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A REVIEW OF THE LITERATURE ON SENSE OF BELONGING AND COMMUNITY IN HIGHER EDUCATION

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Introduction

This literature review investigates the concept of a “sense of belonging and community” in higher education and establishes how this concept is understood and utilised by higher education institutions, particularly Russell Group universities. The literature review aims to better understand what is meant by this concept, who is creating the meanings and why it is becoming a leading notion in the educational environment. This is important to know to develop shared understandings of belonging and community within Newcastle University and embed practice in solid knowledge and research. This is particularly pertinent to understanding and working towards the strategic measures of the Access and Participation Plan (APP), as there may be important links to draw between sense of belonging and some of the key measures of the APP, such as continuation of under-represented groups. Practically, this knowledge is vital so the Inclusive Newcastle Knowledge Centre can have a better grasp on the concept when evaluating projects on their success or failure to foster a “sense of belonging and community” and be equipped to critique the concept and how it may be used by different institutions for different reasons and meaning-making.

The literature review draws on research from a range of disciplines and approaches, incorporating findings from education research, sociological, psychological and international studies journals from both qualitative and quantitative studies. The breadth of sources demonstrates the prevalence of this notion of a sense of belonging for students in higher education, and thus the importance of solidifying common understandings when considering research and practical action in higher education institutions. Throughout the research process, it has become clear that ‘belonging interventions’ – various activities and methods delivered with the aim of improving sense of belonging for students – offer a wealth of evidence and recommendations related to sense of belonging’s impact on academic outcomes. Therefore, some of these studies are explored in-depth to ensure our understandings of belonging are rooted in research and can potentially be used when considering the types of belonging interventions that Newcastle University may wish to engage with.

Definitions of Sense of Belonging and Community

Defining these terms is crucial to embed an understanding of the concepts and ensure all those involved in this work are ‘on the same page’ when reviewing research and interventions. Within the literature reviewed thus far, there is not one singular definition of the idea of belonging shared by all authors; however, their interpretations share key common threads which explain the essence of this concept. There is an understanding that the sense of belonging in the academic sphere requires a specific definition, with Good noting that “sense of belonging to an academic domain likely contains various components, but at its heart it reflects the feeling that one fits in, belongs to, or is a member of the academic community in question... sense of belonging may also entail a sense of being valued and accepted by fellow members of the discipline” (2012: 700). The notion of being valued, accepted and being a part of the academic community is mirrored in other definitions, such as the definitions noted in Thomas’ report (2012):

“At the individual level ‘belonging’ recognises students’ subjective feelings of relatedness or connectedness to the institution. This “involves feeling connected (or feeling that one belongs in a social milieu)” (Vallerand, 1997, p. 300). It may relate to “the extent to which students feel personally accepted, respected, included, and supported by others in the [school] social environment” (Goodenow, 1993a, p. 80).” (12)

Similarly, Yan and Pei’s conceptualisation of belonging is “defined as a sense of (a) being valued, needed, and accepted, and (b) being a complement to an environment or a system” (2018: 455). Yan and Pei also draw on Hagerty *et al* (1992) to explain sense of belonging as “connecting one’s self [with] the fabric of surrounding people, places, and things” (1992: 173), developing the idea of connection with the existing environment as key to belonging. Clearly, acceptance and feeling valued are key components of definitions of sense of belonging in higher education, but the context of the academic environment must be considered to fully engage with goals to belong to the specific institution and the meanings within that.

Some authors closely associated other terms to the sense of belonging, particularly the idea of social integration (Brooman and Darwent, 2013) as the “extent to which a student feels connected to the college environment, peers, faculty and others in college and is involved in campus activities” (Lotkowski *et al*, 2004: 6). Whilst this definition perhaps overlaps with some other authors readings of sense of belonging, Brooman and Darwent operationalise social integration to measure changes in students’ engagement with the university through their social interactions and relationships with staff and students. Weiss references Brooman and Darwent’s study in her article, noting that “in the field of higher education, sense of belonging is often referred to as student abilities to build social networks, which can facilitate transition to university” (2021: 1). The links between social networks, belonging and success at university are shown through various definitions and are important to contextualise the relevance of belonging for students and universities.

Walton and Cohen outline that “social belonging – a sense of having positive relationships with others – is a fundamental human need” (2011: 1447) and can impact wellbeing, health and intellectual achievement. The impact of belonging on other areas of life will be expanded on further within the literature review, but, notably, multiple authors make similar connections between belonging, health and academic outcomes within their definitions. Through engaging with the varying definitions of sense of belonging, it is clear that most authors do not see the concept of belonging in isolation and make various connections between this socio-psychological feeling of belonging and its impact on other aspects of an individual’s life and experience through social connections, sense of inner value and fitting into the university’s fabric of existence.

One notable definition of belonging in the academic context arose from Lewis and Hodges’ research, which focused specifically on “the importance of feeling a sense of belonging within academia” (2014: 197) and questioned whether uncertainty about belonging can determine academic success and retention. This research will be discussed in-depth in a later section, but their proposal is important to include here, as they consider the two dimensions of “social fit” and “ability fit” as the foundations of sense of belonging in university. They propose that “overall academic belonging is likely to be comprised of both social and ability fit, and individuals might question whether they fit within a field of study on either or both of these dimensions” (2014: 198). This specific language of social and ability fit offers a more complete definition of sense of belonging for students in an academic environment and is put forward here as a key point to shape a shared understanding of the definition of sense of belonging in academic communities.

Lewis and Hodges suggest that students gauge their own sense of belonging based on how well they fit in socially, drawing on similar ideas to Brooman and Darwent about social integration and building connections with peers and professors, which is widely agreed on within other definitions already noted. Where they differ, however, is the specific focus on how students feel they fit into the academic environment in terms of their academic abilities and success – if students feel uncertain about their intellectual and practical abilities necessary for their discipline, they feel less motivated to continue and like they didn't belong. By correlating this “ability uncertainty” with social belonging (Lewis and Hodges, 2014: 202), it is made clear that sense of belonging in academic communities goes beyond social networking and feeling like one belongs in a social sense. This expands the definitions already discussed to reflect the realities more clearly for students wishing to fit into their university, both in terms of mixing with others and in terms of feeling like their academic abilities ‘fit in’ with those around them. Both components appear to be important for cultivating a sense of belonging in the university, and it is important that higher education institutions consider how social and academic/ability fit contribute to the sense of belonging for their students, as focusing on only one of these measures is unlikely to significantly improve belonging.

