6)
 - III. ...I would never allow anyone to speak more than a few sentences, if that, so that I can interpret accurately and not miss anything out. Short bursts of speech followed by the translation are how I operate. (Participants ID. 12)
 - IV. Short term memory will be the strongest compare to long term memory. If the duration is long, then the information will be forgotten regardless of the notetaking. Towards the halfway of the interview, the interpreter will be over-exhausted than normal, and accuracy will drop lower and faster. (Participants ID. 14)
 - V. Human beings are not machines and so could omit key points. Even a machine would not keep up. (Participants ID. 19)

- VI. It is difficult to remember the detail. (Participants ID. 29)
 - VII. memory retention of information. (Participants ID. 34)
 - VIII. Memory. There is no way an interpreter can accurately convey everything that was being said in a 15-minute account of the witness precisely the way it was being said, especially if the witness changes the account halfway through. The longer the witness speaks without a break, the less accurate interpretation. (Participants ID. 35)
 - IX. Memory! Try remembering every word that someone has just said, lasting 15 minutes! (Participants ID. 40)
 - X. Quantity of information. (Participants ID. 8)
 - XI. Too many words without break. (Participants ID. 30)
-

Furthermore, 28% (n=15) of the participants observed that 15mins may also impose cognitive load on the participants in the absence of aid to interpretation, such as doing simultaneous interpreting, recording the interview session, and using notes. For example, without taking notes, it may be impossible to remember the exact sequence of sentences and contents of a 15mins witness accounts. Reported in Table 8.34 are participants quotes on note-taking effects.

Table 8. 34: Quotes on Note Taking Effects

-
- I.Inability to take notes..... (Participants ID. 8)
 - II. Note-taking is essential to get the ideas across without forgetting anything. (Participants ID. 11)
 - III. To have total success, it would be necessary either to make notes or do simultaneous interpreting. (Participants ID. 13)
 - IV. After the 3 or 4 minutes, mark any form of consecutive interpreting without notes would be taxing on the interpreter and could mean a high risk of omission and detorsion. Note-taking is necessary or even better to improve accuracy the use of shorter consecutive, (Participants ID. 15)
 - V. Not taking notes, the length. (Participants ID. 28)
 - VI. without taking notes, I would find it very difficult. (Participants ID. 33)

- VII. Often persons ramble, and without taking notes, details will be missed. (Participants ID. 49)
- VIII. Without taking notes or jotting - these are aide-memoire techniques and must be used to obtain the highest accuracy possible. A good and professional Interpreter always uses those aide memories in their work. (Participants ID. 51)

The result also shows that the complexity of information, rendering strategies, cases and language, interviewee tension, interpreters training, virtues, and skills (e.g., patience, concentration, and listening capability) are some of the multiple causes of cognitive difficulty. For example, 13% (n=7) of the valid comments from participants believed that an emotionally charged interview session can alter interpreter concentration and impose cognitive stress. A separate 13% (n=7) of the valid comments from participants also emphasise the effect of inadequate training and lack of proper virtues and skills, e.g., concentration, listening capability, on interpreter's inability to manage cognitive load effectively. Table 7.4.35 present the view of participants on complexity.

Table 8. 35: Quotes on Complexities, Skills, Virtue and Training

-
- I. Emotionally charged speaker. (Participants ID. 8)
- II. Language used, slang, idioms... (Participants ID. 22)
- III. ... technical language used may be difficult to keep up. (Participants ID. 23)
- IV. The answer to both questions should be 'maybe'. It depends on the complexity of the information... (Participants ID. 33)
- V. ... The defendant's tension might affect my concentration. I would feel nervous about the possibility of missing small but crucial points. (Participants ID. 43)
- VI. The time limit for the interpreter to go back and forth with both parties. Sometimes, more people are involved such as family members or legal assistance... and/or the interpreter needs more clarification from both parties. (Participants ID. 7)
- VII. ... with patience and training from investigators in patiently listening to that first account, this would allow a good interview to take place. (Participants ID. 15)
- VIII. ... Yes, if interlocutors pause regularly but then the interpreter ought to manage that... (Participants ID.32)
-

Finally, 4% (n=2) of the participants reflected on the harmful effects of interview speech speed and repetition on the interpreters' ability to interpret 15mins witness account accurately. Because some interviewees are likely to ramble and speak for a longer time without stopping, they tend to repeat what they have said before. As a result, the interpreter may find it challenging to interpret effectively and accurately. In Table 8.36 are participants' quotes on the effect of speech speed and repetition.

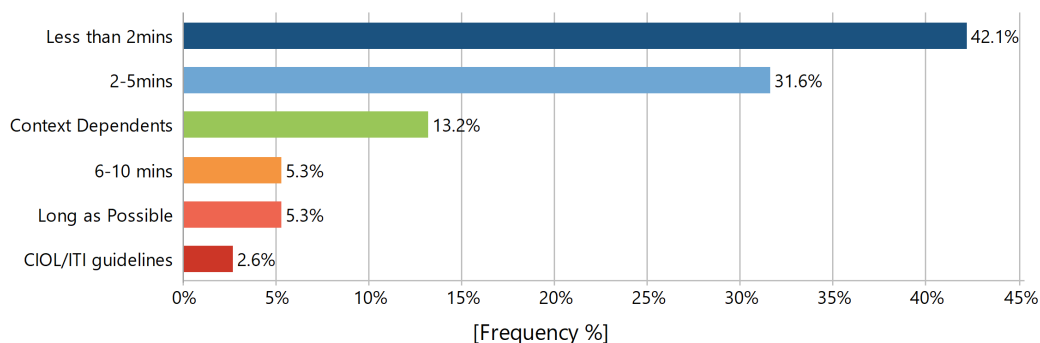
Table 8. 36: Quotes on Speech Speed and Repetition

I.	...speaking too quickly and saying the same thing repeatedly. (Participants ID. 22)
II.	Depending on the speed of speech... (Participants ID. 23)

ii) Optimal Interpreting Duration

Similar to causes of cognitive difficulty, the duration suggestion by participants are classified under seven (7) themes or groups made up of 54 coded comments. The seven duration groups include the missing response group, which constituted 30% (n=16) of the coded comments. The results presented in Figure 8.22 consist of six (6) duration groups excluding the missing response group. Thus, 70% (n=38) of the coded comments represent the six duration groups, and this coded segment is hereafter referred to as the valid coded comments.

Figure 8. 22: Optimal Interpreting Duration



The result of Figure 8.22 shows that 42% (n=16) of the comments favour pausing an interviewee at; every short burst which according to the participants is less than 2mins. 32% of the comment also agree with pausing interviewee after every few sentence (i.e., between 2 and 5mins speech) to allow for adequate interpretation. Table 8.37 reports some of the quotes from participants.

Table 8. 37: Quotes on Short, Few Sentences and < 2mins Duration

I.	Speech turns as short as possible, no more than two sentences. (Participants ID. 3)
II.	Without notes - 1-2 minutes (with a good interpreter) ... (Participants ID. 9)
III.	I would stop the witness after a short burst, interpret and then invite the witness to continue. (Participants ID. 12)
IV.	No time limit if the witness makes breaks after every few sentences to allow for the interpretation. (Participants ID. 17)
V.	Maybe 10-30 seconds or a couple of sentences to be able to precisely interpret what the witness is saying. (Participants ID. 35)
VI.	3 sentences in consecutive mode. (Participants ID. 34)
VII.	1 or less. (Participants ID. 29)
VIII.	A few sentences. (Participants ID. 41)

The writer observed that 32% (n=12) of the valid coded comments from participants pointed towards the interviewee speaking for at least 2mins and at most 5mins. Some of the quotes from participants are presented below in Table 8.38.

Table 8. 38: Quotes on 2-5mins Duration

I.	Around 5mins. (Participants ID. 6)
II.	In consecutive 5 minutes at a time. (Participants ID. 11)
III.	5 mins. (Participants ID. 28)
IV.	3-4 mins. (Participants ID. 33)
V.	2-3 min. (Participants ID. 38)
VI.	2-5Mins. (Participants ID. 47)
VII.	5 minutes. (Participants ID. 51)
VIII.	2 minutes (with a really good interpreter) With notes - 3-5 minutes (for accuracy' sake). (Participants ID. 9)
IX.	2 minutes (Participants ID. 48)

The third most frequently cited optimal duration depends on the context of the interviewee and the behaviour of interpreters during interview sessions. 13% (n=5) of the valid coded segments emphasised the conditionality of an optimal duration on the interviewee action and case complexity. A participant noted that he/she do not think optimality is

"... is a matter of time. Some people naturally repeat themselves, go off on a tangent, use meaningless words or sound to fill the talk while they think and so forth. Other people can be more direct in answering" (Participants 10).

Other participants emphasised in Table 8.39 that optimal duration:

Table 8. 39: Quotes on Duration Conditionality

I.	It depends on notes or not. (Participants ID. 13)
II.	I don't know. It depends on what it is about. (Participants ID. 43)
III.	Witnesses should be instructed to break at the interpreter's signal before continuing to allow what was said to be interpreted. (Participants ID. 49)
IV.	It varies. (Participants ID. 2)

Other less emphasised optimal duration groups consist of the 6-10mins group, the as long as possible group and the CIOTL/ITLS guidelines-based group by 5% (n=2), 5% (n=2) and 3% (n=1) of the valid coded comments, respectively. Table 8.40 below presents quotes from participants on the three (3) duration groups.

Table 8. 40: Quotes on 6-10mins and above Duration

I.	5-10 mins. (Participants ID. 6)
II.	Probably 10 minutes... (Participants ID. 7)
III.	The interpreter is the one managing the flow of the conversation. The other alternative is to do simultaneous with equipment. At any rate, some interviews are video recorded for eventual transcription-translation. (Participants ID. 5)
IV.	20 minutes of simultaneous interpreting and 60 minutes for consecutive interpreting are the standards... check CIOL/ITI guidelines. (Participants ID. 32)
V.	If you can write notes, the time limit is as long as you can concentrate. Everybody is different, and I would not guess a "normal" or specific time. (Participants ID. 26)

8.4.6 Cultural Barriers Dynamics in Language - Reasons

The writer captures the reasons for cultural barrier differences in language and culture under seven (7) reasons group or theme derived out of fifty (50) coded comments. The seven reason groups exclude the missing and irrelevance group, which comprises 30% (n=15) and 4% (n=2) of the total coded comments. Therefore, the seven reasons presented in Figure 8.23 is from 66% (n=33) of the total coded comments - hereafter referred to as the valid coded comments.

