A study exploring the relationship of secondary school teacher attitudes and efficacy beliefs to inclusive behaviours towards young people with social, emotional and mental health (SEMH) needs.

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Abstract

The inclusion of Children and Young People (CYP) with Social, Emotional and Mental Health (SEMH) difficulties has proven to be an ongoing challenge for teachers and schools in the UK; teachers view CYP with SEMH-type needs as the most challenging area of Special Educational Need (SEN) to include in mainstream classes (De Boer et al., 2011; DfE, 2019b; Dimitrelllou, 2017) and schools disproportionately exclude CYP with SEMH-type needs compared to other areas of SEN or no SEN at all (Bryant et al., 2018; DfE, 2019b; Graham et al., 2019; Monsen et al., 2014). Despite the government's commitment to supporting the prevention and effective management of young people's mental health needs (DoH and DfE, 2017; DfE, 2018; DfE, 2019a), SEMH difficulties are highly prevalent and are expected to increase as a result of the disruption caused by the Covid-19 pandemic (Lee, 2020), placing even greater focus on schools to promote the successful inclusion of students with these needs.

Research has consistently highlighted the importance of teacher attitudes and teacher self-efficacy (TSE) in influencing inclusive practices towards CYP with SEN (Amaral et al., 2013; Borg et al., 2011; MacFarlane & Woolfson, 2013; Malak et al., 2018; Pit-ten Cate et al., 2019; Sharma & Sokal, 2016). However, a systematic literature review conducted for this study highlighted that there is currently a lack of research into understanding the relationship between secondary teacher attitudes and efficacy and their behavioural intentions towards the inclusion of CYP, in particular those with SEMH-type needs. Additionally, whilst there is significant evidence into the role of TSE towards inclusive teacher behaviours, there is currently a lack of research into the role of teacher collective efficacy (CTE) in determining inclusive practices.

This study adopted the Theory of Planned Behaviour (Ajzen, 1991) to investigate the relationship between teacher attitudes (both beliefs and feelings), TSE (perceived behavioural control), CTE (subjective norm) and behavioural intentions towards the

inclusion of CYP with SEMH needs. Adopting a cross-sectional survey design, secondary school teachers (*n*=101) from mainstream schools participated in an online questionnaire.

The results of the study found that strength of secondary teacher self-efficacy was significantly higher for teachers with over fifteen years of experience compared to those with less than five years of experience. Only teacher attitudes (both beliefs and feelings) were individually found to be a predictor of behavioural intentions towards the inclusion of CYP with SEMH needs.

The implications of the findings for both research and professional practice are explored including; how headteachers can strengthen teacher attitudes towards inclusion to enable inclusive practices and how educational psychologists may support a deeper understanding of SEMH through specialist training and group-based problem-solving supervision.

Chapter 1 INTRODUCTION

1.1 Personal interest in the Research Area

The government – through successive policies – have emphasised the key role schools have in supporting the prevention, early identification and management of mental health difficulties (DfE, 2018; DfE, 2019a). However, CYP with mental health and other associated needs, represented in the SEN category of SEMH, are seen as the most challenging population of students for teachers to include in mainstream classes (De Boer et al., 2011; DfE, 2019b; Dimitrelllou, 2017). This perception may be reflected in the fact that CYP with SEMH needs are disproportionately excluded compared to students with other types of SEN (Bryant et al., 2018; DfE, 2019b). Understanding how schools and teachers can be supported to strengthen inclusive practices towards this population is of critical importance in order to reduce their vulnerability to exclusion and other poor educational outcomes.

The researcher's personal interest in this research area is drawn on their professional experience as a secondary teacher working in a mainstream school with a large number of CYP with SEMH difficulties. The researcher was committed to the ideology of inclusion and also aware of the importance of adapting their practices, such as instructional and classroom management strategies, in order to support students' needs in the classroom. However, the researcher also recognised that successful inclusive practices relied on teachers having an effective understanding of the individual needs of students and being equipped with a range of strategies to meet those needs.

As a Trainee Educational Psychologist (TEP), the researcher has been frequently involved in supporting teachers to help understand and address the SEMH needs that challenging behaviour may communicate. In their experience, teacher focus is frequently given to problematising the student which could be a barrier to identifying

the students' underlying needs and teacher-based strategies to support these needs in the general classroom.

Furthermore, at the Educational Psychology Service where the researcher was placed as a TEP, EPs were piloting a city-wide secondary school inclusion project for CYP with SEMH, in response to high exclusion rates. Ahead of a full roll-out, there was interest in understanding what secondary teacher-based factors might be pertinent to supporting the successful implementation of inclusive policies and practices. For these collective reasons, the researcher was motivated to explore secondary teacher perspectives towards the inclusion of CYP with SEMH needs.

1.2 Structure of the thesis

The thesis is presented over five chapters, including this introduction (Chapter 1):

Chapter 2 - presents the **literature review**, which provides a detailed overview of the current national and policy context of inclusion and SEMH in the UK. The review also gives consideration of the available research into the relationship between teacher attitudes, efficacy and inclusive teaching behaviours (both intentions and actual). A systematic literature review identified the gaps in available research relating to the relationship between teacher attitudes, efficacy and behaviour, as a basis for the development of the study's research questions.

Chapter 3 - presents the **methodology**, which outlines the theoretical considerations relevant to the researcher's adoption of a post-positivist approach. The rationale for the research design is also explored with particular consideration given to the study's procedure, measures adopted, reliability and validity. The chapter concludes by setting out the data analysis approach employed.

Chapter 4 - presents the **results** based on the analysed data. Both descriptive and inferential analyses are carried out to investigate the research questions and related hypotheses.

Chapter 5 – the **discussion** presents findings for each of the research questions, which are critically considered in relation to the literature reviewed in chapter 2 and any additional pertinent studies. A methodological review, including an evaluation of the reliability and validity of the research method, is presented, followed by possible implications for future research, educational settings and Educational Psychologists. The chapter concludes with a summary of the research.

Chapter 2 LITERATURE REVIEW

2.1 Aim and structure of the Literature Review

This chapter aims to provide a comprehensive overview of the existing body of research that has studied teacher attitudes and feelings of efficacy towards the inclusion of Children and Young People (CYP) with Special Educational Needs and Disabilities (SEND), with a particular focus on those with Social, Emotional and Mental Health (SEMH) needs. The review will begin by setting the research within the current UK educational context around vulnerabilities to harmful inclusive practices and exclusion that CYP with SEMH currently faces. Then a theoretical consideration will be given of the terms' 'inclusion' and 'SEMH' and how they have evolved within a socio-political context.

Following this, an overview of critical teacher-based factors – attitudes towards inclusion, self and collective efficacy towards implementing inclusive practices –may influence inclusive teacher behaviours in the classroom. It will also summarize how previous research has drawn on the Theory of Planned Behaviour (TPB) (Ajzen, 2002) to investigate and explain how these variables may predict such behaviours. Finally, a systematic review is presented, which provides a rigorous search of critical databases, critical analysis and qualitative synthesis of four studies relevant to the purpose of the review. Based on the key findings from the review and identified gaps in the literature, a clear rationale for the current study is then developed, and research questions set out.

2.1. The inclusion of CYP with SEMH needs

2.1.1. The national and policy context

In legislation and amongst practitioners, inclusion is primarily concerned with the education of CYP with SEND. The conceptualisation and operationalisation of inclusive education vary within and between countries. Working definitions typically

focus on how a schools provision is adapted and re-organised – curricular, staffing resources, teacher instructional strategies, physical/supplementary aids – to accept the enrolment of and ensure the academic and social inclusion of children with SEND (Lipsky & Gartner, 1996; Sebba & Sachdev, 2008).

Successive national educational policies and legislation over the last 50 years have intended to support the inclusion of all young people with SEND, including those with SEMH needs, *within* mainstream schools. Broadening the definition of inclusion to include other marginalised groups (relating to ethnicity, race, gender) or even all CYP is debated within the literature but has struggled to influence inclusive policies in the UK and elsewhere (Florian, 2008; Haug, 2017; Woodcock, 2020). Despite the seminal Salamanca statement driving a notion of inclusion that wanted to deliver on principles of equal educational rights for *all* (UNESCO, 1994).

The inclusion of young people with SEMH needs appears to be an ongoing critical challenge for schools, Local Authorities and central government. Teachers view young people with SEMH needs as the most challenging to include in mainstream classes: these pupils are more likely to go to specialist provision and alternative provision and are disproportionately more likely to face fixed and permanent exclusion from a mainstream provision, compared to peers with other types of SEN or no SEN at all (Bryant et al., 2018; Cooper, 2004; Department fo Education (DfE), 2019; Gibbs & Powell, 2012; Graham et al., 2019; Monsen et al., 2014). The challenge around supporting CYP with SEMH needs within a mainstream provision is expected to increase due to the current global pandemic. The exacerbation of SEMH needs due to school closures, lost access to mental health support services and peer support networks was already predicted at the pandemic's start (Lee, 2020).

Recent data and government reports around the use of exclusion and alternative provision highlights the growing concern around difficulties in supporting the inclusion of CYP with SEMH needs (Bryant et al., 2018; DfE, 2019b). Whilst only

representing 17% of young people with SEN, children with SEMH needs represent 78% of permanent exclusions from mainstream schools (DfE, 2019b) and are 15 times more likely to be permanently excluded than their peers without an identified SEN (DfE, 2020). This correlation is not unique to the UK; it has been observed in other developed education systems such as the US (see, for example, Bowman-Perrott et al., 2013). The consequences, both educationally and socially, for young people who experience exclusion is well documented in the literature (Graham et al., 2019).

The exclusion of young people with SEMH needs appears to be particularly problematic in secondary schools (DfE, 2019b). In part, this may be explained by the fact that there is a greater prevalence of SEMH amongst secondary pupils (Bryant et al., 2018). However, this does not tell the whole story. In a literature review commissioned by the DfE investigating why groups such as SEMH pupils were disproportionately affected by exclusion, the higher exclusion rate in secondary schools than primary was attributed to several factors (Graham et al., 2019). These were noted to include greater rigidity around behaviour systems compared to primary schools. Punitive behaviour systems, for example, have been shown to undermine social inclusion in the classroom (Hill & Brown, 2013).

Furthermore, a tighter focus on exam results and less emphasis on wellbeing and a sense of belonging may contribute to lower feelings of contentment and social inclusion amongst CYP with SEMH needs (Schwab et al., 2015). Adolescence and the varying influences on the behaviour of young people during this period may also be a factor (Ciranka & van den Bos, 2019). Finally, difficult transition experiences between primary and secondary school may leave vulnerable pupils behind academically and contribute to social needs (Spernes, 2020).

Schools do not sit within vacuums: it is vital to consider the broader socio-political context within which any systemic barriers to inclusion may have developed. Over the last two decades, schools have been given greater autonomy away from Local

Authority influence for leading their improvement and funding decisions, whilst external accountability has tightened (Hargreaves, 2010; Sandals & Bryant, 2014). The educational 'market' conditions for competition between schools around academic performance may have undermined the impetus towards inclusive school cultures (Hardy & Woodcock, 2015). For example, school leaders see existing external accountability frameworks as not sufficiently recognising school efforts to admit, support or reintegrate students with additional needs, particularly those with SEMH needs (Bryant et al., 2018). Performance league tables upon which schools' reputation are staked may deter schools from accepting and supporting CYP with SEN, who typically have lower attainment and challenging behaviour (Hanko, 2003; Hookey, 2010). Therefore, it could be argued that high stakes and public-facing accountability, focused on exam performance and learning outcomes, unintentionally conflicts with inclusive practices (Woodcock, 2020), disincentivising inclusive leadership and teaching practices (DfE, 2019b; Ewing et al., 2018).

One function of an autonomous local school system is that provision for the most vulnerable CYP is seen as less evolved than local placement planning and school improvement (Sandals & Bryant, 2014). The local implementation of national reforms for SEN (e.g. SEN Code of Practice; DfE, 2015) and devolved funding arrangements for alternative provision and higher-level needs pupils varies considerably across different local education systems (Sandals & Bryant, 2014). For example, in some local systems, schools are financially responsible for the permanent placement of students in alternative provision; in other areas, they are not (Bryant et al., 2018). As a result, in some areas, it can be financially disadvantageous for a school to support and include rather than seek permanent exclusion of CYP with SEND (Bryant et al., 2018).

2.1.2. Theoretical perspectives on inclusion

In order to explore the inclusion of young people with SEMH needs in mainstream schools, it is essential to consider what is meant by the term 'inclusion'. Understanding the term needs to consider the evolving and complex historical and legislative context and the varying interpretations amongst academics and practitioners that persist today. It can be argued that while stakeholders at every level of the education system – national and local policy-makers, headteachers and classroom teachers - appear to support inclusive education principles theoretically, the practical implementation of such principles has been less effective (Haug, 2017; Hodkinson, 2010). This persisting disconnect between the aspiration towards inclusion and its implementation raises questions about policies effectiveness to date.

Difficulties in generating universal meaning around the notion of inclusion have been observed by academics (Slee & Allan, 2001) and practitioners (Sikes et al., 2007). These difficulties could be seen to be the inevitable result of trying to translate what is a complex social construct into a measurable and readily understood stand-alone entity (Haug, 2017). Many international and national policies around inclusive education describe the values and principles of inclusion without explicit definition: capturing inclusive values rather than a definition per se that some have argued should drive policymakers and practitioners (Rose et al., 2014). The difficulty of constructing inclusion as a specific and identifiable notion has been seen as an impediment to how inclusion is practised: a misunderstanding of the theory may lead to confusion around its practical application (Hardy & Woodcock, 2015; Woodcock, 2020). This ambiguity around its meaning may have contributed to the illusion of consensus between government and practitioners about implementing inclusion in schools (Hodkinson, 2011; Rogers, 2013).

In the UK, approaches to inclusive education can be seen to build on a social model of disability that gained momentum in the 60s. Embracing a social model of disability

represented a distinct shift from the uncomfortable legacy of young people with SEN being routinely segregated from their peers until the 1960s (Hodkinson, 2010) (British Psychological Society. (BPS), 2002; Norwich, 2008b). The movement promoted the values of social participation, sense of belonging and equality of opportunity that a community mainstream school was seen to offer (Haug, 2017; Thomas & Loxley, 2007) and argued against the stigmatisation and marginalisation for young people attending specialist schools (Galloway & Goodwin, 1987; Norwich, 2008b). It continues to be unclear whether specialist schooling even delivers better educational outcomes than mainstream, permitting inclusion to rest on the side of morality and ideology rather than what is best educationally for CYP (Tony Cline, 2015; Norwich, 2008b). It can be argued that empirical support for the educational impact of inclusive education systems is irrelevant, as the moral argument is paramount (Lindsay, 2007).

In the UK, the notion of inclusion as one of social equality in schools can be seen to have developed from the policy of ‘integration’ proposed by the original Warnock Report (1978), which ‘normalised’ CYP with disabilities and SEN, allowing them to attend mainstream schooling (Hodkinson, 2010, 2011; Norwich, 2008b). The Labour government of the late 90s and early '00s heralded a more robust concept of inclusion, calling for CYP with disabilities and SEN to be given their right to *full* participation in academic and social life in their local mainstream school (DfEE, 1997; DfES, 2001).

These policies positioned inclusion as being concerned with more than just the *organisational* aspect of education (e.g. placement within a mainstream school or class) but about the *differentiated activities* of teaching and classroom organisation that support full educational participation within a mainstream class (Anastasiou et al., 2015; Haug, 2017; Tobin & Tippett, 2014). It is not sufficient to place a CYP in a mainstream school or class; pedagogical adaptations should also take account of their learning, social and physical needs in order to remove potential barriers to educational participation (Graham & Jahnukainen, 2011; Ainscow & Sandill, 2010; Norwich, 2008a; Schwab et al., 2015). A definition of inclusion that focuses on the

teaching and learning environment also helpfully references a social and eco-systemic perspective of understanding SEN and disabilities, one where the barriers to learning are not just that of the individual child's characteristics but the environmental factors at play, e.g. instructional strategies and the classroom climate (Florian, 2008; Schwab et al., 2015).

The SEN Code of Practice (DfE, 2015) has the hallmarks of this eco-systemic conceptualisation of inclusion. It commits to the “general presumption in law of mainstream education in relation to CYP with SEN and disabilities” (DfE, 2015, p.25). It goes further by expecting schools and teachers to make planned adaptions to reduce potential barriers to learning and get the support they need such that CYP can engage in the activities of a school alongside those without SEN (DfE, 2015).

However, the SEN Code of Practice also acknowledges that there may be a need for a particular educational provision that is different or more commonly available to their peers. It could allow CYP to receive their primary instruction within the regular classroom and receive additional support/services within small groups of 1-1, e.g. literacy intervention, social skills group. This learning and outcome-focused approach to inclusion emphasises working out how children might learn best, even if that includes some degree of separation from regular class (Norwich, 2008b). It is a view supported by the Centre for the Study of Inclusive Education (CSIE) (Rix, 2006). Therefore, the focus is on working out what provision and how it is delivered that is required to support the needs of CYP with SEN and secure the most beneficial academic and social outcomes (Lipsky & Gartner, 1996; Norwich, 2008b). Such a perspective could avoid presenting inclusion as a narrow and ideological driven dichotomy between mainstream schooling and special schools (Haug, 2017) but instead aligned with the needs and desired outcomes of CYP. Concerning the current study, this understanding of the inclusion of CYP with SEMH difficulties should consider how mainstream secondary schools adapt their provision to support their individual SEN needs.

