

Rethinking and reviewing the use of culturally responsive practices for promoting young people's sense of school belonging. A systematic review

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Research reveals ethnic disproportionalities in the identification of pupils' social, emotional, and mental health needs, as well as school exclusion and suspensions. Young people from ethnic minority groups are reported to experience a lower sense of school belonging in comparison to their peers. This review followed a three-stage thematic synthesis method to explore the ways in which culturally responsive practices can be used to promote culturally diverse young people's sense of school belonging. This included examining teaching staff's experience of deploying culturally responsive practices alongside young people's experiences as recipients. Five interpretative themes were generated, showing how most teaching staff recognised the importance of showing cultural sensitivity; however, their practices were not always perceived as attuned or appropriate by culturally diverse young people. Drawing on a synthesis of four of the reported themes, key implications relevant for educational professions, researchers and families were drawn. These included the importance of consulting and listening to culturally diverse young people when shaping or reviewing the school practices which affect them.

Keywords: school belonging, school connectedness, culturally responsive practices, young people

Current UK context

The ethnic composition of the UK schools' population has expanded over the last few decades (Department of Education [DfE, 2022]) with significant increases in the number of children and young people (CYP) from different cultural backgrounds. This has prompted additional focus on how effectively the principles of inclusion, diversity and equity are upheld in schools. Key events in 2020 (i.e., the COVID-19 pandemic and death of George Floyd), highlighted some deep-rooted inequalities, subsequently raising questions about current societal systems (Allen et al., 2020). Education research has demonstrated some clear ethnic disproportionalities relating to the identification of social, emotional, and mental health needs (Strand & Lindorff, 2021), and the imposition of suspensions and exclusions (DfE, 2022). The consequences of such disparities are profound: for example, ethnic minority young people (YP) are reported to be disproportionately exposed to multiple risk factors, (i.e., school exclusion, being in care, in the criminal justice system, and homelessness etc.) which can contribute to significant mental health challenges (Day et al., 2020). As CYP spend a large proportion of time in school, educational environments are vital for the development of social emotional wellbeing, connectedness and identity formation (Riley, 2019; Verhoeven et al., 2018). The need to belong is a fundamental human need, essential for psychological wellbeing (Allen et al., 2018). For adolescence in particular, a period of life extending from age 10 and 24 years (Sawyer et al., 2018), this belonging need is more pronounced.

Adolescents are, typically, thought to be highly sensitive to values and norms of social groups and, therefore, have a deep need to be socially included and feel accepted (Tomova et al., 2021). Research demonstrates the critical role a sense of school belonging plays in improving YP's educational experiences (Graham et al., 2019); however, ethnic minority students have been reported to experience poorer relationships with their teachers and a weaker sense of school belonging in comparison to their white peers (Bottiani et al., 2014; Gray et al., 2018; Fleischmann & Phalet., 2018).

Defining belonging and understanding school belonging

Baumeister & Leary (1995) defined belonging as 'a need to form and maintain strong and stable interpersonal relationships' (p.497). Their 'belongingness theory' has been influential in understanding the relationship between belonging and motivation and the way in which exclusionary experiences threaten belonging needs. The need to belong has clear implications for the inclusiveness of larger institutions and social communities such as schools. Accordingly, school belonging can be seen as 'the extent to which pupils feel personally accepted, respected, included and supported by others (i.e., teaching staff and peers) within the school social environment' (Goodenow, 1993, p.80). A range of terms such as 'school connectedness', 'school attachment' and 'school bonding' have been used interchangeably in the literature; however, for the purpose of this review, the term 'school belonging' will be used to encompass all the varied terms.

There has been a widespread interest in YP's sense of school belonging and a growth in relevant research across the first two decades of the millennium (Bouchard & Berg, 2017). The overarching definition of belonging is now accepted as referring to both relationships and the feeling of being part of a culture, community, school, or work (Allen, 2020). Nevertheless, the concept of belonging is not yet defined in a consistent way (Harwood, 2020) and there remains little consensus regarding how belonging is best measured or exactly how belonging needs can be fulfilled (Allen et al., 2021). Such inconsistencies can impact on education staff's understanding of the barriers and facilitators for promoting school belonging (Allen et al., 2018).

An extensive body of literature has shown strong links between YP's sense of school belonging and academic motivation (Goodenow, 1993; Allen, 2016; Korpershoek et al., 2020). Belonging has been shown to play a significant role in the development of YP's self-identity (Gillen-O'Neel & Fuligni., 2013; Allen, 2016) and positive psychological functioning (Kia-Ketting & Ellis, 2007; Allen et al., 2018; Arslan, 2018). For example, Steiner et al. (2019) found that YP who had a sense of school connectedness were up to 66% less likely to have mental health issues, experience violence victimisation or engage in risky sexual behaviours or substance misuse in adulthood. Overall, research exploring YP's views supports the notion that, in comparison to pupils with a low sense of school belonging, those with a high sense of school belonging are more likely to be motivated, enjoy positive psychological and academic outcomes (Goodenow & Grady, 1993), and pursue future training and employment (Parker, 2022).

School belonging of YP from ethnic minority backgrounds

Some contemporary research on belonging takes a more critical stance with respect to exploring the concept of school belonging for marginalised groups, for whom mainstream identities and norms are a much less comfortable fit. Some authors warn against interpreting belongingness as involving an element of sameness (Faircloth, 2018), thereby consciously or unconsciously excluding or othering those who are different. Other authors argue that the greater emphasis on sameness can lead to ignoring social justice issues. Bettez (2011) proposes an understanding of belonging that encompasses the development of an appreciation for diversity and socially-just models of belonging which facilitate opportunities for cross-cultural interactions.

To embrace wider interacting factors, Allen et al. (2016) proposed Bronfenbrenner's (1979) ecological framework as a means of exploring contextual factors influencing YP's

sense of school belonging. This led to the development of the socio-ecological framework of school belonging (Figure 1). Here, YP's individual characteristics (e.g., socioeconomic status, ability, appearance & gender, race & ethnicity) are cited as factors influencing students' sense of school belonging, which can vary particularly as a result of reported differential treatment by teachers (Osterman, 2000; Thijs et al., 2019; Abacioglu et al., 2019).

El Zaatari and Maalouf (2022) extended this work further by explaining students' sense of school belonging through Bronfenbrenner's bio-ecological systems theory which incorporated the Process, Person, Context and Time (PPCT) model (Bronfenbrenner & Morris, 1998). In seeking to understand how school belonging is experienced between different ethnic groups, Faircloth & Hamm (2005) surveyed a large sample (n=5494) of high school students in the United States of America (USA) from four ethnic backgrounds namely, African American, Asian American, Latino & European Americans. They discovered racial group differences in how belonging is experienced. Cultural contrasts between home and school were found to present additional barriers for African or Asian American groups, highlighting the importance of creating an inclusive ethos of belongingness that recognises and celebrates diversity through culturally sensitive and supportive relationships in schools (Faircloth, 2018). Cartmell & Bond (2015) later explored the experiences of five international new arrivals (INA) pupils in two UK inner-city high schools. Using semi-structured interviews, findings revealed complex interactions between intrinsic, (positive emotions) and extrinsic, (characteristics of the environment) factors informing participants' sense of belonging. The authors acknowledged the need to understand the holistic needs of INA pupils, whilst highlighting the importance of being culturally sensitive to the differing perceptions of belonging amongst the diverse population (Cartmell & Bond, 2015).

Culturally Responsive Practice and belonging

Research on the use Culturally Responsive Practices (CRP) evolved from studies exploring multicultural education (Mayfield & Garrison-Wade, 2015). Whilst multicultural education is understood as something delivered to pupils of a common 'host' culture using a curriculum that represents various cultural perspectives, CRP extends this to describe an educational approach which is responsive to the pupils' cultures present in the classroom (Rychly & Graves, 2012). According to Gay (2002), culturally responsive teaching (CRT) acknowledges a pupil's home culture and uses this to scaffold learning, support social-emotional needs, and build relationships. Similarly, culturally relevant pedagogy and culturally sustaining pedagogy (Paris, 2012) both recognise how the YP's home and community culture, complements or

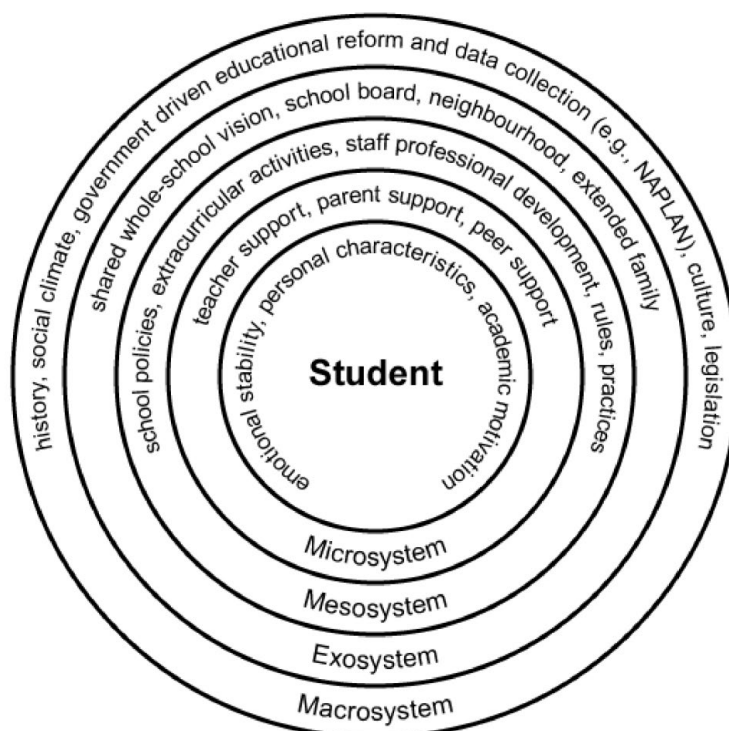


Figure 1. The socio-ecological framework of school belonging (Allen et al., 2016)

contrasts with the school culture, and how both home and school culture collectively facilitate students' academic success (Ladson-Billings, 1995a). There are a variety of terms used to describe CRP, each acknowledging the importance of students' culture in schools. Collectively, CRPs can be defined as practices that teach to and through pupils' strengths, to build bridges of meaningfulness between home-school experiences and academic and lived sociocultural realities (Gay, 2000). For the purpose of this review, the term 'culturally responsive practice' will be used to encompass a number of alternative terms (i.e. culturally responsive pedagogy, culturally responsive teaching, culturally sustaining or relevant pedagogy).