Figure 8. 23: Reason for Cultural Barrier Dynamism

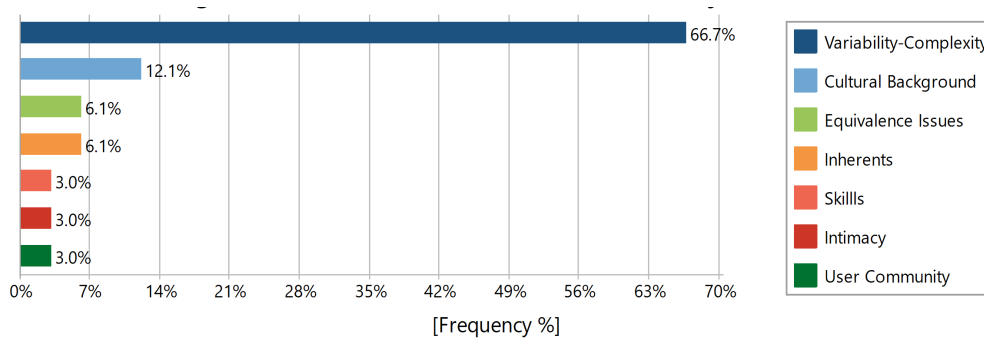


Figure 8.23 shows that variability in culture, norms, gesture, word usage and meaning, and other identity dimensions appears as the most cited reason why cultural barrier differences exist across languages. Close to two-thirds (i.e., 67%, $n=22$) of the valid coded comments or participants emphasised the variability. In addition, closely related identity variability is the background or nativity of interpreters, interviewees, and interviewers, which is likely to vary. 12% ($n=4$) of the valid coded comments or participants in the sample advocated this reason.

Furthermore, the result shows that producing exact equivalence of source language in the target language and the inherent complexity of some languages when spoken causes cultural barrier dynamics in language. 6% ($n=2$) of the valid coded comments is observed for equivalence issues and 6% ($n=2$) for inherent complexity issues. Finally, 9% ($n=3$) of the valid coded segments noted that the cultural barrier dynamic in a language is linked to language usage regarding the user community, nativity or intimacy level, and interpreters' skills. Some of the quotes on language usage, intimacy and interpreters' skill are enumerated in Table 8.41.

Table 8. 41: Quotes on Language Intimacy, Usage and Skills

-
- I. A language does not exist in a void. It is always linked to a population/group of people that use it. Those language users form a community that is based on that language, and it also cements it. The community forms a specific culture around this language; it all has to be taken into consideration when the language is used between people who speak it. (Participants ID. 51)
 - II. Indonesians are different. I am lucky enough to have been intimately involved with Indonesia and Indonesians since 1975, so I am very familiar with Indonesian culture and the ways of the people, even though they may come from a huge selection of islands with their own separate cultures. (Participants ID. 12)
 - III. There are always cultural differences. They can be a barrier or not, depending on the interpreter's skill. (Participants ID. 4)
-

8.4.7 Gender Variability in Interpreting Accuracy

Finally, the study explores causes of gender variability in accuracy based on 51 coded comments comprising 90% (n=46) missing responses and 10% (n=5) valid coded comments or responses. The valid coded comments produce three (3) groups of the reason for gender variability in accuracy. The three (3) reasons include i) effective presence (i.e., been comfortable with a person of similar biological sex), ii) training and cultural expectation, and iii) speech and explanation style. Figure 8.24 shows that affective presence, speed and explanation styles appear as the most mentioned reasons with 40% (n=2) representation in the valid coded comments each. In addition, 20% (n=1) of the valid coded comments cited training and cultural expectation as the reason for the accuracy difference in gender.

Figure 8. 24: Reason for Gender Interpreting Accuracy Differentials

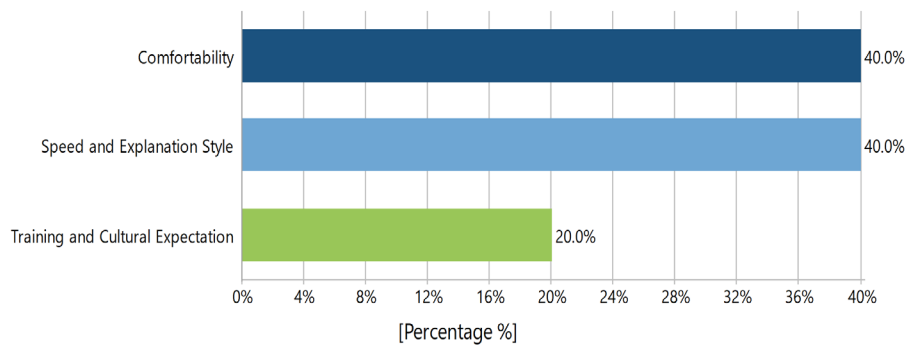


Table 8. 42: Quotes on Reason for Gender Difference in Accuracy

-
- I. Females are more comfortable with females, especially when sensitive issues are discussed. (Participants ID. 29 and 51)
 - II. Men usually rush things and don't like to go over all the details, but I think women are very careful of giving the whole information when they interpret. (Participants ID. 7)
 - III. In my opinion, females are more thorough, including police officers. (Participants ID. 20)
 - IV. To me, differences in accuracy due to gender would not be due to any inherent differences in the inability to transfer messages across languages, but would be more likely to do with training (or lack thereof) and cultural expectations of how gender should interact with authority (either the U.K. or figures from their own culture). (Participants ID. 9)
-

Females are more comfortable with female interviewees and tend to be more careful, relaxed, and detailed in explanations than male interpreters. Participants also perceived further what makes a difference in the training of interpreters and the cultural expectation of a particular society on interacting with others. The response shows that when an interpreter is well trained and the cultural expectation is more liberal, accuracy is likely to differ - rather than based on biological traits or sexes. Participants' quotes on the reason for gender variability are reported in Table 8.42.

Chapter 9: Discussion

9.1 Introduction

One of the significant benefits of the educational process is the awareness of self-improvement options. One of my Directors of Studies told me that on completion of the doctoral work I would know more about some things than almost anyone in the world. I did not believe this at the time, but looking at even the recent literature, the idea becomes more plausible. Alongside a recognition of how the thesis could have been improved is a parallel recognition that aspects of it represent a contribution to knowledge. In a previous draft of this thesis, the writer put an emphasis on how the work could have been improved. The same Director of Studies advised me that the two recognitions go together. He described them as the ‘yin and yang’ of research. The writer was unfamiliar with the terms, but found they were a concept in Chinese philosophy which held that things which seem to be opposite may turn out to be complementary. In this case, the yin is how the thesis could have been better. The yang is it discovered things and set the stage for further discoveries. What follows should not be seen as self-criticism but as intellectual growth which enables new insights.

There are many points at which the doctoral course has led to an understanding of how the writer of this thesis could have improved the thesis, but this is a stupid way of looking at it because only by immersion in the topic did recognition of what was possible become clear. What follows in this chapter is an overview of the work and its theoretical and operational implications. As a whole, it amounts to a series of signposts towards the reorganisation of translation services.

First is the breadth of focus. While the original intent was to examine aspects of the investigative interview using interpreters that could be optimised, the specifics were embedded in a crucial changing context, as seen in the complexity of the role of interpretation in advancing social harmony. Second, an obvious mistake is the placement of emphasis on the non-English speaker as the offender. Community cohesion is better promoted by translation services offered to victims and witnesses and those who were never part of the CJS. In addition, the subsidised provision of education courses reduces the demand for interpretation services and is arguable a more benign social initiative.

This chapter therefore attempt to synthesize conceptual, anecdotal, factual, and empirical theories in support of the broader specifics of interpretation services as a tool for social cohesion and harmony. The chapter also reports on ways to optimised aspect of

investigative interview using interpreters focussing on interpretation service factors affecting investigating interview process and interpretation service outputs. Prior to the conceptual and empirical synthesis, salient discovery in the thesis is succinctly elucidated to provide ground for a formal discussion in terms of its implication for practise and theory. The chapter also explore practical implication of the findings for UK and Nigeria criminal justice system. Although the context of the research is the UK criminal justice system, the discussion extrapolates the findings to a country with seemingly similar, but less advance investigative interview practise. The extrapolation is necessitated due to anecdotal evidence of injustice, abuse of power and citizen right, unprofessional conduct of few personnel, and generic inequality in the case study country i.e., Nigeria (to which the researcher is familiar).

9.2 Summary of Findings

The first study (i.e., Chapter 4) conducts a study space analysis (SSA) of literature on the societal need for interpretation services and their optimisation. The study aims to gauge and map the depth of research coverage achieved on this issue. The result revealed that:

- i) Rapport building appears to be the most researched issue, but the debate on who should build rapport before and during investigative interviews with the use of an interpreter remains yet to be fully explored.
- ii) Planning, preparation, and societal need for interpretation are moderately studied issues, but researchers are yet to investigate the wider context of interpretation service specifics and the impact of these specifics on interpretation service optimisation.
- iii) The impact of interruption, length of material, language and gender on interpretation service optimisation were less studied within the field of face-to-face police investigative interviews.

The discovery from this study led to the path followed in subsequent studies (i.e., studies 2 to 5). The focus of Study 2 in Chapter 5 was a thematic context analysis of the extent to which trust and good race relations between the police and ethnic community impacted the societal need for interpretation services. Since police diversity enhances trust and viable race relations, the study further explored factors militating against the Home Office's 1999 action plan of a diverse police workforce in the UK. Based on the review of available literature, the study found that:

- i. The diversity of the UK police has improved in recent years, but the rate of improvement is marginal compared to the proportion of the ethnic minority population.
- ii. Due to a subtle and unconscious bias in the recruitment process occasioned by technical bottlenecks, ethnic minority applicants have persistently been disqualified.
- iii. Other barriers that impacted the police force's attraction as a career path include the past experience of the ethnic minority with the police force, unconscious bias, lack of interest, and trust issues.
- iv. Trust in the police increased the need for victims and witnesses demand for interpretation service.
- v. Police diversity enhanced trust, but its impact does not automatically translate to an increase in the need for interpretation service.
- vi. Ethnic minority preference for bilingual police officers and language education may likely be responsible for the perceived reduction in the need for interpretation service.