2.1.3. Theoretical perspectives around 'SEMH.'

The term ‘SEMH’ was employed in the Children and Families Act (DfE, 2015) and replaced the former term ‘Behavioural, Emotional and Social Difficulties’ (BESD). It represented a significant re-framing of this area of SEN, firstly by focusing on ‘mental health’ instead of ‘behavioural’ and secondly using the term ‘need’ instead of ‘difficulties’. In the current study the use of ‘SEMH’ refers specifically to the legislative change (DfE, 2015), importantly reflecting a term commonly used by teachers in England schools. ‘SEMH-type’ needs is also applied in the current study to take account of studies that utilise similar conceptualisations of this area of need, such as ‘Social, Emotional, Behavioural Disorders’ (SEBD; Macfarlane & Woolfson, 2013).

The explict focus of the term ‘SEMH’ on mental health needs importantly acknowledges that behavioural difficulties should be interpreted as an external manifestation of underlying SEMH needs (Frederickson & Cline, 2015; Lord, 2011). However, despite recent statutory and non-statutory guidance around the identification and assessment of SEMH, ongoing issues with the ambiguity and complexity of the construct persist amongst practitioners. For schools, challenging behaviours may be the first signal that the CYP has SEMH-based needs. While the SEN Code of Practice (DfE, 2015) makes clear that challenging behaviour should no longer be seen as an SEND in itself, it is still expected that schools take account of behaviour when assessing SEMH needs because they may reflect underlying mental health difficulties (Norwich & Eaton, 2014).

The SEN Code Practice’s focus on mental health represents a broader and ongoing government priority around mental health and the role of schools around early identification and prevention; recent proposals introduce mental health leaders in schools to deliver individual and group-based mental health support and support referrals to specialist services where necessary (DfE, 2018; DfE, 2019a). The significant government response to supporting mental health highlights the

concerning prevalence of mental health problems in CYP (Zafeiriou & Gulliford, 2020). When discussing mental health problems amongst CYP, it is essential to acknowledge some of the key terminology used in research and policy. A mental health *disorder* typically refers to conditions diagnosed by a mental health professional based on medicalised diagnostic criteria within the Diagnostic and Statistical Manual of Mental Disorders (DSM) (American Psychiatric Association, 2013). On the other hand, a CYP with a mental health *difficulty* might not necessarily meet the criteria for a diagnosis but is such that they would require additional and different provision to that commonly available to their peers (DfE, 2015).

A meta-analysis of 41 studies examining diagnosed mental health disorders in children and adolescents between 1985-2012 estimates a pooled prevalence of 6.5% anxiety disorders, 2.6% depressive disorder and 3.4% attention-deficit hyperactivity disorder (Polanczyk et al., 2015). A UK based study that surveyed 28,160 adolescents with mental health difficulties using the Strengths and Difficulties Questionnaire (Deighton et al., 2019); comprising four problem scales; emotional symptoms, conduct problems, peer relationship problems, inattention problems and a prosocial behaviour scale) highlighted that two in five young people scored above 'abnormal' thresholds in three of the four difficult areas (Deighton et al., 2019). The study also demonstrated that having another SEN (such as a learning or communication and language SEN) raised the risk of experiencing mental health difficulties, although it did not distinguish between different areas of need. Unlike Polanczyk et al. (2015), this study was interested in mental health difficulties more generally; it did not use a diagnostic measure and instead relied on a child self-report brief assessment tool. Whilst this does not offer the same reliability as a diagnostic measure, it offers a helpful estimation of the scale of perceived mental health difficulties amongst the school population. As noted by the authors, this highlights the significant challenge for schools in meeting this need (Deighton et al., 2019).

However, just as the previous term, BESD, was criticised for being ambiguous, leading to over-use, so too has its replacement (Norwich & Eaton, 2014). As the extract above sets out, the SEN Code of Practice's (2015) threshold of mental health

difficulties includes specific diagnostics (e.g. attention deficit disorder) and more general ‘challenging’ behaviours. However, the lack of clarity around the specificity, severity and frequency of challenging behaviours may undermine reliable and equitable identification of SEMH needs (Dimitrellou & Male, 2020). The risk to SEMH needs not being correctly identified in response to challenging behaviour is supported by teacher perception studies; externalised (e.g. disruptive) behaviours rather than internalised (e.g. withdrawn) are more likely to capture the attention of teachers, and therefore assessment and support sought (Soles et al., 2008). Another reason for the challenge around identifying SEMH needs is that it is both a discrete SEN and interacts with and cuts across the other three areas of SEN. The term SEMH, and its predecessor BESD, are associated with complex and inter-related barriers to learning such as expressive language needs (Obsuth et al., 2016; Clegg et al., 2009), difficulties with managing relationships with peers and adults, regulating their emotions, own behaviour (MacFarlane & Woolfson, 2013) and motor difficulties (Hill et al., 2017). Therefore the diverse presentation of SEMH difficulties and the underlying interactional barriers to learning may help explain why mainstream teachers view SEMH as the most difficult to identify and address in their classroom (Carroll & Hurry, 2018; Dimitrellou & Hurry, 2019; Monsen et al., 2014).

However, it should also be acknowledged that teacher attitudes to challenging behaviour are likely to impact teachers' capacity and motivation to include CYP with SEMH needs. Teachers are found to consistently view CYP with SEMH-type difficulties as the most challenging to include in mainstream classes because they are more likely to display behavioural difficulties (De Boer et al., 2011; DfE, 2019; Dimitrelllou, 2017). Moreover, teachers have expressed that CYP has behavioural difficulties requiring the highest level of support compared to other groups (Grieve, 2009). Such views towards the inclusion of CYP presenting challenging behaviour appear to emerge before in-service teaching (O’Toole & Burke, 2013). Young people presenting challenging behaviour are seen as undermining effective teaching and the educational outcomes of others by teachers (Hookey, 2010). In one study, challenging behaviour was found to significantly impact all three dimensions of teacher burnout (emotional exhaustion, depersonalisation and personal accomplishment), with the highest impact on emotional exhaustion (Aloe et al.,

2014). Challenging behaviour has also been consistently cited as a factor in poor teacher retention seen in the UK (Barmby, 2006). These findings highlight the importance of considering teachers' perceptions of challenging behaviours on their inclusion of CYP with SEMH needs.

Whilst not stated explicitly by the SEN Code of Practice, an interactional and functional understanding of SEND, including SEMH needs, is implied (Norwich & Eaton, 2014). Such a position aligns well with a bio-psycho-social model of disability, aiming to reconcile social and medical models for understanding SEND. This model argues that an SEN or disability represents an interaction between personal characteristics and broader environmental factors (Carroll & Hurry, 2018; Cooper & Jacobs, 2011). In the case of SEMH, this epigenetic position acknowledges how social and emotional development results from an interplay between inherited traits and the social and interactional context within which we live, e.g. with family, school, local community.

This bio-psycho-social model offers a helpful theoretical framework for understanding SEMH needs as an interaction between the CYP and the school environment (Poulou, 2014). Poulou posits the idea of taking account of teacher-student relationships, social-emotional learning (SEL) and the classroom context as a framework for understanding and intervening with social and emotional difficulties. In a study that surveyed 962 primary school students, their perceptions of their relationships with teachers were significant predictors of emotional and behavioural difficulties (Poulou, 2015).

The relationship between teachers and CYP has necessary implications for inclusion. It has been identified as a critical psychological factor supporting inclusive classrooms and schools (Ewing et al., 2018). One study in the UK established a correlation between student perceptions of positive teacher relations and a stronger sense of belonging amongst CYP with behavioural difficulties (Dimitrellou & Male, 2020). However, poorer teacher relations, characterised by higher levels of conflict,

less warmth, and higher dependency, have been more prevalent amongst primary learners with SEMH needs in mainstream schools than those without SEMH difficulties (Breeman et al., 2015). However, more recent findings suggest inconsistency in this area (Zweers et al., 2020). Zweers et al. followed the development of primary-aged pupils with SEMH type difficulties in mainstream and special schools for 18 months. They found that conflict levels with teachers did not significantly differ between students with SEMH type difficulties and typically developing peers in mainstream schools and their respective development trajectories remained stable. However, interestingly students with SEMH type difficulties in special schools initially developed significantly more conflictual relationships with their teachers but over time, these improved. One explanation for this is that teachers in special schools are more effectively trained and experienced in understanding and supporting students with SEMH type difficulties than their mainstream counterparts (Zweers et al., 2020).

The importance of creating a sense of belonging in the classroom, a phrase often used interchangeably with the terms ‘social participation’, ‘social integration’, ‘social inclusion’, and ‘connectedness’, is frequently highlighted in the inclusive education literature (Avramidis, 2010; Koster et al., 2009; Schwab et al., 2015). Schwab et al.'s (2015) longitudinal study used multiple regression and found that young people with SEN were less likely to experience social participation (as measured by a student questionnaire called ‘Attitudes Towards Inclusion of Students with disabilities Social Inclusion’ measure) than those without SEN. The study did not look at CYP with SEMH needs, but the study emphasises classroom environments that meet the *learning and social-emotional needs* of CYP with SEN, including those with SEMH needs (Schwab et al., 2015). Where this is not achieved, a risk of increasing or maintaining challenging behaviours may heighten the risk of exclusion (Dixon, 2005; Monsen et al., 2014; White et al., 2013). Further understanding the factors and processes relevant to promoting inclusive classroom environments that support both the social and learning needs of CYP with SEN, including with SEMH needs, is therefore critical.

2.2. Teacher-based factors relevant to the inclusion of CYP with SEMH needs

2.2.1. Introduction

Any educational change and improvements rely on "what teachers do and think… it is as simple and complex as that" (Fullan, 1991, p. 117). Teachers are regularly cited as the most influential factor in improving student outcomes, including those with SEND (Hattie & Yates, 2013). What teachers' 'think' and 'do' concerning the inclusion of CYP with SEN, including those with SEMH-related needs, is consistently found to be highly pertinent in supporting the successful implementation of inclusive policies and practices and those reducing exclusion (Amaral et al., 2013; Borg et al., 2011; MacFarlane & Woolfson, 2013; Malak et al., 2018; Pit-ten Cate et al., 2019; Sharma & Sokal, 2016).

Successful inclusion of CYP with SEND requires teachers to *adapt* their teaching behaviours: making changes to the curriculum, behavioural strategies, learning resources or their instructional strategies, in order to support student progress (Avramidis & Norwich, 2002; Kurth et al., 2015). Teachers are typically aware of this need; they may not consistently address it (Kurth & Keegan, 2014; Roy et al., 2013). Therefore, it is essential to understand the key facilitators and barriers that influence teachers' intentions to adapt their teaching behaviours concerning inclusion in the classroom.

2.2.2. Teacher attitudes towards inclusion

Teacher attitudes have consistently been a significant predictor of self-reported inclusive behaviours towards young people with SEND (MacFarlane & Woolfson, 2013; Monsen et al., 2014; Sharma & Sokal, 2016). Observations of teachers'

practice and student satisfaction surveys have corroborated these self-reports (Monsen & Frederickson, 2004; Stanovich & Jordan, 1998), and negative attitudes correlate with less inclusive learning environments. Negative teacher attitudes can lead to young people feeling less connected and contented in the classroom, potentially increasing their risk of school exclusion (Brady & Woolfson, 2008; De Boer et al., 2011; Monsen & Frederickson, 2004). Understanding teacher attitudes and the factors that influence them and addressing them is a critical factor in designing successful inclusive policies (Antonak & Livneh, 2000; Monsen & Frederickson, 2004).

The construct of teacher attitudes towards inclusion can be explored through the Multi-Component Model of Attitudes (Fishbein & Ajzen, 1975), which contends that three dimensions form attitudes: affective (emotions), cognitive (beliefs) and behavioural intentions towards the 'object' of the attitude. These dimensions are assumed to predict actual behaviour (Eagly & Chaiken, 1993; Maio & Haddock, 2015). Within the context of the inclusion of CYP with SEND, the cognitive dimension of attitudes refers to the perceptions and beliefs about the inclusion of this group within a mainstream setting (Fazio & Olson, 2003; Krischler & Pit-ten Cate, 2019). It is the most commonly measured aspect of inclusive teacher attitudes in teacher questionnaires (Monsen et al., 2015). Different measures capture the construct in different ways. The Teacher Attitudes towards Inclusion Scale (TAIS; Saloviita, 2015) captures beliefs about the advantages and disadvantages of the inclusion of CYP with SEN and draws on self-efficacy beliefs (Monsen et al., 2015). The Multidimensional Attitudes toward Inclusive Education Scale (MATIES; Mahat, 2008), on the other hands, explores whether CYP with SEN *should* be taught in mainstream classes but does not explicitly aim to capture self-efficacy beliefs (Mahat, 2008).

The emotional dimension of 'attitude' can reflect the amount of positive or negative feelings towards the inclusion of a particular group of CYP, e.g. frustration, resentment, irritation (Monsen et al., 2015). This dimension can be seen to comprise both explicit attitudes (deliberate and purposeful processes) and implicit attitudes,

which relate to the automatic judgments prompted by the attitude object (Fazio & Olson, 2003; Krischler & Pit-ten Cate, 2019). Inconsistent findings from studies looking at teacher attitudes towards inclusive education have been explained regarding whether the study has measured implicit or explicit attitudes. The former is more likely to reflect generally negative attitudes and the latter potentially more positive views towards inclusion (Pit-ten Cate et al., 2019).

Finally, the third aspect refers to intended inclusive behaviours towards the inclusion of a particular group, although only a limited number of attitude instruments aim to measure it as a separate dimension (e.g. Mahat, 2008; Monsen et al., 2015). Such instruments focus on a teacher's intention or willingness to make accommodations for CYP with SEND to the classroom environment or their teaching methods, e.g. differentiation, support, pace. (Monsen et al., 2015). Importantly, studies tend to operationalise behavioural intention as an outcome measure of the cognitive or emotional aspects of attitudes, e.g. how cognitive or emotional dimensions may be predictive of the behavioural intention dimension (Batsiou et al., 2008; Elik & Wiener, 2010; MacFarlane & Woolfson, 2013; Monsen et al., 2014).

There is inconsistency in the literature around teacher attitudes towards inclusion in terms of which dimensions may be applied, the predictive validity of each concerning behaviour and how they are measured (Mahat, 2008; Monsen et al., 2015). Moreover, teacher attitudes towards inclusion can overlap with other possible variables such as ‘self-efficacy’ and ‘attributions’. The interaction between teacher attitudes and other constructs may challenge the validity of measuring attitudes, depending on the instrument selected (Monsen et al., 2015). A critical review of both self-efficacy and attributions and their impact on teacher attitudes explored later.

Teachers, both in initial teacher training (ITT) and in-service, who are optimistic about the notion of inclusion are more willing to adapt and improve the quality of their teaching approaches and instruction to support the learning needs of CYP with SEND (Grieve, 2009; Ryan, 2009). In Elik & Wiener's (2010) study of 274, ITT Greek

teachers' attitudes towards students with learning and behavioural difficulties, more positive beliefs and emotions towards the inclusion of students with SEND predicted a greater likelihood of planned teaching behaviours (e.g. adapting their instruction) instead of using punitive behavioural responses (e.g. issuing a time out). Similarly, MacFarlane & Woolfson's study (2013) surveyed 111 primary school teachers and found that beliefs and emotions were also shown to predict intentions to behave inclusively. Monsen et al.'s England-based study (2014) surveyed 95 primary school teachers and found that they were least willing to adapt their practice to support CYP with social and behavioural difficulties, which the authors suggested may relate to teachers' expectations they would disrupt the class. This finding is consistent with research into teacher attitudes towards inclusion more generally; in a review of 26 studies, De Boer et al. (2011) found that most teachers held negative or neutral views towards the inclusion of YP with SEND.

Several contextual factors appear to influence teacher attitudes towards inclusion of CYP with SEND more generally. The type of disability has been shown to affect the nature of teacher attitudes. For example, teachers have been found to show more positive attitudes towards the inclusion of students with learning or physical needs than those with SEMH needs, which may be perceived as more challenging (De Boer, Pijl and Minnaert, 2011; Yada et al., 2019). However, one study found that primary teachers held moderately positive attitudes towards the inclusion of CYP with SEBD needs (MacFarlane & Woolfson, 2013). In addition, positive experiences of working in inclusive classrooms (Avramidis & Norwich, 2002; Gibbs, 2007), perceptions of their resources and capacity to support young people with SEN in a mainstream environment (Forlin et al., 2008; Gibbs, 2007), and availability of external resources and support (Avramidis & Norwich, 2002; Boyle et al., 2013) are all consistent predictors of teacher attitudes towards inclusion. There is also a strong correlation between positive attitudes of headteachers towards inclusion and that of teachers within their school, which may also be indicative of higher levels of collective teacher efficacy (Goddard et al., 2004; Goddard & Goddard, 2001); see the section 2.2.5 below for a further discussion on this.