CRPs have been shown to enhance the engagement, academic attainment (Bryd, 2016, Aronson & Laughter, 2016) and sense of belonging (McClanahan, 2018) for ethnically diverse students. In McClanahan's (2018) study, CRPs were used as part of the English Language Arts curriculum. Findings from analyses of classroom observations, students' work and interviews identified areas that YP perceived to be important for supporting their feelings of belonging and success. These included the meaningfulness of the learning in relation to their identity and background, the clarity of expectations, validation of feelings and attitudes, and students' agency. Similarly, Chung (2019) reported a higher likelihood of positive outcomes for YP who have a strong ethnic identity and a

sense of school connectedness.

In the light of emerging evidence showing that CRP have a positive effect on school belonging and academic achievement, there remains a number of questions that would, helpfully, extend understanding. Firstly, it would be valuable to know which specific cultural factors or CRPs are most influential in fostering positive outcomes for ethnic minority YP (Roffey et al, 2019; Allen et al, 2016). A review of the evidence in relation to these factors would help educators and those developing training and advice, to prioritise the things that are most worth working on. Secondly, when exploring the benefits of any specific approaches with YP, people's lived experiences are as important as any measured outcomes. Accordingly, a review of how YP and school staff experience CRPs would provide an increased sense of insight into how CRPs can be used wisely and well.

Current review

This systematic review seeks to understand the intersection between CRP and YP's sense of school belonging through the research questions in Table 1.

A thematic synthesis was applied to develop themes to answer the main question above and provide implications for school staff, EP practice, and future research. It is important to note that the two secondary research questions

Overarching research question	Sub questions
In what ways does CRP foster YP's sense of school belonging?	i. What are the teaching staff's experiences of using CRP to support a sense of school belonging for pupils? ii. How do YP experience the CRP offered by teaching staff?

Table 1. Research questions

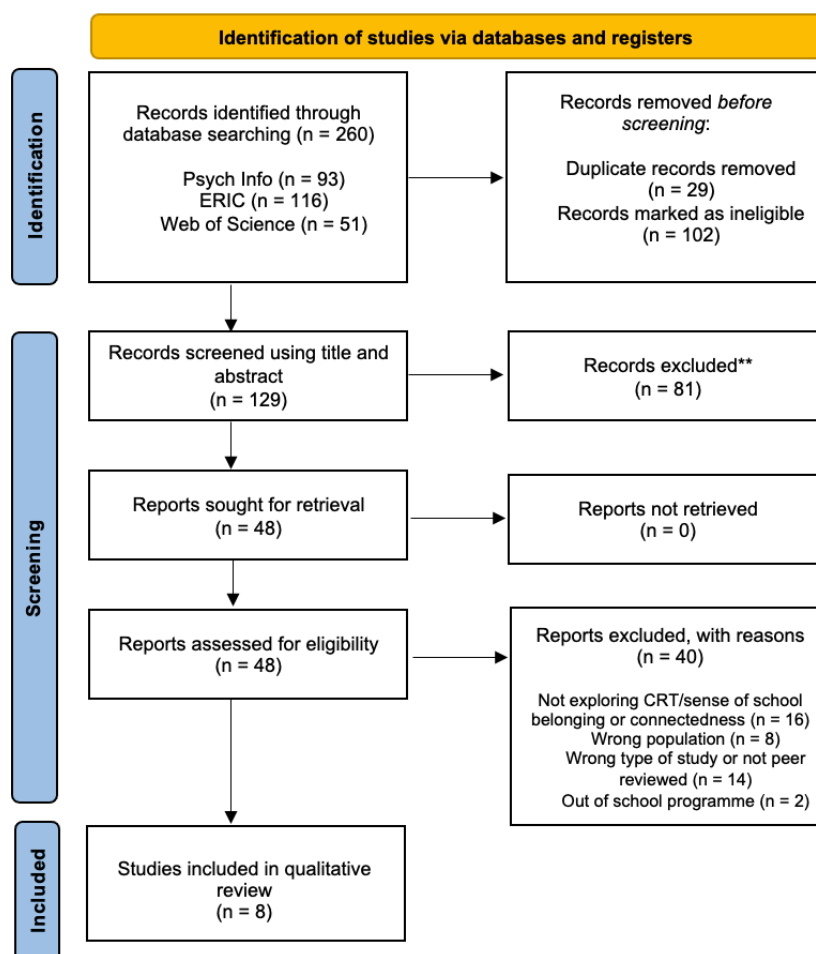


Figure 2. Systematic search strategy using the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) approach (Page et al., 2021)

evolved as key areas to explore after the included review papers were found and analysed.

Methodology

Search strategy and procedure

This review was conducted using a systematic and manual search within the following databases: Web of Science (WoS), ERIC and PsycINFO. Synonyms of

‘culturally responsive teaching’ and ‘school belonging’ were generated by examining various terms used in previous literature and relevant filters were applied (see Appendix A).

A total of 260 papers were imported into Rayyan QCI, a web-based literature screening software that facilitates the screening of titles and abstracts of papers (Ouzzani et al., 2016). The process is illustrated in the PRISMA flow diagram (Figure 2).

Study Item	Inclusion	Exclusion
S - Sample	<ul style="list-style-type: none"> • Human studies • Secondary school-aged young people. • Ethnic minorities • School or teaching staff 	<ul style="list-style-type: none"> • Animal studies • Higher education/University
PI - Phenomenon of Interest	<ul style="list-style-type: none"> • Sense of belonging or connectedness of young people. • Culturally responsive practice 	<ul style="list-style-type: none"> • Exploring other outcomes such as academic achievement.
D – Design	None specified	
E - Evaluation	<ul style="list-style-type: none"> • Voice and perspectives of teachers and young people 	<ul style="list-style-type: none"> • School leadership
R - Research Type	<ul style="list-style-type: none"> • Primary research • Academic journal articles/dissertations • Qualitative study design using interviews, and focus groups. • Mixed methods studies (with qualitative component) 	<ul style="list-style-type: none"> • Secondary research (e.g., meta-analyses or systematic literature reviews)

Table 2. Inclusion and exclusion criteria used for screening studies

Quality Rating	Qualitative Paper
Low (0-5)	Chan, Flanagan, Hermann & Barnes (2015)
Medium (6-8)	None
High (8-11)	Maloney & Matthews (2020); Augustine (2015); Crooks, Burleigh, Snowshoe, Lapp, Hughes, Sisco & Ashley (2015); Kurosaka-Jost (2021); Sumner (2018); Mackay & Strickland (2018); Gaias , Cook, Nguyen, Brewer, Brown, Kiche, Shi, Buntain-Ricklefs & Duong (2020).

Table 3 Quality rating of included studies

Selection criteria

The selection criteria emerged from the research question; namely, how do CRPs foster YP's sense of school belonging? These were created using the SPIDER (Sample, Phenomenon of Interest, Design, Evaluation, Research type) framework (Cooke et al., 2012). All studies retrieved from the systematic search were screened using

the inclusion and exclusion criteria (see Table 2) resulting in a total of eight studies which met the criteria. The YP in the included studies ranged from the age of 11 to 19, except for one study (4) that did not report participants' age. YP in each of the studies were reported to self-identify as White, Black African/American, Asian, Latino/Hispanic, Aboriginal and Multi-ethnic. The CRPs

Descriptive themes	Gaiias et al. (2020)	Mackay & Strickland (2018)	Summer (2018)	Kurosaka-Jost (2021)	Crooks et al. (2015)	Augustine (2015)	Maloney & Matthews (2020)	Chan et al. (2015)
Teaching staffs' intention to develop strong relationships with students	Y	Y	N	N	N	Y	Y	Y
Teacher's self-awareness and introspection	Y	Y	Y	N	N	Y	Y	Y
Impact of cultural responsiveness in students/pupils	N	N	Y	Y	Y	Y	N	N
Unsupportive approaches for culturally diverse pupils	Y	N	N	Y	N	N	Y	Y
Positive views of students	Y	Y	Y	N	N	Y	Y	Y
Difficulty merging two worlds (home and school)	Y	Y	N	Y	N	N	N	Y
Conflicting perception of support (students vs teachers)	N	N	Y	N	N	N	Y	Y
Being understood from a cultural perspective in school	N	N	Y	N	Y	N	N	Y
Students being represented in the school	Y	N	Y	Y	Y	Y	Y	Y
Key Y = descriptive theme <u>present</u> in the study N = descriptive theme <u>not</u> present in the study								

Table 4. Descriptive themes identified in each reviewed study

used varied within the included studies, ranging from use of specific culturally relevant programmes (e.g., Check & Connect; Equity-Explicit Establish-Maintain-Restore & Fourth R for First Nation youth) for targeted at-risk minority ethnic YP, to pedagogy as part of the taught curriculum (e.g., Maths & English) and through general teacher practices.

Quality assessment

Following the screening process, the eight remaining studies were quality assessed using an adapted version of the Critical Appraisals Skills Programme (CASP) qualitative checklist (Critical Appraisal Skills Programme, 2018). The adaptation included an additional question relevant to this review and produced a possible maximum

score of 11 for each qualitative study (see Appendix B). Table 3 illustrates the outcome of the quality assessment resulting in total scores between 5 and 11. This facilitated a deeper evaluation of the studies for methodological rigour and helped to inform how they were synthesised and discussed. No papers were excluded as the only study rated 'low-quality' was included due to its relevance and how it helped to answer the research questions.