The thesis in study 3 (Chapter 6), explores aspect of the investigative interview using interpretation service that can be optimised with a focus on; joint planning and preparation, interruption and rapport-building. The results of the thematic analysis show that:

- i. Sometimes, investigators plan and prepare with interpreters before investigative interviews.
- ii. Time factors, role perception of interpreters and individualism culture of police institution (where planning and preparation are seen exclusively as the prerogative of investigators) appears to discourage joint planning with an interpreter.
- iii. Interpreters are useful for rapport building, particularly before the interview, as the interviewee is less likely to respond negatively.
- iv. Interpreter rapport building assistance is done based on an investigator preference, as interpreter's role in the PEACE Model does not extend to building rapport.
- v. Interruption is largely difficult, because of the distraction effect on investigators' attention, disruption of thought and interview flow, and limitation on interviewee's freedom.

- vi. Interpreter interruption is fairly disruptive to the flow of interviews and the ability to elicit accurate information.
- vii. The disruption effects occur in terms of information loss due to a pause in the interview line of thought, high requisite for experience to manage the possible disruptive effects of interpreter's interruption and high time resources consumption.
- viii. Irrespective of the disruptive effect of interruption, interruption is useful as it allows the parties in the interview space to think about their responsibilities while also ensuring a harmonious relationship between interviewer and interview.
- ix. Interruption may be used when there is a right mix of skills, experience and clarification by interpreters before the commencement of an interview.

Studies 4 (i.e. Chapters 7) investigated factors affecting interpretation quality optimisation with witnesses and victims of non-violent crimes. The factors examined include length of material, language or culture, interpreter characteristics, assessor perspective and gender effects. The study found that:

- i. The length of material has a strong impact on the informativeness of interpretation but not the intelligibility. Short length material leads to less information loss relative to a lengthy material.
- ii. There is a disagreement between the assessor's perception of interpretation quality, but each assessor tends to be consistent in their assessment of quality.
- iii. Language similarities, familiarity complexity, and interpreter's specific characteristics (e.g., skills, experience and training) impact the intelligibility of interpretation service, with no strong effect on informativeness.

9.3 Theoretical and Practical Implications

9.3.1 Societal Needs for Interpretation Service

Optimisation of interpretation service specifics; such as aspect of investigative interviews procedure using interpreter and interpretation quality has been an issue of concern for parliaments (Justice Committee, 2013; Public Account Committee, 2012) and legal scholars (Woods, 2013) in the UK. The fact that these specifics evolve in a much more dynamic context to includes; victims and witnesses of crime implies the need to explore avenues through which societal trust and use of interpretation may be enhanced. The need to use interpretation service during investigative interview and court proceeding has been advocated by a number of scholarly writing and research (e.g. Berk-Seligson, 2009; Bird, 1990; Colin & Morris, 2008;

Dueñas-González et al., 1991; Jongh, 2012; Laster, 1990; Stone, 2018; Trechsel, 2005) so as to ensure; legal fairness, equal access, and avoid coerced confession, wrongful conviction while facilitating efficient communication.

Notwithstanding the rationale in support of interpretation service usage for person with little or no proficiency in English language, research has shown that; migration, socio-cultural and demographic changes in the language spoken (Dueñas-González et al., 1991; Jongh, 2012) are the possible *casus belli why the demand and provision of* interpretation service increases. Interestingly, police diversity is found in policing literature (e.g. Bradford et al., 2019; Holdaway, 1991a; Holdaway, 1991b) to enhance ethnic minority trust in the police. Trust on the other hands appear to be an important ingredient in ethnic minority decision to use professional interpreters or family members and acquittance (Edwards et al., 2006). Police diversity according to Colin & Morris, (2008) increases bilingual officers' usage for interpreting services. The thesis found that even though police diversity is unanimously believed to increase trust and confidence in the police, there exist a divergent perception between persons of ethnic minority origin and expert interpreters on the role of police diversity.

9.3.1 Police Diversity and Use of Interpretation Service: The role of Trust

More specifically, the data showed that expert interpreters perceive police diversity to be a useful initiative for increasing ethnic minority usage of interpreters, while person of ethnic minority thinks otherwise. Expressed more aptly, ethnic minorities argue for a reduction in usage and need for interpretation service as diversity of the police increase. The latter result support Edwards et al. (2006) findings that ethnic minority tends to emphasize personal trust and are influence by social trust when making decision on the use of interpretation service (or the type of interpreters to use). As such, police diversity is likely to increase use of bilingual's officer by person's who speak little or no English, when confidentiality is off high importance. When the need for confidentiality becomes small, social trust and good race relation with the police, combine with individual ethnic minority emphasis on expertise will increase the use experts' interpreters. The result of expert interpreters' perceptual mapping reiterates the conclusion in the United States that racial attitude bias within and without the police force is likely to be low in a multicultural workforce (Richeson & Nussbaum, 2004). The result also shows that diversity tends to boost police image, legitimacy in the community's perception, status as minority or majority, and enhances inter-racial harmony (Oliver, 2017; Watson & Petersen, 2015; Wilson et al., 2013).

Although the perception of ethnic minority in this research may be construed as naïve and simplistic. The data of the thesis based on ethnic minority and expert interpreter perceptions, provide insight into the role of trust dimensions in determining choice of interpretation service preference in the UK CJS. To encourage increased use of interpretation service in UK CJS, confidentiality and security of information ought to be emphasised for all professional interpreters and made to be part of their training routine. Otherwise, ethnic minority individuals may prefer bilingual police officers who are neighbours, family and close friends to serve as an interpreter so as to preserve the confidentiality of their information. The preference for bilingual police officers as an alternative to an expert interpreter implies a reduction in demand, need and use of expert interpreters. When ethnic minority trust and confidence in the police force is overshadowed by social trust and personal trust in relatives and friends at its lowest, increasing police diversity may produce little or no change in the need for interpretation. The little or no change is because the need for interpretation service depends on ethnic minority's perception of and attitude towards the police.

Therefore, it is apparent that without an active and social kind of trust in the police, improving police diversity is likely to lead to little or negative change in need for interpretation services. This is possible if ethnic minority still feels sceptical about the police and withdraws important information from the police. A case in point is the assertion of Holdaway (1991a) regarding the small likelihood of a Black or Asian police officer answering distress or complaint call from an individual of ethnic minority (or the public). Ethnic minority scepticism and reservation about the police (Holdaway, 1991a, 1996; Holdaway & Barron, 1997) remain slightly pronounced and may affect how individuals of ethnic minority origin relate to the police. Therefore, police diversity programmes should optimise the police public image and rebuild trust and confidence with the ethnic minority community. A study by Bury et al. (2018, pp. 1–3) corroborates the thesis' findings by observing a prevalence of "conservative culture" within the police force. The conservation is likely to make any police diversity drive an add-on instead of having immense value to the police. As Holdaway (1996) rightly noted, the extent of bilingualism or diversity in the police signposts a growing social trust and confidence in the police. Therefore, the relevance and significance of ethnic minority trust and confidence in the police is a *sin-qua-non* for ethnic minority need for interpretation service. This position reiterates the concern of Douglas Hogg (Minister of State at the Home Office in 1986) that the image of the police among Black and Asian people will continue to stand as a hindrance to the vision of making the police diverse. The hindrance is likely to continue, except the police force

communicates its discrimination and prejudice eradication effort and progress to the public, in an attempt to build trust and confidence – own emphasis added (Holdaway, 1996; Home Office, 1986b, 1986a).

The situation is nonetheless different in West African countries such as Nigeria, Ghana, Togo, and others, where police diversity and ability to speak language may be a less politicised issue relative to the pervasiveness of diversity debate in the UK CJS. The use of interpretation service may not be taken serious even though the law of this countries may have emphasized provision of a qualified interpreters free of charge. Michael (2016), noted that the use of interpreters in Nigeria is most time limited to pre-trial oral communication in a language that witnesses, victims, and offenders understand as enshrined in Section 36(6) of the 1999 constitution of the Federal Republic of Nigeria. Diversity of the police force may not necessarily translate into automatic increase in the use of police force by victims, witness and offenders of criminal and non-criminal violence. Instead, individual with less proficiency in the language of the investigative interview or court proceedings are likely to be more comfortable with using bilinguals' officers who are either friends, neighbour or are from the same ethnic community as interpreters. The reason for preferring bilinguals police officer to expert interpreters may be because of; seemingly low social trust in police institution, ii.) the less sophistication of interpretation service profession framework in west African countries compare to the UK, iii.) few interpretation service provider, iv.) cost of interpretation service acquisition (since its currently been provided by independent private firms), and v.) low awareness on the right to a qualified interpreters (not just any type) free of charge. In Nigeria, for example, there are privately held interpretation service companies such as dyplus (Dyplus, 2021). However, the writer's anecdotal experiences have shown that police institutions in Nigeria rarely engage the services of these interpretation companies. Instead, police institutions prefer the use of bilingual police officers who are proficient in the three major languages: Yoruba, Hausa and Igbo. The court system in Nigeria is better off in terms of the extent to which they use expert interpreters, but law cases have also shown that they may also sometimes skip the provision of professional interpreters (Michael, 2016). The low patronage may arise as a result of financial bottlenecks in the police, lack of formal legislative oversight and the lacklustre government interest in implementing and financing the provision of free interpretation services. In contrast, in the UK, the interpretation service for police investigation and court trials is funded by the government, and there is adequate legislative oversight on the interpretation service. Due to the UK's parliament legislation and Home Office efforts, the

police institution is beginning to embrace the use of professional interpreter services more than they use bilingual officers or family members.

In summary comparative analysis of interpretation service usage in the UK versus west African countries like Nigeria reveals that, it is easier for police diversity to increase use of interpretation service in the UK relative to Nigeria. In west African countries like Nigeria, governmental commitments to provide free qualified interpreters, social and active trust building initiative by the police and awareness creation on right to free and quality interpretation services are required before any police diversity efforts can have any positive effects on the use of expert interpreter.