Ultimately, the search for a definition of sense of belonging has found multiple interpretations, all of which have merit and utility in different contexts. To move towards shared understandings of the term, necessary to aid belonging interventions, I have developed the following lists of components which are considered key to the concept of a sense of belonging:

‘Social fit’

- A feeling of fitting in and being part of an academic community
- Feeling accepted and valued socially, as part of a cohort or identity group
- Connection with peers
- Connection with staff and mentors
- Positive experience of engagement with the community, campus and university
- Low levels of concern about negative stereotypes and biases about their ability to fit in socially

‘Academic/ability fit’

- A feeling of fitting in and being part of an academic community
- Feeling accepted and valued academically, as part of their course cohort
- Positive experience of engagement with academia (the community, facilities and university)
- Feeling capable and comparable in their abilities to their peers
- Low levels of concern about negative stereotypes and biases about their academic abilities

Whilst these suggested components are listed under social and academic/ability fit categories, belonging is complicated and many of the strands that make up a sense of belonging are intertwined with both social and academic experiences. Feeling a sense of belonging is subjective, personal and difficult to generalise; the range of definitions explored here is a testament to that. Thus, it may not be possible for academics and practitioners to decide on an overarching singular definition of what a sense of belonging means in the academic domain – but we can aim to agree on common threads and principles to help us make sense of what we all really mean when we talk about belonging.

The notion of community is entangled with sense of belonging, with many authors referencing the idea of community within their own definitions of belonging, so it has not been discussed in depth

here separately. Community can take different forms, with much research focusing on the “academic community”, as a group with shared interests and attitudes within the university environment (Good, 2012). Researchers seem to consider these academic communities to be tied to a particular institution, or discipline, comprised of staff and students participating in the social unit. Good focuses on the sense of belonging for women in the mathematics community at university, arguing that when individuals feel they don’t belong to a specific academic community, they “may opt out of the domain— even when achievement remains high—to pursue studies and professional goals within a different discipline that better enables this sense of belonging to take root” (2012: 701). Clearly, belonging and community are linked, and it is important to consider which communities students may feel a part of and how there may be shifting perceptions of belonging, dependent on how accepted students feel in individual disciplines, cohorts and universities.

Sense of Belonging, Academic Outcomes & Belonging Interventions

Cultivating a sense of belonging and community for students at university has the potential to be perceived as something additional to curriculum preparation and a supplementary goal to be strived for. However, there is a strong base of research that suggests that a sense of belonging is related to academic achievement, retention and success at university and beyond. Therefore, creating a sense of belonging should be taken seriously and considered a core part of the student academic experience which universities need to invest in to ensure all students achieve their academic potential. This section of the literature review will explore some of the connections made by researchers between belonging and academic outcomes such as continuation, grade performance and attainment, and how these may be applied to the Russell Group context. Research suggests that sense of belonging can be improved through “belonging interventions”, which various research projects have trialled and largely found positive results for. This section outlines some belonging interventions from key studies, such as Thomas (2012), Mannay and Ward (2020), Walton and Cohen (2011) and Yeager *et al* (2016), and their impact on academic outcomes for students.

Walton and Cohen

Walton and Cohen’s research demonstrates significant results in the academic and health outcomes of students over 3 years at an American college with the use of a belonging intervention. This intervention consisted of students reading a report of a survey of more senior students in their college talking about how they “had worried about whether they belonged in college during the difficult first year but grew confident in their belonging with time” and the participating students then wrote an essay “describing how their own experiences in college echoed the experiences summarized in the survey” (2011: 1448). The intervention “aimed to lessen psychological perceptions of threat on campus by framing social adversity as common and transient” (2011: 1447) through attitude-change strategies to encourage students to internalise the intervention messages during the essay exercise. The focus on framing social struggles as common and temporary is replicated in other studies (Yeager *et al*, 2016; Murphy, 2020), highlighting how the self-belief that struggling to adapt to university is an indicator of not belonging to the university is influential on students’ academic outcomes. By changing perceptions of difficulties settling in, from being something that may reinforce students’ own fears about whether they belong to the academic community, to something that all students experience and can move forwards from, the aim is to reassure students that their experiences are shared by their peers and are likely to improve. As this

article states, the intervention messages “encouraged students to attribute adversity not to fixed deficits unique to themselves or their ethnic group but to common and transient aspects of the college-adjustment process” (2011: 1448), which could be especially important for non-traditional students who worry their struggles are an issue with them, rather than the usual struggles of undergoing a significant life transition.

Walton and Cohen’s use of the belonging intervention had highly noteworthy results, particularly benefitting African American students, a “stereotyped and socially marginalised group in academics” (2011: 1447). They found that the belonging intervention “raised African Americans’ grade-point average (GPA) relative to multiple control groups and halved the minority achievement gap” (ibid). By the students’ senior year, the attainment gap in grade point average (GPA) between European American and African American students “was cut by 79%” (ibid: 1448); this result suggests the intervention is highly effective in improving grades for under-represented students. The research argues that the changes in attainment were related to the belonging intervention, which “robbed adversity of its symbolic meaning for African Americans, untethering their sense of belonging from daily hardship” (ibid: 1449). Walton and Cohen suggest that this increased resilience to hardship contributed both to a greater sense of belonging, and the related positive academic outcomes, as those whose “belonging was more robust to daily adversity...showed greater improvement in their 3-year postintervention GPA” (ibid). With many Russell Group universities now examining their own racial attainment and awarding gaps between black and white students, the results of this study suggest that similar interventions could yield similarly promising results in reducing these gaps by bolstering belonging and, in turn, academic performance.

Alongside these positive academic outcomes, the study also found that “the intervention improved African Americans’ self-reported health and well-being and reduced their reported number of doctor visits 3 years postintervention” (ibid: 1447), suggesting that sense of belonging can also affect an individual’s health and wellbeing, not just their academic performance. With these results suggesting that “social belonging is a psychological lever where targeted intervention can have broad consequences that lessen inequalities in achievement and health” (ibid), Walton and Cohen’s work offers robust findings to support these claims and highlights how a brief belonging intervention could have long-lasting impacts on students’ health and academic outcomes.

