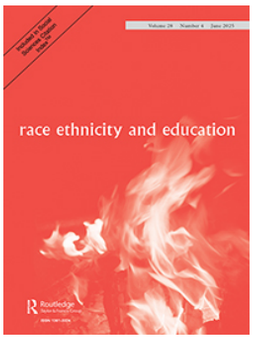

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Minoritised students navigating postgraduate education in England's elite universities: Yosso's Community Cultural Wealth framework adapted for the UK

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ABSTRACT

This paper investigates how racially minoritised students at elite universities in England navigate postgraduate (PG) education, an under-researched area. Drawing on interviews with 15 racially minoritised students, the study found that they employed different forms of capital to help them navigate PG education, in which they tend to be marginalised. We employ and develop Yosso's (2005) Community Cultural Wealth framework. In addition to six capitalis conceptualised by Yosso, we identified a seventh, perspective capital, an understanding of how oppression and privilege operate, afforded by a position of liminality, which enabled participants to legitimise their position in academia. We also evidence the complexity of different types of social capital, highlight the role of social class in mobilising linguistic capital, and provide insights into the interplay between different capitals and how they further enhance each other. We conclude that higher education should foster environments that recognise and enhance these capitals to promote equity.

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Community Cultural Wealth; Bourdieu; postgraduate; racism; perspective capital

Introduction

Research shows that racially minoritised students continue to be disadvantaged and 'othered' in Higher Education (HE) in England. In this paper, we consider how a group of racially minoritised students navigate postgraduate (PG) study, a comparatively under-researched area. Our focus is on STEM (Science, Technology, Engineering, and Maths) education, which, it has been argued, is the most prestigious of subject areas, and where there tends to be most funding and institutional support (e.g. Patton 2016). Based on qualitative interviews with PG STEM (both taught and research) students from racially minoritised backgrounds, we argue that these students are supported by, and employ, a range of capitals which enable them to cope and succeed in PG study in elite universities, a field which has been shown to reproduce white privilege. This

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provides an explicit challenge to the deficit discourses, which often characterise discussion and policy around racially minoritised students in HE.

We draw upon the work of Yosso (2005) on Community Cultural Wealth (CCW), who in turn builds upon the work of Bourdieu and Critical Race Theory (CRT), to help us understand how these capitals function and are deployed, activated, and valued. Originally developed in the US, in CCW Yosso identified six distinct capitals which racially minoritised people use to gain advantage in a society in which they are marginalised and oppressed: social, familial, aspirational, navigational, linguistic, and resistant. In our study, all the capitals were employed by and supported the participants. In addition, we adapt and develop Yosso's original framework in four key ways:

- first, we identify three kinds of social capital: role models, facilitators, and sponsors who support the students;
- second, we found that social class played a role in mobilising linguistic capital, a factor which did not form part of Yosso's original framework;
- third, we identified a seventh capital in the data, which we conceptualise as perspective capital: an understanding of how racial oppression and privilege operate, which provides an extra insight that can be employed to legitimise one's presence in a hostile field;
- fourth, we shine light on the interaction between the different capitals.

Barriers faced by PG students of colour in the UK

The proportion of 'home' (i.e. not international) BAME[1] (Black, Asian, and Minority Ethnic) students in postgraduate education in England is lower than in undergraduate education. BAME students are especially underrepresented in postgraduate research (PGR) degrees (as opposed to taught), with Black students being the most underrepresented (Advance 2023). BAME students make up 28.4% of the undergraduate (UG) population, but only 20.6% of PGR students (Advance 2023). Black students in particular are under-represented, with only 5% of full time UK domiciled PhD students in their first year of study being Black in 2021/2022 (UKRI 2024). Over the academic years 2017/2018–2021/2022 only 1%, or 435, of the 29,312 PhD funded studentships awarded by UKRI research councils were awarded to Black students (UKRI 2024), with students from Black Caribbean backgrounds, traditionally, being underrepresented within the Black category (Leading 2019). The drop in numbers between UG and PG study is especially significant since PGR study is the gateway to progression in academia and access to roles which involve setting the agendas for knowledge creation.

Reasons given for the low numbers of BAME students in PG education include the following: First, the limited funding from government for postgraduate qualifications meaning that potential students from less privileged socio-economic backgrounds, including a large proportion of BAME people, may be excluded for financial reasons (Pasztor and Wakeling 2018). Second, the majority of PGR students have previously attended research-intensive universities for their first degrees (Pasztor and Wakeling 2018) while BAME students, and in particular, Black students, are far more likely to attend lower tariff, 'teaching-focussed' universities for their UG study (HESA Higher Education Statistics Agency 2020). Indeed, both social class and race determine the type

of institution attended, with BAME and lower-class students more likely to study at modern universities (Boliver 2016). Moreover, rather than funding individual students, the UK research councils allocate funds via doctoral training centres and partnerships where financial support is increasingly concentrated among a few prestigious research-intensive universities (Harrison, Smith, and Kinton 2015). Third, as we have argued elsewhere, gatekeepers to postgraduate courses at some of the most elite universities contribute to maintaining white supremacy due to non-transparent recruitment, the maintenance of myths of meritocracy and unconscious bias, which allow them not to address disparities, and the potency of deficit discourses (Jackson-Cole and Chadderton 2023).