9.3.2 Migration and Use of Interpretation Service: Social Trust Imperative

Existing literature (Dueñas-González et al., 1991; Jongh, 2012) provide a factual evidence of migration and language use co-movement using US census data and statistics. The data shows growth in demand for interpretation or language service as a result of migration induced changes in US cities demography and language diversity. The thesis found a near substantial perceptual supports for increase in interpretation or language service demand and usage, when the number of migrants to UK increases. The near substantial support is due to the naïve belief that as more people arrive in the UK from other countries, the need for interpretation service increases. Meanwhile, increase in interpretation service demand as a result migration induced demographic and language diversity changes, is moderated by the extent of trust in the police as demonstrated in an earlier result reported in the thesis. Trust appears as the missing information in the US census data which could have intuitively provide a more convincing explanation for the observed increase in demand for language service as demographic and language diversity changes. Trust is necessary because, as demonstrated by years of research journey by Holdaway (1991b) into police racialisation and recently by Cochran and Warren (2012), ethnic minority communities in the UK appears sceptical about the police force. In addition, trust is necessary because persons of ethnic minority origin are less likely to report a crime to the police, as observed in Wright et al. (2013) for Nottingham and Los et al. (2017) for the whole minority community in England and Wales.

9.3.3 Diversity Deficiency of UK Police and Some Causes

In the UK's CJS, low rate of ethnic minority representation in the police persists (Gilroy, 1987; Holdaway, 1991a; Rawlinson et al., 2017) – even though representation has been demonstrated to improve slightly in recent years (Allen & ZAYED, 2021; Silverstone & Walker, 2020). Evidence reported in the research shows that very few ethnic minorities

considered the police force as a career or even applied to join the police force. Earlier studies (Holdaway, 1991a; Stone & Tuffin, 2000) noted that this is due to the risk, job insecurity, job prospects, rewards and environmental toxicity associated with police career. This discovery agrees with the findings of Stone and Tuffin (2000) and Wright et al. (2013). Evidence of possible mild attractiveness to the police job was estimated to be around 18.5% of the sample surveyed in the study by Wright and colleagues. The discovery differs in that the attractiveness was at its lowest of 6% in the sampled participants, relative to the percentage observed by Wright et al. (2013). There are several proximate and remote rationale aiding the low considerations of a police force career by ethnic minority. These factors explain the extent to which ethnic mix, absence of senior police officers of ethnic minority origin and peer pressure discourage ethnic minorities from applying to join the police force. According to a review of early 1990 literature by Holdaway (1991a), ethnic minorities are discouraged from joining the police due to the police force's image and police recruitment practice entrenched in the history of immigration to the UK legal context. The evidence in this thesis supports ethnic reservation about the police image, and the majority of the reservations is sociological and racially related. The racial issues include racial prejudice and discrimination, marginalisation, bullying and harassment targeted at people of an ethnic minority. The racial issues stress the importance of the racialisation of the British police, as seen in the study of Holdaway (1996) and that of Holdaway and Barron (1997). The racialisation cuts across operational and recruitment discrimination as well as prejudices towards potential ethnic minority employees and ethnic minority officers. This is consistent with the findings of Smith et al. (2014) and Wright et al. (2013) on the harassment and bullying of a person of an ethnic minority by the police. Police operational discrimination and prejudice are evidential factors blurring every effort to make the British police more diverse (Bury et al., 2018). Issues of employment discrimination, prejudice and technical bias found in this study are traceable to the existence of unconscious bias (Dovido et al., 2002). The unconscious bias is prevalent among some white recruiters - although not at an alarming rate. The bias, in combination with obedience to authority (Brief et al., 2000) and association practise (i.e., the racialisation of the policing process) (Rooth, 2010), are factors that put off a person of ethnic minority origin. Holdaway (1991a) noted that one police officer's single act of insensitivity might be much harmful to any recruitment policy and programmes aimed at encouraging qualified members of an ethnic minority to apply to the police force as a career.

The thesis additionally found existing ethnic minority mix of the police force (in terms of the number of senior and junior bilingual officers, lack of social support, cultural identity, pre-application requisite skills and experience and the subtle issue of citizenship status) to affect ethnic minority's consideration and the likelihood of applying to join the police force. Lack of social support and identity is explained by the conflict of loyalty (Holdaway, 1991a), where a potential ethnic police recruit may be wary of the confusion created by the dual need to be loyal to the ethnic constituents as well as the police institution at the same time. As demonstrated in this study, intended applicants are likely to be faced with hostility from their community members if they fail to protect the interest of the ethnic community to which they belong. This possibility is demonstrated in a study into ethnic minority attitudes toward police by Carole (2000). Besides, they may also go against the ethics of the police profession if they decide to be loyal to their community. Therefore, it is important that proper education on people and loyalty management should be provided to bilingual officers to reduce this concern.

The discovery reported in this study relating to policing employment procedure attributes (e.g. skills, experience and other pre-recruitment and selections conditions) is similar to the observation made by earlier studies (Bury et al., 2018; Carole, 2000; Holdaway, 1991a). These studies critically consider employments bottlenecks and technical barriers as factors deciding the likelihood of an ethnic minority considering or applying to join the police force. The thesis also discovered feelings of inferiority, fear of being unqualified to make it through screening or training, and general misconception about the police job requirement such as height (Carole, 2000). The inferiority notion is supported by Holdaway (1996) rhetoric and the book's long discussion of how manual and low-income jobs and housing are often attributed to being black or belonging to the ethnic minority.

9.3.2 Interpreter Assisted Investigative Interview: Process and Quality Optimisation

The use of interpretation service during investigative interviews involves a number of specifics that must be worked harmoniously together to ensure that an investigation elicit accurate and reliable information. In addition, interpretation service must be done in such a way that its use does not lead to loss of evidential credibility, control and power of witnesses, victims and offenders. As such, the interpretation service process accompanying the planning, engagement and account stage of the PEACE Model must be done to guarantee accurate, complete and truthful information. The use of interpretation in such a way that it affects the decision process of interviewees and discourages them from voluntarily disclosing needed information is not desirable, and therefore a need for interpretation process optimisation is desirable.

Furthermore, it is generally agreed that interviewee statements' evidential credibility and power may be altered or lost with interpretation (Böser, 2013; Olanrewaju & Oyedokun-Alli, 2020; Zambrano-Paff, 2011). Hence, the need to maintain the quality of interpretation service in an investigative interview and during the court proceeding. This raises issues concerning the need for interpretation quality optimisation. The discussion that follows explains this thesis' findings regarding the issue raised with the process and quality optimisation.

9.3.2.1 Investigative Interview Process Optimization

9.3.2.1.1 Joint Planning and Investigative Interview Optimisation

In study 3 (Chapter 6), the thesis found that investigators rarely engage in joint planning and preparation with interpreters before investigative interviews with witnesses, victims, and offenders. The seldom joint planning and preparation with interpreters occur majorly because of the institutional culture of individualism and role perception of the interpreter's role by investigators and interpreters alike. Interpreters are observed to be uncomfortable with the level of awareness and understanding among investigators on the need to jointly plan, brief and prepare for an interview with an interpreter. In addition, the study also discovers that the purpose for advocating for joint planning with interpreters before interview sessions include the need to: brief interpreters on interview objectives and goals, clarify procedures, strategies and processes, inform interpreters on the salient details of the interview (e.g., background, address), and gauge the extent of interpreter nativity and proficiency in a potential target and source language. The triangulation results reported in Chapter 8 confirm the findings of a main study in Chapter 6. In that chapter, investigators admitted to inviting interpreters to a planning session occasionally or, in some instances, never invite interpreters. In similar vein the interpreters sample surveyed also concede to a seldom planning and preparation participation with investigators.

The result of the thesis is similar to discovery in previous literature on investigators perception, attitude and use of planning and preparation (e.g. Kim, Walsh, Bull, & Bergström, 2018; Walsh & Bull, 2011; Walsh & Milne, 2007). The similarity is manifested in terms of low attitude to planning by investigators which is the hallmark of the above research findings. The exception however is that in an interpreter assisted investigative interview, investigators and interpreters alike do not see planning to be the job of an interpreters. That is, across sample of investigators and interpreters investigated, there is a seemingly general believe that interpreter does not have a role to play in planning. This is contrary to Wilson and Walsh's (2019) trust, emotion and role conflict proposition, where interpreters and investigators appear

to disagree on the purpose of planning. This explains the seldom invitation of interpreter to pre-interview planning as corroborated by both the investigators and interpreter sample. Additionally, the thesis extends previous literature (e.g., Kim et al., 2018) findings on the role of investigators personality and organisational cultural on investigators' reluctance or seldom willingness to jointly plan with interpreters by showing that with awareness creation, retraining and review of police training manuals. Investigator's reluctance or seldom willingness to plan jointly with a qualified interpreter may be subdued and overcome.

The thesis also enriches existing literature by providing some sets of agenda which can be used to design a guide for a joint planning session. In simple terms the result of the thesis put forwards salient issues which need to be addressed in a typical joint pre-interview planning session between investigators and interpreters. More importantly, the result of the thesis shows that absence of joint planning and preparation in an interpreter assisted interview is likely to negatively impact the investigative quality and outcome. The negative effects is more pronounced in the context of an interpreter assisted investigative interview, relative to an investigators only interview.

Furthermore, even though the planning phase of the PEACE Framework does not mandate investigators to jointly plan with interpreters and the PACE Act 1984 already describe planning as solely the prerogative of investigators. Failure to plan with interpreters may spell doom for an interpreter-assisted investigative interview. The disruption to an interview is likely to be manifested in the form of divergent interest, objective and knowledge gap of interviewee background information such as language, norms, culture, and criminal history. The absence of joint planning with interpreters implies that the interrogation strategy to be applied by investigators is likely to have implementation difficulty because of the interpreter's knowledge gap about the intent or direction of the investigators or the investigation.

Beyond the shores of UK CJS to other commonwealth country's' like Nigeria, where the conversation management (CM) style of investigative interview procedure (Ajayi, 2014; Farinde et al., 2015; Idem, 2018) is prevalent. Joint planning and preparation with interpreters prior to the commencement of an interview may not be a common place. This is because the three stages of the CM model which includes "account, agenda and challenge" phase, makes no explicit provision for planning before the commencement of an interview (Milne et al., 2007, p. 72). Instead, investigators only plan during the agenda phase of CM. Relative to the impact of joint planning on the output of the PEACE model of investigative interview, there is

likelihood of goal or strategy mismatch in the challenge phase of the CM model. The mismatch is possible when the agenda setting phase of the CM does not explicitly incorporate the idea of the interpreters.

In summary, lack of joint planning and preparation with interpreters before the engage phase of the PEACE model or during the agenda phase of the CM model is likely to impact the optimality of the investigative interview outcome. This is intuitively true for near all investigative interview involving the use of interpretation or language service.