Yeager *et al.*

Whilst Walton and Cohen’s study participants were college first-year students observed throughout their degree, Yeager *et al.*’s study considers how belonging interventions delivered pre-entry could impact student’s sense of belonging and academic outcomes. Yeager’s approach draws on the same assumptions of Walton and Cohen’s, that “college students benefit when they understand that challenges in the transition to college are common and improvable and, thus, that early struggles need not portend a permanent lack of belonging or potential” (Yeager *et al.*, 2016: 3341), but takes this further to question whether delivering these lessons could be effective before college matriculation for US students. This lay theory intervention – used to “help people interpret adversities they encounter” (ibid: 3342) – was tested with a large sample size and a range of preparatory lay theory interventions, leading to largely generalisable and reliable results which could be tested in other contexts.

The social belonging intervention “effectively taught the lay theory that many students feel that they do not belong at first in college but come to do so over time” (ibid: 3343) and survey results 6

months after the delivery of the intervention suggested that “the social belonging intervention increased students’ social and academic integration on campus” (ibid). The interventions also impacted continuation in full-time enrolment, which found a 9% increase in continuation for students who received the interventions (ibid). In terms of academic achievement, the experiments “showed improvement in disadvantaged students’ achievement in the first year of college” and “the treatments reduced raw achievement gaps by 31-40%” between students from disadvantaged and non-disadvantaged backgrounds (ibid: 3346). This significant achievement gap reduction suggests the interventions were effective, particularly for disadvantaged students (which Yeager *et al* defined as “negatively stereotyped racial/ethnic minority students and first-generation students” (ibid: 3342)). These outcomes suggest that belonging interventions delivered before university entry can ease the transition and lead to significantly better continuation and achievement rates for students, particularly those from under-represented backgrounds.

Alongside the notable improvements in academic outcomes, it is worth noting that follow-up surveys with the student participants from this study suggest that “the interventions improved disadvantaged students’ overall college experiences, promoting use of student support services and the development of friendship networks and mentor relationships” (ibid). Engagement with campus activities and participating in social networks is a key indicator of sense of belonging for students (Thomas, 2012) and these results suggest that this intervention may have a long-lasting impact that improves students experience throughout university.

Murphy

Murphy (2020) focuses on broad-access institutions in America - colleges that tend to have minimally selective admissions policies, and often recruit a higher number of non-traditional university students, including first-generation and racial minority students. This is particularly interesting as it questions how belonging may impact persistence and completion of degrees for non-traditional students even in institutions where they are the majority. Murphy’s decision to focus on a broad-access institution offers another angle to this area of research, with most existing studies (Walton and Cohen, 2011; Yeager *et al*, 2016) taking place in elite institutions or Ivy League colleges, the US equivalent to Russell Groups in terms of status and traditional student demographics. Whilst this literature review needs to offer comparative studies from institutions similar to the Newcastle context, it is also relevant to consider how belonging impacts under-represented students regardless of the status and demographic of their university and establish whether belonging is a universal concern for students.

The intervention in this research was delivered as a “reading-and-writing exercise in all required first-year writing courses” (Murphy, 2020: 2), customising existing intervention materials from Walton and Cohen to adapt them for the university’s context. The participating students “read stories from upper-year students that highlighted common academic and social challenges to belonging in this context and represented these challenges as normal and temporary. Students were then asked to complete writing exercises to facilitate the personalization and internalization of the core belonging message.” (ibid), mirroring similar methods from Walton and Cohen and Yeager *et al*. Murphy’s belonging intervention, aimed at improving first-year students’ sense of belonging, “increased the likelihood that racial-ethnic minority and first-generation students maintained continuous enrolment” and promoted “greater feelings of social and academic fit one-year post-intervention” (2020: 1). These results specifically relate to Lewis and Hodges’ concept of social and academic fit, supporting their hypothesis that both elements of ‘fitting in’ are important for a

student's confidence and academic outcomes. The results also support the notion that internalising messages about struggles being normal and transient leads to better academic outcomes and improved feelings of belonging and engagement with the academic community.

Mannay and Ward

Mannay and Ward's belonging intervention is regarded by other researchers, such as Weiss, as an example of best practice in fostering a sense of belonging for underrepresented students. Their article shows the detail and efficiency of the 'Coffee Club' activity aimed at improving participation and engagement for mature students in universities in Wales. They contextualise the landscape of higher education in the UK, which is positioned as a "gateway to social mobility" but argue that "entrance to the academy and success within its institutions, particularly elite universities, is highly differentiated" (2020: 226). To challenge the realities of non-traditional students feeling unsupported in university, the researchers initiated the 'Coffee Club' "as a safe space where students could build a supportive peer network" and evaluated its potential to "attend to the barriers faced by mature and non-traditional students and improve their experiences of university" (ibid: 227). As other research states, network-building is a crucial element of belonging (Thomas, 2012; Brooman and Darwent, 2013), so an intervention dedicated to this could potentially have a significant impact on non-traditional students' feelings of belonging and acceptance within university.

The Coffee Club was created in response to initial research aiming to engage mature students at a Welsh university to establish their challenges and barriers at university. Using creative and innovative methods to evaluate how mature students felt about their first-year experience, the research design involved sandboxing, which "facilitates participants to metaphorically represent their ideas and experiences" through creating scenes out of sand and objects (ibid: 229), followed by an interview to discuss the meanings of their creations. Common themes were isolation, feeling different due to age, socio-economic status and class, and difficulties in finding someone to confide in and "form a support network" (ibid: 231). The researchers created the Coffee Club to address these struggles of building networks on campus, in the form of a fortnightly coffee club where students had opportunities to "build support networks, share problems and solutions, and interact with other students with whom they shared similar characteristics" (ibid: 232). The sessions were particularly useful for sharing experiences from older students and staff with similar backgrounds, drawing on the heart of other interventions' focus on sharing experiences and framing difficulties as normal and something that can be overcome. From a survey of participants, results suggested that "the Coffee Club has offered a forum for talking through difficulties and the opportunity to forge sustained networks" (ibid: 234), which is a key component of fostering a sense of belonging.

Drawing on the success of the Coffee Club at one Welsh university, a similar initiative was set up in another Welsh university, which "also welcomed other non-traditional university students, for example, those who might be the first in their families to go to university, young parents and students from different cultural backgrounds" (ibid: 236). It is important to note that in this university, the Coffee Club did not flourish over time: "Despite its initial success with students forming social networks, attendance dropped to two or three regulars and the future of the Coffee Club became uncertain" (ibid: 238). This may be due to the networking opportunities of the Coffee Club creating links between students who then preferred to continue these connections more informally, or the students involved were less in need of the intervention (ibid). In this particular university, subjects such as nursing and social work were popular with mature students, perhaps

coming from work, who may have existing networks outside of the university and less interest in building these during their demanding practical courses. The differing success between these two universities highlights the importance of context when considering which interventions may be most appropriate and what students want and need.