However, evidence is more inconsistent around the impact of other factors on attitude formation. Initial teacher training is generally seen to provide an essential contribution to developing positive, inclusive attitudes, with ITT teachers more likely to hold positive attitudes towards inclusion than their in-service counterparts (Aprile & Knight, 2020; Beacham & Rouse, 2012). However, it has been found that such attitudes begin to waiver even by the end of training (Romi & Leyser, 2006) and after the first year of teaching (Boyle et al., 2013). There are also mixed findings around the extent to which length of teaching experience may influence attitudes towards the inclusion of CYP with SEN; studies have found that teachers with greater experience working with such children have more negative attitudes than those with lesser experience (MacFarlane & Woolfson, 2013; Forlin, Douglas & Hattie, 1996). Other studies however found that there was no significant relationship (Boyle et al., 2013; Avramadis et al. 2000). The reported influence of gender is mixed, with some studies suggesting female teachers are more positive towards inclusion (Boyle et al., 2013) whilst others show no noticeable effect (Woodcock, 2020).

Whilst attitudes towards the inclusion of CYP with SEND has been extensively researched, only a limited number of studies have explored attitudes about the inclusion of CYP with SEMH type needs, and specifically, there is a gap in studies in attitudes of secondary teaching staff.

2.2.3. Teacher efficacy towards inclusion

Given the identification of several factors relevant to the development of attitudes towards inclusion, such as experiences of working in inclusive classrooms, perceived capacity and personal resources, and views of headteachers, some studies have explored the influence of teacher efficacy beliefs both in terms of inclusive attitude formation (Krischler & Pit-ten Cate, 2019; Malinen et al., 2012; Pit-ten Cate et al., 2019) and inclusive teaching behaviours (Amaral et al., 2013; Borg et al., 2011; MacFarlane & Woolfson, 2013; Malak et al., 2018; Pit-ten Cate et al., 2019; Sharma & Sokal, 2016).

Teacher efficacy beliefs are constructed in two ways;

- Teacher self-efficacy (TSE) (also referred to as individual teacher efficacy in the literature) is concerned with a teacher's belief in their *own ability to influence positive outcomes* for their students regardless of their difficulties or needs (Bandura et al., 1999; Gibbs & Powell, 2012; Guskey & Passaro, 1994).
- Collective Teacher Efficacy (CTE) reflects individual teachers' perceptions of the *collective ability of staff in their school to influence positive outcomes* for students (Donohoo, 2017; Eells, 2011; Goddard et al., 2004).

2.2.4. Teacher self-efficacy (TSE)

TSE draws closely on Bandura's work on general self-efficacy (GSE) (Bandura, 1978, 1993; Bandura et al., 2001). Bandura (1998, 2001) referred to three key sources of self-efficacy development: mastery experiences, vicarious experience, and direct social persuasion and affective state. These are all considered to influence the formation of general self-efficacy beliefs, such that the more the individual experiences success, observes success, and receives encouragement and feedback, the more their sense of efficacy strengthens (Bandura, 1977, 1997). These sources provide the necessary conditions for individuals to believe they can affect positive change. As GSE is considered domain-specific (Bandura et al., 1999), it is vital to consider its specific relevance to inclusive teaching (Pit-ten Cate et al., 2019). TSE towards the inclusion of CYP can be seen to represent the strength of belief that teachers have in their competence towards the organisation or implementation of inclusive practices, related to the management of their classroom environment, engagement of their pupils and instructional strategies (Gibbs & Powell, 2011; MacFarlane & Woolfson, 2013).

Several non-UK studies have found a positive correlation between inclusive attitudes towards SEN in general and TSE towards the inclusion of CYP with SEND (Savolainen et al., 2012; Scheer et al., 2015; Sharma et al., 2012), with low levels of

self-efficacy being shown to be a predictor for less positive attitudes towards inclusion (Desombre et al., 2019). However, other studies have found no relationship between TSE towards the inclusion of CYP with SEND and inclusive attitudes (e.g. Sari, Celikoz & Secer, 2009).

A teacher with low levels of TSE will have less conviction in their ability to influence outcomes for children with SEN and, correspondingly, will less likely adapt their practice to support them. Studies have demonstrated that positive self-efficacy beliefs can be predictive of intentions to behave inclusively or of actual inclusive teacher behaviours (Ahmmed et al., 2014; MacFarlane & Woolfson, 2013; Malak et al., 2018; Sharma et al., 2018; Sharma & Nuttal, 2016; Sharma & Sokal, 2016). However, two studies found that it did not significantly predict *actual* teacher behaviours (MacFarlane & Woolfson, 2013; Hellmich et al., 2019), illustrating some inconsistency in this area.

TSE can be seen as closely aligned with the construct of agency (teachers' ability to initiate and bring about change): a highly efficacious individual (or group) positively believes that pupil progress and achievement is determined by the actions they have taken rather than the influence of factors beyond their control (Hattie & Zierer, 2017; Eells, 2011). Efficacious teachers believe that external and uncontrollable factors (e.g. family/home life) can be overcome through influencing internal and controllable factors (e.g. instructional/relational strategies within the class) (Bandura, 1978, 1993; Bandura & Locke, 2003; Eells, 2011; Goddard et al., 2000). The alignment between TSE and agency here also highlights a third relevant construct: teacher causal attributions.

Teacher causal attribution draws on attribution theory (Weiner, 2010), which can be defined as a teacher's perceptions as to the cause of the performance of themselves or pupils, e.g. whether teachers attribute the causes of performance to pupil, teacher or home factors (Lambert & Miller, 2010; Wang & Hall, 2018). Teacher causal attributions towards challenging behaviour appear particularly pertinent to self-

efficacy beliefs towards implementing inclusive practices (Avramidis & Norwich, 2002; Brownell et al., 2010; Miller et al., 2000; Podell & Soodak, 1993; Woodcock, 2020). The type of attributions that teachers make to explain challenging behaviour is shown to significantly influence a teacher's future emotional and behavioural responses to the student, for example, providing sympathy and support instead of stigmatisation of the challenging behaviour (Gaier, 2015; Wang & Hall, 2018; Woodcock, 2020). Teachers' tendency to attribute the causes of challenging behaviour to factors external to themselves and the classroom environment (i.e. factors they could influence) could be seen as a critical barrier to promoting inclusive behaviour management practices that positively engage young people with SEND in a mainstream environment (Bibou-Nakou et al., 2000). Causally attributing behaviour to factors a teacher cannot control – to pupil and home factors - can reduce a teacher's expectations for a young person's future educational success and their will; as a result, to implement inclusive practice (Georgiou et al., 2002).

Teachers who make external attributions have lower levels of self-efficacy towards positively engaging young people displaying challenging behaviours; they are more likely to use punitive behaviour strategies (Tollefson, 2000), seek out consultation with external professionals such as Educational Psychologists (EPs) and seek exclusion of a pupil (Soodak & Podell, 1993). However, another study suggested that external attribution is necessary; teachers are more likely to be sympathetic and supportive when they attribute the cause of the behaviour to home/parental factors rather than pupil factors (Reyna & Weiner, 2001).

On the other hand, teachers who attribute causes for challenging behaviour to teacher-based factors are more likely to show increased self-efficacy towards improving their strategies and practices with young people displaying challenging behaviour (Brownell et al., 2010; Donohoo, 2017), perhaps indicative of a greater empathy with the young person (Poulou & Norwich, 2000; Turner & Gulliford, 2020). If staff believe they can make a difference to pupil behaviour, they are more willing to be inclusive (Freytag, 2001; Podell & Soodak, 1998).

Importantly, TSE is improve-able. One way in which staff self-efficacy can be developed is through embedding professional learning practices such as collaborative inquiry by explicitly drawing out the causal link between their actions and student outcomes, thereby strengthening their belief in their ability to bring out positive change (Donohoo, 2017; Donohoo & Velasco, 2016). Correspondingly, improved TSE can shift causal attributions for pupil achievement from uncontrollable student and parental factors towards teacher-controllable factors (i.e. teacher instruction) (Gaillimore et al., 2009). Strengthened TSE – developed from experience and *evidence* of success – affects a more profound belief in a teacher's ability to overcome rather than be limited by uncontrollable factors through those they can control (Bandura, 1991).

Despite considerable and growing interest in TSE in the context of inclusion, only one study has investigated and established a positive relationship between TSE beliefs concerning inclusive behaviours towards children with SEMH-type needs (MacFarlane & Woolfson, 2013). Additionally, a limited number of studies have also investigated the behavioural difficulties manifested by SEMH type needs concerning TSE (Emmer & Hickman, 1991; Gibbs & Powell, 2011; Almog and Shechtman, 2007). However, given the influential impact that TSE can have on teacher practices, further research into its application to inclusive education is needed.

2.2.5. Collective teacher efficacy (CTE)

Whilst self-efficacy is concerned with an individual's belief about their own ability to support bring about the desired outcome; collective efficacy can be seen as a group's "shared belief in its conjoint capability to organize and execute the courses of action required to produce given levels of attainment" (Bandura, 1997, p. 477). CTE – informed by general collective efficacy – is a school-level variable that reflects teachers' beliefs about the staff body's (or a specific group of teachers, e.g. department team) collective ability to bring about successful outcomes for their students (Goddard et al., 2000, 2004; Klassen, 2010). Bandura discovered that high levels of CTE were positively correlated with student's achievement (Bandura, 1997),

findings validated in a later study (Goddard, Hoy and Hoy, 2000). A meta-analysis that synthesised 26 individual studies found that collective efficacy is strongly correlated with student achievement, with a Cohen's effect size of *d*=1.57 (Eells, 2011), twice the effect size of feedback (*d*=0.72) and three times that of classroom management strategies (*d*=0.52) (Hattie & Donoghue, 2016). This analysis informed the powerful assessment from John Hattie that collective efficacy is the *most* influential factor for improving outcomes for young people regardless of their socio-economic background or need (Hattie, 2016). Therefore, understanding and influencing the construct concerning implementing inclusive practices and policies appear highly pertinent.

In addition to Bandura's (1997) three critical sources of self-efficacy development (mastery experiences, vicarious experience, direct social persuasion and affective states), an additional 'psychosocial' source expressed in the school culture and staff ethos has been proposed as relevant to CTE and in turn TSE (Gibbs & Powell, 2011; Miller, 2003). This source is concerned with the *indirect* social *influence* of the school organisation and, therefore, conceptually distinct from Bandura's *direct* social *persuasion*. This psychosocial source highlights the importance of how the more comprehensive social system within which teachers interact shapes their belief about who '*we* are and can be' such that teachers' perception of themselves as a member of school may mediate their perception of themselves as an individual teacher (Gibbs, 2018; Goddard & Goddard, 2001). CTE may deepen due to the staffroom culture and the 'discourses' that occur about certain groups of CYP (Goddard et al., 2004; Goddard & Goddard, 2001; Stanovich & Jordan, 2003; Tschannen-Moran & Barr, 2004). Moreover, these discourses could be seen to create a common language or code that "permits group members some control over the actions of others when those actions have consequences for the group" (Goddard & Goddard, 2001, p.4). The pervasive beliefs amongst the staff body about their *responsibilities* towards certain groups of CYP may also turn to appear to impact the TSE of that same group (Stanovich & Jordan, 2003). This impact helps explain why CTE has been shown to be predictive of TSE (Goddard & Goddard, 2001; Miller, 2003; Jordan & Stanovich, 2003).

The influence of CTE on inclusive teacher behaviours has not yet been investigated. However, two studies of relevance should be noted here. Hellmich et al.'s (2019) Germany-based investigation into 290 primary school teachers' views and practices around inclusion found that teacher attitudes and collective self-efficacy beliefs were predictive of behavioural intentions towards inclusion. However, collective self-efficacy beliefs were not predictive of self-reported inclusive practices. It should be acknowledged that the construct of *collective self-efficacy* applied in this study is distinct from the *collective teacher efficacy* construct discussed above. Collective self-efficacy was defined as a teachers' perception about their ability to organise inclusive education by themselves or collaborate with another teacher. Therefore, the study aimed to consider how teachers' perceptions of the abilities of other teachers may impact their self-efficacy beliefs towards implementing inclusive practices (Hellmich et al., 2019). Moreover, the collective self-efficacy scale was developed based on school policy statements rather than existing standardised scales and was not empirically tested before the study.

Whilst they did not look at inclusive behaviours specifically, Gibbs & Powell's (2011) UK-based study is also relevant in discussing CTE. The study explored the relationship between TSE and CTE towards managing challenging behaviour and whether these were associated with exclusion amongst 197 primary school teachers. In this study, both TSE and CTE closely reflected Bandura's (1997) construct by measuring individual teachers' perceptions of their own and the staff body's ability to manage challenging behaviour. These were represented by several 'factors' previously identified and validated in previous studies, e.g. classroom management, influencing external factors and promoting student motivation (Goddard, Hoy, & Hoy, 2000; Tschannen-Moran & Barr, 2004). TSE was found to correlate positively with CTE concerning the motivation of pupils displaying challenging behaviour.

Moreover, CTE towards influencing external influences (e.g. home context) negatively correlates with school exclusions. This finding was seen to be explained by the type of causal attributions teachers make towards challenging behaviours.

Given that at least one aspect of CTE may correspond with lower use of school exclusion as a sanction, exploring the relationship between collective efficacy and inclusive teacher behaviours towards CYP with SEMH may deserve further exploration.

2.2.6. Attitudes and efficacy beliefs as predictive of inclusive teacher behaviours

Understanding *if and how* teacher inclusive attitudes and feelings of efficacy towards implementing inclusion explain inclusive teacher behaviours relies on a coherent conceptual framework. The TPB (Ajzen, 1991 & 2002; Ajzen and Fishbein, 2005) has been extensively used to investigate and demonstrate how both teacher attitudes and efficacy beliefs towards inclusion are predictive of intentions to behave inclusively or actual inclusive behaviours (MacFarlane & Woolfson, 2013; Malak, Sharma & Deppeler, 2017; Sharma & Jacobs, 2016, Hellmich et al, 2019; Ahmmed, 2013).

The TPB offers a conceptual change process for understanding how attitudes, perceived behavioural control (perception of difficulty towards carrying out the focus behaviour), subjective norms (perception of how ‘significant others’ will approve of the focus behaviour) act as pre-determinants for people's behavioural intentions (willingness to carry out the behaviour) and consequently their actual or concrete behaviour (Ajzen, 2012). It offers a helpful framework for explaining the variables at play that may influence an individual's behaviour in a challenging situation.

TPB has been applied to investigate the inclusion of CYP; however, inconsistencies around how variables are applied and operationalised contributed to inconsistent findings. Several studies have demonstrated how both attitudes towards inclusion and TSE concerning the organisation of inclusive classrooms (typically operationalised as the behavioural control variable) are significant predictors of inclusive behavioural *intentions* (Ahmmed et al., 2014; Hellmich et al., 2019;

MacFarlane & Woolfson, 2013; Malak et al., 2018; Sharma & Jacobs, 2016). However, in the few studies investigating these variables concerning *actual* teacher behaviours, findings are more inconsistent. For example, whilst Hellmich et al. (2019) found that attitudes (measured using a self-developed questionnaire) and intentions (measured using a self-developed vignette) significantly predicted self-reported inclusive behaviours, TSE did not. In contrast, Wilson et al. (2016) found that TSE and attitudes (both measured using self-developed scales) were significant predictors of behavioural intentions towards inclusive practices. Only TSE, however, was a predictor of teachers self-reported behaviours. On the other hand, MacFarlane & Woolfson (2013) found that neither attitudes nor TSE were significant predictors of actual behaviour.

Measurement of the ‘subjective norms’ variable in the TPB has also produced inconsistent findings in inclusive education studies. Such inconsistency may relate to differing operationalisations of the variable, methodology, context and population between different studies. For example, Ahmmed et al. (2013) found that the subjective norm – operationalised as the injunctive norm by measuring teachers' perceptions of school support for inclusive practices - was predictive of behavioural intentions among 1387 Bangladeshi primary school teachers towards CYP with an identified disability. Hellmich et al. (2019) supported this finding by measuring teachers' perceptions of headteachers views on inclusive practices. Here, headteacher attitudes towards inclusion were predictive of 290 German primary school teachers' behavioural intentions, including all children, but not predictive of the self-reported inclusive behaviours.