9.3.2.1.2 Pre-Interview Interpreter-Interviewee Rapport and Interview Optimisation

Furthermore, good rapport between interpreters, investigators and interviewees is discovered in this study to lead to voluntary and detailed information disclosure from interviewees. However, the thesis discovers in study 3 (Chapter 6) that the responsibility to building rapport during the engage phase of PEACE Model is solely that of investigators and any rapport building effort by interpreters' is deemed to affect impartiality or neutrality expectation of the interpreters. This finding is consistent with the provision of the Police and Criminal Evidence Act (Code C, 1984/November 2016) and standard (Home Office, 2020) for investigation and interpretation service in the UK. This is because interpreters are expected to serve as a conduit of communication and avoid any personal relationship with the interviewee or maintain neutrality, and rapport building is the sole duty of investigators (Milne et al., 2007). The result of the triangulation in Chapter 8 shows that rapport building in an investigative interview session may become problematic because of: lack of adequate training, skills and experience, neutrality and impartiality consciousness, dual rapport building responsibility to investigators and interviewees, time constraint, information inadequacy and other personal characteristics such as politeness, tone and gesture.

The results reported in Chapter 8 of the thesis align with an earlier perceptual mapping of investigators and foremost ethnic minority interpreters in study 3 (Chapter 6) and provide additional insights. The overall data for the thesis diverge from previous empirical studies (Baker et al., 2008; Driskell et al., 2013; Kosny et al., 2014), where interpreters' presence is seen as inimical to the goal of rapport building, but confirms the optimistic view of interpreters' presence (Ewens et al., 2014; Houston et al., 2017). The findings of the study extend the causes of rapport difficulty with interpreter presence beyond the length of the interview and lack of interpreter-interviewer pre-interview rapport building reported by previous researches (e.g. Ewens et al., 2014; Houston et al., 2017), to include factors such as; experience, skills, neutrality-rapport conflict, and multiplicity of rapport needs (i.e. when there is need to build

rapport simultaneously with interviewee and interviewer at the same time). This reinforces Houston et al.'s (2017) study, which found that interviewee confidence is enhanced when there is pre-interview rapport building between interpreters and interviewees. The result also supported Bull et al.'s (2009) research, which concluded that interviewees' decision to disclose information voluntarily occurs before the commencement of an interview or interrogation. The result suggests that rapport-building between interpreters and interviewees before the planning phase of the PEACE model should be incorporated to further influence the interviewees' likelihood of voluntary information disclosure.

The CM Model of investigative interview on the other hand does not allow for rapport building between interviewees and interpreters in any of its three stages i.e. the account, agenda and challenge phase. Instead, the CM model of investigative interview involves use of torture, deception, bullying, intimidation, and oppression to elicit information from victims, witnesses and suspects (Maliki, 2009; Temidayo, 2017; UNODC, 2006). Meanwhile, pre-trial rapport between interpreters and interviewees (see Houston et al., 2017) and rapport building between investigators and interviewees during the engage phase of the PEACE model are regarded as useful for guaranteeing the success of an investigative interview. The success arises as a result of the interviewee's cooperation, which is likely to reduce or eliminate coercive means to elicit information. Ajayi and Temidayo (2018) claimed that the use of laughter reduces the suspect's or witness' tension in police-interviewee discussion and makes the interrogating environment more relaxed. Therefore, it is essential that the current PEACE model of the investigative interview in the UK and the CM model elsewhere incorporate or encourage relationship building between interpreter and interviewee, or investigators and interviewee before or during interview respectively. Rapport is more useful before or during the planning stage of investigative interview or interrogation and may be counter-productive or lead to bias and conflict of role when allowed during an active investigative interview session. The impact is more disastrous in a CM based investigative interview style.

9.3.2.1.3 Interruption and Investigative Interview Optimisation

In a typical investigative interview without the assistance of an interpreter, the PEACE Model, the ECI, and CM investigative style frowned at interrupting interviewees during the free recall initiation or the account stage (Meissner et al., 2014; Milne et al., 2007). The PEACE Model suggests using note-taking instead of interruption by investigators and that interruption can only come during the challenge or questioning stage. In an interpreter-assisted investigative interview, the interpreter needs to pause the interviewee to provide interpretation

of the speaker speech to ensure accuracy of interpretation. Interruption may be challenging to achieve, not only because investigators are precluded from interfering during free recall as prescribed by the PEACE Model, but so as not to affect the interviewee's remembering ability (Meissner et al., 2014). It is difficult because whenever it originates from interpreters, undesirable consequences are likely to occur. The study found that it is somewhat difficult to interrupt the interviewee or take a speakership turn during the free recall session. The difficulty arises because of the distraction or loss of attention it causes investigators and interviewees, the disruption of interviewee recalls capability and flow of thought, and the limitation it imposes on interviewee's freedom of expression. Low remembering capability and infidelity of interpretation in relation to the original source material is also found to cause interruption difficulty. The latter consequence is well documented in earlier research (Böser, 2013; Mason, 2007).

The triangulation results in Chapter 8 also reiterated and expanded the result of the main study in Chapter 6 by showing that even though interpreter interruption is essential for an accurate interpretation service provision, it is inimical to the recall ability of the interviewee who most of the time is the speaker. The danger occurs because of the effect on accuracy and transcription efficiency when interpreters have less experience or skill on how to interrupt interviewees and when the interviewee is prone to rambling (i.e. going off track while speaking). The triangulation results also confirm the result of the main study in chapter 6 the thesis that interpreter interruption is likely to be difficult if it disrupts the interviewee's thought flow and causes the interviewee's forgetfulness and the investigator's distraction. The findings of this study coincide with the main result of Chapter 6, where an interruption may become an issue because it causes loss of information, distracts others, and does not allow for freedom of thought. These researches discovered that interpreters' use of interruption during an interpreter-assisted investigative interview allows interpreters to introduce alien words not intended by the original source documents. With a mix of skills, training and experience, the interruption difficulty may be eliminated via briefing and clarification prior to the interview.

Interestingly, despite the undesirable consequences of interrupting interviewees during the account stage of the PEACE Model, interruption is a useful instrument needed by interpreters to guarantee accurate interpretation. Interruption is useful because it helps avoid information loss attributable to lengthy speech. The usefulness and desirability of interruption by interpreters implies pervasive and persistent usage of interruption in face-to-face police investigative interviews. On the one hand, with appropriate clarification, briefing prior to

interview, valuable interpreting skills and experience, interruption may be used to avoid loss of information because of inadequacy or absence of note-taking. This is most visible when the interviewee seems to speak fast and ramble for a long time. On the other hand, with good note-taking skills, interruption usage may be superfluous to the investigative interview and may cause remembering difficulty and impact the interview flow. In its own right, interruption is therefore helpful in avoiding information overload for the interpreters' working memories, which may create interpretation difficulty manifested in the form of inaccurate interpretation by interpreters. Overall, the thesis data support previous literature discovery that it is always hard to resume a task after interruption (Cades et al., 2011; Eyrolle & Cellier, 2000; Hodgetts & Jones, 2006; Monk et al., 2004; Trafton et al., 2003). The data also support the likelihood of disrupting the interviewee's memory because of interruption but differs as it does not observe the deleterious effect of interruption before the end of a clause or sentence on the accuracy of interpretation provided by the interpreter (Mason, 2007). Overall, disruption and infidelity are possible, when interruption is abruptly used. Meanwhile a well thought out interruption orchestrated to allow for a pause with no intention to control the agenda (Leanza et al., 2010). of the interview, make likely helps achieve the goal of the interview.

9.3.2.2 Interpretation Quality Optimisation

The thesis investigates interpretation quality optimisation in study 4 (Chapter 7) and found that interpretation intelligibility (i.e. the extent to which interpreters communicate the intended meaning of the original) is impacted by factors such as language or culture, interpreter characteristics and assessors' perception. Meanwhile, only length of material tends to cause interpretation infidelity or informativeness (addition of alien information, manipulation and subtraction of important information present in original when interpreting). Above all, the thesis reveals the degree of design and sample manipulation that may have occur in previous literature in translation and conference interpreting studies to achieve some desirable level of reliability. Without any form of subject manipulation and exploring subjects in their natural state this thesis found evidence of rating diversity, disagreement and inconsistency in rating among volunteer assessors. A similar fit is observed more than a half century ago by Miller and Beebe-Center (1956) in sample of monolingual and bilingual raters assessors who differ, not only in how they grammatical perceive the correctness of translators output, but in perception of translation task difficulty. The consequence of which lead to varying rating of the same translation by different judge or raters. Consistent with Miller and Colleagues findings, the thesis demonstrates the natural state of interpretation rating that is void of any

moderation or manipulation attempt so as to meet a predetermine objective. Intuitively, the thesis found evidence of perceptual consistency and reliability in each assessor's grammatical correctness approach in the baseline (or natural) state without the need to manipulate the translators towards a desired behaviour. As such the result that follow is based on evaluation of interpretation without the need to manipulate the assessor towards any desired behaviour.

9.3.2.2.1 Short Length and Interpretation Quality Optimisation

More specifically, the extent to which interpreters remain faithful to the original without loss or addition of information is affected by material length. Short length material less than 5mins is discovered to have less likelihood of information loss relative to lengthy material of 10mins and above. Similar to the result above, the triangulation result in Chapter 8 shows that material length - not more than 10mins is more accurate than a lengthy material of 15mins and above. It is further discovered that the optimal duration for interpretation allows for 2 to 4 sentences or less than 5mins. The triangulation study further uncovers that it is more difficult to achieve accuracy for a material length of 15mins because of human memory limitation, case complexity, emotional interference, absence of note-taking, communication speed, word repetition, skill, attitude and training of interpreters. The results of the triangulation in Chapter 8 confirmed the results of the log-linear and word count analysis in study 4 (Chapter 7). These studies support the effects of material length on the fidelity of interpretation relative to the original material and the possibility of reducing information loss as the length of the source material becomes small. The finding of the studies is buttressed in verbal learning literature (Loftus & Palmer, 1974), where changes in words in the form of an introduction of additional words is likely to dilute a person's ability to provide accurate information about events. In addition, the thesis also confirmed the possibility of a limitation on the activities' that can be exerted on the cortex or the PPC (Bartlett, 1932; Todd & Marois, 2004). The Cortex activities limitation explanation is helpful in explaining the loss of information due to omission and introduction of new information as an addition. The information loss occurs because, the brain can only hold a specific chunk of information (Miller, 1956) about human experience at a time and may become stressed with increased activities.