Thomas

Thomas' 2012 report encompasses swathes of research around belonging in the university context, with several studies focusing on different elements of social integration as well as induction and personal tutoring best practice. The report was commissioned to "generate evidence-based analysis and evaluation about the most effective practices to ensure high continuation and completion rates through seven projects involving 22 higher education institutions" (2012: 8), so offers a very broad view of various projects. The report complements other findings about the influence of sense of belonging on student retention and engagement, concluding that there is "a compelling case that in higher education, belonging is critical to student retention and success" (ibid: 10). Various projects observed in the study support this case, and wider evidence across the projects "firmly points to the importance of students having a strong sense of belonging in HE, which is the result of engagement, and that this is most effectively nurtured through mainstream activities with an overt academic purpose that all students participate in" (ibid: 12). Thomas notes that belonging interventions should be mainstream and delivered in the academic sphere to entire cohorts of students to be effective, with a focus on 'opt-out' methods so less confident students are still able to participate without having to nominate themselves. This is an interesting suggestion, particularly as most research thus far has focused on the benefits for under-represented groups, whilst Thomas clearly sees value in expanding these interventions to all students regardless of their background.

The insights of the report are vast and cover induction programmes, personal tutoring best practices and various other interventions, which are too much to include here in detail. However, key findings emphasised the importance of students' engagement with staff and students, the role of professional services in developing student's confidence and early institutional outreach interventions to support students from the beginning of their higher education journey. Thomas' key recommendation for improving student retention and success summarises the conclusions that can be drawn from the overwhelming evidence linking belonging with academic outcomes explored throughout this section:

"All interventions or activities should aim to nurture a culture of belonging through supportive peer relations, meaningful interaction between staff and students, developing students' knowledge, confidence and identity as successful HE learners and an HE experience that is relevant to interests and future goals" (ibid: 20).

Belonging Interventions and the Role of the University

The previous section has shown compelling evidence that belonging interventions impact students' sense of belonging, their academic outcomes and even their health. It has become clear through this research that commitment to delivering belonging interventions can result in positive changes for students, which are also desirable for universities as retention and grade performance improves. This section will discuss the role of the university in providing belonging interventions, outlining approaches that the research recommends universities follow. Some critiques about how higher

education institutions should be supporting this work will also be highlighted, based on points raised by authors like Mannay and Ward, Thomas, and Weiss.

Intervention delivery to whole cohorts

Multiple authors support the idea that universities should deliver belonging interventions to entire cohorts, rather than focusing only on under-represented groups. The *What Works?* project report from Thomas explains that evidence from the studies analysed “firmly points to the importance of students having a strong sense of belonging in HE, which is the result of engagement, and that this is most effectively nurtured through mainstream activities with an overt academic purpose that all students participate in” (Thomas, 2012: 12). This clearly states the importance of *all* students participating in activities designed to improve belonging and engagement, and Thomas highlights that “the academic sphere is of primary importance to ensure all students benefit” (ibid: 15). Thomas argues that delivering belonging activities through the academic sphere is most effective, and whilst social and professional services interventions have a role, the most effective interventions have “an overt academic purpose” (ibid). This may look like induction activities, personal tutoring or specialised seminars and tasks delivered, perhaps utilising methods from studies like Yeager, Walton and Cohen or Brooman and Darwent.

For example, Brooman and Darwent created a core module for law students, Independent Learning in Law (ILL), “which included closer contact with a personal tutor, involvement of second and third years in ‘guidance’ seminars, early return of a marked piece of work, the use of a reflective diary and a summative reflective assessment of the transition period” (2013: 1524). Similar modules could be developed for all first-year students across a particular programme or school, or even more efficiently, across the entire university. Notably, Brooman and Darwent view the successful transition to university as a longer-term, complex process that needs to go beyond induction activities in the initial arrival period, as “‘induction’ (‘first-contact’ during week one) forms part of the overall ‘transition’ strategy, which we see as the longer process of acclimatisation during the first year” (ibid). Other research supports this need for longer processes of transition, with particular support for engagement before entering university.

Early engagement

Thomas highlights that “it is essential that engagement begins early with institutional outreach interventions and that it extends throughout the process of preparing for and entering HE”, noting that these pre-entry and induction activities need to support students to “build social relationships with current and new students and members of staff, and engage students with information that will enable them to assess whether the course is relevant to their current interests and future aspirations” (2012: 17). This early engagement is shown by Yeager *et al* to be effective, as their pre-matriculation lay theory intervention “raised first-year full-time college enrolment among students from socially and economically disadvantaged backgrounds” and “improved disadvantaged students’ overall college experiences, promoting use of student support services and the development of friendship networks and mentor relationships” (2016: 3341).

Yeager questioned whether detailed materials would be useful pre-entry for students, suggesting that a too in-depth approach may fail as the challenges of college have not yet been experienced and students may forget material before class begins (ibid). Therefore, their study aims instead to

challenge students' preconceptions about starting college, through providing a lay theory of the transition, "a starting hypothesis that many challenges in the transition are common and not cause to doubt one's prospects of belonging and success" (ibid). By helping students make sense of the challenges to come and offer support in how to overcome these, students are more likely to feel able to cope with difficulties and understand them as temporary challenges, and the inequalities between different demographic groups experiences of belonging should be reduced. Delivering these messages earlier aims to facilitate an easier and more enjoyable transition and avoid students struggling before post-entry interventions can be delivered, ultimately improving their experience as new students who understand what difficulties they may face.