While most HE institutions claim to promote equity, diversity, and inclusion, research shows that UK universities can be hostile spaces for minority racialised students. There is a racialised awarding gap of 10.7pp at UG level, with 83% of white students and only 72.3% of BAME students gaining good degrees, i.e. first and 2:1 (Advance 2023). The gap grows to 20.2pp for Black students, with only 62.8% achieving good degrees (Advance 2023). Research suggests there is a lack of understanding of cultural differences among staff (Morrison, Machado, and Blackburn 2019), and the perception that judgements by staff of racially minoritised students is different from white students (Bunce et al. 2021). Some racially minoritised students have reported feeling that staff did not engage with them as often as other groups (Bale et al. 2020) and a lack of trust in their institution's ability to support racially minoritised students, leading to many not seeking support when needed (Morrison, Machado, and Blackburn 2019). There is also evidence that a Eurocentric curriculum prevails at most institutions, despite recent limited efforts to 'decolonise' the curriculum (Arday, Belluigi, and Thomas 2021) and that racially minoritised people continue to be depicted negatively within the curriculum (Webb et al. 2022). Students also reported feeling excluded by their peers and isolated both in their programmes and accommodation (Bale et al. 2020; Bunce et al. 2021; Halpin 2022; Morrison, Machado, and Blackburn 2019) and some reported overt racism from peers (Morrison, Machado, and Blackburn 2019). They also stated feeling the pressure of knowing that they may be subject to negative stereotyping (Morrison, Machado, and Blackburn 2019). Sakata, Winston-Proctor, and Harris (2023) found that the students in their study, a rare study focussing on both UG and PG at an elite institution lacked a sense of belonging. This marginalisation is having a negative impact on racially minoritised people's mental health, fuelling reduced self-confidence and low self-esteem (Arday, Branchu, and Boliver 2022; Morrison, Machado, and Blackburn 2019).

The majority of the above research, however, does not specifically differentiate between home and international students, most focuses on UG and post-92 universities, with much less on PG and more elite institutions. This gap is significant, because PG education is in many ways a very different space to UG: it is, for example, more elite, and admissions processes are less transparent. This means that strategies and resources for success in PG may be somewhat distinct from those required in UG education. Equally, elite institutions are whiter, meaning students from a racialised minority background are more likely to feel under-represented. Moreover, degrees from these universities are associated with more prestigious jobs and higher earnings. This suggests that for racially minoritised students the challenges at elite universities may be even greater than at post-92 institutions, but also the potential scale of reward (Bhopal and Myers 2023).

Achieving success in HE in the face of racism

While US literature offers more examples of research on how racialised PG students achieve success (e.g. Bañuelos and Flores 2024), UK research on racially minoritised students in PG education has focused more on student experiences (e.g. Lootens and Fúnez-Flores 2024). The little literature there is on how British racially minoritised students achieve success in the face of a range of difficulties tends to focus on UG students. For example, in Read, Archer, and Leathwood's (2003) study, UG students actively tried to mitigate their position as 'other' by choosing a university with a high proportion of students 'like them', which usually meant choosing a less prestigious institution. For those who attended the UK's more elite institutions, research suggests that parental aspiration and extra support from teachers enabled them to access these institutions (Dumangane 2016). Once there, peers were allies who provided solidarity, and academic and emotional support (Morrison, Machado, and Blackburn 2019), finding somewhere to live and accessing resources (Corrado and Tang 2024). In a study of racially minoritised students at medical school, while most participants had a diverse range of friends, many noted that their closest friends were other racially minoritised students. They felt these friendships helped them overcome isolation and gain confidence (Morrison, Machado, and Blackburn 2019). Equally, they mentioned receiving support from tutors who were from racially minoritised backgrounds, who, they felt, set the bar higher than white tutors (Morrison, Machado, and Blackburn 2019).

On the other hand, students' narratives indicated that they had to mask their identity to fit in and to avoid negative stereotyping (Morrison, Machado, and Blackburn 2019), or what Dumangane (2016) refers to as 'moderating blackness'- aligning their behaviour and appearance more closely with that of their white middle-class peers. Some felt they needed to 'over-perform' in order to succeed (Bale et al. 2020). Bhopal and Myers (2023), in a rare study of PG students, found that students sometimes self-excluded from activities.

As others have pointed out, most previous research on these issues, perhaps particularly on coping mechanisms, has been rather atheoretical and largely descriptive (Bunce et al. 2021). Dumangane's (2016) study of African Caribbean males at elite institutions theorises the support and resources accessed by the students in his study as 'capitals', although he does not draw upon Yosso's work.

Theoretical framework: Community Cultural Wealth

The theoretical framework used in this study is Yosso's (2005) Community Cultural Wealth (CCW), which is based on Critical Race Theory (CRT) and Boudieusian thinking tools. Bourdieu (Bourdieu and Passeron 1990) argued that besides their economic capital, middle and upper classes possess cultural and social capitals that are deemed valuable by society and can be employed by these classes to further, maintain and reproduce their social success and privileges. The capitals of lower classes are less valued by society in general and mean that these classes have less access to economic capital, and valuable cultural and social capital. By cultural capital, Bourdieu was broadly referring to assets such as education, qualifications, language, cultural preferences, styles, and behaviours, and by social capital, he meant networks and contacts who enable access to privileged

spaces and economic capital. Possession of these capitals is rewarded within a given context, which Bourdieu referred to as a 'field'. Capitals can be directly converted into advantage or enhanced within different fields in order to gain further privilege or accumulate other capitals.