Data extraction and synthesis

Following screening, the eight papers were reviewed systematically, and key data was extracted (i.e., including author name, date of paper and country of publication, participant characteristics, study design, type of CRP used and identified outcomes). The study ID column indicates

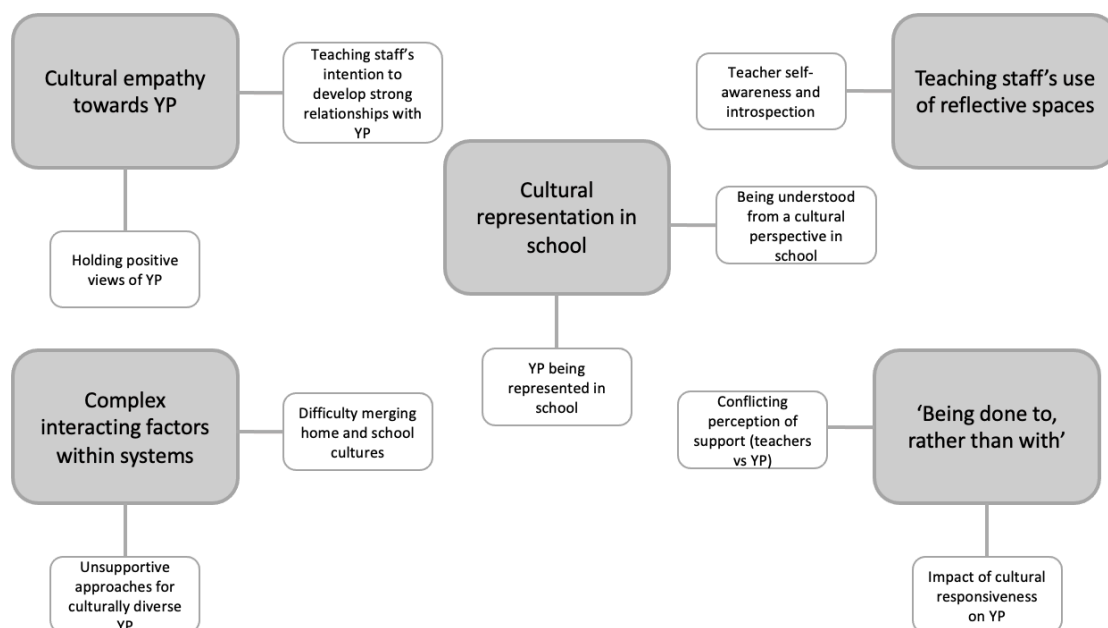


Figure 3. Thematic map demonstrating how the descriptive themes contributed to the development of analytical themes. The 5 analytical themes are presented on a shaded background, distinguishing them from the descriptive themes

the number which will be used to refer to each of the studies throughout this synthesis (see Appendix C for the data extraction table).

Each paper was then analysed using an inductive thematic synthesis process which facilitated the identification, appraisal and summarising of the qualitative evidence (Thomas & Harden, 2008). Thematic synthesis was selected for its suitability to aggregate existing evidence, whilst enabling patterns to be identified within the data (Boland et al., 2017). All included papers were imported into NVivo 12 software package to assist with the coding and analysis of data. The three-stage process consists of: i) line-by-line coding, ii) generation of descriptive themes and iii) development of analytical themes (Thomas & Harden, 2008). Stage one involved an iterative process of reading and re-reading each sentence of the results/findings and discussion sections, including quotes and the authors' interpretations of the selected papers, where initial codes were captured (Appendix D). 79 initial codes were created (Appendix E), leading to Stage 2, in which descriptive themes were generated from organising the codes. Appendix F shows examples of quotes for each descriptive theme. Similarities and differences were identified between initial codes which were grouped as best fit, resulting in 9 descriptive themes (see Table 4). Stage 3 was interpretative, going beyond the original studies' results and exploring how the descriptive themes

could answer the research questions. This involved deliberate efforts to interpret and infer how both teaching staff and YP experienced CRP in relation to developing a sense of school belonging.

Synthesis

Of the eight qualitative and mixed-methods papers in this synthesis, published between 2012 and 2021, seven were conducted in the USA (1,2,3,4,6,7,8) and one in Canada (5). All the studies were conducted in mainstream secondary and high schools and reflected the demographic makeup of the communities (see Appendix C for the data extraction table).

Initially, five analytical themes were generated from the descriptive themes as demonstrated (see Figure 3). Two of the themes (*Cultural empathy towards YP*; *Teaching staff's use of reflective spaces*) were specifically developed in response to the question exploring the teaching staff's experiences of developing YP's sense of school belonging through CRP. Another two themes (*'Being done to, rather than with'* & *Cultural representation*) addressed the question relating to how YP experienced the CRP offered by teaching staff. The fifth theme (*Complexity of systems and interacting factors*) addressed both research questions, highlighting the issues experienced by both teachers and YP. Four out of the five themes are discussed in more detail

in this paper with the omitted theme (*Teaching staff's use of reflective spaces*) discussed in a longer thesis paper submitted to University of Southampton.

Analytical themes

Q1. *What are the teaching staff's experiences of developing YP's sense of school belonging through CRPs?*

Theme 1: Cultural empathy towards YP

This theme describes the cultural empathy demonstrated in the approaches used by teaching staff to build relationships with YP from ethnic minority backgrounds. Teaching staff often prioritised developing nurturing teacher-student relationships that recognised the YP's sociocultural experiences (1,3,6,7,8). The teacher-student relationships were valued because of their contribution to engagement in learning (6,8). The teaching staff's intention to connect with YP was strongly evidenced throughout with efforts to be authentically supportive (2), offering unconditional care (6) and being interested in the YP's lives (2).

Many teaching staff used a person-centred approach which involved learning directly from the YP (1,8), holding positive views, and having high expectations for everyone, despite the challenges experienced by the YP (3,6,7). Some teaching staff recognised the impact of social and economic oppression on these YP and responded empathically (7) or sought to address the emotional needs before expecting academic engagement (8,7,6). Additionally, some teachers challenged negative stereotypes about ethnic minority YP by relating their personal experiences (7, p.410) and engaging in self-reflection (8), whilst others explored differences sensitively through curious questioning (3).

It is noteworthy that some teaching staff reported a 'colourblind approach' (i.e., failing to acknowledge cultural or other sociodemographic factors; 1,4). For instance, one teacher only offered culturally responsive support if the school expectations were met. In other words, if YP failed to meet high expectations regarding motivation, behaviour or performance, care and additional support were withheld (7, p.53). Despite this, however, the collective findings of the reviewed studies attest to teachers' efforts to be culturally empathic so they could develop positive relationships and increase their YP's sense of school belonging.

Q2. *How do YP experience the CRPs offered by teaching staff?*

Theme32: 'Being done to rather than being done with'

This theme highlights the contrast between what teaching staff perceived to be CRP and how YP experienced these. Despite the findings in Theme 1 that teaching staff could be person-centred and responsive, some practices seemed to be done to the YP rather than with them. This disconnect was particularly emphasised in two of the studies (3,8). In one, the ethnic minority YP's post-intervention focus group findings suggested that despite their teachers taking part in a project to increase their cultural responsiveness, the teachers did not do enough to make them feel part of the school community and address insensitive race-related remarks by other YP (3, p.72). Here, YP felt misunderstood from a cultural perspective and reported only 'sometimes' feeling connected to the school community (3, p.69). The other study found that the YP's stories often differed from the teacher's expectations and sometimes conflicted with the goals identified in the curriculum as important (8, p.17). This same study also demonstrated that assumptions made by the teacher that what she perceived to be culturally sensitive support were not perceived in the same way by the YP, resulting in tension. '*James' response to this curricular material, however, surprised Natalie and left her wondering what next to introduce if materials that seemed most obviously of interest to him yielded such a negative response*' (8, p.16). Teachers were able to use these points of disconnection as opportunities for more appropriate interventions by revising their assumptions and, instead, learning with and from the YP themselves. Study 4 took place in a predominantly white independent school, where the impact of the conflicting perceptions between teachers and YP led to high levels of teacher anxiety, feelings of inadequacy, and socio-economic disconnect from YP.

Three studies reported positive effects of CRPs (3,5,6), with the YP not only reporting increased feelings of belonging, but also improved confidence and communication skills, more positive experiences in school, a stronger sense of identity, healthier relationship skills (5), and improved school engagement (6). In other words, because certain CRPs were seen as helpful, YP reported feeling supported, connected, and recognised, and this positively influenced their academic achievement (3,6). These findings underline the importance of enabling YP to be understood not only from a cultural perspective but to be consulted and listened to on matters about them. Additionally, when delivered appropriately and in line with YP's wishes and needs, CRPs have the potential to promote factors contributing to a sense of school belonging.

Theme 4: Cultural representation in school

This theme focuses on the importance of being culturally represented within the school environment and how this influences YP's connectedness to school. In one study, YP expressed how they would have valued the presence of role models within the school (4). In another, teaching staff responded to the needs of diverse YP by including appropriate literature, citing the importance of the YP seeing themselves represented in the curriculum (8). Similar views were echoed in relation to the importance of YP seeing people from similar backgrounds within the educational workforce. It was also noted that various approaches deemed to be 'best practice' were not necessarily suitable for all Black and Hispanic students. For example, a White female teacher stated '*...you need to first build the trust when you are [viewed as] the oppressive race. I tend to be more hardcore and that is not the best for all*' (3, p.67). The effects of the cultural mismatch between teachers and YP were acknowledged, with some teachers experiencing difficulties connecting with YP of different genders, race or ethnic identities from their own (1,4,8).

Opportunities for valuing the culture and validation of the identities of ethnic minority YP in the school were seen as key factors in developing YP's sense of belonging (1,3,8). For example, a culturally responsive programme offered in school to a First Nation pupil was seen by the YP as showing cultural connectedness (1). In addition, the use of native language amongst YP from the same community was viewed positively as a means of fostering strong levels of support and connectedness within the school (8). The overall findings here suggest the importance of YP being represented and valued culturally in school so as to promote an enhanced sense of belonging.