Similarly, MacFarlane and Woolfson (2013) captured the perceptions of 111 primary school teachers in Scotland towards CYP with social, emotional and behavioural difficulties (SEBD) of their headteacher views about their inclusive practices using the Teachers' Subjective Norm Scale (Tschannen-Moran & Woolfolk Hoy, 2001). Based on this measure, the subjective norm was strongly predictive of teachers' self-reported inclusive behaviours but did not significantly predict their intentions to behave inclusively independently. Stanovich and Jordan's (1998) Canada-based

study supported this finding that directly measured headteacher views towards inclusion and found it the most significant predictor of effective teaching practices. It should be noted that Hellmich (2019) and MacFarlane and Woolfson (2013) findings were inconsistent with Ajzen's TPB (1991), which proposed that behavioural intentions are the strongest predictor of behaviour. MacFarlane and Woolfson (2013) and Stanovich and Jordan (1998) suggested a possible explanation for this discrepancy; the significant importance of headteacher and views in schools may compel teachers to act inclusively despite their beliefs and willingness to behave inclusively.

The Wilson et al. (2016) Scotland-based study of 145 primary school teachers focused on inclusive beliefs and practices towards CYP with intellectual disabilities. In contrast to the other studies discussed, Wilson et al. operationalised the variable as the descriptive norm (teacher perceptions about colleagues' inclusive practices) and the injunctive norm (teacher perceptions of what people in their life they value would expect them to do concerning inclusion). Wilson et al. found that whilst injunctive norms were not predictive of teachers' behavioural intentions to behave inclusively, descriptive norms where i.e. intentions to behave inclusively correlated with perceived typical practices of other staff. It was not clear why Wilson et al. (2016) applied such a general measure of the injunctive norm and raised the question of whether a specific focus on perceptions of headteacher views towards inclusion would have produced different findings. The authors did propose that the predictive power of the descriptive norm on behavioural intentions may help explain the inconsistent findings from MacFarlane & Woolfson (2013), which only considered injunctive norms. The influence of the descriptive norm highlights the importance of the psycho-social norms within the school culture – see earlier discussion on collective efficacy – and its potential role in supporting the development of teachers' intentions to behave inclusively. This observation also supports the argument that some scholars have made that the subjective norm variable could be represented by collective efficacy (Gibbs, 2007; Goddard & Goddard, 2001; Stanovich & Jordan, 2003).

Whilst the TPB has been applied to the literature towards the inclusion of SEN more generally and other areas of SEN, only one study has appeared to have applied it to the specific population of CYP with SEMH-type needs, which focused exclusively on primary school teachers as a pre-determinant for inclusive behaviour (MacFarlane & Woolfson, 2013). There appears to be a significant gap in the research around the relationship between teacher attitudes and efficacy beliefs towards young people with SEMH, particularly in secondary teachers. Understanding the relationship between teacher-based factors and inclusive practices towards this vulnerable group may provide a basis for schools, external professionals such as EPs and local systems to consider teacher beliefs and motivations when designing and implementing inclusive policies, practices and training. A systematic review of studies that have explored the relationship between teacher attitudes and efficacy towards inclusive behaviours will be examined more closely in the next section.

2.3 Systematic review

2.3.1 Purpose of the review

The purpose of this review is to provide a systematic analysis of the evidence regarding the relationship between teacher attitudes, efficacy and behavioural intentions towards inclusive behaviours in the classroom, and thereby provide a basis for further research avenues (Gough et al., 2012).

A systematic review aims to critically appraise the literature on a specific topic to address a clearly defined question and identify further research avenues (Gough et al., 2012; MacKenzie et al., 2012). The critical appraisal is likely to include assessing what is already known about the particular topic area, including an analysis of methodology employed and gaps and inconsistencies (MacKenzie et al., 2012). A systematic literature review aims to overcome the potential limitations of a narrative literature review – such as the omission of relevant research - by establishing a clear set of rules or methodology that supports a more rigorous and scientific enquiry; this

helps ensure that all studies relevant to the research question are systematically identified, synthesised and critically appraised (MacKenzie et al., 2012; Petticrew & Roberts, 2008).

However, it should be noted that systematic reviews can also fall foul of researcher subjectivity – through the omission of research based on interpretation of inclusion criteria and confirmatory bias when appraising studies - leading to variable conclusions between researchers. Therefore, researchers should ensure should their methodology is transparent so that the review can be replicated and verified (Petticrew & Roberts, 2008).

2.3.2 Method

The current systematic literature review was informed by the process outlined below in fig 2.1. The first part of the review followed a systematic methodology for the research activity; formulation of the review question, setting out inclusion criteria for the studies to be included, search strategy, screening studies that meet the criteria and description of the individual studies selected. The second part of the review appraised each study's methodological quality and relevance using Gough's (2007) Weight of Evidence (WoE) framework, synthesised the key themes from the findings concerning the question and provided a rationale for further research. Full details of each step taken in the systematic review process are set out below:

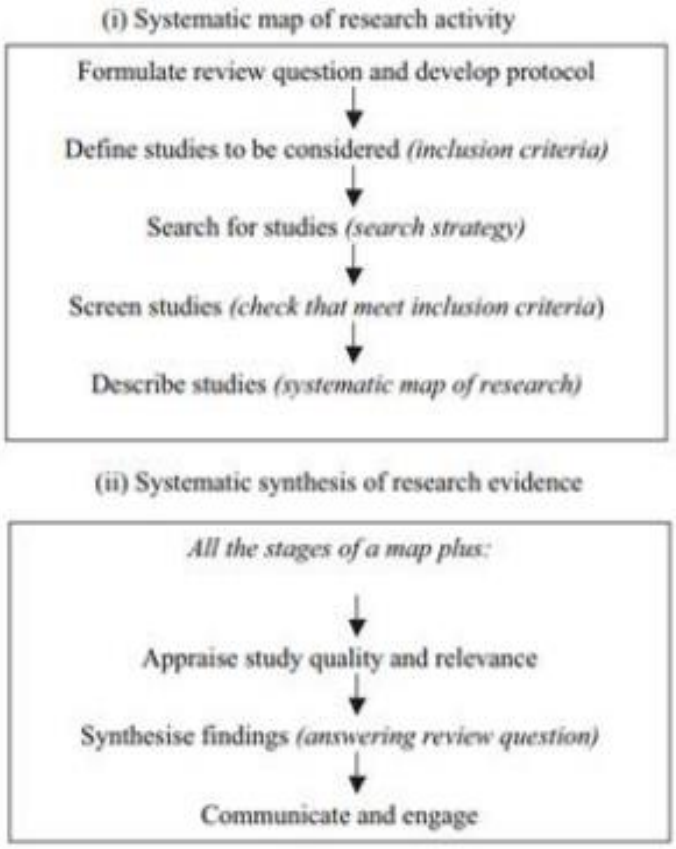

Figure 2.1 The systematic review process outlined by Gough (2007, p.5)

2.3.3 Formulation of the systematic review question

The systematic review was informed by the narrative literature review above and focused on teacher attitudes and efficacy and their association with inclusive behaviours and practices. The review aimed to identify, synthesise and critically appraise studies pertinent to this topic and aims to answer the following review question:

What is the nature of the relationship between mainstream teacher attitudes and efficacy and inclusive teacher behaviours and practices?

2.3.4 Inclusion and exclusion criteria

In order to identify studies that were relevant to the review question, the researcher developed a detailed list of inclusion and exclusion criteria that each study would be mapped against during the selection process (see Table 2.1 below). A stipulation was made that study participants should be currently practising in-servicing teaching staff based on mainstream or regular provision. No parameters were placed around any demographic factors such as gender, years of teaching experience, position in the school. Studies that were excluded focused on alternative provisions or specialist provisions and or studies that looked exclusively at support staff as these were not relevant to the focus of the review question. Studies of non-mainstream provisions alongside mainstream provisions or non-teaching staff alongside teaching staff were included as long as data collected were analysed separately.

In the narrative literature review, it was apparent that teacher attitudes and efficacy were studied concerning populations of students who did not have specific SEMH needs, e.g. those with SEND generally, other identified SENs (e.g. learning difficulties). It was decided that a review only focusing on SEMH could be too narrow and therefore not generate meaningful findings. However, studies that focused explicitly on teacher attitudes and efficacy towards managing challenging behaviour were excluded because they were not considered relevant enough to the review's focus on *inclusive* teacher behaviours and practices. Future systematic reviews in this area could take account of such studies, given the association between challenging behaviour and SEMH.

Additionally, given how extensively the TPB had been applied in similar studies, it was decided that only studies that had aimed to verify this theory would be included. Moreover, given the potential relevance identified in the literature review of the relationship and mediation between variables and teacher inclusive behaviours, it was decided that only studies that aimed to verify the TPB in total would be included. Again, future systematic reviews could consider including studies which did not

include all TPB variables, as valuable insights between specific variables and the outcome measure could have been generated.

Finally, criteria around the type of data – focusing on quantitative data suitable for generating statistical analysis relevant to the review question - were also developed to provide consistency within the synthesis. The inclusion and exclusion criteria for the selection of studies are outlined below in table 2.1:

Table 2.1 The inclusion and exclusion criteria for study selection

	Inclusion Criteria	Exclusion Criteria
Type of participant	Participants are school-based in-service teachers (including leaders with teaching responsibilities). Teachers work in mainstream early years, primary or secondary provision (or country equivalent).	Participants are ITT teachers or do not have whole-class teaching responsibilities, e.g. teaching assistants, some senior leaders. Teachers work in pre-school, private schools, Further Education, specialist provision, alternative provision.
Type of study	The study is based in a developed country, which reflects the present study. Studies aim to examine both teacher attitudes and efficacy beliefs and their relationship to inclusive behaviours.	The study is based in a developing country. Studies that do not examine these variables concerning inclusive behaviours; which could exclude studies that focus on effective teaching and learning more generally.

	Studies focus on the inclusion of CYP with SEN.	Studies that do not specifically focus on the inclusion of CYP with SEN.
	Studies that apply all three pre-determinant variables in the TPB to explain behavioural intentions and actual behaviour.	Studies that do not use the TPB or not in full, i.e. a variable is missing.
	Studies use quantitative measures such as questionnaires or surveys to generate data suitable for statistical analysis relevant to the present study.	Studies use qualitative measures such as focus groups or interviews.
	Analysis of data is provided.	Data is not analysed or presented.
	Individual study.	Meta-analyses and systematic review studies.
	The study is published in a peer-reviewed journal.	Study not peer-reviewed.

2.3.5 Search Strategy

Studies included in this review were identified through systematic searches in August 2020 using the University of Nottingham student portal. Three well-established databases were used:

- ERIC (Education Resources Information Center) – a database of literature in education.
- PsychINFO – a database of psychology articles.
- Web of Science – a database of articles in sciences, social sciences and arts & humanities.

Simple search terms were used to identify the broadest possible range of studies to capture varying contexts and populations that may be relevant to the review question (see Table 2.2 for a complete list of concepts and related search terms used). The concept ‘teacher’ was searched with truncation (‘teach’) to cover all term variations, e.g. ‘teachers’ and ‘teaching’. The term ‘attitude’ was used in searches to allow for ‘attitudes’, and ‘efficacy’ was used to allow for a range of possible operationalisations, e.g. ‘self-efficacy’, ‘individual efficacy’, and ‘collective efficacy’. The concept of ‘inclusive teaching behaviours’ was truncated to ‘include’ to cover ‘inclusion’ and ‘inclusive’ and avoid excluding studies that may refer to ‘practices’, ‘pedagogy’, or ‘strategies’ instead of ‘teaching behaviours’. Search terms were combined using Boolean operators, e.g. ‘and’, ‘or’.

Table 2.2 The key search terms used

Concept	Search terms
Teacher	‘teach’ to cover words such as ‘teacher’ and ‘teachers’ and ‘teaching’.
AND	
Attitudes	‘attitude’ used to allow ‘attitudes’.
AND	
Efficacy	‘efficacy’ covers a range of terms; ‘self’, ‘individual’, and ‘collective efficacy’.
AND	
Inclusive teaching behaviours	‘Inclus’ to cover ‘inclusion’ and ‘inclusive’. ‘Teaching Behaviours’ was not included in the search terms as this could also refer to other phrases such as ‘practice’, ‘strategies’, ‘pedagogy’. Instead, the

	screening process identified relevant studies.

2.3.6 Search results and screening

The initial search based on the key terms above generated 573 results that could be relevant for review (see Figure 2.2). The titles and abstracts were then screened against the inclusion and exclusion criteria, leaving just 32 studies. The majority of studies were excluded because they either did not apply the TPB, only focused on one or two of the predictive variables relevant to the question (e.g. efficacy but not attitudes) or did not focus on the relationship between these predictive variables and inclusive teacher behaviours. Several studies were also removed because they were focused exclusively on a teacher population not relevant to the review question (e.g. ITT teachers) or because they adopted qualitative methodologies.

Once duplicates were removed, only 16 studies remained, which were read in full. In addition, the reasons for exclusion based on a screening of the title and abstract, studies were excluded because they were based in a developing context, did not focus on the inclusion of CYP with SEN and did not generate quantitative findings across all measures (see appendix A for list of excluded full-text articles with reasons for removal). As a result, four studies were assessed as appropriate for inclusion in the review. Figure 2.2 sets out the stages taken:

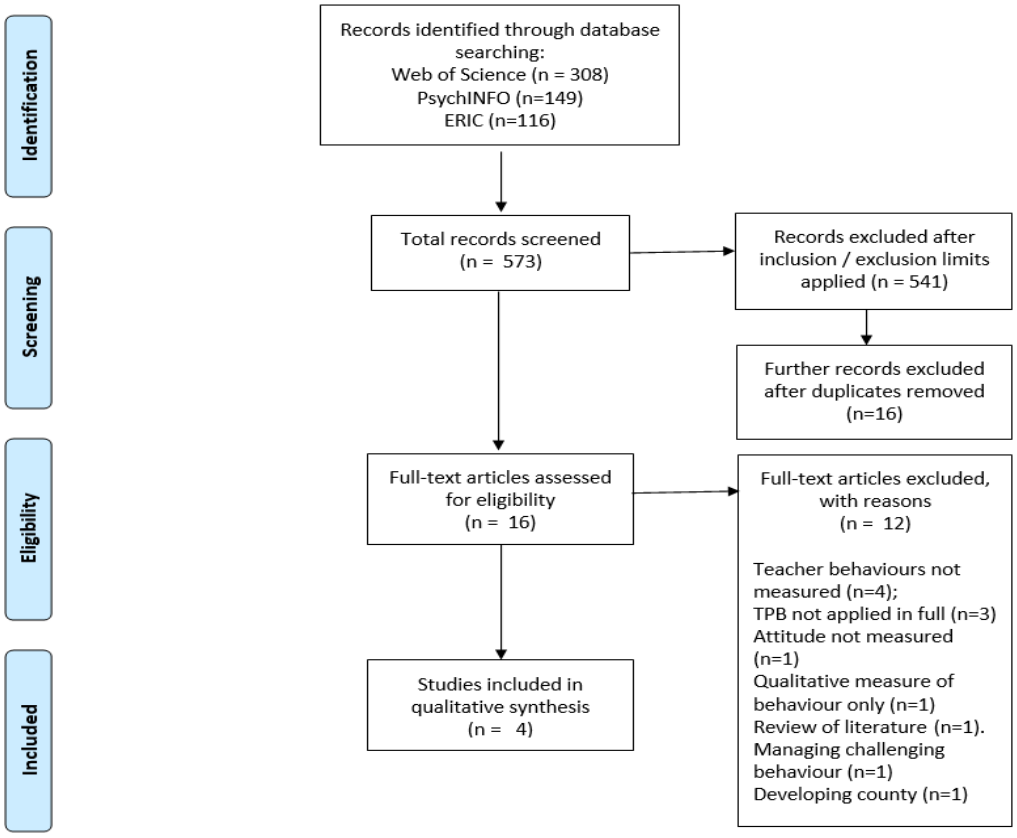

Figure 2.2 The adapted PRISMA flow diagram of database search and study selection

2.3.7 Quality Assessment

In addition to the inclusion criteria set out above, each of the four studies included in the review was subject to Gough's (2007) WoE framework, which is used to assess the quality of quantitative research. This framework provided a helpful basis for supporting individualised appraisal of the quality of each study and the weight that should be attributed to it in the synthesis stage of the review. Criteria relevant to the review question were developed to guide judgments relevant to each weighting (see appendix B), and a detailed assessment for each study can be found in appendix C. The overall results of this assessment of the included studies are found in table 2.3.

2.3.8 Characteristics of individual studies included in the review

The key characteristics of the four individual studies included in the review are set out in table 2.3 below:

Table 2.3 The key characteristics of individual studies

Study authors, title and location	Sample / Participants	Method	Specific TPB variables and measures	Findings	Limitations
Hellmich, F., Löper, M. F., & Görel, G. (2019). The role of primary school teachers' attitudes and self-efficacy beliefs for everyday practices in inclusive classrooms – a study on the verification of the 'TPB'.	N=290 primary school teachers. Age/grade range of students taught not specified. One hundred thirty-eight teachers worked in 'inclusive' schools, where CYP with SEN are enrolled with those without	Non-experimental design. A questionnaire, that was conducted by a research assistant. Data analysed using both descriptive and inferential statistics, including two	Application of TPB towards the inclusion of 'all' CYP: Attitudes: Self-developed scale based on school / national policy statements. Five items, 5-point Likert scale. Behavioural control (efficacy towards collaborating with special needs teachers): Collective self-efficacy relating to collaborating with special needs teacher towards inclusive	Teachers' *intentions* towards inclusive teaching are significantly predicted by attitudes towards inclusion, collective self-efficacy beliefs and expectations of school management. Teachers' self-reported behaviours were significantly predicted by	Inconsistent sampling approach; over half of teachers did not work in 'inclusive' schools and did not have recent teaching experience with SEN. Use of non-standardised measures. Questionnaires not empirically tested in preliminary study raising internal validity concerns.