Yosso (2005) builds on Bourdieu's work, which focussed on class, to argue that like those of the lower classes, the capitals of people of colour are less valued in US society, while the capitals of those classified as white, and upper and middle classes, are more highly valued. Yosso employs a CRT lens to Bourdieu's work on capitals, which extends and develops it in two ways: first, it centres racial structures as fundamental to shaping society, and second, explicitly values the knowledge, experiences, and perspectives of people of colour as capitals, to develop a framework which she refers to as *community cultural wealth* (CCW). This focuses the analysis on the capitals which these communities bring to the table, rather than on how their capitals are not valued by privileged social groups (although this latter forms the basis for the analysis). Yosso's framework is made up of at least six forms of capitals, which racially minoritised people have at their disposal to 'survive and resist macro- and micro-forms of oppression' (Yosso 2005, 77) and gain advantage in society.

In the field of education, CCW is a way of understanding the tools with which students of colour successfully navigate education and resist racism, as well as a way of challenging frequent deficit understandings of knowledge, skills, abilities, and contacts of racialised minorities. These capitals are often unrecognised by society as such, and via this framework, are instead, understood as assets. The CCW framework has similarities with 'ethnic capital' (e.g. Shah, Dwer, and Modood 2010), which considers ethnicity as a resource, and combines Bourdieu's notions of social and cultural capital, to understand educational achievement and social mobility among racialised minorities without much economic capital. However, Yosso's CCW breaks down these notions of capitals into several, explicit factors which support success, and avoids the top-down approach which ethnic capital tends to take (see Shah, Dwer, and Modood 2010).

Yosso's (2005) six capitals are as follows: f*amilial capital* - understood as cultural knowledges, history, and memory acquired from nuclear and extended family. *Aspirational capital* relates to maintaining high aspirations and hope, 'nurturing a culture of possibility' (Yosso 2005, 78) despite systemic barriers (breaking the connection between parental occupational status and children's educational outcomes). *Navigational capital* refers to 'skills of maneuvering through social institutions' (80) and allows racially minoritised students to move through the educational field and achieve success by highlighting aspects of knowledge and skills valued in the field and/or downplaying those which may not be seen favourably. *Resistant capital* refers to attitudes, knowledges and skills that help one to resist oppression and/or internalisation of negative societal messages. These are likely to be oppositional and potentially transformational in nature. *Linguistic capital* stems from skills attained by knowing more than one language, or more than one communication style, e.g. poetry or songwriting as a mode of communication. Finally, *social capital* has been described as a network of acquaintances, who can provide support, information, or resources. For example, they might help students identify opportunities, such as scholarships, prepare for examinations or university applications. Yosso's (2005) understanding of social capital adds a community element to Bourdieu's original understanding, in which the bonds which

mobilise this capital stem from community and can provide not only material but also emotional support. It is to be noted that, '[t]hese various forms of capital are not mutually exclusive or static but rather are dynamic processes that build on one another' (Yosso 2005, 77). However, Yosso does not discuss in any detail the relationships between capitals.

The framework has mostly been employed in US research to reframe deficit understandings of minority groups. Burciaga and Kohli (2018) have conducted research which challenges deficit understandings of teachers of colour, arguing, '[t]his research expands our understanding of overlooked pedagogical characteristics that are foundational to serving students of color' (Burciaga and Kohli 2018, 6). Significantly, their work enables us to value what these teachers actually bring to the classroom, rather than just focusing on addressing their numerical under-representation. Equally, CCW has been employed to highlight positive cultural assets which assistant professors of colour in the US brought to their work (Martinez, Welton, and Welton 2017). Their mobilisations of Yosso's capitals enabled them to deal with students' stereotypes of them, mentor others, and avoid cultural taxation (carrying the burden of diversity work) and tokenism. Martinez, Welton, and Welton (2017) demonstrated that CCW is an intersectional framework, in which race and ethnicity intersect with gender and sexuality. As in our own study, CCW has been employed to understand how students of colour navigate a hostile and racist institutional environment in HE. Luna and Martinez (2013) identify the factors that support Latino students' success at college and Espino (2014) explores how Mexican American doctoral students activated CCW to navigate HE. A few scholars have extended the framework to include other capitals. For example, Pérez Huber (2009) identified 'spiritual capital'.

CCW has also been employed as a pedagogical tool. For example, in DeNicolo et al. (2015) work, elementary school students in the US wrote testimonios (personal narratives) to help them identify their CCW to value the knowledge they bring from their homes and families, and to counter deficit notions of themselves. Similarly, Zoch and He (2020) used CCW as a pedagogical tool to prepare pre-service literacy teachers to work with linguistically and culturally diverse groups. This approach enabled these teachers to value the families and languages of the students and their contributions.