Yeager acknowledges the benefits of lay theory interventions for "students who have the greatest reason to draw negative inferences from adversities in college", which they highlight as "students from racial/ethnic minority groups and those who would be the first in their families to earn a college degree [who] can face negative stereotypes about their intellectual ability, numeric underrepresentation, and other group-based threats on campus" (ibid: 3342). However, they also note that the strategy could be delivered to entire cohorts, with perhaps heightened benefits for students from under-represented groups when these interventions are delivered at scale:

"Moreover, because many colleges have structural opportunities to reach students en masse before matriculation— such as first-year student registration or orientation—this strategy might remedy a portion of group disparities at institutional scale." (ibid: 3341)

Student involvement in intervention design

As well as the importance of early and sustained interventions to improve sense of belonging, the involvement of students in the design of these interventions is also highlighted by both Weiss and Murphy. Weiss and Murphy both include references to the importance of student involvement and voice in designing interventions and in establishing barriers to belonging in that particular university context. Notably, Weiss states that "universities can engage better with diverse learners" and uses her article to "reflect on the responsibility of universities to foster a sense of belonging among students" (2021: 92), with a clear position that universities need to take accountability. She acknowledges that "universities play a key role in fostering social inclusion" but, referencing Mannay and Ward's research, Weiss argues that "the support that is offered to students is often inadequate and not targeted to their needs, such as fostering a sense of belonging through establishing relationships with peers" (2021: 95). The article focuses on how this lack of institutional support disproportionately impacts under-represented student groups, who are likely to face significant challenges when beginning university, and Weiss argues that "in order to foster their ability to build a sense of belonging at university, it is necessary to individualise support" (ibid). Weiss, then, strongly believes that universities need to invest time, energy, and effort into personalising and individualising support for students to ensure they can build this sense of belonging. Importantly, she suggests that "students should be actively involved in designing measures and in creating initiatives for making universities more inclusive spaces" and that "student voices need to be included in mission statements of all universities" (ibid). Student voice is highlighted here as a key component of successful belonging interventions, which in turn create more inclusive spaces, a greater sense of belonging for students, and the associated increases to student retention and completion rates for universities.

The active student involvement in designing interventions, which Weiss calls for as best practice for universities, is seen in practice in Murphy's research centred on belonging interventions in a broad-access university. Murphy's research aimed to fill a gap in the literature left by most belonging intervention studies taking place in elite universities, by considering if the same belonging interventions would be effective in a less selective institution. This gap meant the existing materials for belonging interventions were created for these elite institution contexts, so Murphy needed to develop the methods used first by Walton and Cohen. Murphy adapted the social-belonging intervention for the broad-access institutional context:

“Starting with intervention materials that had effectively bolstered students' sense of belonging and fit at highly selective universities (9, 12), our research team engaged in an extensive customization process in partnership with upper-year students and university administrators to redesign materials that would (i) address the specific barriers and obstacles to belonging that students in this broad-access context face and (ii) model coping strategies that were available and effective in that context.” (2020: 2)

This importance placed here on working in partnership with students to design the most appropriate materials to suit the context of the study should be considered by universities when thinking about adapting existing materials and methods to their contexts. Whilst the original materials used by Walton and Cohen would likely be fairly appropriate for the Russell Group university context, there may be a need to customise the materials further due to more up-to-date research or to adapt from the US to UK context; these processes should include student input, following these best practice examples from Murphy and Weiss to ensure any interventions are as effective as possible.

Tackling procedural barriers

Yeager and Murphy both emphasise the importance of tackling other barriers facing students, and stress that belonging interventions delivered in isolation are not likely to be very effective if other barriers remain. As Murphy highlights, “if students lack learning opportunities, if bureaucratic processes are prohibitive, or if needed financial aid is lacking, psychological interventions might not work” (2020: 5). Murphy argues that if universities don't work on other issues alongside sense of belonging, then these may not be effective, and students may still struggle to cope at university. These factors intersect, as sense of belonging can be impacted by financial barriers and perceived lack of financial support from the university. For example, low-income students may assume the university doesn't accommodate people like them and that they don't belong because they can't afford to fully participate.

Yeager draws attention to complementary research about behavioural economic approaches, “which show that remedying procedural barriers (like simplifying the completion of financial aid forms and text messages to remind students to pay registration fees or select courses) can increase college persistence” (2016: 3346). This suggests that by minimising bureaucratic procedures and being proactive with support and signposting, universities can positively impact persistence and continuation. This complements the findings from belonging interventions, with a strong sense from these authors that belonging interventions should be delivered alongside, and connected to, interventions to minimise procedural barriers, which may impact vulnerable student groups more. Thus, the research suggests that the best impact on students' sense of belonging and academic outcomes comes from a combination of interventions and approaches to reduce barriers socially, academically and economically.

Commitment and resources needed for success

Various authors who have been referenced throughout the literature review argue that all higher education institutions should be proactive in supporting their students to succeed, and that planning and delivering belonging interventions should be part of this. Thomas outlines that “the notion of engagement should be embedded into the institutional vision” and, crucially, that “developing engagement opportunities throughout the institution and across the student life cycle requires all staff to be involved - it is not a task that can be left to a few committed individuals” (2012: 19). Thomas emphasises that institutions cannot rely on a small number of keen staff to do the work, particularly when this work isn’t supported through wider policies, “recognition, support and development and reward” for staff involved (ibid).

Mannay and Ward echo this emphasis that staff doing this work should be supported, as they suggest their Coffee Club intervention was not embedded into university structures well enough: “an over-reliance on key individuals is unsustainable, as without a defined institutional role the meetings could come to an end if the authors move to different positions” (2021: 239). The administrative burden for the Coffee Clubs was taken on by volunteers out of goodwill and personal interest in the project and wasn’t accounted for in workload allocations by the university, which the authors warn could mean the interventions have to end if staff leads become too busy or leave the institution. If interventions are to last and be effective, there is a clear need for universities to invest in staff recognition, resources, support, and remuneration into this work, or risk the interventions becoming unsustainable and no longer effective in supporting students’ sense of belonging and related academic outcomes.

Manny and Ward strongly feel that it is the responsibility of the university to embed the work of supporting underrepresented student groups into existing structures and ensure the work is taken seriously: “there is an onus on institutions to assist non-traditional, mature students to form supportive networks, which can engender successful journeys in higher education” (ibid). Other research appears to agree with this sentiment, that universities do have a responsibility to invest in supporting students, as Weiss, Brooman and Darwent, and Murphy make similar points in their research about delivering belonging interventions, universities committing to longer transition processes, and the importance of universities anticipating the concerns their students may have on entry. This is clearly outlined by Murphy, highlighting the need for universities to be open to change and proactive in providing support to facilitate a sense of belonging:

“It is essential that schools anticipate the worries about belonging that students commonly experience as they come to college, especially from positions of social disadvantage, and then help students to both adopt adaptive mindsets about belonging as a process and create contexts in which students can use this mindset to legitimately and authentically develop their belonging in the institutional context with time” (Murphy, 2020: 5).