Study authors, title and location	Sample / Participants	Method	Specific TPB variables and measures	Findings	Limitations
Journal of Research in Special Educational Needs, *19*(S1), 36–48. Germany	SEN. One hundred forty-eight taught in 'regular' schools where CYP without SEN were not enrolled alongside SEN.	structural equation models (SEM).	teaching. 8 items, 5 point Likert-scale adapted from (Skaalvik & Skaalvik, 2007). Subjective norm (school management expectations); Perceived school management expectations. Adapted four items, 5 points Likert scale (Mahat, 2008; Wertheim & Leyser, 2002). Teaching behaviours; Behavioural intentions vignette. Five items, 5 points Likert scale adapted from (Schwab et al., 2015). Self-reported behaviour. An adapted five items, 5 points Likert scale (Wertheim & Leyser, 2002).	intentions and attitudes but not collective self-efficacy.	Operationalisation of behavioural control was collective efficacy, defined in the study as teacher efficacy towards collaborating with special needs teachers. The author acknowledges that this is inconsistent with other TPB studies and may explain the unexpected results.

Study authors, title and location	Sample / Participants	Method	Specific TPB variables and measures	Findings	Limitations
Sharma, U., Aiello, P., Pace, E. M., Round, P., & Subban, P. (2018). In-service teachers' attitudes, concerns, efficacy and intentions to teach in inclusive classrooms: an international comparison of Australian and Italian teachers. *European Journal of Special Needs Education*, *33*(3), 437–446	N=314 primary and secondary teachers from across Italy and Australia. Australian teachers were predominantly secondary (96% - grade 7 and above), whereas Italian teachers were relatively evenly distributed across pre-school to grade 7.	Non-experimental design. The questionnaire, completed online by Australian teachers and at training course by Italian teachers. Comparative mean scores for each variable. Regression analysis of whether variables predicted teachers'	Application of TPB towards students with disabilities (SWD): Attitudes: Attitudes towards Inclusion Scale; 8 items, 7 point Likert-scale (Sharma & Jacobs, 2016). Behavioural control (self-efficacy): Teacher Efficacy for Inclusive Practices scale (TEIP). Eighteen items, 6 point Likert-scale (Sharma et al., 2012). Three scale factors explored efficacy in using inclusive instruction, efficacy in collaboration (EC), and efficacy in managing behaviour (EMB)	Attitudes and efficacy beliefs were significant predictors of participants' intentions to include students with disabilities (SWD) from both countries. Italian teachers had significantly more positive attitudes, lower levels of concern and more positive behavioural intentions towards inclusive classrooms than Australian teachers.	The sampling approach was inconsistent; Italian teachers approached one training course (a 'Learning Support Teacher' certification) with 156 / 177 attendees completing the questionnaire. Australian teachers are drawn from 12 schools from 613 schools who were approached.

Study authors, title and location	Sample / Participants	Method	Specific TPB variables and measures	Findings	Limitations
Australia and Italy		intentions to teach in inclusive classrooms.	Subjective norm (concerns); Concerns about Inclusive Education Scale (CIES). Twenty-one items, 4 points Likert scale (*Sharma, U. & Desai, I. P. (2002). Measuring Concerns about Integrated Education in India. Asia & Pacific Journal on Disability, 5 (1).*, n.d.). Teaching behaviours; Teach in Inclusive Classroom Scale (ITICS). Seven items, 7 points Likert scale (Sharma & Jacobs, 2016).	Australian teachers had significantly higher levels of efficacy beliefs compared to Italian teachers.	
Wilson, C., Woolfson, L. M., Durkin, K., & Elliott, M. A. (2016).	N=145 primary school teachers across Scotland.	Non-experimental design	The application of TPB was focused on the inclusion of CYP with 'intellectual disabilities'.	Attitudes (instrumental dimension), subjective norm (descriptive	The study focused on CYP with 'intellectual disabilities'. Given the context-specific nature of

Study authors, title and location	Sample / Participants	Method	Specific TPB variables and measures	Findings	Limitations
The impact of social cognitive and personality factors on teachers' reported inclusive behaviour. *The British Journal of Educational Psychology*, *86*(3), 461–480. Scotland	Age/grade range of students taught not specified.	Questionnaire 'packs' were sent to schools. Multiple regression analysis was used to evaluate predictors of teachers' intentions.	A two-component version of TPB was used (Ajzen, 2002; Rhodes & Courneya, 2004). For all TPB components, questionnaires were designed by the authors based on guidance for developing TPB questionnaires (Ajzen, 2002): Attitudes: Total of 12 items across two variables (instrumental and affective), 9-point bipolar scale. Behavioural control (self-efficacy and controllability): Total of 5 items across two variables (self-efficacy and	dimension; belief that others perform the behaviour), and self-efficacy were predictive of teachers' intentions to use inclusive strategies. Self-efficacy was the only significant predictor of teachers' reported classroom behaviours. Inconsistent with TPB, behavioural intention not a significant predictor of teachers'	attitudes and efficacy, the findings could not be generalised to other areas of SEN/disability. Non-standardised measures. However, the scales were piloted with six teachers to establish content and face validity. Use of self-report for actual behaviour, but the author notes other studies have validated correlation with observed behaviour.

Study authors, title and location	Sample / Participants	Method	Specific TPB variables and measures	Findings	Limitations
			controllability), 9-point Likert scale. The self-efficacy items focused on confidence towards adapting curricular content for CYP with intellectual disabilities. Subjective norm: Total of 5 items across two variables (injunctive and descriptive norms), 9-point Likert scale. Injunctive items explored perceptions of what 'important' people would expect them to do concerning curricular adaptation. Descriptive norms explore perceptions of what other teachers did around curricular adaptation.	reported classroom behaviours. The author argues that high efficacy beliefs may relate to motivation and behaviour that excludes behavioural intention.	

Study authors, title and location	Sample / Participants	Method	Specific TPB variables and measures	Findings	Limitations
			Teaching behaviours: Intentions; 3 items, 9 points Likert scale. Actual behaviours; 4 items, 9-point Likert-scale.		
MacFarlane, K., & Woolfson, L. M. (2013). Teacher attitudes and behaviour toward the inclusion of children with SEBD in mainstream schools: An application of the TPB.	N=111 primary school teachers in Scotland. Age/grade range of students taught not specified.	Non-experimental design. Questionnaires; a combination of online & paper. Regression analysis conducted.	The application of TPB was focused on the inclusion of CYP with SEBD. Attitudes: Cognitive and affective aspects measured Multidimensional Attitudes Toward Inclusive Education Scales (MATIES) (Mahat, 2008). It was adapted to focus on SEBD. Twelve items, 9-point Likert scale.	Teachers with higher levels of beliefs ('cognitive' aspect of attitudes) and self-efficacy predicted more positive intentions to include children with SEBD in a positive direction. Teachers' feelings ('affective' aspect of	Self-report may have led to socially desirable responses, but the author felt the confidentiality of the questionnaire mediated these.

Study authors, title and location	Sample / Participants	Method	Specific TPB variables and measures	Findings	Limitations
Teaching and Teacher Education, *29*(1), 46–52. (MacFarlane & Woolfson, 2013) Scotland			Behavioural control (efficacy): Teachers Sense of Efficacy Scale (TSES) (Tschannen-Moran & Hoy, 2001). Adapted to focus on SEBD. It included three sub-scales; instructional strategies, classroom management, and student engagement: 12 items and a 9-point Likert scale. Subjective norm: Teachers Subjective Norm Scale modified from the TSES (Tschannen-Moran & Hoy, 2001) to capture teacher perceptions about Headteacher views around the inclusion of CYP with SEBD, 12 items, 9-point Likert scale.	attitudes) and subjective norms (measured by teacher perceptions of Headteacher views) did not significantly predict behavioural intention. However, subjective norms were the only predictive variable of adaptive teacher behaviours. The authors note this is inconsistent with the TPB literature, where perceived behavioural control is typically the	

Study authors, title and location	Sample / Participants	Method	Specific TPB variables and measures	Findings	Limitations
			Behaviour: Teachers' Willingness to Work with Severe Disabilities Scale (TWSD) (Rakap & Kaczmarek, 2010). Vignette and then eight items, 9 points Likert scale. Adaption Evaluation Instrument (AEI) (Schumm & Vaughn, 1991) looking at the feasibility and desirability of performing adaptations that support inclusive behaviour. Thirty items, 5 points Likert scale.	strongest predictor. However, the finding highlights the importance of Headteacher expectations on influencing the efficacy of staff.	

2.3.9 WoE (assessment of quality)

Each item of the WoE Framework (Gough, 2007) was applied to the included four studies; the quality and appropriateness of evidence concerning the review question were considered during the synthesis of findings below. Appendix B sets out the criteria based on Gough's framework used to appraise the studies. Appendix C sets out the rationale for the judgments given based on these criteria. The overall results are set out below in Table 2.4:

Table 2.4 The WoE of the individual studies

	Weight A Quality of study	**Weight B** Appropriateness of method	**Weight C** Appropriate evidence	**Weight D** Overall weighting
(Hellmich et al., 2019) Germany	Medium	Medium	High	Medium
(Sharma et al., 2018) Australia and Italy	Medium	Medium	High	Medium
(Wilson et al., 2016) Scotland	High	Medium	High	High
(MacFarlane & Woolfson, 2013) Scotland	Medium	High	High	High

2.3.10 Synthesis of findings

Based on each study's analysis and quality assessment, a synthesis of the key findings was developed below.

2.3.10.1 Sample and participants

The sample size for all studies was reasonably large, ranging from *n*=111 to *n*=314, and was suitable for statistical analysis. In Sharma et al. (2018), the total teacher sample of *n*=314 was split between two countries (Italy and Australia) and primary and secondary age groups. In Hellmich et al.'s study (2019), the sample was reported *n*=290; this was split between teachers who worked in 'inclusive' mainstream schools (where pupils with SEN were enrolled alongside those without) and those who did not. As the Hellmich et al. (2019) study included teachers working between different contexts, the generalisability of the findings is reduced. For teachers who did not teach in inclusive schools are less likely to have had exposure to the experiential sources needed for efficacy development (e.g. mastery experiences or social persuasion) and attitude formation (e.g. affective dimension) feelings towards CYP with SEN) concerning inclusion.

As per the inclusion criteria, all four studies exclusively recruited in-service teaching staff for their sample. However, teacher populations were based in different settings. While three studies were recruited entirely from primary schools (Hellmich et al., 2019; MacFarlane & Woolfson, 2013; Wilson et al., 2016), only one study was recruited from primary and secondary schools (Sharma et al., 2018).

The four studies represented teacher views towards inclusion from high-income countries (Australia, Italy, Germany and Scotland), highlighting the potential value of research in the future in other contexts. Notably, two studies recruited staff from

Scotland (MacFarlane & Woolfson, 2013; Wilson et al., 2016), suggesting a particular interest in this topic in the country. One study explored cross-cultural differences between inclusive education systems in Italian and Australia (Sharma et al., 2018). Italian teachers had significantly more positive attitudes and behavioural intentions towards teaching in inclusive classrooms than Australian teachers. This difference could be explained by variance in inclusive practices between the countries as inclusive education has been part of Italy's system for longer (Sharma et al., 2018) but also by the differences between the populations recruited. While Australian teachers were predominantly from the secondary sector and completed the survey online, teachers from Italy were recruited across the school-age phases. They completed the survey at a training event focused on 'learning support' suggesting that this group already had a favourable bias towards inclusive practice.

2.3.10.2 Methods

All four studies implemented questionnaire measures that allowed for the collection of quantitative data suitable for statistical analysis. The format of the questionnaires was generally consistent across the studies. Only one study (Hellmich et al., 2019) utilised a researcher to facilitate teacher responses to the questionnaire, whilst the other three studies sent out paper and online 'packs'. The reliance on self-report in all studies risked social desirability bias (Robson & McCartan, 2016), although this could be seen to be mediated by the confidentiality and anonymity of responses.

Three of the four studies exclusively utilised questionnaire scales to measure the TPB variables and outcomes (MacFarlane & Woolfson, 2013; Sharma et al., 2018; Wilson et al., 2016). Only one study utilised a vignette to measure self-reported behaviours (Hellmich et al., 2019). Despite many readily available and psychometrically robust standardised measures in the literature, two studies included non-standardised measures designed by the authors (Hellmich et al., 2019; Wilson et al., 2016). Neither measure was empirically tested in preliminary studies, which meant the internal validity of the scales could not be validated. However, the

reported reliability of primary measures was at least adequate across all variables in the four studies, except for one measure in one study (Sharma et al., 2018).

All four studies reported descriptive statistics. Three studies (MacFarlane & Woolfson, 2013; Sharma et al., 2018; Wilson et al., 2016) utilised regression analysis to evaluate how attitudes and efficacy were predictive of behavioural intentions or actual behaviours, suggesting the appropriateness of the analysis for this type of study.

2.3.10.3 Operationalisation of attitudes, efficacy and inclusive teacher behaviours

Given the possible impact of inconsistencies in the operationalisation of TPB variables on findings in this area, the author gave specific critical attention to this area in the systematic review. Despite the variance across the four studies in how TPB was operationalised as a conceptual framework, there was considerable consistency around specific findings across the four studies.

Whilst all four studies applied TPB to explore inclusive teacher behaviours, the 'target' group for such behaviours varied. One study (Hellmich et al., 2019) looked at the inclusion of all children and did not make specific reference to CYP with SEND. One study looked at attitudes to the inclusion of CYP with disabilities in general (Sharma et al., 2018). The other two studies looked at specific groups of CYP: one focused on 'intellectual disabilities' (Wilson et al., 2016b) and another on SEBD (MacFarlane & Woolfson, 2013). Given that the constructs of attitudes and efficacy are highly context-sensitive, the generalisability of individual study findings to SEMH – except for MacFarlane & Woolfson (2013) – is limited.

Concerning attitudes, three studies measured both the cognitive and affective dimensions of attitudes (MacFarlane & Woolfson, 2013; Sharma et al., 2018; Wilson et al., 2016). Hellmich et al. (2019) only measured the cognitive aspect of attitude.

The cognitive aspect of attitudes was a significant predictor of behavioural intentions in all four studies and found to be a stronger predictor than the affective dimension in two studies (MacFarlane & Woolfson, 2013; Wilson et al., 2016b). The Wilson et al. (2016) study measured teachers' cognitive attitudes towards inclusion in 'instrumental' terms, that is, how adapting the curriculum might deliver perceived benefits to the teacher or students. The authors suggest that the anticipated rewards of delivering inclusive education might substantially influence behavioural intentions compared to the affective aspect of their attitude.

TSE was used in all studies to operationalise the notion of behavioural control across all four studies. However, the variable was measured differently. Three studies aimed to measure efficacy towards adapting instructional or curricular strategies (MacFarlane & Woolfson, 2013; Sharma et al., 2018; Wilson et al., 2016). Two studies measured efficacy towards classroom or behaviour management (MacFarlane & Woolfson, 2013; Sharma et al., 2018) and collaborating with others to support inclusion (Hellmich et al., 2019; Sharma et al., 2018). One study measured efficacy towards engaging CYP (MacFarlane & Woolfson, 2013). Despite these differences in the operationalisation of the construct, all four studies found self-efficacy to be a significant predictor of behavioural intentions. One study (MacFarlane & Woolfson, 2013) was inconsistent with the TPB, and the behavioural intention was not a significant predictor of actual behaviour. However, TSE was a significant predictor of actual behaviour. The authors suggest that firm TSE beliefs may mediate the need for behavioural intention because it reflects one's motivation towards performing a behaviour.

The subjective norm variable was the most inconsistently operationalised among studies. Perceived expectations of school management or headteacher attitudes were measured in two studies (Hellmich et al., 2019; MacFarlane & Woolfson, 2013), but only the former found it significantly predicted behavioural intentions. Sharma et al. (2018) measured teachers' concerns towards factors such as available resources, academic standards, acceptance and workload, but these were not found to be a significant predictor of intentions. Whilst the rationale for the operationalisation of

the subjective norm variable in this way was not made clear in the study, these factors can be seen to relate to wider systemic or external influences relevant to inclusive behaviours. The Wilson et al. (2016) study measured both teacher perceptions of whether ‘essential others’ wanted them to behave inclusively (injunctive norm) and their beliefs about whether other teachers behave inclusively (descriptive norm).