CCW has recently started to make inroads in the UK, although this work is not yet widespread. Doyle (2022) uses the framework to problematise assumptions that portray the Roma Slovak community in the north of England as homogeneous, marginalised, and uncritically family oriented. In their study on a post-16 service, they show how culture is historically located by demonstrating how Roma culture is changing, due to mixing with other cultures in England. Equally, Cook (2021) looks at the strategies of Sierra Leonian parents in the UK to meet expectations and overcome challenges in outdoor adventure activities. Sangha (2022) uses the CCW framework combined with self-concept to better understand the role of self-esteem combined with Yosso's six capitals in UG Social Work students achieving success.

Methodology

This paper reports part of a larger study (Jackson-Cole 2019) which explored the lived experiences of racially minoritised students in postgraduate education using qualitative

data (interviews with university staff and racially minoritised students) and quantitative data (survey of white and racially minoritised PG students). This paper focuses on the qualitative data from the racially minoritised students on their coping strategies. The interviews with staff are discussed elsewhere (see JJackson-Cole and Chadderton 2023).

The research sought to foreground the voices of racially minoritised people as the 'legitimate, appropriate and critical to understanding . . . racial subordination' (Solórzano Daniel and Tara 2015, 133). STEM students from four research intensive English universities were interviewed, including two prestigious Russell Group institutions. Each university had recorded a decrease in 'home' BAME students going from UG to PG and in particular PGR study (HESA 2017).

Participants were recruited through convenience sampling (Merriam and Tisdell 2015), to cause as little disruption to universities as possible. This meant allowing a level of flexibility as to how the institutions recruited participants, which was done either by university staff centrally sending emails and newsletters to all students or by e-mailing staff within STEM departments who then e-mailed their students.

To be eligible students had to be classified as 'home' students, be enrolled on a postgraduate course (master's or doctorate), in a STEM field (excluding medicine and dentistry, due to different course structure) and identify as racially minoritised, from underrepresented groups (i.e. students of Chinese and Indian descent were not eligible, as they are well represented in HE). STEM subjects enjoy an elite status and a relatively favourable funding environment in UK HE. This is linked to their potential for increasing national economic growth (Royal Society 2008). The UK government has previously identified increasing BAME participation in HE and improving higher order (PG) STEM skills as important focus areas for growing knowledge economy through HE (BIS/Department for Business, Innovation and Skills 2016). Hence, the focus of this paper on BAME students in STEM, which has particular implications for this policy agenda.

The final sample included 15 students, mostly in PhD programmes (13), with only two students from Black Caribbean backgrounds, mirroring the national underrepresentation. For details see Table 1 below.

Table 1. Interviewed students.

Pseudonym (self-selected)	Ethnicity	Course and STEM area	Gender
Sebastian	Asian British - Bangladeshi	MSc Mathematics	Man
Tom		PhD Biophysics	
John McIntyre	Black British - African	PhD Financial Mathematics	
Vincent		PhD Biomedicine (completed as MPhil)	
Halle Berry		PhD Medical Engineering	Woman
Annabelle		PhD Computer Science	
Lola		PhD Epidemiology	
Nana		PhD Mechanical Engineering	
Hannah		PhD Cell Biology	
Buzz	Asian British - Pakistani	MSc Forensic Science	
Elena		PhD Nanotechnology	
Marian		PhD Biomedical Imaging	
Adele	Black British - Caribbean	PhD Climate Change	
Christiana		PhD Physics	
Rachel	Mixed - White and Black African	PhD Physics	

Interviews were semi-structured. They explored students' family unit, school environment, and experiences of HE, including feelings of belonging or exclusion, relationships with peers, academics and supervisors, and techniques of navigating PG study. All interviews were audio-recorded, transcribed, and coded using hand-coding and NVivo. The interviews were conducted by the first author. Coding both informed was informed by, and closely mapped onto, the conceptual framework.

Research focused on race is impacted by many factors, not least the positionality and power relations between the researchers and participants (Merriam and Tisdell 2015). A researcher does not simply collect data, but as a result of the interactions with the researched and the social context, they actually generate data (Chadderton 2012). The authors of this paper are both white. One is a queer male-identified person of intermediate class background, originally from Poland, the other a female who straddles working and middle-class identities from northern England. Some might argue that it is problematic for white scholars to conduct research on race, since we are inevitably privileged by raced structures. Hence, the close mapping of the interview themes against the theoretical framework was particularly important in mitigating against the dangers of re-centring white dominance of the white researcher in the research process (Chadderton 2012). Moreover, the aim of this research is explicitly to contribute to understanding how minoritised individuals navigate the whiteness of the PG field, to theorise these students' narratives, to critique the ongoing potency of structures of white supremacy, and ultimately to promote social change in HE (see Solórzano Daniel and Tara 2015) by contributing to the recognition of oft under-valued capitals. This aligns with researchers' positionality and dedication to fighting systemic oppression. Both researchers recognise that it is impossible to step outside whiteness, but they are committed to challenging whiteness and inequality wherever possible. They both work in HE where they put this to work in their research, teaching, and academic activism. While one can never fully neutralise power imbalances, in this study, to explicate and interrupt power relations, the interviewer self-declared their positionality to participants. Different identities came to fore in each interview with different impacts depending on the participant. For example, before self-disclosure, Jackson-Cole was often assumed to be US American. However, after clarifying that he was Polish, some participants seemed to be more comfortable talking about their racialised experiences, particularly as the interviews took place in the context of increased anti-Polish hostilities following the Brexit referendum.