Under-represented Student Groups and Sense of Belonging

As already seen throughout the literature review, much of the research in this area focuses on belonging interventions and academic outcomes for under-represented groups. Whilst it is likely that belonging interventions will benefit wider groups of students (Thomas, 2012), there is evidence to suggest these are particularly impactful for under-represented student groups who may be more

likely to feel a lack of belonging to the academic community due to historical bias, under-representation, and stereotypes. This section will delve more deeply into research focused on under-represented student groups and consider how non-traditional students may uniquely benefit from belonging interventions to improve their student experience and academic outcomes.

Historical exclusion and stereotypes

Whilst all university and college students are likely to experience some struggles as they adjust to a new phase in their life, students from some underrepresented groups are disproportionately impacted by challenges. Murphy outlines that in selective university contexts, such as Ivy League or Russell Group settings, “worries about belonging among racial-minority and first-generation college students can arise from awareness of the historic exclusion of their groups or families from American higher education and of cultural stereotypes that impugn their intellectual abilities” (2020: 1). It is relevant to note the historical stereotypes that exist which make negative assumptions about the intelligence and academic capability of racial minorities, such as stereotypes that label black people as less intelligent than their white peers (Green, 2021; Plous and Williams, 1995), which are likely to impact a black student’s confidence and fuel fears of not academically fitting in, an important criterion for feeling a sense of belonging.

This impact of historical exclusion and the associated assumptions others make about students from backgrounds where attending higher education has been less common is also highlighted by Lewis and Hodges. They argue that research investigating belonging and student persistence shows that “sense of belonging is a significant predictor of positive academic outcomes, and perhaps even more so for historically marginalized and stereotyped groups” (2014: 197). They expand on who they define as being included in these groups, by referencing Walton and Cohen’s findings of “buffering African American students’ belonging in college by normalizing concerns as something experienced by all students predicted increased academic engagement and achievement”; Lewis and Hodges suggest that it is understandable that African American students would benefit from belonging interventions “because African American students may encounter under-representation throughout multiple aspects of college life (social and academic), it makes sense that they may question belonging generally” (ibid). Here, the authors draw links between academic performance, belonging, and the reality of being a racialised minority in the university context.

For students whose identity has been historically excluded from higher education spaces, it does indeed ‘make sense’ that they would “perceive common challenges in college—such as struggles making friends or receiving a poor grade early in the term—as signs that they do not belong” (Murphy, 2020: 1). These students are less likely to have positive educational experiences of people similar to them, such as their family or peers, to reassure them that their experience is normal, and those who feel a wider societal lack of belonging are, unsurprisingly, less resilient to struggles in the academic environment. It’s important to note that the authors discussed here are all working within the American context, with specific reference to the experience of African Americans in the US higher education system; it is not yet clear from the literature available how far these feelings and experiences would apply for Black British students or black students from other countries and educational contexts.

Similar struggles with stereotypes impacting sense of belonging were highlighted by Yan and Pei in their research investigating how international students studying in the US handled difficult experiences (2018). Some experiences were particular to the international student experience, with

the struggles to “live and study in this unfamiliar culture with its unfamiliar education system” (2018: 454), whilst some issues have similarities to the lack of belonging that was felt by African Americans in Walton and Cohen’s study. Yan and Pei highlight that “international students can face exclusion, prejudice, questioning of their academic credibility, and discrimination” (ibid). We can draw similarities between the questioning of academic credibility for international students, who are a diverse group but who are often homogenised and viewed simply as ‘other,’ and the stereotypes around the academic credibility of African American students discussed already. Notably, Yan and Pei argue that for students not originally from English-speaking countries, mostly East Asians and Central and South Americans, they suffer harassment and discrimination which causes them “to devalue their own ethnic/racial group, justify the inequalities, and legitimize their status quo by believing that they deserve such a low status” (ibid: 455). This internalisation of beliefs and stereotypes about their identity group impacts sense of belonging; if the student feels their race, language and cultural identity is not being accepted, they begin to believe that they do not belong and shouldn’t be accepted, as these stereotypes and assumptions can be very influential and deep rooted. As this literature review has established, social networks are key to a sense of belonging, and if these social connections are damaged by negative biases about the ‘fit’ of an individual based on their place of origin, race, or previous education, it follows that a sense of belonging would be damaged too. Yan and Pei reference findings from AhnAllen *et al.*’s study of the sense of belonging and group exclusion for Japanese European Americans, which correlate with this point:

“Exclusion from a community or society (i.e., discrimination, comments about differences, and subtle looks and stares that convey the impression ‘you do not belong here’) precludes or diminishes any sense of belonging to this community or society” (Yan and Pei, 2018: 456, from AhnAllen *et al.*, 2006: 683).

Decision-making for working-class students

As well as the clear evidence of how racial minorities and international students can find their sense of belonging impacted by the external factors of stereotypes and assumptions, largely based on racist and xenophobic bias, there is also evidence to suggest that first-generation and working-class students experience different, but somewhat comparable, feelings of not belonging due to societal expectations of where they fit in. Reay *et al* (1991) begin to explore the different experiences of applying to university for middle-class and working-class students in the UK with a focus on “how class and ‘race’ issues interrelate in their decision-making” (1991: 855). Whilst the text is from 1991, before some of the most influential changes to higher education (e.g., introduction of tuition fees, growing marketisation of universities) so will lack some of the nuance and up-to-date issues that today’s students must consider, Reay still offers a valuable insight into how non-traditional students have viewed university and their place within it.

Reay found that for some of the working-class students interviewed in the research, the choice-making about higher education destinations was “a process of psychological self-exclusion in which traditional universities are often discounted” (ibid: 863). Working-class students were anticipating a sense of exclusion from traditional (Russell Group) universities, and so were excluding themselves before that could be experienced, with one student interviewed expressing discomfort at elite universities as “daunting,” and “his priority is to go to an institution where he is comfortable, somewhere where there is a chance he will feel at home within education” (ibid: 864). Reay’s research demonstrates the importance of belonging for students, especially those who feel more out of place in higher education, and that students from these under-represented groups tend to

have a keen sense of what places are ‘for them’ or where they will find others like them. If they perceive a university to be for people ‘not like them,’ they may actively decide to attend a different university that feels more relatable and inclusive, regardless of the university’s league table status.