Theme 5: Complex interacting factors within systems

This theme encapsulates the complexities within systems and interacting factors which contributed to some of the challenges experienced by both teaching staff and YP. Indeed, teachers experienced challenges associated with the delivery of CRP (1,2,8) and YP reported challenges in being recipients of this (2,4). In some cases, the teachers' lack of competence and confidence in implementing CRP was evident. For example, a teacher in study 2, acknowledged that integrating that knowledge into her instruction was challenging: "*I think something that I really look at is empowering students, like really thinking about race to empower Black and Latino students to become mathematicians. It's something that I'm struggling with but working toward doing more often.*" (2, p.411). Other studies implied that bridging home and school experiences was not as straightforward as envisaged by the teachers. For example, some YP were reported to be reluctant to divulge home experiences in school (2). Although similar findings

were reported in another study (8), the authors further reflected on the humbling realisation that engaging YP was not limited to learning about their cultural difference but also learning about their ideas and experiences, whilst remaining open to reconsidering what they thought they knew about the YP (8, p.22). Some teaching staff experienced difficulties associated with limited resources, particularly the time to support, effectively, the YP with their emotional challenges (1, p.1014, 8, p.16-17).

The YP shared their perceptions that issues relating to race, ethnicity and cultural diversity were being overlooked, with teachers, instead, opting for a neutral approach to relationship building (4, p.51). In this study, the lack of cultural responsiveness, particularly in the context of a predominantly white independent school further evoked feelings of disengagement and cultural disconnect from peers. In Study 2, the teaching staff tended to overlook Black and Latino YP's frustration resulting from institutional marginalisation and instead attributed difficulties to low effort, grit or self-confidence. During moments of frustration, teachers demonstrated a superficial understanding of the problem that complicated the key and vital connection with YP (2). It is clear here that the interaction of multiple and complex factors within the school environment appears to contribute to various challenges encountered by both teachers and YP.

Discussion

The current review set out to explore the use of CRPs in developing YPs' sense of school belonging. The research questions were formulated to capture the teaching staff's experiences of delivering CRPs as well as YP's perceptions as the recipients of CRP in relation to their felt sense of school belonging.

The findings can be explored through an analysis of the contextual complex socio-ecological interactions between the individual YP (microsystem), relationships with others (mesosystem), school rules and practices (mesosystem) within a wider school community (exosystem) which are embedded within a political, cultural, and geographical landscape of each school setting (macrosystem; Allen et al., 2016). For example, the characteristics and differences of minoritised YP could be seen as affecting the degree to which these YP are understood by and enjoy positive relationships with school teaching staff. These differences may also influence ways in which typical school practices are or are not appropriate and whether such YP feel accepted and acknowledged within the school, as a whole. The ways in which school settings prioritise and include CRPs to support minoritised YP are seen as affected by the commonly recommended practices and policies (which can, in turn, be affected by the results of wider research studies and reviews).

Teaching staff's experiences of developing YP's sense of school belonging through culturally responsive practices

The results of the current review demonstrated the value placed on teacher-student relationships which were deemed crucial for promoting a sense of school belonging for all YP, particularly those from minoritised backgrounds. These relationships contribute to a school climate that could enhance students' school belonging (El Zaatari & Maalouf, 2022). The process of establishing meaningful relationships is reflected within the mesosystem and is consistent with previous studies that account for positive teacher-student relationships functioning as a protective factor, particularly for ethnic minority YP (Faircloth & Hamm, 2005; Göbel & Preusche, 2019; Juang et al., 2018; Osterman, 2000; Tillery et al., 2013). A sense of care, acceptance, and respect (Roffey, 2012; Hughes, 2011), in a well-structured learning environment (El Zaatari & Maalouf, 2022), with fair expectations (Klem & Connell, 2004) contributes to positive relationships. For this population specifically, cultural empathy - defined as the ability to understand the experiences of people from culturally diverse backgrounds (Ridley & Lingle, 1996) - appears to be a key attribute of teaching staff seeking to develop these relationships. This is demonstrated in the offer of authentic caring support whilst also acknowledging the unique challenges experienced by ethnic minority students. Ginn (2021) reported similar findings based on YP's views who equally valued authentic and meaningful relationships. Other studies in the review, however, highlighted the ongoing presence of a neutral, 'colourblind approach' to relationship-building and support in schools, which fails to address the unique needs of minoritised YP, is deemed unsupportive, and results in a low sense of school belonging.

When viewed within the microsystem and mesosystem, teachers' beliefs and values can influence their motivation to support YP using effective practices (Alvi & Gillies, 2020). This review shows that effective approaches include CRPs, which not only encourage the engagement of all diverse YP but also explore social injustices, stereotyping and implicit bias, allowing teachers and YP to explore these and develop an awareness of others' lived experiences (Robinson, 2020). However, teaching staff reported challenges associated with incorporating appropriate cultural elements into the curriculum, and this affected their sense of self-efficacy. Such findings align with previous research which reported teachers feeling more confident building personal trusting relationships with YP but less so with teaching the YP about their cultural contributions to curricular topics (Cruz et al., 2020).

YP's experience of the culturally responsive practices offered by teaching staff

With respect to the YP's experience of CRP, there were contrasting findings shown in this review. The teaching staff's intentions and objectives when delivering CRP were not always in agreement with what the YP experienced as helpful support. It can be argued that reduced sociocultural consciousness on the teacher's part may play a role in an unconscious reliance upon their own experiences to make sense of the YP's lives, resulting in misinterpretations and miscommunication (Villegas & Lucas, 2002). Additionally, the effect of any cultural mismatch identified between teachers and YP, when seeking to build relationships and establish appropriate in-school support, is widely demonstrated in previous literature. For example, studies have found that when the majority culture within the school differed from the YP's own, there were challenges relating to communication, YP engagement, and increased disciplinary issues (Skiba et al., 2014, Thijs et al., 2012, Snyder et al., 2016).

The unthinking use of a colourblind approach to facilitate pupils' assimilation into the dominant culture is one which is viewed as undermining the differences, strengths, languages and implicit knowledge bases of other cultures, (Carter, 2013). Such an approach has also been found to perpetuate the marginalisation and inequities experienced by these culturally diverse YP (Annamma et al., 2017) and potentially lends itself to YP feeling less validated and understood. In contrast, CRP invites teachers and education staff to consciously engage in difficult and uncomfortable critical discussions about the status quo, often raising relevant issues about social equity, privilege, race, etc (Parsons & Wall, 2011). For that reason, school policies, practices, and rules within the mesosystem need to reflect the unique challenges faced by minoritised YP groups and address these through staff training. By adopting both whole-school and pupil-centred approaches to CRP, teaching staff can better acknowledge YP's unique needs and provide appropriate support at various tiers of involvement to nurture a felt sense of school belonging.

Finally, the importance of being represented ethnically emerges from both teachers' and YP's perspectives. Teaching staff acknowledged the importance of ethnic minority YP being represented across the school. This view concurs with Block et al.'s findings that one potential route for achieving improved school belonging is for YP to see themselves and their families reflected within the school's wider provision (2021). From the YP's perspective, the lack of and need for more representation within peer groups, school staff and leadership as well as the curriculum is important (Ginn, 2021). This could also include finding ways to encourage the possibility of culturally diverse YP having the opportunity to undertake positions of prominence in the school setting. For instance, Stickl (2017) suggested offering opportunities for leadership roles through extracurricular activities within the mesosystem as

For	Implications
Teaching staff/School leadership teams	<ul style="list-style-type: none"> Increasing YPs' agency and involvement in enhancing CRP through participation in future reviewing and updating of school curricula and policies. School senior leadership teams could review their whole school approaches, co-creating (with their school community and with representatives from vulnerable and minority populations) inclusive policies that reflect an understanding of cultural diversity and empathy. This may involve opting for relational, rather than simply punitive, behaviour and exclusion policies (El Zaatari & Maalouf, 2022). Representation within school staff; YP from minority backgrounds need to be able to sense themselves authentically represented in all different aspects of their school life. Develop effective ways of encouraging families to share their views so as to support the continual updating of culturally sensitive practices and to ensure that relevant information about the YP is passed on (e.g., co-creating a pen portrait or pupil passport for use in school).
EPs	<ul style="list-style-type: none"> Adopt person-centred approaches through listening, consulting and co-creating CRPs that are authentically responsive to diverse YP's needs Reflect on their own role and positionality in the development of inclusion for minoritised groups through, for example, the use of CRPs (Sakata, 2021). Acknowledge the lack of cultural representation in their own profession or in the psychological research that they draw upon (Wright, 2020) Facilitate safe, reflective spaces for teaching staff (Ferguson, 2022) as well as for themselves to allow for reflection on their own biases and areas for development and learning. Provide reflective spaces within schools through use of collaborative reflective supervision such as 'Solution Circles' (Forrest & Pearpoint, 1996) or 'Circle of Adults' (Grahamslaw & Henson, 2015). Support school staff to develop cultural empathy by emphasising the importance of understanding YP as cultural beings, having their own cultural lens, and acknowledging the effect of culture on what people notice, see, attend to, and how they think and what they think about and value (Porter and Samovar, 1991). Offer further training and advocacy to assist schools to better understand the need of all YP, to feel that they belong and how this is crucial for achieving the academic and social aims of education.
Researchers	<ul style="list-style-type: none"> To continue to expand use of qualitative and participatory methodologies to gain rich data regarding a collective understanding of how minoritised student populations perceive CRPs in the UK context, what they might look like and, specifically, what facilitates a sense of school belonging Use of action-based research to co-create more culturally appropriate practices that might better support culturally diverse YP to feel considered, catered for and connected to their school communities.

Table 5. Implications for different professionals

a means of empowering certain YP.

Overall, it is clear that the bio-ecological systems framework (Bronfenbrenner, 1979) can facilitate the process of identifying ways of providing culturally responsive support, in schools, at different systemic levels. By viewing the complex interactions experienced by both teachers and YP through the bio-ecological systems theory (Bronfenbrenner, 1979), barriers and facilitators can be identified which help to promote a better understanding of lived experiences from both parties' perspectives. Based on the findings of this literature search, the role of CRPs in developing YP's sense of belonging remains underexplored

from YP's perspective due to the very limited number of quality studies explicitly exploring their views. Generally, studies in this area have relied on quantitative 'closed question' surveys which fail to explore or expand upon the full range of factors contributing to an increased sense of school belonging. To further develop CRP in schools and better understand the unique needs of minoritised pupils, there is a need for increased research into this area in the future (Allen et al., 2016).