Findings and discussion

This study found that all of Yosso's (2005) CCW capitals featured in the narratives of the participants, employed by them or supporting them, to navigate PG study. Familial, aspirational, resistant, and navigational capital functioned similarly to how Yosso conceptualised them. We also found some differences. The study adds detail to our understanding of how social capital functions and the role which social class plays in CCW, in particular in linguistic capital. In addition, we identified a seventh capital, perspective capital. Lastly, the data enabled us to show some of the ways in which the different capitals interact build on and enhance one another.

Familial capital

Several participants stated that they had acquired social skills, confidence, and educational aspiration from their families, understood as familial capital, which proved useful for navigating the field of HE.

> They [parents] are also quite loud, you know, people with very good social skills and I kind of just picked that up from them. (Elena1)

> I think the main reason that I went into further study was probably because of my family. They kind of really drummed education into me. (Tom1)

Aspirational capital

A further capital demonstrated was the students' own aspirations.

> I do want to lecture in the future, and I haven't seen a lecturer who's [Black] . . . if I can inspire others to also do the same, why not. And I've read [. . .] less than one percent of professors are Black. (Hannah1)

Aspirational capital was particularly evident in the way these students aspired to inspire others from similar ethnic backgrounds to enter academia and thus contribute to addressing the low numbers of racially minoritised people working in HE. They were able to turn their concern about the marginalisation of racialised minorities in elite academia into an aspiration and thus a capital, which inspired their own success as well. In this study, aspiration capital links closely to resistant and perspective capitals.

Resistant capital

Resistant capital 'refers to those knowledges and skills fostered through oppositional behavior that challenges inequality' (Yosso 2005, 80). We found that resistant capital was also a factor in facilitating educational success and builds on perspective and familial capitals:

> I feel like there's a lot of stigma attached to Pakistanis being under-achievers, even I've studied that at school myself and I've seen it first hand as a teacher as well . . . I think that because I'm aware of that, maybe subconsciously I am doing everything I can to become the best that I can as a person but also from my ethnic background. (Buzz1)

In the quote above, Buzz suggests that she was able to convert her awareness of the negative stereotypes around Pakistanis in education into resistant capital. This is contrary to studies that indicated 'stereotype threat' lowered the performance of students of colour, particularly women of colour (O'Brien et al. 2015). Her resistant capital was also supported by aspirational capital, 'to become the best that I can'.

However, resistant capital can display conformist traits (Yosso 2005), which was also evident in our data:

> Don't think that being in an ethnic minority is going to hold you back because it will if you think like that . . . If you don't see colour, then people don't see it . . . If you've got the right support around you and you've got the drive, you can do anything really. (Adele1)

Adele, in this example, deploys colour-blind rhetoric as resistant capital. However, as others have argued, a world where colour does not affect perceptions is perhaps desirable, but since it is not currently in existence, colour blindness often in practice means that racism goes unchallenged (Collins 2015).

Navigational capital

Navigational capital played an important part in enabling students to navigate the whiteness of elite PG study. It tended to come from family and can be seen as closely linked to familial capital. Two strategies were evident in the data. First, some students were taught to work harder than a white person would for the same recognition, to succeed in the face of racism:

> My parents would just be like, you need to work hard, you might need to work harder, but that's just something you have to do. (Vincent1)

Second, others were taught to hide aspects of themselves to succeed:

> She's [her mother] like, 'Don't bring up your diversity stuff too much' . . . I do, but sometimes I maybe hesitate a little bit because of what my mum says. I don't feel like I've really tried but I don't feel as if I've done anything really Black to really have to hide anything. (Christiana1)

This second point is consistent with wider literature that finds that 'acting white' or 'moderating blackness' can provide a navigational technique for racially minoritised people in a world dominated by whiteness, albeit perhaps an uncomfortable one (Carbado and Gulati 2013; Dumangane 2016). When asked whether she employed this strategy on her CV, Christiana responded:

> I haven't written anything about my clubs and societies. In fact, if there's anything that I do feel more conscious of, more than that [being part of the Afro-Caribbean Society], is actually the fact that I was in the Gospel Society, because that one I was most active in. Even in an interview I had last week I just almost stuttered on it, and that made me feel really bad about that, like I was worried how they're going to feel about me being a Christian, which is just odd. I find this stuff really odd. You're trying to keep yourself as neutral as possible, and I think that's why I get concerned about all the things that I say to them. I just want them to take me for what they want, which is someone who can do that role. Not oh, you're also this Black activist, Christian thing. (Christiana2)

She suggests that there are aspects of herself which she omits from her CV, because she fears it might give the impression that she cannot do the role. In particular, she avoids mentioning her membership of the Gospel society, perhaps for two reasons. First, because it might indicate to the reader that she is religious ('I was worried how they're going to feel about me being a Christian'). She does not explicitly say why, but perhaps because religion is often portrayed as unscientific, superstitious, or primitive. Second, she suggests that Gospel might indicate 'Black activism' to the CV reader, a political blackness. Again, she does not explicitly say why, but perhaps it is to do with the assumption that this is a cultural capital which might be perceived as threatening to white people (Cartwright 2022). While it may form resistant capital in certain situations, in others, knowing how to minimise it may indicate a strategic deployment of navigational capital.