Working-class and racialised minority students were “wrestling with difficult conflictual feelings about what constitutes a good university for them” with considerations to league tables and academic performance but also “the problems inherent in going places ‘where there are few people like me’” (ibid: 865). This classed and racialised conflict for these students highlights some of the barriers to feeling part of a university, especially where reputation and knowledge about “overwhelmingly white and middle-class” (ibid: 858) student populations have to be considered. This work was published when there were less non-traditional students entering university, and it would be insightful to compare these experiences to how students are making decisions about their universities in the contemporary context, with the development of widening participation programmes as well as increased tuition fees and marketised education. This literature review has not been able to conduct this comparative research, and whilst the limitations of Reay’s work are acknowledged due to the evolution of university and access over the years, it is thought that some of the findings outlined here will continue to strike a chord with students from underrepresented groups.

Lack of belonging in discipline

Some identities may feel less belonging in particular disciplines within the university, rather than being noted as a group vulnerable to a lack of belonging in general. Generally, in the research studied for this review, there has been very little statistically significant evidence of disparities in belonging for female students versus male students in relation to sense of belonging, impact from belonging interventions or academic outcomes. However, there appears to be some instances where women’s sense of belonging has been highlighted as an issue. This was found in Good’s study (2012) about women in mathematics and their feelings of belonging, particularly in relation to the perpetuation of negative stereotypes about women’s math ability.

Good specifically considers women’s “sense of belonging to math – one’s feelings of membership and acceptance in the math domain” (2012: 700) in her research, as women are particularly under-represented in maths, and it is suggested that a lack of belonging could contribute to this gap in representation between men and women studying and working in maths. Whilst gendered experiences haven’t been discussed significantly in other texts within this literature review, Good offers a compelling argument that negative stereotypes about women’s maths ability have an impact in their academic outcomes, sense of belonging and interest in continuing to pursue maths. She found that “in a longitudinal study of calculus students, students’ perceptions of 2 factors in their math environment—the message that math ability is a fixed trait and the stereotype that women have less of this ability than men—worked together to erode women’s, but not men’s, sense of belonging in math” (ibid). This lowered sense of belonging impacted “women’s desire to pursue math in the future and their math grades”; these findings correlate to the significant evidence from other studies that sense of belonging impacts persistence and academic outcomes and suggest that this is an area to improve on the experience of women studying maths.

Good offers an interesting angle on the common belonging intervention approach which frames challenges as normal and transitional, testing messages that math ability could be acquired and wasn’t fixed or innate – as the idea of maths as a fixed trait is linked with the “stereotype that

women have less of this ability than men". She found that "the message that math ability could be acquired protected women from negative stereotypes, allowing them to maintain a high sense of belonging in math and the intention to pursue math in the future" (ibid). Building resilience to negative stereotypes is a method that has proven effective for Walton and Cohen and others' participants, with Good honing this into a specific focus on gender and discipline. The stereotypes the study challenged are not dissimilar from stereotypes about the intelligence and ability of African Americans highlighted by Murphy, and Good argues that these stereotypes are powerful: "Negative stereotypes, however, may have the power to disrupt more than performance; they may also carry a strong message that certain groups are less valued or accepted" (ibid: 701). Good makes the connection between stereotypes, value and sense of belonging, emphasising that the impact goes beyond grades and is more deeply rooted in how students perceive the way they're seen and treated, and how that may be due to their identity and demographic groups they are part of.

When women in maths were in a supportive environment, they felt less affected by these stereotypes and felt part of the maths community, highlighting the importance of the learning environment on non-traditional students' confidence and sense of belonging. Good offers a detailed conceptualisation of sense of belonging within the academic community, which, whilst specifically referring to women in maths, can be extrapolated to other contexts to better understand the components that constitute belonging for underrepresented students:

"A sense of belonging to math likely contains various components, such as one's feelings of membership and acceptance in the domain. In addition, one's affect may also reflect sense of belonging, for feeling happy and comfortable in a domain may reflect greater belongingness than chronically feeling nervous and distressed. Moreover, a hearty sense of belonging in students may also entail a sense of trust that one's peers, colleagues, and professors have their best interests at heart and will strive to ensure their learning and success. And finally, when members of an academic community truly feel a sense of belonging, they are likely to show active participation in that community rather than desiring to fade into the background and not be noticed. Thus, sense of belonging, as we conceptualize it, involves one's personal feelings of membership and acceptance in an academic community in which positive affect, trust levels, and willingness to engage remain high." (ibid: 702)

This quote arguably demonstrates a strong universal message of belonging and its key components of trust, acceptance, strong social networks and desire to engage, which the literature review has sought to unpack throughout. Admittedly, the study itself only focuses on a very particular type of student in a particular discipline, and it would be interesting to see if there are similar experiences for other under-represented students in different discipline, such as lower income students studying Fine Art, a discipline with significant hidden costs and additional expenditure needed. However, the quote is useful to remember that different types of students may experience a significant lack of belonging in different contexts, and perhaps offers more support for the idea of a universal belonging intervention delivered to all students, as any student could find themselves struggling with a sense of belonging at some point in their studies.

Fitting in, or being fitted in with

Throughout the literature review, the idea of 'fitting in' has been crucial to our understandings of belonging and community. However, it can be easy to take the idea of fitting in at face value,

without questioning who is being asked to do the fitting in, and who is being fitted in with. There are some references to these questions within some of the texts studied, such as Mannay and Ward and Reay. Mannay and Ward argue that “despite moves to bring non-traditional students into the academy, ideas of what it means to ‘be a student’ are largely governed by discourses of the traditional, young (aged 18–21), White and middle-class student” (2020: 226). Their argument is that whilst the concept of “being a student” is decided by traditional, privileged student stereotypes, other types of students – non-traditional, less privileged – may be able to access the university, but that doesn’t mean they will be integrated fully into the ‘student experience’ as dictated by these elitist discourses. This draws attention to the question of what types of students may feel that they have to change their behaviour to fit in, and whose expectations they’re trying to meet.