Strengths and limitations

To the author's knowledge, this synthesis of qualitative

studies is the first to examine the use of CRPs in seeking to promote YP's sense of school belonging and fills a clearly identified gap within the published literature. The review followed a rigorous and systematic process of identifying relevant studies which were assessed for quality to ensure the review findings were credible and trustworthy (Lewin et al., 2018). All included studies were of high quality except for one which was still included due to the relevance and contributions to the review findings. To reduce the possibility of publication bias amongst the findings, doctoral theses were included in this review, recognising that they would have been peer reviewed through examination by Viva.

A key limitation is that none of the studies were conducted in the UK or Europe and the search resulted in only a small body of findings emerging solely from North America, (i.e., Canada and USA); where the concept of CRP originated. There is a possibility that limiting the search to studies explicitly mentioning 'culturally responsive practices' may have meant an unintentional exclusion of some relevant studies conducted in other parts of the world which deal with the same phenomena but use other terms to describe this. There are, undoubtedly, cultural differences between the UK, Europe, and North America which mean that any transferability of the findings needs to be cautiously made when considering these regions. A final limitation of this review is that many of the included papers failed to adequately capture the YP's perspective qualitatively. For example, the studies that used self-report surveys to measure school belonging did not further elaborate the key elements that promoted CRPs resulting sense of school belonging.

1.1.1 Implications for future practice

The present review highlights several important implications that are relevant for teaching staff, educational psychologists (EP) and researchers (see Table 5).

1.1.2 Conclusion

Overall, the findings strongly suggest the need for adopting person-centred, culturally responsive support for YP in schools, and in addition for school staff to have access to reflective spaces that facilitate the acknowledgement, valuing and respecting cultural diversity more generally. This review provides additional insights into the benefits of CRPs and highlights some of the considerations that need to be made when introducing and implementing CRPs in schools. The importance of consulting with ethnic minority YP and developing practices with them, rather than for them, is emphasised. The findings also demonstrate the value of ensuring that YP from minority or marginalised cultural backgrounds can regularly see their identities

represented positively within the school community and curricula. Finally, the review points to the benefits of school staff having access to reflective spaces where they can discuss and think about the appropriateness of their differentiated approaches, whilst also recognising the universal benefits of understanding each YP's socio-cultural background, showing a genuine interest in them, and offering person-centred practices as a core way of nurturing and celebrating their diversity



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Appendix A
Search strategy terms

Date accessed	Database used	Search keywords	Limits	Results
21.10.22	WOS	(((TI=(cultur* NEAR/2 responsiv*)) OR TI=(cultur* NEAR/2 appropriate)) OR TI=(cultur* NEAR/2 relevant)) OR TI=(cultur* NEAR/2 adaptive)) OR TI=(cultur* NEAR/2 inclusive)) OR TI=(cultur* NEAR/2 sensitiv*)	Title of culture	4891
15.01.2023		Re-run		4,930
21.10.22	WOS	(((AB=(cultur* NEAR/2 responsiv*)) OR AB=(cultur* NEAR/2 appropriate)) OR AB=(cultur* NEAR/2 relevant)) OR AB=(cultur* NEAR/2 adaptive)) OR AB=(cultur* NEAR/2 inclusive)) OR AB=(cultur* NEAR/2 sensitiv*)	Abstract of culture	31,512
15.01.23		Re-run		32,067
21.10.22	WOS	(((TI=(cultur* NEAR/2 responsiv*)) OR TI=(cultur* NEAR/2 appropriate)) OR TI=(cultur* NEAR/2 relevant)) OR TI=(cultur* NEAR/2 adaptive)) OR TI=(cultur* NEAR/2 inclusive)) OR TI=(cultur* NEAR/2 sensitiv*) OR (((AB=(cultur* NEAR/2 responsiv*)) OR AB=(cultur* NEAR/2 appropriate)) OR AB=(cultur* NEAR/2 relevant)) OR AB=(cultur* NEAR/2 adaptive)) OR AB=(cultur* NEAR/2 inclusive)) OR AB=(cultur* NEAR/2 sensitiv*)	OR Title & Abstract of Culture	34,262
15.01.23		Re-run		34,819
21.10.22	WOS	(AB=(class* NEAR/2 (belong* OR connect*))) OR AB=(school NEAR/2 (belong* OR connect*)) OR (TI=(class* NEAR/2 (belong* OR connect*))) OR TI=(school NEAR/2 (belong* OR connect*))	OR Abstract & Title of belonging	28612
15.01.23		Re-run		29123

21.10.22	WOS	(((TI=(cultur* NEAR/2 responsiv*)) OR TI=(cultur* NEAR/2 appropriate)) OR TI=(cultur* NEAR/2 relevant)) OR TI=(cultur* NEAR/2 adaptive)) OR TI=(cultur* NEAR/2 inclusive)) OR TI=(cultur* NEAR/2 sensitiv*) OR (((AB=(cultur* NEAR/2 responsiv*)) OR AB=(cultur* NEAR/2 appropriate)) OR AB=(cultur* NEAR/2 relevant)) OR AB=(cultur* NEAR/2 adaptive)) OR AB=(cultur* NEAR/2 inclusive)) OR AB=(cultur* NEAR/2 sensitiv*) AND (AB=(class* NEAR/2 (belong* OR connect*))) OR AB=(school NEAR/2 (belong* OR connect*)) OR (TI=(class* NEAR/2 (belong* OR connect*)) OR TI=(school NEAR/2 (belong* OR connect*)))	Abstract & Title of belonging AND Title & Abstract of Culture	50
15.01.23		Re-run		51
21.10.22	ERIC	abstract(cultur* NEAR/2 (responsive* OR appropriate* OR relevan* OR adapt* OR inclus* OR sensitiv*)) OR title(cultur* NEAR/2 (responsive* OR appropriate* OR relevan* OR adapt* OR inclus* OR sensitiv*))	Abstract & Title of culture (OR)	9288
15.01.23		Re-run		9366
21.10.22	ERIC	abstract(class* NEAR/2 (belong* OR connect*) OR school NEAR/2 (belong* OR connect*)) OR title(class* NEAR/2 (belong* OR connect*) OR school NEAR/2 (belong* OR connect*))	Abstract & Title of belonging (OR)	4469
15.01.23		Re-run		4493
21.10.22	ERIC	MAINSUBJECT.EXACT("Culturally Relevant Education")		7110
15.01.23		Re-run		7194
21.10.22	ERIC	(abstract(cultur* NEAR/2 (responsive* OR appropriate* OR relevan* OR adapt* OR inclus* OR sensitiv*)) OR title(cultur* NEAR/2 (responsive* OR appropriate* OR relevan* OR adapt* OR inclus* OR sensitiv*))) OR MAINSUBJECT.EXACT("Culturally Relevant Education")		13209
15.01.23		Re-run		13329

21.10.22	ERIC	(abstract(class* NEAR/2 (belong* OR connect*) OR school NEAR/2 (belong* OR connect*)) OR title(class* NEAR/2 (belong* OR connect*) OR school NEAR/2 (belong* OR connect*))) AND ((abstract(cultur* NEAR/2 (responsive* OR appropriate* OR relevan* OR adapt* OR inclus* OR sensitiv*)) OR title(cultur* NEAR/2 (responsive* OR appropriate* OR relevan* OR adapt* OR inclus* OR sensitiv*))) OR MAINSUBJECT.EXACT("Culturally Relevant Education"))	Abstract & Title of belonging AND Title & Abstract of Culture	115
15.01.23		Re-run		116
21.10.22	APA PsychInfo	TI (cultur* N2 (responsiv* OR appropriate* OR relevan* OR adapt* OR inclusive*)) OR AB (cultur* N2 (responsiv* OR appropriate* OR relevan* OR adapt* OR inclusive*))		19824
15.01.23		Re-run		20242
21.10.22	APA PsychInfo	TI (school N2 (belong* OR connect*) OR class* N2 (belong* OR connect*)) OR AB (school N2 (belong* OR connect*) OR class* N2 (belong* OR connect*))		4931
15.01.23		Re-run		5011
21.10.22		DE "School Integration" OR DE "Social Connectedness"		1750
15.01.23		Re-run		1776
21.10.22	APA PsycINFO	TI (school N2 (belong* OR connect*) OR class* N2 (belong* OR connect*)) OR AB (school N2 (belong* OR connect*) OR class* N2 (belong* OR connect*)) OR DE "School Integration" OR DE "Social Connectedness"		6643
15.01.23		Re-run		6749

21.10.22	APA PsycINFO	TI (school N2 (belong* OR connect*) OR class* N2 (belong* OR connect*)) OR AB (school N2 (belong* OR connect*) OR class* N2 (belong* OR connect*)) OR DE "School Integration" OR DE "Social Connectedness" AND TI (cultur* N2 (responsiv* OR appropriate* OR relevan* OR adapt* OR inclusive*)) OR AB (cultur* N2 (responsiv* OR appropriate* OR relevan* OR adapt* OR inclusive*))		92
15.01.23		Re-run		93

Appendix B
Quality Assessment checklist

Adapted Critical Appraisals Skills Programme (CASP) qualitative checklist (2018)		Study Number							
Item		1	2	3	4	5	6	7	8
Section A: Are the results valid?									
1.	Was there a clear statement of the aims of the research?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
2.	Is a qualitative methodology appropriate?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
3.	Was the research design appropriate to address the aims of the research?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
4.	Was the recruitment strategy appropriate to the aims of the research?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Can't tell
5.	Was the data collected in a way that addressed the research issue?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
6.	Has the relationship between researcher and participant been adequately considered?	No	No	Can't tell	Yes	Can't tell	Yes	Can't tell	Can't tell
6a.	Evidence of explicit reflexivity e.g. research philosophy/stance evaluated? (Woods, 2000)	Not reported	Not reported	Not reported	Not explicitly reported	Not reported	Yes	Not reported	Not reported
Section B: What are the results?									
7.	Have ethical issues been taken into consideration?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Can't tell
8.	Was the data analysis sufficiently rigorous?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Can't tell
9.	Is there a clear statement of findings?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Can't tell
Section C: Will the results help locally?									
10.	How valuable is the research?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Total Score out of 11		9	9	9	10	9	11	9	5