Interestingly, it was only the latter norm that was a significant predictor of behavioural intentions. That said, the generic use of ‘important others’ in the injunctive norm measure could be seen as problematic. For example, a more specific reference to headteachers may have generated a different finding, as seen in other studies. However, the apparent influence on teachers' inclusive behaviour may result from their beliefs about whether other teachers also act inclusively appears significant, particularly given the earlier discussion on collective efficacy. As Wilson et al. (2019) argue, this may help explain why several studies that have not considered such beliefs - including two reviewed here (MacFarlane & Woolfson, 2013; Sharma et al., 2018) - have found that the subjective norm has limited or no predictive power of behavioural intention.

2.3.10.4 Limitations

Due to variations in the sampling approaches, participants, and TPB variables operationalisation and measures, only tentative comparisons between the findings can be made. Whilst the internal reliability of measures used was generally good, the selection of non-standardised questionnaires to measure specific primary measures (particularly Hellmich et al., 2019) threatened internal validity. On occasions where standardised measures were adapted, adaptations were not described in full in a way that allowed for replication, e.g. Hellmich et al. (2019).

2.3.11 Summary of review

The number of studies identified for this review highlights the small amount of research into understanding the relationship between teacher attitudes and feelings of efficacy towards inclusive behaviours in the classroom. Nevertheless, all four studies' relatively recent publication dates (between 2013 – 2019) suggest a growing interest in the area.

The TPB appears to be the most commonly applied conceptual framework for explaining how these variables may influence teacher behaviours towards inclusion. Variations in the operationalisation and measurement of the TPB influence findings. However, both attitudes (particularly the cognitive dimension) and self-efficacy appear to be significant predictors of behavioural intentions. Nevertheless, there were inconsistent findings around the predictive validity of the subjective norm variable. Differing operationalisations and measures of the subjective norm variable across the four studies may explain this variance. The findings of this review inform the overall chapter conclusion that follows (Section 2.4) and the aims of the proposed research study (Section 2.5).

2.4 Conclusion

This literature review aimed to provide a comprehensive analysis of existing research investigating the influence of teacher attitudes and efficacy beliefs on CYP's inclusion, particularly those with SEMH needs. A theoretical exploration of the term ‘inclusion’ acknowledged ongoing inconsistencies around its interpretation both in academia and policy. It has been suggested that difficulties with creating a consensus between policy-makers and practitioners around the meaning of inclusion could be a barrier to its practical implementation in the classroom. The term SEMH represents a recent shift towards understanding presenting challenging behaviours as the manifestation of growing concerns around underlying SEMH needs. Despite this conceptual shift, the literature highlights how this group is still likely stigmatised

by schools for being ‘naughty’. Causal attributions towards challenging behaviour are most likely to be made to factors outside of the teachers' control, which may explain why teachers are least likely to support the inclusion of this group of CYP.

The impact of teacher attitudes towards inclusion and efficacy beliefs were also explored concerning inclusive behaviours. There is little research in this area concerning CYP with SEMH-type needs. Research regarding attitudes and efficacy beliefs about the inclusion of CYP with SEND more generally and in other SEND areas is better established. The TPB typically offers a helpful conceptual framework for explaining how these factors may determine teacher behaviours towards inclusion. However, differing operationalisations of the subjective norm variable may explain why there is inconsistency in the literature around the predictive validity of this variable towards inclusive teacher behaviours. Specific consideration was given to collective efficacy, which considers the indirect influence of the school culture and organisation as measured by teachers’ perceptions of the overall staff body’s ability to make a difference to CYP outcomes. Whilst its presence indicates a high correlation with several areas (academic performance and managing challenging behaviour), it has not yet been investigated concerning the inclusion of CYP, including those with SEMH needs. Moreover, as CTE aims to capture the indirect influence that the perceived behaviour of the staff body may have on individual teachers’ own behaviours, it could be appropriately operationalised as the subjective norm variable in the TPB.

The systematic review highlights a growing recent interest in the predictive power of teacher attitudes and efficacy beliefs towards inclusive behaviours. However, research is absent in collective efficacy, lack of representation from secondary teacher views and limited focus on CYP with SEMH needs. Methodological inconsistencies, particularly around TPB variables and measures' operationalisation, suggest that further research is needed to contribute to this critical area and support more generalizable conclusions.

2.5 The Aims of the Proposed Research

Supporting successful implementation of national and local inclusive policies must recognise the critical role of teacher-based factors. Understanding how teachers' attitudes and efficacy towards inclusive practices influence their inclusive behaviours can optimise EP support to teachers in acting inclusively. Whilst significant research has been undertaken to explore attitudes and feelings of self-efficacy towards implementing inclusive education, understanding the predictive power of these variables concerning inclusive teacher behaviours is limited, particularly in the case of collective efficacy. The TPB has offered the most frequently applied and validated conceptual framework for explaining how teacher-based pre-determinants may explain inclusive behaviours in the classroom. However, there remain inconsistencies around the operationalisations of these variables and findings, and thus further research is needed. Moreover, there appears to be a particular lack of representation from secondary school teacher views and a focus on CYP with SEMH-type needs. Given the specific vulnerabilities that this group of CYP face (particularly in secondary settings) regarding harmful inclusive practices and an increased risk of exclusion, further research is needed here.

The study will investigate the validity of the TPB for explaining secondary teachers' intentions to behave inclusively towards CYP with SEMH needs. It will do this by investigating the predictive power of teacher attitudes, self-efficacy (as a conceptualisation of the 'perceived behavioural control' variable) and collective efficacy beliefs (as a novel operationalisation for the 'subjective norm' variable) about their intentions to behave inclusively towards young people with SEMH needs. A better understanding of the relationship between these variables and inclusive teacher behaviours may provide insights for both schools, initial training providers and Local Authorities on how to consider such factors when planning for initial teacher training, ongoing professional development and the development and implementation of inclusive policies.

A tentative conceptual framework for the study is set out below (Figure 2.3):

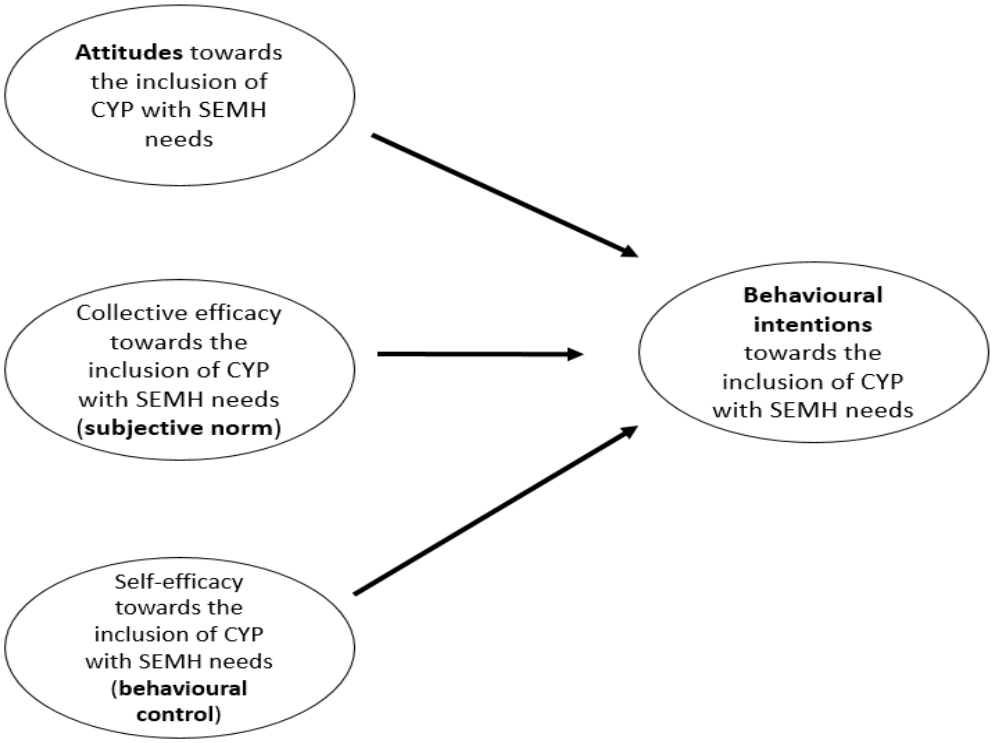

Figure 2.3 The summary of the tentative theoretical framework for the study; adapted and modified from Ajzen's TPB (2002) for this study

Thus, this study aims to answer the following questions:

1. What is the strength of secondary school teacher attitudes (beliefs and feelings), collective efficacy (CTE), self-efficacy (TSE) and behavioural intentions towards the inclusion of CYP with SEMH needs?

2. What is the relationship between secondary school teacher attitudes (beliefs and feelings), CTE, TSE and behavioural intentions towards the inclusion of CYP with SEMH needs?

Specifically, it is hypothesised that:

H1a: Strength of teacher beliefs, feelings, CTE, TSE and behavioural intentions will vary depending on teaching experience, such that teachers with greater experience will present with more negative levels than teachers with less experience.

H1b: Strength of teacher beliefs, feelings, CTE, TSE and behavioural intentions will vary depending on gender, such that female teachers will present with more positive levels than male teachers.

H2: Teachers' beliefs and feelings, CTE, TSE will each predict behavioural intentions.

Chapter 3 METHODOLOGY

3.1. Aim and structure of the methodology

This chapter aims to set out the methodological approach taken by the current study. Initially, an overview of key research paradigms will be provided, and a rationale for the study's position of post-positivism discussed. Discussion of the research design relevant to the current study will then be considered to justify adopting a non-experimental correlational design. Consideration of the data collection procedures and measures employed will focus on reliability, validity and ethics. Finally, an in-depth discussion of the data analysis methods utilised in the study will be presented.

3.2. Theoretical considerations

3.2.1 Research paradigms

Research paradigms draw on the ontological (the nature of reality) and epistemological (the nature of knowledge and its relationship with reality) assumptions of the research and accordingly influence the researcher's decisions about their methodological (systematic inquiry process through which knowledge is acquired, e.g. data collection and analysis methods), and axiological (nature of ethical behaviour) approaches (Mertens, 2020; Dillon & Wals, 2006). By explicitly acknowledging the research paradigm, the researcher can engage in a systematic process of critical inquiry to examine, interpret, and understand the nature of reality and acquire knowledge from a particular worldview (Mertens, 2020). Moreover, alignment with a specific paradigm also offers the reader a helpful insight into the researcher's motivation and intentions for the research in terms of how they will seek to obtain knowledge that will offer an evidence base to influence and shape practice and policy in the 'real world' (Mackenzie & Knife, 2006).

Researcher decisions about adopting a particular paradigm should consider their own personal ontological and epistemological assumptions; these are informed by their own experience of the world (Mertens, 2020) but importantly be led by their research inquiry foci/questions (Dillon & Wals, 2006). Within the context of educational psychology research, there are arguably four fundamental key paradigms; constructivism, pragmatism, transformative and post-positivism (Mertens, 2020 & Mackenzie & Knife, 2006). Table 3.1 presents the key assumptions underpinning the four main research paradigms (after Mertens, 2020).

Table 3.1 The Research paradigms in educational psychology (adapted from Mertens, 2020)

Key Assumptions	**Post-positivism**	**Constructivism**	**Transformative**	**Pragmatic**
Ontology	• One true objective reality; • Knowledge accessed with a degree of probability.	• Reality is based on multiple social constructions.	• Accepts differing perceptions of reality equally. • Acknowledges influence of social position and privilege	• Each individual has a unique interpretation of a singular reality.
Epistemological	• Emphasises objectivity.	• Acknowledges the interactive relationship between researcher and participants	• The interactive relationship between researcher and participants but takes account of power imbalances.	• Informed by the research question/purpose.
Methodology	• Quantitative (primarily) • Interventionist • Contextual factors not considered.	• Qualitative (primarily) • Contextual factors considered.	• Primarily Qualitative (Mixed Methods / quantitative	• Informed by the research question/purpose. • Mixed methods typically used.

			methods possible) • Contextual and historical factors considered	
Axiology	• Beneficence • Informed consent • Respect privacy • Justice • Equality of opportunity	• Balance of differing views. • Raises participant awareness	• Respects cultural norms • Beneficence: promoting human rights and social justice • Reciprocity	• The researcher's politics and value influence how knowledge is gained.

3.2.2. The chosen paradigm for the current study; post-positivism

For the current study, the researcher selected a post-positivist paradigm. This perspective was reflective of the researcher's personal epistemological and ontological perspective, when seeking to advance psychological explanations of a nomothetic kind for phenomena in education. Additionally, the paradigm has been adopted in similar studies, and therefore the current study would contribute to the literature. The researcher also considered a post-positivist paradigm to be most appropriate for addressing the research questions the study aimed to address:

1. What is the strength of secondary school teacher attitudes (beliefs and feelings), collective efficacy (CTE), self-efficacy (TSE) and behavioural intentions towards the inclusion of CYP with SEMH needs?

2. What is the relationship between secondary school teacher attitudes (beliefs and feelings), CTE, TSE and behavioural intentions towards the inclusion of CYP with SEMH needs?

The post-positivist paradigm builds on the positivist paradigm, and the two are therefore closely aligned. Whilst both promote a worldview of reality sitting independently of our knowledge of it (Furlong & Marsh, 2010), post-positivists acknowledge the practical challenge of obtaining a single and objective reality in real-world research (Robson & McCarten, 2016). Critics of the positivist paradigm and its positivist ontological perspective argue that a researcher brings unconscious bias that undermines the possibility of knowing a singular objective reality that sits independently of the researcher (Robson & McCarten, 2016). On the other hand, post-positivism adopts a realistic ontological perspective; it does not avoid researcher bias but acknowledges and even embraces it as part of the diverse experiences and beliefs that researchers and participants bring to the research process (Reichardt & Rallis, 1994). While a reality independent of our knowledge exists, it reflects an evolving human experience and can therefore not be known with complete certainty (Reichardt & Rallis, 1994). Post-positivists argue that experimental and systematic inquiry within real-world research offers a lens through which reality can be objectively – albeit imperfectly - tested and understood (Ingleby, 2012).

The implications of the epistemological and ontological assumptions of the post-positivist paradigm for the research design of the current study are important to acknowledge. In its methodology, a post-positivist research design would adopt a deductive reasoning approach, drawing on theory from literature to generate testable hypotheses and predictions, which can be empirically verified or falsified through the generation of quantitative data (Shadish et al., 2002). Quantitative data generates visible and measurable results, which will enable the researcher to adopt a realistic understanding of the relationship between teacher attitudes and efficacy towards inclusive behaviours based on the perceived collective experiences of the participants (Shadish et al, 2002; Pring, 2007).

A post-positivist study offers good internal reliability because the data it generates can be seen to link to the constructs being measured explicitly. However, within a given study, the external validity and reliability are arguably limited by researcher

bias and error; instead, a post-positivist would argue that more reliable knowledge can be generated through the combined findings of cumulative studies (Robson & McCartan, 2016). That said, a researcher can strengthen the reliability and validity of their interpretation of reality through systematic, transparent and replicable development and implementation of their methodology, highlighting the high ethical or axiological standards a post-positivist researcher should hold themselves against (Lach, 2014; Mertens, 2020).

3.3 Research designs

A study's research design can be seen to provide a golden thread that integrates purpose, theory, research questions, methods, sampling procedures and axiological considerations and takes account of issues surrounding validity and reliability (Robson & McCarten, 2016; Mertens, 2020). A research design provides a coherent framework that provides reassurance to readers that any findings are based on a sound and reliable research process. Its research paradigm informs a study's design; the post-positivist position adopted by the current study most complements a fixed design, components of which will be explored in more detail below (Cooper, 1997; Robson & McCartan, 2016).

3.3.1 Fixed designs

Fixed designs are theory-driven and mandate that a study – including the variables that underpin the research questions, data collection method, procedure and analysis – is fixed before data collection (Robson & McCarten, 2016). As a result of having a pre-determined research design, researcher bias and effect are minimised, therefore offering greater methodological rigour than flexible or mixed-method designs. Whilst fixed designs *can* adopt a qualitative data collection method, they are more conducive to collecting quantitative data (Robson & McCarten, 2016; Meyrick, 2006).

Fixed designs differ depending on the strength of causal inference they seek to obtain. Designs range from controlled experimental designs that manipulate independent variables in order to measure the impact of an intervention on dependent variables (e.g. Randomised Controlled Trials) through to non-experimental designs that aim to measure the relationship or causality between variables found amongst individual participants without the need for variable manipulation (e.g. correlational or comparative designs). In the context of real-world research, the concept of 'variables' represents the *sui generis* nature of reality (objective and apart from individuals), allowing psychological constructs and the relationships between them to be measured and conclusions drawn with varying degrees of confidence (Yilmaz, 2013).

Whilst non-experimental designs – as with all fixed designs – arguably fail to capture the complex nuances of psychological and social phenomenon (Robson & McCarten, 2016), they offer the advantage of reducing researcher bias and subjectivity that is more prevalent in flexible designs (Coolican & Coolican, 2014; Robson & McCarten, 2016). A non-experimental design – specifically a correlational design – was seen as more relevant to the current study's aim of exploring the strength of constructs of attitudes, self-efficacy and collective efficacy and their predictive validity towards behavioural intentions.