Indeed, as Cartwright (2022) suggests, Christiana implies that cultural capital itself is racialised – viewed in different ways depending on the racialised position of the holder. Christiana says she wants to be 'as neutral as possible', presumably to an assumed white reader of her CV, in case any aspect of herself might be wrongly assumed to be unscientific or culturally threatening.

In the excerpt below, Lola alludes to the need for conformity to white norms to succeed while Black.

> So, you have to be who they want you to be and then [. . .] you see the Black people who do succeed, Black researchers who do succeed and the ones that go on . . . [are] extremely agreeable, very quiet, very soft spoken, very this, very that, very meek, blah, blah. (Lola1)

She identifies being 'soft spoken', 'very quiet' and 'agreeable' as a strategy, like Christiana, suggesting that conforming to white norms of how blackness is to be performed can facilitate success (Carbado and Gulati 2013). Uncomfortable and problematic as it may be, it offers a navigational technique (capital) that is actively and strategically employed by racially minoritised people to provide currency in elite, white spaces.

Linguistic capital

The fifth capital mobilised by the students was linguistic capital. However, unlike Yosso's (2005) original theory, which conceptualises linguistic capital as having access to two or more different languages, in our study, linguistic capital equated to accent and indicated status. This occurred in two different ways: first, an English accent provided evidence that they were 'home' students and not international students, and second, that they were higher class – Black and Asian students are commonly assumed to be working class and, thus, lower status. This link with class resonates with Bourdieu and Passeron's (1990) original conceptualisation of linguistic capital, in which they refer to linguistic behaviour, including grammar, accent, tone, delivery, etc. and define as 'the practical mastery of language and culture that authorises cultivated allusion and culturated complicity' (119).

In the quote below, Nana suggests that her English accent and class background sheltered her from possible racism and indicated to others that she was confident in belonging in the PG space:

> I demand my presence and this is who I am . . . I do have a sort of [privilege], I come from ruling class of, not a ruling class but, like the top class . . . [. . .]
>
> I know for a fact that it's because I, I have an English accent. [. . .] it's . . . because I'm the type of person who speaks as soon as they enter a room, so there's no sort of grey areas to where I'm from. I think if I had an accent, if I wasn't so confident, if I wasn't so loud, or like imposing, I would probably have a problem with my race. (Nana1)

Her linguistic capital, which identifies her as English middle/upper class, enabled her to challenge the stereotypical association of blackness with foreignness, working classness, or being inarticulate (Wallace 2017). It also enables her to demonstrate that she belongs in this space, with regard to citizenship/culture, class, and level of education. Other studies have argued that racially minoritised people who speak a standard variety of language or accent tend to be seen as more competent than their white counterparts with a similar language register (Hansen et al. 2017).

Social capital

Social capital, along with familial, differs from the other capitals in that it is external (other people) as opposed to internalised/embodied. Three types of social capital can be identified in the narratives of the research participants, adding complexity to Yosso's framework. These were: (1) role models – inspirational individuals personally known to these students, (2) facilitators – people who 'went out of their way' to help the students, and (3) sponsors – people who had a direct say on the students' future. Students in this research could count on social capital at different stages of their lives – from primary education to postgraduate study. While these are not rigid categories, this typology allows for a clearer understanding of the different ways in which social capital works:

1. The data suggests that role models helped build up aspirational capital by making success seem within reach

For example, Tom and Vincent had some role models in their close networks when growing up:

> The reason I chose science is that I did have some family friends who were kind of well-educated. (Tom2)

> . . . my aunt is a doctor and, [. . .] when I was about six she was just starting university, like a medical degree so I kind of had that influence and actually, I wanted to be a doctor when I was growing up so when I was in school I had that in my mind. (Vincent2)

Their words demonstrate the strength of representation, which was derived from personally known role models, as a motivational and inspirational factor. Role models were mostly embedded in the family and/or community, which was similar to Rhamie's (2012) research which showed the importance of family and community for facilitating educational success for African-Caribbeans in the UK. The interconnectivity of the different CCW capitals is also demonstrated here – in this case social capital with familial capital.

2. In this study, facilitators were those, who went above and beyond their job roles to support the development of these students' skills and capitals:

> I did have a friend of the family who's a doctor . . . who actually was my brother's doctor when he had leukaemia and he always kept in touch, so he became like another member of the family, and he was quite instrumental in us pursuing further education. He was always very encouraging. He'd print past papers for us and help us with things if we struggled so he was really great. (Annabelle1)

> [m]y tutor and that maths teacher, they encouraged me to do it [apply to university]. But . . . he [the maths teacher] had an operation so he was out for a couple of months. By the time that my interview [. . .] came round, he only had two days to prepare me . . . He came back early from his leave to do that, which I'm grateful for. (Sebastian1)

Both examples illustrate that students had the support of an individual paying particular attention to them and making an extra effort to facilitate the development of skills and knowledge to increase their chances of success in an elite world, where the rules tend only to be understood by those already embedded in these worlds.

All examples of facilitators in this study were white men. As Miller (2016) argues the success of people of colour in academia often hinges on what he refers to as 'White sanction', i.e. white people allowing or enabling minority racialised staff and students to access predominantly white spaces.