Finally, the result of thesis in chapter 7 do not provide support the effects of material length on interpretation intelligibility. The result is intuitively correct since its possible for interpretation to sound like the original, and yet miss important or add unsolicited information. As such the result indicate that the length of the material does not matter in determining

whether the interpretation sound like the original. What matter is the interpreter ability to present the information as concise as possible, while capturing all salient issues in the original. The finding reiterates the essentials of note-taking during interpreter assisted investigative interviews. It is glaring that lengthy interviewee speech or statements prevalent during the account stage of the PEACE Model (i.e., during free recall) may lose their accuracy or completeness during the interpretation process. The loss is visible in terms of more omission and introduction of words that are alien to the original material.

9.3.2.2.2 Cultural similarities, simplicities and Interpretation Quality Optimisation

The strong impact of culture and language complexity factors on interpretation quality is already an essential issue discussed in translation studies (Brislin, 1970; Sinaiko & Brislin, 1990; Treisman A., 1965; Weeks et al., 2007), linguistic literature (Angelelli, 2004; Hale, 2014; Scollon & Scollon, 2001; Wadensjö, 1998/2013) and court interpreting literature (Lee, 2009; Wati, 2017). The data for the study support a clear-cut cultural barrier in language that arises because of the interpreter's background knowledge and nativity in the target language, lack of skills and proficiency, the inherent difference in word usage, meaning, colloquialism, norms, and gesture and believes. The result of the triangulation confirms the result of the main study in Chapter 7 in which there is a strong effect of language on the interpretation likelihood of replicating the intended meaning of the original i.e., interpretation intelligibility. The results also validate findings from existing literature in translation studies (Sinaiko & Brislin, 1990; Spilka, 1968; Treisman A., 1965), where cultural familiarity and similarity encourage easy and speedy translation of the original material.

The result is however at variance with the poor effects of language and cultural on interpretation fidelity or informativeness. The poor effects occur because, the degree of cultural or language complexity and similarities differ from language to language and as such cultural or language may or may not lead to information loss, addition or manipulation depending on the degree of complexity and similarities embedded in a culture. Brislin (1970) specifically noted that the interaction of content and language strongly affect interpretation quality. As such, the result reiterates the need for cultural proficiency, disclosure and filtering whenever culture appears to pose a challenge to the ability of the interpreter to produce an intelligible and faithful interpretation that replicate the original (Felberg & Skaaden, 2012; Jongh, 1991; Lee, 2009; Wati, 2017).

It is therefore apparent from research that language familiarities, syntax, similarities and colloquialism and idiom aid in ensuring speedy and easy translations. The findings also

align with earlier research (Felberg & Skaaden, 2012; Jongh, 1991; Lee, 2009; Wati, 2017) which documented that translation and interpretation are more of a cross-cultural than cross-linguistic process and that improving language proficiency, use of cultural filter or language disclosure is necessary to achieve some level of quality. Furthermore, works of literature on interpreters' training, experience and skills effect (Christoffels et al., 2006; Dong, 2018; Jongh, 1991; Lee, 2011; Signorelli et al., 2011; Tzou et al., 2011; Yenkimaleki & Van-Heuven, 2016) support the strong interpreters' effects on the ability to capture the intended meaning of the source language. These studies clarify that interpreters' performance is more likely to improve with training, experience, skills, age, and the more task they perform.

9.3.2.2.3 Gender and Interpretation Quality

Finally, gender is found in study 4 (Chapter 7) of the thesis to affect interpretation quality to an ignorable extent. The ignorable impact is discovered independently in the triangulation study of Chapter 8 because it appears counter-intuitive to many participants in the triangulation result that gender differences in interpretation quality are possible. This position is evident in the high rate of missing responses observed in the survey. Instead, the triangulation data support factors outside the interpreter's genders such as comfortability level, training, cultural expectation (Baumeister, 2007), speech and explanation style. This finding resonates directly with the result of a number of researches in translation literature (Dogancay-Aktuna & Kanuşli, 1996; Hilmioglu, 2015; Karadeniz, 2014; White, 2003; Wong & Shen, 1999) where factors such as; culture power distance and status are exert more visible impact on translation or interpretation output. The gender data for this study corroborate Hilmioglu (2015) findings of no gender difference in translation quality of snippets from 4 books. The findings also seem to replicate earlier discoveries in Chapter 7, which is an ignorable gender effect on interpretation accuracy. Overall, the finding from the thesis contrasts discovery in an organisational context that there is a gender difference in conversational style vis-a-vis power of sign language interpretation (Morgan, 2012) but tend to support Hyde (2005) similarity hypotheses. Its therefore possible that any likely difference in mainstream interpretation studies is due to difference in delivery style, tone, assertiveness, and the possibility of one gender being more careful than the other all which are by implication a function of culturally determined role of male versus female (Baumeister, 2007; Baumeister, 2010) and power inequality between male and female gender (Galinsky, 2018).

Chapter 10 Conclusion and What Should Come Next

10.1 Introduction

This chapter sets out the process the writer went through in selecting research topic and designing the studies. It provides a concluding remark on findings reported in an earlier chapter, and highlighting aspects of interpreter assisted investigative interview practise and empirical evidence that require further improvements. The chapter closes by highlighting salient claims of contribution to theory and practise achieved by the thesis.

10.2 Conclusion

First, the changes in the writer's perception of the topic should be set out. The thesis was first conceived as a narrow study of the factors which shape the intelligibility and informativeness of accounts of police-related incidents in English, which are translated into and from Yoruba and Chichewa languages. The variables of interest were the length of text, language and gender of the translator, which remains at the centre of the thesis. However, the candidate's perspective changed and became more comprehensive. So, additional studies on obstacles to police diversity, planning, rapport in investigative interviews, and a study space analysis of interpretation in the investigative interview were included. As to the major study as initially conceived, the standout result was that expert assessors could not reach independent agreement as to the intelligibility and informativeness of translations. This is an important finding and has troubling implications for mutual comprehension of people from different linguistic communities. In follow-on work envisaged by the writer, the role of machine translation in advancing mutual comprehension is believed to be the research result from the thesis to be of most urgent attention in the reform of translation services (see below).

Interestingly, the between assessor inconsistency reported replicate result of earlier research (Miller & Beebe-Center, 1958) which was conducted without manipulating assessor's behaviour toward a desired set of behaviour. The study also shows how factors other than gender of the interpreters such as; culture; exploitation, power inequality and conversational style, interpreters' status, skills and experience are likely to affects the degree to which the interpretation sound more like the original i.e. interpretation intelligibility.

In the aggregate, the thesis provides a wider view of the need for and function of interpretation services currently in place and how they would ideally work. The writer held the view that an increase in the ethnic diversity of the police service would in itself reduce the need for interpretation services. It became clear that this was an over simple starting point. All depends on the linguistic diversity of the population police. Suppose a language is spoken by

10% of the population policed and by 10% of the police service; in that case, only 1% of on-street encounters will be between the police officer and citizens who share that language. As such the much-trotted emphasis on interpretation services as a means to ensure justice for suspected offenders is only a small part of the larger societal problem. The larger societal problems come from the reluctance or inability of victims and witnesses of violent or non-violent crime to contact the police. This may result in a higher number of crimes not being reported to the police. In light of the reporting issues, the position is now taken that, the eyes of a police force that reflect the population policed are essential, but the effect on crime, justice and use of interpretation service is complex. In summary, the thesis contends that fulfilling the Race Relation (Amendment) Act 2000 provision on interpreting access to all parts of the communities ensures quality justice delivery. The UK justice system and, more specifically, the police workforce must reflect the diversity entrenched in the society that it seeks to protect. A diverse, efficient and fair justice system is achievable if more bilingual officers from minority communities are recruited, trained and drafted to perform interpreting service duties (mostly at the initial stage of investigation) when the need arises. The thesis diversity proposal is meant not to replace the outsourcing arrangement or the registered interpreter framework. The goal is to complement the pre-existing arrangement by ensuring that only core interpreting tasks are outsourced to expert interpreters while using bilingual officers to communicate and interact effectively with non-English speakers on the street. Bilinguals' interpreters are useful (temporarily) in an emergency that requires interpreting service as a temporary replacement when an expert interpreter is unavailable. The thesis believes this will reduce non-attendance and adjourned cases due to the absence of an interpreter. It, therefore, becomes more critical that;

1. People who need an interpreter should have one, and in the policing context, the PACE Act of 1984 (as revised in 2016) is designed to ensure this is a possibility.
2. Policymakers are aware of the growing need for interpretation services, if one assumes that the increase in the immigrant community reflects an increase in needs for interpretation,
3. The Police should reflect the ethnic mix of the general population. This is for two reasons. First, it means that 'on the street' communication will be facilitated. This will reduce conflict getting out of hand and reduce the need for formal interpreter services requests (for on the street police officers). Second, the criminal justice system's formal interpretation services will be more readily available and interpretation quality enhanced.

The second change of emphasis came in an increasing questioning of the adequacy of interpreter skills, evident in the findings on intelligibility and informativeness. This is reflected in two studies in Chapters 7 which include the main and a supplementary exploration of factors affecting intelligibility and informativeness. That study demonstrated the extent to which material length is likely to affect informativeness or fidelity of interpretation much more than its intelligibility. This has obvious and immediate implications for the conduct of investigative interviews. The extent of information losses in the translation process was reflected in the length of the translated texts, which were around one-quarter of the length of the texts they purported to translate. It is observed that machine translation is less susceptible to information loss compared to human interpretation. The lower infidelity for machine translation reflects the general inadequacy of interpretation skills. For instance, one small pilot study using one of the texts used in the central study showed a much lower information loss using the Yoruba machine translation facility in Google Translate. Given the sensitivities of interpretation (for example, the 'tells' of hesitation, choice of sentence structure and so on), and cultural differences in, for example, the language and explicitness with which victims are willing to describe sexual assault, the candidate is not ready to admit the general superiority of machine translation but feels strongly that a research programme built on insights gained from this study is important. It is therefore apparent that;

1. Interpretation services involve a series of processes and actions that are likely to impact investigative interviews between investigators and interviews.
2. This process includes; planning and preparation, rapport building, and a well-planned interruptions strategy.
3. Optimising these processes through joint planning with interpreters, interpreter-interviewee rapport building, and careful use of interruptions lead to a much successful interpretation service outcome in face-to-face police investigative interview.
4. Loss of interpretation quality with its consequence impact on language power and credibility evaluations of the witness and victim of crime need to be addressed.
5. Interpretation quality represent having a culturally equivalents interpretation relative to the original text, and maybe objectively or subjectively measured and,
6. In addition to the effects of content, idioms, word usage difference, colloquialism, familiarities, culture and language complexity affects the degree to which interpretation sound

like the original (intelligibility), while the length of material impact the extent to which interpretation remain faithful to the original (i.e., fidelity or informativeness).