Reay suggests this is largely a matter of class: “While more working-class and minority students are entering university, for the most part they are entering different universities to their middle-class counterparts” (1991: 858). This could be read as non-traditional students choosing different types of institutions to pursue studies at in comparison to their middle-class peers – often seen as ‘poly vs posh’, referencing the tendency for former polytechnic universities (post-1992 universities) to recruit more working-class and minority students than red brick or Russell Group universities, which have traditionally been the choice of the upper classes. However, it could also point towards the very different experiences middle-class students may be having to working-class and racialised minority students, with it feeling like they’re attending different universities with vastly different experiences, often due to structural and social barriers. Reay highlights the “continuing and developing forms of social stratification within higher education” (ibid), warning of the “political rhetoric of widening access” distracting from these entrenched class differences. Both Mannay and Ward and Reay suggest that discourses and structures of universities need to change to create a more equitable experience for students from different backgrounds.

A critique of the literature studied here overall is that there is no clear elaboration on the notion of ‘fitting in’ that questions where power sits within student and staff cohorts. There is some discussion of working-class and racialised minority students feeling that they need to adapt to the university context, but limited elaboration on how they feel they must adapt, class dynamics or articulating who the more advantaged students are. This raises questions about sense of belonging as a concept entirely; do students from non-traditional backgrounds, with different social and cultural capital and experiences to more ‘traditional students’, need to change themselves to fit in and feel a sense of belonging? Is there opportunity to fit in and be accepted whilst remaining true to yourself and your experiences? These questions could unravel some interesting insights into belonging, who it benefits and who it may patronise or treat as something to be changed for the sake of an improved student experience and academic outcomes.

However, we could surmise from the literature that those students with most to gain from belonging to the university (students from non-traditional backgrounds who are less likely to continue their studies if they feel a lack of belonging) are also those students who feel the most pressure to belong, through adapting to a new set of norms and expectations and overcoming challenges. Whilst it seems that the efficiency of the belonging interventions studied here is not explicitly linked to students being asked to change their sense of self or their behaviour to fit in, it is something to be aware of when discussing the notion of fitting in and critiquing research of this nature.

Drawing conclusions

The literature review has highlighted that the concepts of sense of belonging, and community are rich, complex, and highly subjective and personal to individual students attending higher education institutions. As demonstrated throughout the document, definitions of these concepts are multi-faceted but maintain the core understanding that belonging *matters*. Beyond the definitions there is emerging evidence of universities prioritising belonging for their students, shown particularly through the multiple studies investigating belonging and transition interventions. There are clear links between sense of belonging, academic outcomes and even health outcomes for university students, with the literature revealing the ways students from underrepresented groups may be particularly impacted by their sense of belonging.

Whilst this literature review is intended to primarily inform, it has been made clear throughout the analysis process that there is compelling evidence to argue that universities should put significant resources into fostering a sense of belonging for all their students. The literature suggests that belonging interventions delivered early in the transition from secondary to higher education are effective, and these could have particularly valuable impacts for students from underrepresented groups. Conversations about belonging and its value both to students psychosocially and in terms of their academic outcomes are ongoing in the higher education world, and further insights may emerge as this field of study grows.

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Appendix i: Methodology

As demonstrated throughout the literature review, research and texts focused on sense of belonging can come from a variety of disciplines and schools of thought. There is not one set database of sources on this topic, making the undertaking of a literature review dependent on finding relevant and useful texts from a breadth of sources. The methodology of the literature review will be outlined to ensure clarity of the methods used and to offer starting points for any similar research or reviews that may be undertaken in future.

The initial sample of texts was found through the Newcastle University Library, utilising their online LibSearch. Different combinations of keywords were tested in the search function, aiming to find a range of sources related to the topic of 'sense of belonging and community in higher education.' An initial keyword search of "sense of belonging" found some relevant sources, but some results were particularly focused on sense of belonging in schools or belonging in relation to identity, religion, or

ethnicity. More focused searches of “sense of belonging higher education” and “belonging university” found more relevant sources. The most successful keyword search was “sense of belonging university”, which yielded a range of books and articles that appeared related to the topic. Any results which felt relevant to the topic – usually with ‘sense of belonging’ in the title with some reference to students, university, or college – were pinned as favourites within LibSearch. The ‘My Favourites’ in LibSearch saves records to be viewed later, with options to tag them with relevant labels to avoid confusion over their purpose. An initial 22 texts were saved under the label “belonging”, to maintain organisation, and when the search was replicated at a later stage of the literature review, a further 6 texts were added.

From this first set of 22 results, a selection of texts that appeared most useful, after a skim read of their abstracts or first paragraphs to ascertain their focus and discipline, were selected to be read first. Some sources originally selected were discarded as they were lengthy books unavailable from the library or identified to be less relevant than first thought. Some articles were read but did not find a place in the literature review when another text was more useful, their findings were not significant or were out of place when considered in the focus of the literature review. For example, an educational research journal article was selected due to its mention of belonging, but on closer analysis, the focus was on the role of contextual admissions, which was outside the scope of this review. However, some articles from the initial search were used to find other, more meaningful research to ensure the literature review had a strong breadth and depth of sources. For example, one of the first articles, Weiss’ ‘Fostering sense of belonging at universities’ (2021) was particularly useful as a springboard to expand the literature review to include texts referenced in her work. Studies such as Mannay and Ward, Yan and Pei, and Walton and Cohen were noted as important references in Weiss’ article and these made up the next layer of the search for literature. The literature review continued in this methodology, using initial texts to link across to other relevant texts and finding connections and comparisons between them, until the initial search was revisited after the completion of a first draft.

The second search used the most successful keyword search of “sense of belonging university” to re-search the LibSearch database and check for more recent additions or any literature which could have been missed, or not noted as initially useful. This yielded more articles to explore, with a particular success in finding very timely articles from 2020 and 2021, a time where this topic appears to be producing a significant amount of research and insights from authors across the UK and US contexts.

After a text was selected for reading, a critical reading notes template was used, adapted from similar templates found online from university resources. This ensured the bibliographic information was stored, alongside allocating spaces to note down main points of the article, its context, and any links to other authors or studies. This template was filled in during and after the readthrough of each article, and relevant quotes were copy and pasted into the document below the template, with notes and critical analysis written beside these. This structured method for reading and note-taking ensured each article was given the same attention to detail and opportunity for notes to make sense of the quotations and make connections between different authors perspectives or findings.

Once an initial sample of 14 articles had been read, and notes completed for, the key sections of the literature review began to take shape based on key themes and findings outlined in the notes. The literature review was written whilst referencing back to the literature, utilising useful quotations, and ensuring relevant critical analysis was incorporated throughout each section.