3.3.2 Non-experimental designs

Non-experimental designs are valuable where the manipulation of the variables being measured may not be modifiable; age, gender, individual beliefs or views (Robson & McCartan, 2016). A correlational non-experimental design can be adopted to explore the strength of and relationship between variables without the researcher manipulating said variables (Curtis et al., 2016). Correlational designs can adopt a cross-sectional (measures taken at one point in time – often using surveys - focusing on relationships between variables across one group of individuals) or longitudinal design (measures taken over different points in time).

A correlational design again appeared to be the most suitable in the current study because the research questions explored the strength of and relationship between teacher-based variables that could not be modified. Moreover, the approach would be cross-sectional; teacher views would be collected once at a given point in time using a questionnaire survey.

3.3.3 The rationale for the current study's research design

The current study aimed to investigate the strength of and relationships between teacher attitudes, self and collective efficacy and behavioural intentions towards the inclusion of CYP with SEMH needs. Informed by critical ontological, epistemological, methodological and axiological assumptions and the research questions, a post-positivist paradigm was adopted. Consonant with this paradigm, since the independent variables could not be manipulated, the researcher assumed a fixed, non-experimental, cross-sectional correlational design and adopted a questionnaire data collection method.

3.4 Data collection

3.4.1 Data collection method; questionnaire

Consistent with a post-positivist paradigm and non-experimental research design (Shadish et al, 2002), the current study utilised a survey as its data collection method. Surveys were considered preferable to other data collection methods because they would allow the researcher to collect data in a standardised way from a large and representative sample of participants across a relatively short period. The researcher also considered the strong literature basis for measuring teacher attitudes and efficacy beliefs towards inclusion, which provided additional justification for selecting this method. Surveys offer the advantage of enabling responses to be

completed anonymously, meaning that participants may be more willing to complete the survey honestly even if they are concerned about the sensitivity of specific topics (Murdoch et al., 2014). Furthermore, the disruption caused to normal school operations by the Covid-19 pandemic meant that the researcher saw an online survey that could be administered remotely as more efficient and practical.

However, on the other hand, response rates for surveys are generally low, and social desirability bias may undermine the reliability of individual participant answers (Robson & McCarten, 2016). Moreover, as surveys rely on pre-determined, often closed questions with a pre-populated set of options for responses, the data collected can be limited. Surveys – particularly online formats - are typically completed without the researcher present, and as such, there is the risk that participants misunderstand or misinterpret certain items and may not seek clarification. This risk highlights the importance of designing straightforward questions and questionnaire layout and design that maximises accessibility and coherence for the participants (Cohen et al., 2011; Mertens, 2020).

3.5 Quality of research

Quantitative research continues to be seen as a critical source of evidence to support policy and practice changes (Noyes et al., 2019). However, in order for there to be confidence in the research process, data and the findings drawn from it, the reliability and validity of the research must be robustly evaluated (Roberts et al., 2006; Yilmaz, 2013). The researcher took account of the following factors in the design and implementation of the current study to optimise its quality and trustworthiness (Mertens, 2020):

Reliability; for non-experimental designs employing surveys, reliability is concerned with adopting stable measures that include items that generate consistent results. This internal consistency – i.e. survey items related as a coherent group – will be determined in the current study using Cronbach's alpha coefficient.

Construct validity; is concerned whether the constructs or variables in the study are measuring what they intend to and is typically demonstrated based on the data collection and analysis results. The current study considered how similar studies had operationalised and measured variables and closely followed the sample and context for whom the measures were designed. A pilot study was carried out to ensure the appropriateness of the survey before full implementation.

External validity; considers the extent to which inferences drawn from the data can be generalised to other people and contexts.

Internal validity; quantitative design methods should pay particular attention to whether the evidence establishes a relationship between independent and dependent variables and whether alternative explanations could be provided for any findings generated. Strong internal validity relies on demonstrating essential conditions; statistical analysis establishing a relationship between its variables that did not occur by chance; a strong effect size indicating the strength of the inference drawn; and transparent and replicable judgments that inform the inference in order to minimise concerns of researcher bias and error (Alivernini, 2012; Patino & Ferreira, 2018).

3.6 The study's variables and measures

The functions, constructions and measures used in the current study are shown below in table 3.2. A further discussion of the measures used for each construct is included in section 2.7.

Table 3.2 The study's variables and measures

Function	Construct	Measure
Predictor	Teacher attitudes (beliefs and feelings)	The first two sub-scales (cognitive (beliefs) and affective (feelings) aspects of attitudes) from the Multidimensional Attitudes Toward Inclusive Education Scale (MATIES; Mahat, 2008) were adopted. 6 items for each sub-scale respectively. In a critical review of questionnaires on teacher attitudes towards inclusion, the MATIES along with only one other survey was identified as having adequate psychometric properties to address the components of teacher attitudes (Monsen et al., 2015). A discussion on reliability of the original survey and latter adoptions can be found in section 3.9.2. With the current study, the language from the two sub-scales from the Mahat (2008) study were adapted to reflect the focus on SEMH rather than 'disability' more generally.
	TSE	Teachers Sense of Efficacy Scale (TSES, Tschannen-Moran & Woolfolk Hoy, 2001). Twelve items. A discussion on reliability of the original survey and latter adoptions can be found in section 3.9.3. With the current study, the language from the scale from the Mahat study was adapted to reflect the focus on SEMH.
	CTE	Teacher's Sense of Collective Efficacy scale (TSCE, Goddard, 2002). Twelve items. A discussion on reliability of the original survey and latter adoptions can be found in section 3.9.3. The scale was adapted in the current study to reflect the focus on SEMH.

Outcome	Teacher behavioural intentions	The third sub-scale the teacher attitude instrument; MATIES (Mahat, 2008). Six items. A discussion on reliability of the original survey and latter adoptions can be found in section 3.9.2. The scale was adapted to reflect the focus on SEMH and the target population of secondary teachers in England.
Co-variate	Gender	-
	Years teaching experience	-

3.7. Characteristics of the current study

3.7.1. Stakeholders

During the development and implementation of the current study, the needs and rights of several stakeholders were considered as per the British Psychological Society's ethical Code of Human Research Ethics (BPS, 2021). The key stakeholders are described below:

The Local Authority: The researcher was employed as a Trainee Educational Psychologist (TEP) within an East Midlands UK, local authority Educational Psychology Service (EPS) where the research was undertaken. The EPS was currently developing and implementing an educational inclusion initiative in response to rising rates of permanent exclusions across schools in the city. The initiative aimed to build schools' capacity to identify systematically, assess, and meet the needs of CYP presenting with SEMH difficulties. The EPS expressed an interest in developing an understanding of teacher-based factors towards the inclusion of CYP with SEMH to inform the further development of the initiative and strengthen inclusive practices across their secondary schools. The current study was therefore

crucial in supporting the EPS to develop an evidence-informed understanding of the role of teacher attitudes and efficacy in influencing behavioural intentions towards the inclusion of CYP with SEMH needs, which could be taken be taken account to support strategic planning and development towards inclusive practices across the city.

The University of Nottingham: The current research was completed as a required part of the Doctorate in Applied Educational Psychology (DAEP; professional training). The DAEP is a three-year full- course that prepares students for the professional role of educational psychologist (EP).

The participating teachers: The secondary school teachers who completed the questionnaires were also stakeholders within the research.

3.7.2. Selection of teacher participants

An opportunity sampling approach was adopted to recruit secondary teachers from mainstream secondary schools. Initially, schools from across the researcher's placement Local Authority were invited to express interest in the study. Five secondary schools gave their consent for teachers to be invited to participate. However, following three rounds of data collection, only 8 complete responses were received. In agreement with the researcher's supervisors, participants were then sought nationally via social media channels and personal networks to meet the minimum sample size.

3.7.3. Sample size; statistical power

Statistical power is concerned with the probability of research detecting a statistically significant result (Cohen, 1988). Research that collects statistically analysable data can risk Type I errors (the false acceptance of the research hypotheses) and Type II errors (failing to detect significance where it exists). The sample size – along with

power, effect size and significance criteria – is a key factor in determining a statistical power calculation. This assumption of power that can confer a statistically significant result can be based on the following calculation (Tabachnick & Fidell, 2018):

$$N > 50 + 8m$$

N = number of participants

m = number of independent variables

This study had five variables (attitudes, self-efficacy, collective efficacy, gender, years of teaching experience) in addition to its outcome measure of behavioural intentions. Therefore, the minimum sample size was calculated as follows:

$$N > 50 + (8 \times 5)$$

$$N > 90$$

This minimum requirement was exceeded by the 101 cases included in the researcher's data analysis.

3.8. Research procedure

3.8.1. Questionnaire Design

A 6-stage design process – informed by the stages outlined by Mertens (2020) - was used to create the survey so that data collection could take place successfully is summarised below. Further details about the recruitment strategies for seeking both LA and social media participants are set on in appendix H.

Stage 1 (purpose of the survey identified): The defining purpose of a questionnaire and target sample population was directly informed by the literature review in chapter 1 and adopting a post-positivist research paradigm.

Stage 2 (constructs and measures identified): the literature review identified the constructs of teacher attitudes (beliefs and feelings), self and collective efficacy and behavioural intentions to be measured and interpreted. The systematic review informed the selection of several standardised and well-established self-report measures. As similar studies had done, the scales were slightly adapted to focus on the specific population of CYP with SEMH needs. See section 2.7 for a further discussion of the scales adopted.

Following the expansion of data collection to schools beyond the Local Authority where the researcher was based, a second version of the survey was developed for national application. Following a more extensive literature review since the initial implementation of the survey, two co-variates (gender; years of teaching experience) were added to both versions (the LA and national). The national survey only differed in that respondents were not required to provide the name of their school; this amendment avoided the need for headteacher consent, proving to be a significant barrier to teacher recruitment.

Stage 3 (participants identified): given the study's research questions, the participants were identified as secondary school teachers currently practising in mainstream schools in England.

Stage 4 (design and format of the survey): the presentation and organisation of the scales' questions were considered to ensure that teachers could easily access the online survey, whether completing it by mobile, tablet or desktop computer. The instructions for completing the survey, consent and use of data also required careful consideration to ensure that teachers understood the purpose and uses of their responses. The researcher viewed the adopted language in the survey as most appropriate to the target population of mainstream secondary school teachers in England. Furthermore, the face validity (Taherdoost, 2018) of the final draft version of the questionnaire was reviewed by the researcher's supervisor with minor amendments suggested.

Stage 5 (pilot of the survey): as the survey had been designed for use with secondary school teachers in the English education system in mind, a small pilot

study was conducted to anticipate and address any issues around the clarity and interpretation of the survey. Key considerations focused on; the instructions given in the survey, clarity of the language used for secondary school teachers; and usability of the survey design and format. The survey was piloted with three secondary school teachers known to the researcher; all respondents confirmed that the language, format, and design were clear and appropriate for secondary school teachers and no suggested amendments were given.

Stage 6 (administer the survey): the online survey was then ready for administration for secondary school teachers, who could complete the survey by phone, tablet or desktop computer. See appendix D for the template questionnaire.

3.9 Measures

The current research drew on well-established standardised questionnaires adopted in previous studies that measured teacher attitudes, self and collective efficacy beliefs and behavioural intentions. In addition to demographic information, four measures containing 42 items were included in the online questionnaire.

3.9.1 Demographic and contextual information

Teachers were asked to give their gender (options were male; female; prefer not to say) and years of teaching experience (covering different ranges from 1-5 years through to 15+).

In phase 3 (see section 3.10) teachers were also asked to provide the name of their school to enable a both a group-referent measure of CTE and a school-to-school comparison across the city where the study was based. However, due to a poor response rate and resulting requirement to expand the study beyond the city, this request was removed. Therefore a group-reference measure of CTE and school-to-school comparative analysis was not possible.

3.9.2 Attitudes and behavioural intentions towards the inclusion of CYP with SEMH needs

The strength of teacher attitudes (predictor) and behavioural intentions (outcome) was measured using an adapted version of the MATIES (Mahat, 2008). The MATIES was developed to measure three core dimensions of teacher attitudes towards inclusive education relevant to the current study; cognitive (beliefs), affective (feelings) and behavioural intentions towards inclusion. However, consistent with similar TPB studies, the current study utilised the cognitive and affective dimensions to measure 'attitudes' whilst the behavioural intention dimension was used to measure the outcome variable. Each sub-scale includes six items and a 5-point Likert scale, ranging from 'strongly disagree' to 'strongly agree'). 3 items that were negatively phrased are reverse coded so that all higher scores indicate positive attitudes. Mahat (2008) demonstrated good internal consistency of the measure with primary and secondary teachers in Australia (α=0.77 for cognitive, α=0.78 for affective and α=0.91 for behavioural intentions). Similar reliability was reported in latter studies; 0.75 for both the cognitive and affective sub-scales was reported in a study examining Primary Scottish teacher attitudes (MacFarlane & Woolfson, 2013); between 0.77 – 0.91 across the three sub-scales for a study examining teacher attitudes in Florida from Kindergarten to grade 12 (Gaines & Barnes, 2017); and 0.81 for the behavioural intentions sub-scale reported in a Hong Kong study (Yan & Sin, 2014).

In the current study, the items in the MATIES were modified to focus on CYP with SEMH needs. An example of how the items were adapted for the present study is provided below in table 3.3. The adaptations closely followed the format used by MacFarlane & Woolfson (2013), who used the scale to measure attitudes towards CYP with SEBD needs. MacFarlane and Woolfson (2013) reported good internal consistency for their adapted measure with one hundred and eleven teachers based in Scottish Primary schools, similar to that reported by the original author.

Table 3.3 Example of how original survey items were adapted for the current study

Original item (Mahat, 2008)	**Adapted for current study to reflect focus on SEMH**
Affective sub-scale: 7. I get frustrated when I have difficulty communicating with students with a disability.	*Affective sub-scale:* 7. I get frustrated when I have difficulty communicating with students with *SEMH needs.*

Once negative coded items are re-coded, a mean score for each sub-scale is generated based on total teacher responses. Higher scores indicate positive attitudes and behavioural intentions towards inclusive practices.

3.9.3 TSE towards the inclusion of CYP with SEMH needs

TSE towards the inclusion of CYP with SEMH needs was measured using an adapted version of the TSES (Tschannen-Moran & Woolfolk Hoy, 2001). This measure includes three sub-scales; classroom management, engagement of pupils, instructional strategies. The measure contains 12 items with a 5-point scale, ranging from 'Nothing' to 'a great deal'. The reliability of the original 12-item instrument has been shown to be very high by Tschannen-Moran & Woolfson Hoy, 2001, with a Cronbach alpha of α=0.98. Due to its close alignment with self-efficacy theory and internal consistency, the TSES has been characterised as a reliable and cross-culturally applicable measure of teacher self-efficacy (Koniewski, 2019). Furthermore, an international cross-cultural study focused on six groups of teachers across five countries demonstrated the tool's reliability in measuring TSE across various contexts (Klassen et al., 2009). A mean score is generated based on total teacher scores for each of the three sub-scales. A higher score indicates a positive TSE.

The survey adaptations made for the current study closely followed those made to its language, used by the Gibbs & Powell study based in England, which explored the

relationship between teacher self and collective efficacy beliefs with regard to managing challenging behaviour (2011) but with a specific focus on SEMH. Gibbs & Powell's study reported strong internal consistency (α=0.92), similar to that of the original author.

3.9.4 CTE towards the inclusion of CYP with SEMH needs

The strength of CTE was measured by employing an adapted version of the TSCE (Goddard, 2001), which includes sub-scales on addressing external influences, motivating pupils, and teaching skill. The measure includes 12 items and a 5-point Likert scale ranging from 'strongly disagree' to 'strongly agree'. Excellent internal consistency (α=0.94) was reported in Goddard's (2002) study. Whilst the scale has been criticised for aspects of conceptually unclear language (Klassen, 2010), its inclusion of items that focus on the home environment makes it distinct from latter measures, e.g. The Collective Teacher Efficacy Belief Scale (CTEBS) (Tschannen-Moran and Barr, 2004). Moreover, the holistic lens of the scale also better exemplifies the relevance of the construct of CTE for the eco-systemic focus of educational psychology (Goddard, 2002). Once negatively worded items are reverse-coded, a mean score is generated based on total teacher scores for each of the three sub-scales. A higher score indicates a positive CTE. For the current study, the adaptations to the measure's items again closely followed the adapted format taken by Gibbs & Powell (2011) to reflect the specific focus on SEMH.