3. While the role models and facilitators could be seen as having supporting functions, the sponsors had a more direct influence on students' pathways by choosing them to continue to doctoral studies or personally introducing them to decision-makers. At least five interviewees knew their supervisors before applying for their doctoral studies:

> My [UG] supervisor had already just noticed me and was just, 'Oh I think you'll be good for this [PhD]'. I was like, 'ok', and I had my interview. (Christiana3)

> I didn't automatically think I was going to stay at [University]. I was looking around for PhD and then professor suggested, 'oh there's this PhD. Are you interested in it?'. (Elena2)

> I think she [the supervisor] just got a soft spot for me really, ever since I have met her, [. . .] she's been very encouraging, very supportive, very nice, really. I guess if I was white, they might think I am her daughter [laughs] . . . I didn't have a formal interview. (Halle Berry1)

Several participants were initially uncertain whether they wanted to do a PhD. The personal approach of their supervisors including offering advice, building their confidence, and even providing access to scholarships (economic capital) were key factors in them taking on PGR studies. This is consistent with other literature which suggests that sponsorship (rather than mentorship), is highly effective in allowing racially minoritised people to ascend the career ladder, more than, for example, in the case of women (Hewlett 2013; LFHE 2017). It is also a key point for PG study, where access and entry are not transparent or centralised, and where social capital plays a larger role than in UG study.

Perspective capital

In this study, we identified a seventh capital, which we conceptualise as *perspective capital*. This was students' understanding of how oppression and privilege operate – the wider lens afforded by their position of liminality – which enabled them to navigate and challenge whiteness, to understand their value and legitimise their position in a field in which they are marginalised. While related to resistant and navigational capitals, perspective capital refers instead specifically to an insight afforded by marginalised positionality which functions as a capital by providing currency in a field where a given individual's capitals tend to be devalued. This then legitimises their position in a field, and thus perspective converts into wider advantage. Perspective capital enables resistance and navigation (capital). Other scholars, also drawing upon Bourdieu, have theorised this perspective in terms of class, as cleft-habitus, '"the marginal vantage point" which contests the terms of the two incommensurable fields to create a new space' (Ingram and Jessica 2015, 170). Here, we argue that this is in fact perhaps better understood as a capital, as it in itself both contributes to the accumulation of other capitals and functions as an asset which is convertible into wider advantage.

Perspective capital also builds on notions such as Collins's (1986) 'outsider within' and Rollock's (2012) perspective advantage. Rollock notes that '[r]ather than being regarded as a place of disadvantage and degradation, it has been posited that those excluded from the centre can experience a "perspective advantage" as their experiences and analyses become informed by a panoramic dialectic offering a wider lens than the white majority located in the privileged spaces of the centre are able to deploy' (65). Collins (1986)

argues that 'the experiences of outsiders within is one where intellectuals learn to trust their own personal and cultural biographies as significant sources of knowledge' (29). Again, we argue that theorising perspective as capital enables a better understanding of how it is convertible into advantage and contributes to the accumulation of other capitals, in a given field.

While perspective was not explicitly identified as a distinct capital in Yosso's work, in our study it played an important role. It enabled a legitimisation of students' presence in the academic field and contributed to the accumulation of other forms of capital, such as aspirational, navigational, or resistant. While perspective capital is a result of social oppression, it can be linked to familial and social capitals, whereby family and community teach an individual how to interpret their experiences.

For example, Nana alluded to having an enriched perspective stemming from her blackness:

Nana: In the engineering department, I mean they're just socially, it's not even socially awkward, it's just socially backwards … it's so socially difficult [for white men in the department]

Researcher: So, do you think that being from a multi-diverse background gave you some kind of advantage?

Nana: … So, in terms of being Black … a different ethnicity … there is obviously an advantage in terms of you know a lot more, you experience a lot more … you're not oblivious, I think you know exactly who you are and where you're from and I think it's just a stronger identity (Nana2).

By juxtaposing what Nana suggests is social awkwardness of her white male colleagues with the richness of experiences, stemming from her minoritised identities, she positions herself as possessing a stronger identity and (implied) social intelligence, which in turn, she implies, could help legitimise her presence in, and demonstrate the value she added in the department.

Similarly, in the following example, perspective capital enabled Lola to demonstrate her value to the field of Epidemiology:

> They were going on about how the Gypsy community don't allow us to come in and vaccinate their children and I was slightly becoming irritated and I said quite calmly, look, is it perhaps that the years of persecution over the centuries, that mean that these Roma communities are more fear[ful] of authority, maybe what you need to do is to establish blah, blah, blah. You know the answer. And this rang a chord with a few people in the room. (Lola2)

In this example, the epidemiologists appeared not to understand the reluctance of the Roma traveller community to have their children vaccinated. However, Lola's knowledge of the wider context of the history of harassment, over-surveillance, and abuse of groups who are 'othered' by the authorities meant she suggested an explanation and a solution.

This was recognised by some colleagues despite her being more junior (a PhD student). Her perspective capital enabled her both to challenge whiteness and contributed to legitimising her role in the field.