Yes = 1; No/Not reported = 0; Can't tell = 0

Adapted Critical Appraisals Skills Programme (CASP) qualitative checklist (2018)

1. Was there a clear statement of the aims of the research? Is the relevance, importance and goal of the research clear?
2. Is a qualitative methodology appropriate? Does the methodology fit in addressing the aims of the research?
3. Was the research design appropriate to address the aims of the research? Is the research design justified?
4. Was the recruitment strategy and sample appropriate to the aims of the research? Is the clarity in how the participants were recruited and why they were selected?
5. Was the data collected in a way that addressed the research issue? Consider the setting, methods and data and how these are explained.
6. Has the relationship between the researcher and the participants been adequately considered? Has the research examined their own role in the research development, data collection and interpretation?
- 6a. * Is there evidence of explicit reflexivity e.g., an evaluation of the research philosophy/stance?
7. Have ethical issues been taken into consideration? Is there clear consideration of the impact on participants, ethical approval and consent?
8. Was the data analysis sufficiently rigorous? Is there a description of the analytic process, including how themes were derived, the presentation of quotes, quantity and quality of data? Do researchers report/examine the influence of their own role during analysis and the data they present?
9. Is there a clear statement of findings? Are findings and their credibility explicitly reported in relation to the research question? Is there adequate evidence for and against the researcher's arguments?

**Additional question to the criteria.*

Appendix C - Data extraction table

Characteristics of the reviewed studies

Study ID & Title	Author & date	Country	Study design/Analyses	Participants characteristics	Type of CRT focused on	Results/themes/outcomes identified	Notes about quality of the study
1 <i>A mixed methods pilot study of an equity-explicit student-teacher relationship intervention for the Ninth-Grade transition</i>	Gaias, Cook, Nguyen, Brewer, Brown, Kiche, Shi, Buntain-Ricklefs & Duong (2020)	US	Mixed methods study First – Teacher’s responses from PLC roster reflections Second – Teacher semi-structured interviews for the qualitative aspect. The student’s voice was gathered using pre-post quantitative surveys measuring	133 - 9 th -grade pupils (students aged between 14-15 identified as white, multiracial, Asian, Black/African American, Latino/Hispanic) 16 teachers (2 teachers non-white)	Equity-Explicit Establish-Maintain-Restore, a student-teacher relationship intervention.	Qualitative data - 34 professional learning community reflections and 16 semi-structured interviews with class teachers to gain feedback on the cultural responsiveness of the programme. Codes developed - content and social identity Quantitative survey results - students reported an improved sense of belonging post-intervention	High (10)
2 <i>Exploring culturally responsive teaching and student created videos in an at-risk</i>	Mackay & Strickland (2018)	US	Exploratory case study - semi-structured interview with the teacher (pre & post), student created iPod	18 consenting 8th-grade students attending 2 summer school English classes. Students self-identified as; 7 were white, 5 as	CRP with novel technology	Theme (1) Teacher's and students' intentions to connect home and school contexts (2) Relationships (3) Relevance	High (10)

<p><i>middle school classroom.</i></p>			<p>video with narration and classroom observations. Data analysed using a 3-step coding system to develop themes</p>	<p>Multi-ethnic, and 4 as Hispanic. Age 13-14</p>			
<p>3 <i>The influence of sustained professional learning on teachers' cultural responsiveness and middle school students' engagement.</i></p>	<p>Sumner (2018) <i>Doc thesis</i></p>	<p>US</p>	<p>Mixed-methods study Pre and post teacher and student surveys followed by student and teacher focus groups at the end of the intervention</p>	<p>25 teachers could impact the cultural responsiveness of teachers at MMS and improve student engagement. Teaching staff were mostly white with a smaller number of Black, Hispanic & Asian staff. Student voice survey completed pre-and-post-intervention by 30 Black and Hispanic students in the middle school. Age 11-13</p>	<p>CRT practice in middle school as a result of a book study attended by the teachers.</p>	<p>5 themes emerged following a post-intervention focus group with six staff. 1 - need to go deeper into learning about cultural responsiveness 2 - their thinking, practices and interactions with students and others whose cultures were different from their own had been influenced by the project 3 - the importance of not evaluating the validity of other cultures through the lens of their own. 4 - increased appreciation for diversity 5 - ways they had grown in their ability to manage the dynamics of difference and institutionalise cultural knowledge. p.75 onwards</p>	<p>High (10)</p>
<p>4 <i>Neutral doesn't work: The importance of educators' active engagement in</i></p>	<p>Kurosaka-Jost (2021) <i>Doc thesis</i></p>	<p>US</p>	<p>Online semi-structured interviews lasting 45mins on average.</p>	<p>30 alumni of colour (representing Asian, Black & Latinx perspectives) reporting on their previous</p>	<p>General teacher practices</p>	<p>Theme 1) AOCs experience inherent marginalisation due to predominantly white school culture p.46 (2) Silence surrounding microaggression not equal to 'It's okay' p.67 (3)</p>	<p>High (10)</p>

<i>creating racially inclusive spaces for students of colour at predominantly-white independent schools.</i>			Data were analysed for themes	experience in predominantly white independent school. Age of participants was not reported		Students of colour experience significant social stress at Predominantly-White independent schools p.77 (4) Non-verbal messages can exhibit powerful signs of caring/uncaring p.89 (5) Neutral doesn't work: The importance of creating an inclusive curricula and class environment	
5 <i>A case study of culturally relevant school-based programming for First Nations youth: Improved relationships, confidence and leadership, and school success</i>	Crooks, Burleigh, Snowshoe, Lapp, Hughes, Sisco & Ashley (2015)	Canada	Surveys with 47 secondary students and 7 individual semi-structured interviews with youth participants of the Fourth R programs & interviews with 5 aboriginal educators and 2 administrators principals at schools involved in the programming	82 participants consisting of elementary, secondary students, educators and administrators from 15 schools. 12 were secondary schools, 47 secondary school students took part in the mentoring programme (Age range 14-19 years), 7 secondary school YP took part in interviews, 2 Aboriginal educators took part in the interviews and 2 administrators.	Fourth R school-based, culturally relevant relationship-focused programming with and for First Nations youth.	4 themes were developed - student success, sense of belonging, leadership skills and confidence and cultural relevance	High (9)
6 <i>Teacher mentors: Lived</i>	Augustine (2015)	US	Phenomenological approach - a combination	5 teachers serving as 1:1 mentors of middle school	Check & connect mentoring program -	11 themes were developed 1) Relationships are foundational in the	High (11)

<p><i>experiences mentoring at-risk middle school students</i></p>	<p><i>Doc thesis</i></p>		<p>of interviews and focus groups used to gain views from the participants. 1:1 interviews with a final focus group with all participants.</p> <p>Data analysis used iterative and inductive cycle of analysis to develop themes</p>	<p>students at risk of dropping out of school (Middle school that serves 800 students in grades 6-8 in an ethnically diverse community)</p> <p><i>11-12year olds</i></p>	<p>evidence-based intervention used to keep students in school and reduce the number of school drop-outs</p>	<p>mentoring process 2) Finding time to meet with the mentee in challenging but essential 3) Mentoring required doing more than the minimum 4) Student progress provides motivation for the mentor 5) Mentors find mentoring personally rewarding and enlightening 6) Learning from mentoring at-risk students transfers into teachers' classroom 7) Mentoring is hardwork 8) Mentoring challenges collegial relationships 9) On-going relationships with parents require strategy and follow through 10) Monitoring mentee's data is a framework for the mentoring process 11) Mentors appreciate training and ongoing support</p>	
<p>7 <i>Teacher Care and students' sense of connectedness in the urban mathematics classroom</i></p>	<p>Maloney & Matthews (2020)</p>	<p>US</p>	<p>Mixed-methods study explored via semi-structured interviews. A survey measuring the sense of connectedness was completed by 321 students.</p>	<p>5 schools (K-8 schools, 2 high schools & 1 secondary school Grades 7-12). <i>321 participating students - Black Latino and predominantly multi-cultural Age 10 to 15-year-olds</i></p>	<p>Culturally responsive pedagogy (care) in Maths classrooms</p>	<p>i) Empathic care - evidenced through 3 patterns a) emotional consciousness to understand and manage student frustration b) affirming student self-identity while engaging in Maths c) partnering with struggling students in Maths and life. ii) Transactional care - although teachers had high</p>	<p>High (9)</p>

			<p>i) subjective teacher practices and beliefs ii) student perceptions of classroom climate and personal beliefs about Maths.</p>	<p>12 urban mathematics teachers' perception of care practices align with Black & Latina students</p>		<p>expectations and care for students, this care was often superficial, inactive, narrowly focused or conditional. iii) Blended care - a mix of empathic care and transactional care.</p>	
<p>8 <i>Tentative steps into the space of another: Teacher challenges of crossing cultures to build bridges with students.</i></p>	<p>Chan, Flanagan, Hermann & Barnes (2015)</p>	<p>US</p>	<p>Participant observations in their classroom, interviews with the teacher, writing conferences with the students, and gathered artefacts and samples of student work.</p>	<p>10th-grade English students from culturally diverse backgrounds (number not specified) and one class teacher in their first year of graduating. <i>(15-16year olds)</i></p>	<p>Culturally sensitive curriculum</p>	<p>i) Highlighted the complexities of building a culturally sensitive curriculum for a first-year teacher. ii) Points disconnect between pupils and teachers being more revealing. iii) Teachers had assumptions of what they thought was helpful but were perceived differently by the pupils. iv) Assumptions and interpretations of students held by teachers. v) Teachers acknowledge that their needs might differ from what is offered within the curriculum. vi) Learning about students was centred on learning from them.</p>	<p>Low (5)</p>