7. Gender have little or no effects on interpretation quality. Instead interpretation quality is likely to be affected more by interpreter characteristics such as; experience and skills and other social variables such as; societal or income status, power and cultural inequalities.

10.3 Recommendations

In light of the findings reported, the following suggestion are put forward:

First, the UK justice system and, more specifically, the police workforce must reflect the diversity entrenched in the society that it seeks to protect. A diverse, efficient and fair justice system is achievable if more bilingual officers from minority communities are recruited, trained and drafted to perform interpreting service duties (mostly at the initial stage of investigation) when the need arises. The thesis diversity proposal is meant not to replace the outsourcing arrangement or the registered interpreter framework. The goal is to complement the pre-existing arrangement by ensuring that only core interpreting tasks are outsourced to expert interpreters while using bilingual officers to communicate and interact effectively with non-English speakers on the street as a filter. Bilinguals' interpreters are useful (temporarily) in an emergency that requires interpreting service as a temporary replacement when an expert interpreter is unavailable. The thesis believes this will reduce non-attendance and adjourned cases due to the absence of an interpreter. However, as noted earlier, a more diverse workforce will probably not reduce the demand for interpretation services, for two reasons. First. The more multilingual the society, the less likely any particular citizen encountering any particular police officer will share a language. Second, there is believed to be a huge latent demand amongst victims of crime which will become evident when better services are provided.

A review of the planning phase of the PEACE Framework's is required to encourage more investigators to plan and prepare with interpreters. The thesis further advocates for attitudinal change by police investigators and native interpreters with in-depth knowledge of the target language and culture, which is an additional solution to the common understanding issues. In addition, there is the need to increase the scope of awareness creation effort to capture all investigators and inform them on the need for pre-interview planning jointly with interpreters. Finally, for investigators to profoundly agree to plan with interpreters, there must be a review of police policy guidelines and the police training curriculum to teach the importance of planning with interpreters before an investigation commences.

In an interpreter-assisted investigative interview, it becomes intuitive that the PEACE Model's stand of no interruption during free recall should be made flexible to allow for a minimal, skilfully planned and well-thought-out interruption pattern or scheme to be preceded by a pre-interview briefing and clarification. This is so because it helps avoid the incident of information loss associated with lengthy discussions. Additionally, to manage the effect of interruption on recall ability of interview, the use of note-taking, aids, skills, gesture, pre-briefing, professional judgements on when to pause interview, and training and retraining are likely to go a long way in ensuring that interviewees or witnesses do not have memory difficulty issues.

10.4 Opportunities for Future Research and Contribution of the Thesis.

Hopefully the greatest contribution of the research reported here will be to re-direct research on and practice of the provision of translation services. Some hints about methodology in replications of the research in this thesis follow

1. The additional insight on factors affecting interpretation quality when only one type of interpreters are used in a much larger sample relative to the use of two different types of translators (expert and others) and small sample of interpreters in this thesis.
2. The possibility of teasing out practise and fatigue effects to achieve clarity of material length effects, if the first and final sentence of the fifteen-minute text are used relative to comparing five, ten- and fifteen-minute text. This possibility has not been explored due to the dependence of the final intelligible sentence on the first and second intelligible sentence, making interpretation of what was happening difficult and seemingly impossible.
3. The possibility of counter-balancing the order of presentation of the conditions, so as to spread the fatigue effects equally across the conditions.
4. The usefulness of extending the use of only two interpreters from each gender cluster in this thesis to a larger sample of male and female interpreters to encourage richer insight and the possibility of generalizing beyond the current thesis sample into a wider context.

Notwithstanding the methodological refinements to be made, the following points are claimed as contributions to knowledge:

First, the thesis via a study space analysis of extant literature on interpreter assisted investigative interview and beyond has help to contextualise and map the breadth and dearth of researches into various issues on optimisation aspect of investigative interview using interpreters and the quality interpretation itself. Second, the thesis extends the traditional view of police diversity as a means to guarantee social and political correctness, to includes improvement of social trust, community cohesion, and increase use of interpretation service. Third, the thesis reports and describe interpreters and investigators experience or opinion on aspect of investigative interview requiring the use of an interpreters. As such the thesis evaluate the consistency and adequacy of the PEACE model when applied to an investigative interview involving the use of interpreters. In such context the thesis shows that aspect of the PEACE model of investigative interview such as; planning and the engage phase (rapport building) ought to be conducted in before the interview with interpreters. More importantly, the thesis demonstrates the usefulness of allowing interpreter to plan with investigators and engage the interviewee or target before the commencement of an interview.

In addition, the thesis provides perceptual evidence of difficulty associated with the use of interruption to manage, its causes and consequence on the goal of investigative interview when an interpreter. Fourth, the thesis provides real life evidence of difficulty inherent in measuring and judging intelligibility and fidelity of an interpretation or translation, when judges behaviour is not manipulated via training and retraining to achieve a set level of behaviour. The research also demonstrated the possibility of a massive information loss as the length of interpretation material increases for both human and machine translation, casting doubt on the adequacy of the interpretation function in crime-related contexts. Last, the thesis provides supportive evidence for the gender similarities hypothesis in the context of interpreter assisted investigative interview and show that culture, power inequalities and interpreter status may be responsible for difference in interpretation quality. Albeit, language and interpreter characteristics impact interpretation quality.

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Appendices

APPENDIX

Study 2 Questionnaire for the Black, Asian and Minority Ethnic (BAME) Only

Questionnaire

Please answer all questions as fully as possible and by marking the appropriate box as indicated.

Questionnaire Instruments

Please answer all questions as fully as possible and by marking the appropriate box.

1. Are you: Male Female Do not wish to say

2. Please choose your ethnicity

Asian or Asian British Indian Pakistani Other Asian

Black or Black British African Caribbean Other Black

Mixed – White + African White + Caribbean White+ Asian Other Mixed

Other Do not wish to say

3. Please select your age category

18 - 25 26 -30 31 – 39 40 – 46 47 – 52 53 -60 Above 61

4. Have you ever considered applying for a job in policing? Yes No

4a. If yes, did you ever actually apply for a job in policing? Yes No

4a(i). If yes, please indicate the year and what was the role you applied for? (Police Officer / PCSO / Police staff / Don't know).....

4 a(ii). If yes, what was the outcome of your application?.....

4a(iii). If yes, how did you feel about the outcome of your application?

Please give reasons for those feelings.....

5. Please answer this question if you either never considered the police or you considered one and for whatever reason (rejection or change of mind) never took a job in policing. When you look for employment, how would you describe what you are looking for?

.....

6. Police forces have struggled for many years with attempts to make the ethnic mix of their forces correspond to the ethnic mix of the communities they serve. Do you think any of the following factors contribute to this situation? Please give your answers in as much detail as you wish.

(i) Potential applicants from ethnic minorities are put off by current minority representation.....

(ii) Potential applicants from ethnic minorities are put off by current minority representation taking senior roles in the forces to which they are applying.....

(iii) Friends from their own community put them off or are hostile.....

7. There remains a need for a more diverse police force to promote or enhance public trust and confident in the police? Please select one of the following: Strongly Agree Agree Neutral Disagree Strongly Disagree

8. As a result of recent migration from non-English speaking countries, the need for an increasing number and range of languages means that more interpreters will be required during police interview? Please select the option below that applies to you:

(a) Strongly Disagree (b) Somewhat Disagree (c) Nether Agree or Disagree (d) Somewhat Agree (e) Strongly Agree

9 A more diverse police force (representing officers from all ethnicities in the UK) may reduce the use of interpreters during investigative interviews? Please select the option below that applies to you: (a) Strongly Agree (b) Agree (c) Neutral (d) Disagree (e) Strongly Disagree

10. Is there anything else that you would like to add?

.....

Thanks for your participation!

Study 3 Questionnaire for Investigators Only

Questionnaire

PLEASE ENTER YOUR UNIQUE IDENTIFIER HERE (and make a note of it please).....

There will now follow a series of questions regarding investigative interviews. Please answer all questions honestly and by yourself – please do not discuss your responses with anyone else.

1. Are you: *Male/Female *Delete as appropriate
2. What was your role prior to working in the ILEA, and in which country? _____
3. How long have you been an investigator with the ILEA? _____ years/months
4. How many investigative interviews have you participated in at the ILEA?

1-20 21-40 41-60 61-80 81-100 Over 100

a. How many of these have been with interpreters?