Interactions between capitals

Yosso (2005) did not see CCW capitals as separate but rather as closely linked, intertwined and impacting one another. However, in her work she did not specify their exact intersections and impacts on one another. Our study enables us to contribute to a better understanding of the relationships between the capitals. First, CCW capitals should not be seen as separate from Bourdieu's cultural and social capitals (Bourdieu and Passeron 1990) but as more specific types of these. Social and familial capital in the CCW framework can be understood as forms of Bourdieusian social capital, while aspirational, resistant, navigational, linguistic and perspective capitals are specific forms of embodied cultural capital. This links clearly to Yosso's re-conceptualisation of Bourdieu's notion of cultural capital, since these capitals are connected to the individuals' marginalised social position (rather than as in Bourdieu's work, connected to a dominant social position), and then translated into success.

Furthermore, as discussed above, perspective capital, familial capital and social capital often contributed to the development and accumulation of other capitals. Table 2 shows the most common interrelations among different forms of capitals in this study, with the first column indicating the 'source' capitals and the following columns across indicating the capitals, which are, at least partly, developed by the source capitals.

For example, linguistic, resistant, and aspirational capitals are often derived from familial capital, whereby the family teaches the individual their languages (quote: Nana1), how to resist racist discourses, to navigate social institutions (quotes: Vincent1, Christiana1), or to aspire to success (quote: Vincent2). These capitals are then converted into wider educational success. Similarly, resistance is preceded by an understanding of being othered and the development of a perspective different from the dominant group, i.e. perspective capital (quote: Buzz1). Finally, perspective capital acts both as a building capital, for example, for resistant and navigational capitals, and a built-up capital, often derived from family, as in the example below:

> So, [. . .] something that someone mentioned [. . .] a stereotype threat. And for me, I think my mum, she probably wouldn't have . . . put it in those terms but I think she was always aware of these types of biases that I might face. And looking back on some of the things that she said, I think that she was behaving in such a way to kind of [counter] that potential. She would have always said that you could achieve whatever and I think that she had these biases in mind and now [. . .] looking at what I see on the TV [. . .] I have no doubt that it would probably affect someone in an adverse way. [. . .] So, I think that that for me is . . . one of the key determining factors [for success]. (John McIntyre1)

Table 2. Main interaction of capitals in CCW.

	Capitals developed, at least partly, by source capitals				
Source capitals	Aspirational	Resistant	Navigational	Linguistic	Perspective
Social	x		x		
Familial	x	x	x	x	x
Perspective		x	x		

John McIntyre suggests that his familial perspective capital bolstered his navigational and resistant capital, enabled him to resist negative stereotypes and therefore achieve educational success.

Conclusion

In this paper, we have identified and analysed the different capitals which enabled racially minoritised students to navigate the white and elitist space of PG education in the UK, drawing on Yosso's CCW model, and adapting it for the UK context and this study specifically.

The conceptualisation of different coping strategies and factors as capitals enabled us to demonstrate how these elements – which may normally have little currency in society and are linked to minoritised positions – accumulate and are converted into educational success. The data suggests that all six of Yosso's capitals: social, familial, aspirational, navigational, linguistic, and resistant supported and enabled the success of the participants. Albeit not all were straightforward or comfortable. While familial, aspirational, navigational, and resistant capital functioned very similarly to Yosso's original framework, we also found some differences and developments in this UK study. First, we identified three kinds of social capital: role models, facilitators, and sponsors; second, linguistic capital in this study resonated more with Bourdieu and Passeron's (1990) understanding of language as a form of cultural capital, in this case, denoting an accent from the educated class, as well as demonstrating non-foreignness in a field where racially minoritised students are often perceived as international. We also identified a seventh capital, which we conceptualise as perspective capital: an understanding of how racial oppression operates, which can then be translated into other forms of capital and wider advantage, such as to legitimise one's presence in the field. In addition, we have been able to show how some of the different capitals interact, for example, that social, familial, and perspective in particular contribute to the accumulation of other capitals.

Research continues to show that racially minoritised students and staff are marginalised, stereotyped, and discriminated against in HE. Our study enables us to make some tentative recommendations for the sector based on our findings, which might, help universities to support racially minoritised students and improve institutional outcomes. First, rather than only regarding racially minoritised students, as often happens, as a tick in the 'diversity' box or a widened student market, institutions should consider how they can better value, support, and benefit from students' under-recognised and under-valued capitals in HE. This approach of recognising students' capitals enables us to recommend a shift away from initiatives which focus on the increase of students' cultural capital, which essentially assume students have a deficit of capitals, and onto institutional initiatives that enhance recruitment and retention of PG students. Second, equipped with a better understanding of the lengths that some students have to go to, to survive in PG study (which include concealing parts of themselves, or 'acting white', to appear to fit into the expectations and norms of the institution), universities can improve their efforts at building a sense of belonging. For example, by employing CCW as a pedagogic tool (DeNicolo et al. 2015). This is not to say that valuing such forms of capital can neutralise all the effects of racial disadvantage and stereotyping (see also Shah, Dwer, and Modood 2010); however, it could make a contribution.

This was a small study in an area which remains under-researched. We recommend that further research is conducted in the UK to enable a better understanding of the capitals of minoritised students, and how these can be valued in PG study.

Note

1. While this term for racially minoritised students has been challenged for a variety of reasons from both sides of the political spectrum, it continues to be commonly used in the UK in policy settings, and we use it here while referring to statistical reports and policy.

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