Appendix D Example of coding

The screenshot shows the VIVO software interface. On the left is a sidebar with navigation options: IMPORT (Data, Files, File Classifications, Externals), ORGANIZE (Coding, Codes, Analytical themes, Descriptive themes, Line by line coding), Cases, Notes, Sets, and EXPLORE (Queries, Visualizations). The main workspace has a top menu (Home, Edit, Import, Create, Explore, Share, Modules) and a toolbar with icons for Clipboard, Item, Organize, Visualize, Code, Autocode, Uncode, Code in Vivo, Spread Coding, Case, File, and Workspace. Below the toolbar is a table of codes:

Name	Files	References	Created on	Ability to add...
<input type="radio"/> Ability to address needs a...	4	7	10 Mar 20	<input type="radio"/> Ability to address needs as a result of a better...udents' cultural backgrounds and experiences
<input type="radio"/> Advocating for the students	1	2	12 Mar 20	
<input type="radio"/> Authentic support and co...	2	5	12 Mar 20	
<input type="radio"/> Avoiding unhealthy relatio...	1	1	10 Mar 20	
<input type="radio"/> Be interested and interesti...	3	3	10 Mar 20	
<input type="radio"/> Being listened to and valu...	2	2	10 Mar 20	
<input type="radio"/> Caring support given only...	1	1	11 Mar 20	
<input type="radio"/> Challenges of implementi...	2	2	11 Mar 20	
<input type="radio"/> Challenging stereotypes a...	2	3	11 Mar 20	
<input type="radio"/> Colourblind approach to r...	3	6	10 Mar 20	
<input type="radio"/> Complexities with bridgin...	2	3	10 Mar 20	
<input type="radio"/> Connection through simila...	1	1	13 Mar 20	
<input type="radio"/> Contingent support	2	2	12 Mar 20	
<input type="radio"/> Cultural connection at sch...	2	5	10 Mar 20	
<input type="radio"/> Cultural mismatch relating...	3	7	10 Mar 20	
<input type="radio"/> Cultural valuing and valida...	3	4	10 Mar 20	
<input type="radio"/> Culturally responsive prac...	1	1	13 Mar 20	
<input type="radio"/> Deficit based view of the...	1	2	11 Mar 20	
<input type="radio"/> Easier secondary school t...	1	2	10 Mar 20	
<input type="radio"/> emotional impact of appro...	2	2	10 Mar 20	
<input type="radio"/> Emphasis on learning over...	2	4	11 Mar 20	
<input type="radio"/> Exploring differences thro...	1	1	13 Mar 20	
<input type="radio"/> Extended friendship netw...	1	1	10 Mar 20	
<input type="radio"/> Feeling supported connec...	2	2	11 Mar 20	
<input type="radio"/> Having high expectations...	3	6	11 Mar 20	
<input type="radio"/> Healthy relationships skills	1	2	10 Mar 20	
<input type="radio"/> High levels of anxiety in P...	1	1	13 Mar 20	
<input type="radio"/> Importance of connection...	1	3	12 Mar 20	
<input type="radio"/> Importance of relationship...	2	3	12 Mar 20	
<input type="radio"/> Increased confidence skill...	1	3	10 Mar 20	
<input type="radio"/> Increased sense of belong...	2	2	10 Mar 20	
<input type="radio"/> Intentional desire to make...	3	3	10 Mar 20	
<input type="radio"/> Limited resources to provi...	1	1	13 Mar 20	

The right pane shows a detailed view of a selected code: 'Ability to address needs as a result of a better understanding of students' cultural backgrounds and experiences'. It includes a 'Reference' section with the following text:

Files\A Mixed Methods Pilot Study of an Equity-Explicit Student-Teacher Relationship Intervention for the Ninth-Grade Transition
3 references coded, 0.57% coverage

Reference 1: 0.16% coverage
By learning more about their students' cultural backgrounds (eg, home language) and racialized experiences (eg, stereotypes regarding ability) using Establish strategies, they felt better able to address their students' academic needs.

Reference 2: 0.22% coverage
At times, teachers discussed how their relationships with students were situated within larger societal systems of power and privilege. This included references to social processes (eg, gentrification) or movements (eg, Black Lives Matter) that teachers addressed with students, which served as the backdrop for relationship building.

Reference 3: 0.19% coverage
Teachers focused on learning about students' cultures, home lives, and interests, which enhanced their ability to build relationships and resolve conflicts. Some teachers noted that by learning about students' backgrounds, they were also better able to genuinely engage students in academic work.

Another reference is shown below:

Files\Teacher Care and Students' Sense of Connectedness in the Urban Mathematics Classroom
2 references coded, 0.54% coverage

Reference 1: 0.10% coverage
Mr. Espada's experiences growing up in an urban environment established his acuity to simultaneously acknowledge his students' personal challenges (pattern three) while actively maintaining high expectations for them.

Appendix E

Line-by-line coding and descriptive codes

Descriptive codes	Line-by-line codes
<p>Teaching staff's intention to develop strong relationships with students</p>	<ul style="list-style-type: none"> ● Ability to address needs as a result of a better understanding of students' cultural backgrounds and experiences. ● Authentic support and connection. ● Be interested and interesting ● Importance of relationship building ● Teacher-student interactions. ● Unconditional care & support. ● Intentional desire to make meaningful connections with students. ● Learning about students involves learning from them. ● Power dynamics impacting on teacher-student relationships
<p>Teacher's self-awareness and introspection</p>	<ul style="list-style-type: none"> ● Reflecting and acknowledging teachers' own privilege, bias and position ● Teacher's self-disclosure of stories and experiences for connecting ● Connection through shared similar experiences ● Teacher self-reflection ● Point of resonance ● CRP increases teacher efficacy and confidence. ● Teacher's learning opportunities through experience.
<p>Impact of cultural responsiveness in students/pupils</p>	<ul style="list-style-type: none"> ● Feeling supported, connected and recognised supports achievement ● Healthy relationship skills ● High levels of anxiety in PWIS ● Increased confidence skills encouraging further school engagement. ● Increase sense of belonging

	<ul style="list-style-type: none"> ● Positive communication skills ● Student report feeling inadequate academically in PWIS ● School engagement ● ‘sometimes’ feeling a sense of belonging ● Socio-economic disconnect among peers. ● Student feeling less understood from a cultural perspective. ● Increased comfort in school ● Reduced negative school experiences for students ● Increased success due to programme
<p>Unsupportive approaches for culturally diverse pupils</p>	<ul style="list-style-type: none"> ● Colourblind approach to relationship building ● Contingent caring support/when teacher expectations are met. ● Deficit-based view of students ● No acknowledgement of experiences ● Emphasis on learning over students’ personal lives. ● Challenges implementing CRP ● Superficial support from teachers. ● Cultural differences between teachers affecting their relationships
<p>Positive views of students</p>	<ul style="list-style-type: none"> ● Having high expectations for students despite challenges ● Seeking to understand students’ experiences ● Challenging stereotypes about ethnic minority pupils ● Person-centred support ● Revoicing as a means of connecting ● Prioritising students’ emotions before teaching ● Exploring differences through curious questioning. ● Teachers’ acknowledgement of impact of social and economic oppression of students ● Teachers’ empathic care towards students.
<p>Difficulty merging two worlds (home and school)</p>	<ul style="list-style-type: none"> ● Complexity with bridging home and school experiences ● Reluctance by other students to share lives outside school

	<ul style="list-style-type: none"> ● Limited resources to make meaningful connections with students.
Conflicting perception of support (Students vs Teachers)	<ul style="list-style-type: none"> ● Teachers' assumptions regarding support available for students ● Tension between teachers and students' perception of culturally relevant/sensitive curriculum. ● Student perceived teacher support. ● Reconsideration of what teachers thought they knew about the students. ● Within ethnic group differences
Being understood culturally in school	<ul style="list-style-type: none"> ● Appreciation of managing the dynamic of cultural diversity ● Cultural valuing and validation in school ● Cultural connection at school ● Point of disconnect, presenting as an opportunity for connection ● Feeling valued and listened to ● Increased cultural connectedness ● Strong sense of identity
Students being represented in the school	<ul style="list-style-type: none"> ● Representation from educators from same cultural background ● Cultural mismatch between teacher & student ● Representing peers and encouraging connectedness and engagement. ● Representation in the curriculum