1-20 21-40 41-60 61-80 81-100 Over 100

5. How many investigative interviews have you participated in elsewhere?

1-20 21-40 41-60 61-80 81-100 Over 100

6. Have you ever received training in investigative interviewing? *Yes/No *Delete as appropriate

a. If 'Yes', what training was this and where did it take place? _____

7. Have you ever received training on the use of interpreters? *Yes/No *Delete as appropriate

a. If 'Yes', what training was this and where did it take place? _____

8. Do you invite the interpreter to participate in the planning and preparation of an interview before the interview takes place? *Yes/No/Sometimes *Delete as appropriate

a. If you answered 'Yes' or 'Sometimes, what does it involve? _____

b. If you answered 'No', why not? _____

9. What do you consider the interpreter's role to be during an investigative interview?

10. Do you think there are any misconceived ideas about the role of an interpreter during investigative interviews? *Yes/No *Delete as appropriate

a. If you answered, 'Yes', please explain what you believe the actual role of an interpreter is as opposed to the perceived role by others: _____

11. In your experience, have interpreters assisted in rapport building, or have they been a barrier to building rapport during investigative interviews? *Yes/No/Sometimes *Delete as appropriate

a. Please explain your answer in full detail: _____

12. Is the use of an interpreter disruptful for the flow of an investigative interview?

1	2	3	4	5
Not at all disruptful		Somewhat disruptful		Very distrustful

a. If you answered anything other than 1 (Not at all disruptive), please briefly explain your answer: _____

13. Please describe how effective you think interpreters are at interpreting accurately what was said during the interview:

1	2	3	4	5
Not at all effective		Somewhat effective		Very effective

a. What are the reasons for your answer (please explain in full detail)? _____

14. When an interviewee is providing information, how disruptive do you find it when the interpreter interrupts or gets the interviewee to pause in order to interpret the information:

1	2	3	4	5
Not at all difficult		Somewhat difficult		Very difficult

a. Please explain your answer in full detail: _____

15. Please describe what you think is/are the most difficult aspect/s of conducting an interpreter-mediated investigative interview: _____

16. Describe any cultural issues (if any) that you think affect interpreter-mediated interviews: _____

17. Do you allow the interpreter to choose their own seating in an investigative interview? *Yes/No *Delete as appropriate

18. Please describe where you would normally ask an interpreter to sit during an investigative interview: *Sitting/standing *Delete as appropriate

- a. Behind the investigator;
- b. Behind the interviewee;
- c. Next to the investigator but not between the investigator and interviewee;

- d. Next to the interviewee but not between the investigator and interviewee;
 - e. Between the investigator and interviewee;
 - f. Sat opposite the investigator and next to the interviewee;
 - g. Sat opposite the interviewee and next to the investigator;
 - h. Any other position (please state below).
- i. Please provide additional information you feel necessary: _____
- ii. What is your reason for taking the position outlined above? _____

18. Are there ever any disagreements with an investigator and an interpreter on the positioning of each person in an interview? *Yes/No *Delete as appropriate

- a. If 'Yes', please explain: _____

19. Now, please think about the last interpreter-mediated investigative interview you conducted with the OTP. Please describe below how you feel it went overall – what aspects did you think went well, and what aspects did you think were not as good? Please provide a full and detailed response below: _____

20. Is there anything else you would like to add or clarify? *Yes/No *Delete as appropriate

Study 3 Questionnaire for Interpreters Only

Questionnaire

PLEASE ENTER YOUR UNIQUE IDENTIFIER HERE (and make a note of it please).....

There will now follow a series of questions regarding investigative interviews. Please answer all questions honestly and by yourself – please do not discuss your responses with anyone else.

1. Are you: *Male/Female *Freelance/Full-time staff of ILEA *Delete as appropriate
2. In which country are you normally based: _____
3. For which language combinations are you accredited by the ILEA? _____
4. How long have you worked with the ILEA? _____ years/months

5. How long have you been an Interpreter: In general _____ at the ILEA?

6. How many investigative interviews have you participated in with the ILEA?

1-10 11-20 21-30 31-40 41-50 Over 51

7. How many investigative interviews have you participated in elsewhere?

1-10 11-20 21-30 31-40 41-50 Over 51

8. Have you ever received training in investigative interviewing? *Yes/No *Delete as appropriate

b. If 'Yes', what training was this and where did it take place? _____

9. Do you personally participate in the planning and preparation of an interview with the investigator before the interview takes place? *Yes/No/Sometimes *Delete as appropriate

c. If you answered 'Yes' or 'Sometimes', what does it involve? _____

d. If you answered 'No', why don't you participate? _____

10. In investigative interviews, do you consider it possible to interpret with 100% accuracy?

1	2	3	4	5
Not at all possible		Somewhat possible		Entirely possible

a. Under what circumstances do you find it most difficult to accurately interpret (please provide a detailed response): _____

11. When an interviewee is providing information, how difficult do you find it to interrupt or get that person to pause in order to accurately interpret the information:

1	2	3	4	5
Not at all difficult		Somewhat difficult		Very difficult

b. Please explain your answer in detail: _____

12. Please describe what you think is/are the most difficult aspect/s of interpreting in an investigative interview: _____

13. Do you think there are any misconceived ideas about the role of an interpreter during investigative interviews? *Yes/No *Delete as appropriate

a. If you answered, 'Yes', please explain what you believe the actual role of an interpreter is as opposed to the perceived role by others: _____

14. In your experience, during investigative interviews, do you actively assist in rapport-building with the witness? *Yes/No/Sometimes *Delete as appropriate

a. Please explain your answer in detail: _____

15. Describe any cultural issues (if any) that you think affect interpreter-mediated investigative interviews: _____

16. Do you choose your own seating during an investigative interview?

*Yes/No/Sometimes *Delete as appropriate

17. Please describe in detail where you would normally position yourself as an interpreter during an investigative interview: *Sitting/standing *Delete as appropriate

- i. Behind the investigator
- j. Behind the interviewee
- k. Next to the investigator but not between the investigator and interviewee
- l. Next to the interviewee but not between the investigator and interviewee
- m. Between the investigator and interviewee
- n. Sat opposite the investigator and next to the interviewee
- o. Sat opposite the interviewee and next to the investigator
- p. Any other position (please state below)

i. Please provide additional information you feel necessary: _____

ii. What is your reason for taking that position? _____

18. Are there ever any disagreements with an investigator and an interpreter on the positioning of each person in an interview? *Yes/No *Delete as appropriate

b. If 'Yes', please explain: _____

19. Now, please think about the last interpreter-mediated investigative interview you conducted with the OTP. Please describe below how you feel it went overall – what aspects did you think went well, and what aspects did you think were not as good? Please provide a full and detailed response below: _____

20. Is there anything else you would like to add or clarify?

Study 5 Questionnaire for Interpreters

Research Questions

Demographic Questions

(1) Male ; Female ; Transgender– Please tick

(2) Please choose your ethnicity:

Asian or Asian British Indian Pakistani Other Asian
 Black or Black British African Caribbean Other Black
 Mixed – White White + Caribbean White+ Asian Other Mixed
 White Do not wish to say Other- (Click or tap here to enter text)

(3) How long have you been an Interpreter? (Click or tap here to enter text)

(4) For which language(s) are you accredited to interpret? Please mention all. (Click or tap here to enter text)

(5) Have you ever received training for interpreting in investigative interviews? a. Yes ;
 b. No

If yes, please specify what was the focus of your training? (Click or tap here to enter text).

Professional Questions

(6) Do you think the role of an interpreter in investigative interviews is clearly defined? a. Yes ; b. NO .

(6a) However you answered Q6, how would you define the role? (Click or tap here to enter text)

(7) How many times have you assisted in conducting an investigative interview? (Click or tap here to enter text).

(8) What challenges and issues have you experienced during investigative interviews with the use of an interpreter? (Click or tap here to enter text).

(9) In your own opinion, do you think people migrating from non-English speaking countries to the UK could increase the use of an interpreter? Please select the option below that applies

to you: (a) Strongly Disagree (b) Somewhat Disagree (c) Neither Agree or Disagree (d) Somewhat Agree (e) Strongly Agree

(10) A more diverse police force (representing officers from all ethnicities in the UK) may reduce the use of interpreters during interviews conducted by the police? Please select the option below that applies to you: (a) Strongly Agree (b) Agree (c) Neutral (d) Disagree (e) Strongly Disagree

(11) In your role as an interpreter, how much understanding do you think there is amongst police officers as to the importance of joint preparation (between investigator and interpreter) prior to interviews? a. YES (please go to 11a) b. NO . (Please go to 11b). Please add your expanded views on this point

(12) Do you think rapport building is a technique that encourages interviewees to give information more freely? a. YES ; b. NO

(12a) If Yes – do you think the use of this technique is difficult during interpreter-assisted interviews? a. YES (please go to 12b) b. NO

(12b) If Yes, please say why (Click or tap here to enter text).

(13) In investigative interviews, do you consider it is possible to interpret ten-minute-long witness accounts with 100% accuracy? a. YES ; b. NO c. Maybe

(14) During investigative interviews, do you think it is possible to interpret fifteen-minute-long witness accounts with 100% accuracy (without making notes/ jotting down)? a. YES b. No c. Maybe

(14a) If your answer is NO or Maybe, what are the challenges that could hinder you from achieving this? (Click or tap here to enter text)

(14b) If No – how long would you suggest is the time limit to interpret a witness account? (Click or tap here to enter text).

(15) How would you describe the role of an interpreter during interpreter-assisted interviews? (Click or tap here to enter text).

(16) When an interviewee is providing information during interpreter-assisted interviews, do you think language issues could hinder the accurate interpretation of an interviewee's account? a. YES b. No c. I don't know

(17) In your role as an interpreter, do you think cultural barriers differ across languages during an interpreter assisted interview? a. YES b. No c. I don't know

(17a) If your answer is Yes - Please state your reasons (Click or tap here to enter text).

(18) When an interviewee is providing information, how easy or difficult to interrupt (or get that person to pause) in order to accurately interpret the information: a. YES ; b. NO

(18a) If YES, please (Click or tap here to enter text) to explain your answer in detail:

(19) Do you agree that to interrupt or get that person to pause in order to accurately interpret (during interview) will affect interviewee memory recall? a. YES b. No

(19a) If YES, click or tap below to explain how you handle/manage this situation?

(20) In your experience, during interpreter-assisted interviews, do you think there are any differences between the accuracy of male and female interpreters? a. YES ; b. NO c. I don't know

(20a) If Yes - (click or tap here) to explain the differences in detail.

(21) Is there anything else you would like to add or clarify? (Click or tap here to enter text)

Thank you for your participation

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Oghene-Ovoh Tyson Amurun
Doctoral Student
University of Derby

11th October 2018

Dear Tyson (Sols)

Re: Examining the impact of interpreters during investigative interviews, concerning the accuracy of interpreters experiencing cognitive difficulties, language/cultural barriers and gender differences.

This letter is to confirm that your research (as subject line above) has received ethical approval by Chairs Action on behalf of the College of Business, Law and Social Sciences Research Ethics Committee.


Note: should your research evolve and further ethical considerations arise you will need to submit an amended ethical application.

Yours sincerely

Dr Polina Baranova PhD FHEA CMgr MCMi

Senior Lecturer in Strategic Management
Chair of College of Business, Law and Social Sciences Research Ethics Committee
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Vice-Chancellor Professor Kathryn Mitchell
Incorporated in England as a charitable limited company
Registration no 3079282


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Ethics applications: Interpreter-Assisted investigative Interviews: Needs, Challenges and Accuracy

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Application	Date submitted	Date of outcome	Status
ETH1920-1762	08 Jan 2020	17 Jun 2020	Approved with conditions
ETH1920-1745	06 Jan 2020	17 Jun 2020	Approved with conditions