Appendix F

Descriptive themes identified in each reviewed study with illustrative quote

Descriptive themes	Galle et al. (2020)	Mearns & Strickland (2018)	Sumner (2016)	Kunzle-Jost (2017)	Crooks et al. (2015)	Augustine (2015)	Maloney & Matthews (2020)	Chan et al. (2019)
Teaching staffs' intention to develop strong relationships with students	By learning more about their students' cultural backgrounds (eg, home language) or racialised experiences (eg, stereotypes regarding ability) using Establish strategies, they felt better able to address their students' academic needs. At times, teachers discussed how their relationships with students were situated within larger societal systems of power and privilege. This included references to social processes (eg, gentrification) or movements (eg, Black Lives Matter) that teachers addressed with students, which served as the backdrop for relationship building (p.1011)	The result suggests that the contribution both students and teacher stories is necessary, and the interaction of these is important for building relevance and relationship (p.11).				The teacher mentors in this study demonstrated authentic enthusiasm around the relationships with their mentees. Jane shared, Mentoring, I love it. I love building relationships with students whether it's talking about their grades, about their character, about their families (p.73).	The teacher mentors in this study embraced their role to build relationships that are emotionally and academically supportive (p.76).	Learning about students was centred on learning from them, and their knowledge could not be captured in neat packets that could be passed on to others (p.22).
Teacher's self-awareness and introspection	Notably, multiple teachers commented on the importance of owning their own racial privilege, implicit bias, or position of power as a teacher. These reflections indicate teachers were able to explicitly focus on identify characteristics (students' and their own) as they built and maintained relationships with students... (p. 1014)	When the teacher discussed his ideas of relationship building in the classroom he indicated, "I'll try to be interesting and interested. So I'll tell the anecdotes about my dad and my mom, I'll tell stories about growing up, or I'll tell stories about classroom experiences. (p.6)	The White male stated, "I've definitely become more reflective in my lessons and student interactions. First time ever [in] my 7th-grade science [I have] created a student's family portfolio related to genetics." A Black female shared a new awareness of how her race influences the way she works with students. (p.65)			The teacher mentors in this study clearly identified the pairing of mentoring with culturally responsive teaching strategies as a powerful combination. This combination appeared to not only increase the confidence and ability of the teacher mentors to meet the needs of their mentees, but seemed to transfer into their classroom strategies as well. (p.123)	The theme that surfaced in the four former responses was the importance of not evaluating the validity of someone else's culture through the lens of your own (p.67).	This idea of resonance emerged in our encounters with the students in James' class, and helped us to better understand the experiences they brought to school. Sometimes the resonances became apparent when we caught a glimpse of something familiar in a context that seemed initially to be unfamiliar, and sometimes, we sought resonances in situations that we initially interpreted to be familiar but then developed in unexpected ways. We marvelled at how resonances were highlighted as a starting point when our assumptions about aspects of the students' lives did not seem to evolve in the way we might have anticipated. Andrea wrote about another such encounter with one of James' classmates, Sang. (p.20)
Impact of cultural responsiveness in students/pupils			As for feeling a part of the school community, the responses were "sometimes" (F), "some teachers encourage group participation" (F), "some teachers don't encourage participation in groups". They do not believe the teachers do enough to help them feel a part of the school community nor do they believe teachers go far enough in addressing insensitive remarks made about race and ethnicity (p.70-71)	Tiffany also described feeling like an outsider to a close-knit community, as she recalled feeling keenly aware of the interconnectedness of her school's residential neighborhood, recounting: [The school neighborhood] is a pretty small, tight-knit community. Everybody knows each other. Me coming in and being the only person of color with all these people that knew each other... the teachers had relationships with the students because their sisters had them or their brothers had them. I was just a stranger to that community (p.48).	One educator identified the programs as an important stepping stone to increasing school involvement and joining other activities: There are students that you saw in grade 9 and it's their first thing that they ever got involved in and then by the time they are in grade 10 they are starting to go out to other clubs and then by grade 11 and 12 they are leaders within the school and not just within the First Nations groups. For example, this year one of our former mentors is the co-president of the school. (Interview, female educator, 2012) (p.8)	With each teacher mentor, success no matter whether large or small, they seemed to take more pleasure in seeing changes in the student's effort and engagement over even any academic outcome. In one instance, a teacher mentor was thrilled that after several months of not showing up, her mentee came and was willing to talk (p.91).		
Unsupportive approaches for culturally diverse pupils	Teachers indicated that their relationship-building practices and relationship status did not differ with students according to race/ethnicity or other sociodemographic factors, even when directly probed (p.1011).			A pervasive sense of cultural disconnect was expressed by Nicole, who felt her white teachers lived naive and unreliable lives. She suggested drastic measures towards cultural competence: There really needs to be some rewiring because it's not happening. [The teachers] just live these perfect lives out here: they pull up to the parking lot in their perfect little cars and then they have their perfect little kids go to these same schools and they're perfect, [and their] partners are doing perfect things (p.51).			However, the perfunctory ways in which these teachers enact care may impede students from feeling the sense of connectedness that mediates their mathematical identity development (p.425).	Natalie questioned how a curricular decision that was intended to enhance the relevance of school curriculum for a Native American student was met with unexpected anger, while Rita's recognition of a connection with the same student helped to shed light on possible underlying tensions in his life beyond the school context (p.21).

	Galles et al. (2020)	Meady & Strickland (2018)	Summer (2018)	Kurosaka-Jost (2021)	Crooks et al. (2015)	Augustine (2015)	Maloney & Matthews (2020)	Chan et al. (2015)
Positive views of students	This included feeling challenged building relationships with students whose teachers thought had high levels of privilege and/or wanting to provide supports for students who faced systemic disparities and discrimination that impacted their educational trajectories. This also included teachers changing their behavior or practices based on feedback from students regarding systems of power and privilege (eg, asking students about their preferred pronouns). p.1011	Mr. Simm's responses to the students' videos, he revociced student experiences as a connection....teacher self-disclosure of stories and experiences can pave the way for positive teacher-student relationships because stories provide a "powerful means for people to establish bridges across other factors that separate them (p.8)	In discussing the final question of whether teachers believed they could learn each day's objective, the students were less jauntly in how they answered. One student said, "One of my teachers believe everyone can do the work" (M). Another student expressed that only two teachers believed in the student's ability to do the work. The student's evidence for this was that the two teachers had said, "I wouldn't give you work that I didn't think you could do" (F). (p.71)			The role of these teacher mentors showed a depth of commitment to not only help their mentees navigate through their middle school years but also to help their mentees develop their own self-efficacy and create positive relationships with their teacher mentor and with others inside or outside of the school. While often the teacher mentors were dealing with their mentees having made poor choices, they continued to be dedicated and committed to the students (p.86)	Three of the four empathetic caring teachers were Black or Latinx and attended K-12 schools in the same community they now teach or similar urban communities. Thus, race and sociocultural background were likely meaningful for building kinship and a collective struggle orientation with students. (p.409).	She was excited to hear more about Tom's experiences of interacting with peers of different cultural background in school. Over time, however, she realized that most days, Tom missed a good part of what took place in class because he kept his eyes closed and his head on the desk, not paying attention to what was taking place around him. Initial thoughts of connection were tempered with the reality of limited time during class when conversations might have been possible and an adolescent that did not seem to be interested in reflecting further on a past moment. (p.20)
Difficulty merging two worlds (home and school)	Some teachers even reported that because their focus was to build positive relationships with students from historically marginalized groups, their relationships with students from privileged groups remained in the Establish phase. This may be due to the high number of students a high school teacher has and the limited time they can devote to implementing relationship-building practices with students (p.1014).	The findings of this study revealed that bridging home and school experiences is more complex than simply inviting students' lives into the classroom. When the students were asked to share about their lives outside of the classroom in a digital mode while inside the classroom context, their perceived home-school disconnection prescribed, and therefore limited, the information they chose to share (p.10).		Tamara reflected on how she did not have an Asian model for coming out while in high school, and how this partly contributed to her not coming out until later in college. Three others (Bo, Henry, and Cameron) also described experiencing classroom lessons or teacher support in terms of their LGBTQ identity while also encountering lack of race conversations in the classrooms (p.58).				The work of engaging students needed to involve learning about what was important to them, and listening as they offered tidbits of information and thoughts that we might build on. We were humbled by the realization of the extent to which learning to engage students of diverse social and cultural backgrounds was not so much about learning about difference and culture as much as being open to learning about their ideas and experiences, and being willing to reconsider and question what we thought we knew about them (p.22).
Conflicting perception of support (students vs teachers)			They do not believe the teachers do enough to help them feel a part of the school community nor do they believe teachers go far enough in addressing insensitive remarks made about race and ethnicity (p.72)	This first finding points to how school culture and traditions can feel exclusive and unwelcoming to a student of color (SOC) and how, even with the absence of discriminatory practices or policies, school culture can still feel marginalizing (p.46).				We examine these points of interest and tension when we as teachers, teacher educators, and researchers, were urged to reconsider what we believed we knew about the students (p.16).
Being understood from a cultural perspective in school			The White male reflected, "Collaborating with team members, co-teachers, department members, I have to remember our own views can be different based on our backgrounds." The responses to this question indicated a growing appreciation of managing the dynamics of difference and institutionalizing cultural knowledge, two of the themes from the CCS-A (p.68)	Moreover, Kim noted a "dearth of culture and representation in the curriculum (despite the fact that) it's easy to do in English" and Carol described an absence of multiculturalism in all of her core classes. As well, three others (Ben, Ethan, and Opa) could not recall feeling connected to what they learned in their core classes (p.53).	Mentors are showing other kids that you can succeed and still be Aboriginal. That's the key; it's showing kids they don't have to lose who they are in order to be successful. We are not asking you to assimilate or give up everything to success. We know that you can keep connected to your culture and success. (Interview, female educator, 2012) (p.10)			An exchange that was initially interpreted as a point of disconnection between James and his teacher was perceived instead as a possible point of connection when Rita reached back into her own experiences as a teacher, a teacher educator, and a former student to inform her, and our, understanding of ways in which James' experiences might shape his experience of his school curriculum (p.19).
Students being represented in the school	Teachers reflected on how their own background and identity, typically their race and gender, impacted their relationships with students (p.1009).		The White male responded, "It makes me think of staff diversity. Students should see themselves in us." A Black female responded, "The kids don't bring the same experiences [we have]. They bring their own experiences." A White female stated, Now I understand that best practice isn't always a best practice for Black and Hispanic students. You need to first build trust when you are [viewed as] the oppressor; race. I tend to be more hardcore and that is not best for all. I feel more confident in intervening in staff or student conversations that are not culturally sensitive (p.67).		Educators viewed the programs' provision of role models from the same cultural background as important: "... where you can see kids from your community in leadership positions and that's very powerful. You see amazing leadership, you see some articulate students at the secondary level going off to college and university with high aspirations and those kids have had those mentors through grade 8 up through high school and you can see that it builds confidence and capacity. (Interview, female educator, 2012) (p.8-9)	Because Rachel lived in Central America for three years, she also shared how that experience impacted her ability to understand how he might feel. "I guess, when I lived in a foreign country, I know how that felt for me and I kind of imagine what he feels like coming here to a foreign country" (p.79).	Three of the four empathetic caring teachers were Black or Latinx in the same community they now teach or similar urban communities. Thus, race and sociocultural background were likely meaningful for building kinship and a collective struggle orientation with students (p.40).	She spoke to us about how she believed in the importance of students being able to see themselves in the curriculum materials (p.18)