3.10 Recruitment and implementation procedure

Once ethical approval for the study had been secured on the 20th of May 2020 (see Appendix G), emails seeking expressions of interest were sent to secondary schools in the Local Authority (LA) where the researcher was based. Follow up emails were sent, and queries clarified with schools considering participation. Further details on recruitment of the participants are set out in appendix H. A summary of the recruitment and implementation process is set out below in table 3.4:

Table 3.4 The recruitment and implementation process

Phase A; Pilot study (June 2020)
Secondary school teachers were identified to pilot the survey instrument. Three teachers took part, and feedback sought. Survey finalised ready for implementation.
Phase B; Discussions with schools based in LA (July 2020)
Information about the study and requests for consent for teachers to be contacted were provided to all headteachers across the LA. Arrangements for the primary data collection stage was made with each school that gave headteacher consent to participate. Some schools opted for data collection to begin before the summer holidays and begin in the autumn term.
Phase C; Initial data collection with teachers based in LA (July 2020 – April 2021)
Secondary school teacher responses were sought in participating LA schools. Information and consent forms and the survey were sent via a senior leader to all staff, inviting teachers to participate. However, despite two further reminders (September 2020 and March 2021), responses remained extremely low (8 complete responses). During this time, the researcher also had an extended leave of medical absence, delaying data collection.
Phase D; Roll-out of the study beyond the LA (April 2021).
Due to the poor response rate and agreement with the researcher's supervisor, the study began seeking participants nationally. The requirement for individual respondents to provide their school's name was removed, and therefore headteacher consent was deemed unnecessary. In addition, two variables were added to both the national and LA-based surveys (gender, years of teaching experience).
Phase E; Further data collection with teachers within the LA and nationally (May 2021-August 2021)
The research study was promoted through social media channels and personal networks to boost responses and meet the minimum sample size required.

Participation continued to be sought from within the LA where the researcher was based.
Phase F; Debrief and dissemination of findings with the EPS (planned for November/December 2021)

3.10.1 Implementation of the Questionnaire

In Phase C, following headteacher consent, the LA-based online survey was distributed via the headteacher or a senior leader (e.g. Special Educational Needs Co-ordinator (SENCO)) to all staff, inviting them to complete the questionnaire. Following the expansion of the study (phase D), the survey was distributed directly to teachers via social media channels and through personal contacts. The researcher was not present during the completion of any of the questionnaires. Communication with school staff took place via email or social media, which made explicit information about informed consent, the right to withdraw without prejudice and an encouragement to ask questions to clarify any misunderstanding about the instructions or questionnaire items. The limitations of an online questionnaire are acknowledged; the researcher had limited control over who was accessing the measure and whether they were honest about meeting the condition of being a mainstream secondary school teacher in England, particularly when the survey was shared through social media channels. However, it was deemed that the risk of respondents not coming from the target population was low, given that the only obvious motivation for completing the survey was to contribute their views to this area of study. The researcher also mitigated any small risk by requesting respondents through the national survey to confirm they were practising teachers in mainstream secondary schools.

3.11 Ethical considerations

The study was designed in line with the BPS Code of Human Research Ethics (2021) and the ethical guidelines set out by the University of Nottingham's Ethics

Committee. Ethical approval was sought from the School of Psychology's Ethics Committee and gained from the latter on 20th May 2020 (see appendix G). As part of the ethics submission process, key ethical considerations focused on the following:

Informed consent: In phase B, all headteachers in the LA were provided with information letters about the study and invited to provide consent for their teachers to be contacted about the study (see Appendix E). In phase C, information sheets about the study and informed consent were sent to secondary school teachers via the consenting headteacher or nominated member of staff and consent obtained prior to teachers completing the survey (Appendix F). In the national roll-out of the study (phase D and E), information about informed consent (from Appendix F) was explicitly presented before participants could complete the survey. The right to withdraw at any point was made clear to participants throughout the research process.

Confidentiality and anonymity: The respondents names were not requested in line with the UK Data Service recommendations. Participants were informed that their responses would only be used for the aims of the study. The online survey data was stored on a password-protected account with Qualtrics data analysis software (Qualtrics, 2020) an online survey software platform to which the university was subscribed. Once the data had been entered into SPSS, the online data was deleted, and the survey taken offline.

Deception: The purpose and procedure for the study were communicated through the information letters and during the school and teacher recruitment process. Opportunities to ask any clarifying questions and raise queries were explicitly offered by the researcher throughout the data collection process.

Dissemination: The researcher will offer a meeting with the EPS and LA stakeholders to share any pertinent findings and implications; this is expected to occur in December 2021 / January 2022.

3.12 Method for data analysis

3.12.1 Data cleaning

A total of 101 respondents provided informed consent and participated in the research study. The Qualtrics data analysis software identified that 56 responses were only partial and thus removed by the researcher. Therefore a total of 101 completed survey responses were entered in the Statistical Package for the Social Sciences (SPSS: IBM, 2019), v.26 for analysis.

3.12.2 Data preparation

Data preparation and analysis took place within SPSS. Firstly, negatively coded items (MATIES; TSES) were recoded to score the same as positively worded items. Secondly, the mean scores based on the total teacher responses for each of the subscales were calculated.

3.12.3 Approach to data analysis

3.12.3.1 Assumption testing

Decisions regarding approaches to data analysis were made based on preliminary checks for assumptions for parametric rather than non-parametric testing; the data is normally distributed; the measures produce interval level data; the variance is

homogeneous (Field, 2009). A brief outline of how these assumptions were tested and proven to allow for parametric testing are set out below:

Normal distribution: considers whether the sample data is normally distributed as assumed on the broader population. Normally distributed data can be identified visually as a bell-shaped curve where the mean exists at the peak of the curve, the approach adopted for the current study.

Interval level data: consistent with educational studies and research that focuses on attitudes and behaviour, the Likert scales included in the questionnaire items were treated as interval level data, which was necessary for a mean score to be generated in data analysis (Carifio & Perla, 2008; Lovelace & Brickman, 2013; Willits et al., 2016).

Homogeneity of variance: assumes that the level of variance for a particular variable is constant across the sample. Observation of scatter plots or calculations based on numerically presented data such as Levene's test, which performs a one-way ANOVA on the deviation scores, helps assess the homogeneity of variance in statistical analysis. In the current study, statistical significance was established at $p < .05$, which indicated that the result being produced by chance was less than 5%. In addition, effect sizes were calculated and reported alongside each statistical test in the results section.

3.12.3.2 Analysis procedure

Initially, measures of central tendency and dispersion were calculated for each study variable, including the demographic information. The internal consistency scores concerning the target population for each measure was then calculated using Cronbach's alpha (Ponterotto & Ruckdeschel, 2016) and compared to previously

reported calculations from the original authors of the measures. Following this, further inferential statistics were conducted to address the two research questions.

This research question investigated the strength of each variable by conducting one-way within-subjects analysis of variance (ANOVA) to determine if teachers rated any of the variables more highly. ANOVA was conducted to investigate any significant differences between teacher groups across the measures.

In order to address the second research questions, relationships between the predictor variables (beliefs and feelings, self-efficacy, collective efficacy) and its outcome (behavioural intentions) were investigated (Ajzen, 1991). Correlations were conducted to identify associations between any of the pre-determinants and the outcome measure. Where correlations were significant, simple linear regressions were carried out to investigate whether any pre-determinant variables were predictive of behavioural intentions. Finally, multiple regressions were carried out to explore whether combining variables would be predictive of behavioural intentions.

3.13 Summary of methodology

This chapter presented the rationale for the methodological approach adopted by the researcher. The study adopted a post-positivist paradigm, non-experimental cross-sectional correlational design and employed an online survey as its data collection method. Descriptive and inferential statistical tests were employed to address the two research questions. The next chapter sets out the results of the research.

Chapter 4 RESULTS

4.1 Introduction

In this chapter, the data collected will be analysed, and the findings presented. Descriptive statistics for each measure in the study and the percentages of teachers in each gender and teacher experience group are provided. Following this, findings in response to the two research questions and hypotheses set out in Chapter 2 will be presented. Table 4.1 sets out the current study's research questions, hypotheses and the sections within the current chapter where they are addressed.

Table 4.1 Research questions and hypotheses

Research questions

1. What is the strength of secondary school teacher attitudes (beliefs and feelings), collective efficacy (CTE), self-efficacy (TSE) and behavioural intentions towards the inclusion of CYP with SEMH needs?
2. What is the relationship between secondary school teacher attitudes (beliefs and feelings), CTE, TSE and behavioural intentions towards the inclusion of CYP with SEMH needs?

Section	Hypotheses
4.3.2	**H1a:** Strength of teacher beliefs, feelings, CTE, TSE and behavioural intentions will vary depending on teaching experience, such that teachers with greater experience will present with more negative levels than teachers with less experience.
4.3.3	**H1b:** Strength of teacher beliefs, feelings, CTE, TSE and behavioural intentions will vary depending on gender, such that female teachers will present with more positive levels than male teachers.
4.4.2	**H2:** Teachers' beliefs and feelings, CTE, TSE will each predict behavioural intentions.

4.2 Descriptive statistics

The descriptive statistics for the overall data set (*n*=101) are shown in Table 4.2, which presents the number of teachers; and the mean and standard deviation (SD) for each of the study's variables. For the data set, which included gender and teaching experience responses (*n*=93), the percentage of teachers within each group is presented in Table 4.3.

As shown in Table 4.2, all variables had a mean score of over 3 (based on a scale of 1-5), indicating a more positive than a negative perception of inclusion towards CYP with SEMH needs on average. Behavioural intentions (outcome measure) had the highest mean score. Within the predictor variables, teacher feelings scored highest. CTE scored the lowest on average across the respondents in the study.

Cronbach's alphas for CTE, TSE and behavioural intentions indicated good internal consistency over $\alpha > .7$ (Taber, 2017). While teacher beliefs and feelings had Cronbach alpha scores below this threshold, they still scored an alpha score of over $\alpha > .6$, which has been cited as adequate in studies using similar attitudinal instruments (Cortina, 1993; Taber, 2017).

Table 4.3 shows that the highest percentage of teachers represented the most experienced teaching group (over fifteen years), although the second-highest percentage of teachers represented the least experienced teacher group (under five years). Females represented the large majority of participants in the study.

Table 4.2 Descriptive statistics for each measure used in the study

Study's variables	**N**	**Mean**	**SD.**	**Min. Range**	**Max. Range**	**Cronbach's Alpha**
Beliefs	101	3.89	.487	3	5	.64
Feelings	101	3.91	.532	3	5	.63

CTE	101	3.30	.540	2	5	.83
TSE	101	3.68	.496	2	5	.89
Behavioural intentions	101	4.39	.516	3	5	.89

Table 4.3 Percentage of teachers in each gender and teacher experience group

Teaching experience	**% Of teachers in the sample**
Less than five years	29
6-10 years	16.1
11-15 years	19
More than 15 years	35.5
Total	100

Gender	**% Of teachers in the sample**
Male	21.5
Female	78.5
Prefer not to say	0
Total	100

4.3. Research question 1

What is the strength of secondary school teacher beliefs and feelings, CTE, TSE, and behavioural intentions towards including CYP with SEMH needs?

Assumption testing for the data on gender and teaching experience (*n*=93) was initially conducted. Following this, descriptive data and inferential analysis explored differences between teaching experience and gender groups to examine hypotheses 1a and 1b.

4.3.1 Assumption testing

Shapiro-Wilk tests (see appendix I), highly recommended for normality testing (Ghasemi & Zahediasl, 2012; Peat & Barton, 2008), found there was no significance

across teacher beliefs and feelings, and CTE based on teaching experience grouped data and gender grouped data; indicating the distribution was normal across these variables. However, there was significance between 11-15 years of teaching and levels of TSE and between teaching experience and gender grouped data and behavioural intentions, indicating the distribution on these variables were non-normal. Further assessment of the normal distribution of the data was carried out using visual analysis of histograms, QQ plots and boxplots in line with guidance from Pallant (2020). A small number of outliers across the variables in teaching experience and gender grouped data were identified, and only two were detected as extreme; both occurred in the teaching experience grouped data. However, given the isolated cases relative to a reasonably large sample size, it was judged that removing them would not have a significant influence on the results.

Based on the statistical and visual analysis, assumptions for normality were met by teaching experience grouped data for teacher beliefs, feelings, CTE but not for TSE and behavioural intentions. For gender grouped data, assumptions for normality were met by all variables except for behavioural intentions.

4.3.2 Hypothesis 1a – teaching experience

H1a. The strength of teacher beliefs, feelings, CTE, TSE and behavioural intentions will vary depending on teaching experience, such that teachers with greater experience will present with more negative levels than teachers with less experience.

To explore Hypothesis 1a, the data is presented first using descriptive analysis for each teacher experience grouping followed by inferential statistics.

Table 4.4 Mean scores of variables for teaching experience groups

Teaching experience	Variable	N	Mean	Std. Deviation
Less than 5 years	Beliefs	27	3.80	.419

	Feelings	27	3.86	.506
	CTE	27	3.18	.508
	TSE	27	3.45	.383
	Behavioural intentions	27	4.34	.488
6-10 years	Beliefs	15	3.77	.326
	Feelings	15	3.69	.630
	CTE	15	3.23	.628
	TSE	15	3.63	.623
	Behavioural intentions	15	4.29	.558
11-15 years	Beliefs	18	4.02	.548
	Feelings	18	3.86	.592
	CTE	18	3.22	.516
	TSE	18	3.65	.424
	Behavioural intentions	18	4.41	.506
More than 15 years	Beliefs	33	3.84	.533
	Feelings	33	4.03	.484
	CTE	33	3.35	.522
	TSE	33	3.84	.474
	Behavioural intentions	33	4.37	.547

4.3.2.1 Descriptive analysis

Table 4.4 shows that all teaching experience groups demonstrated moderately positive levels of teacher beliefs and feelings, CTE, TSE and high levels of behavioural intention concerning the inclusion of CYP with SEMH needs. All teaching experience groups had stronger behavioural intentions towards including CYP with SEMH needs than their beliefs, feelings, CTE or TSE. CTE had the lowest mean score for all groups, although this was still slightly positive.

Teachers with more than 15 years of experience demonstrated higher mean scores across all variables than teachers with less than five years of experience. The most experienced teacher group also showed the highest feelings towards inclusion than

any other group and the second high level of beliefs. Teachers with 6-10 years of experience typically showed the most negative views of inclusion, with the lowest scores in beliefs, feelings and behavioural intentions.

4.3.2.2 Inferential analysis

One-way between-subjects ANOVAs were conducted to explore differences between teachers by their length of teaching experience concerning their beliefs, feelings and CTE. Levene's Test for Equality of Variance was non-significant, indicating equality of variance across groups. Analysis of variance did not show a main effect of length of experience on beliefs, feelings and CTE. All teachers, regardless of experience, showed similar beliefs, feelings and CTE towards the inclusion of CYP with SEMH needs.

Kruskal Wallis tests were conducted between the length of experience teacher groups and TSE and behavioural intentions, which showed that teaching experience significantly affects TSE, H (3) = 9.27, p = .026. There was no effect between the length of experience and behavioural intentions. Post hoc analyses using a Mann-Whitney test were conducted to compare all pairs of groups. The difference in TSE in teachers with over 15 years of experience was significantly higher than for those with less than five years of experience, $U\ (N=33, N=27)$ =243, z = -3.02 p = 0.03). None of the other comparisons was shown to be significant.

Hypothesis 1a was therefore not supported.

4.3.3 Hypothesis 1b – gender

H1b. Strength of teacher beliefs, feelings, CTE, TSE and behavioural intentions will vary depending on gender, such that female teachers will present with more positive levels than male teachers

To examine Hypothesis 1b, descriptive data by gender is presented, followed by inferential statistics.

Table 4.5 Mean scores of teacher beliefs, feelings, CTE, TSE, and behavioural intentions by gender

Gender	Variable	N	Mean	Std. Deviation
Male	Beliefs	20	3.69	.457
	Feelings	20	3.88	.525
	CTE	20	3.30	.490
	TSE	20	3.75	.444
	Behavioural intentions	20	4.22	.583
Females	Beliefs	73	3.89	.477
	Feelings	73	3.89	.549
	CTE	73	3.24	.544
	TSE	73	3.63	.497
	Behavioural intentions	73	4.39	.496

4.3.3.1 Descriptive data

As table 4.5 shows, both gender groups had stronger behavioural intentions towards including CYP with SEMH needs relative to teacher beliefs, feelings, CTE or TSE.

Females reported slightly more positive feelings and behavioural intentions than males but similar belief scores. Males reported slightly higher CTE and TSE than females.

4.3.3.2 Inferential analyses

To explore differences by gender, an independent samples *t* Test was conducted to explore differences between beliefs, feelings, CTE and TSE across gender groups. Levene's Test for Equality of Variance was non-significant indicating equality of variance across groups. Results indicated that scores for the 20 male participants compared to the 73 female participants did not demonstrate significantly differently (*t* (91) -1.7, *p*= .092), feelings (*t* (91) = .068 *p*= .946), CTE (*t* (91) = .470 *p*= .639), and TSE (*t* (91) = .952 *p* = .344). A Mann-Whitney test to explore differences between

behavioural intentions by gender showed males and female did not differ significantly in relation to their behavioural intentions, *U* (*N* = 20, *N* = 73 = 243, *z* = -1.35 *p* = 0.18).

Hypothesis 1b was therefore not supported.

4.4. Research question 2

What is the relationship between secondary school teacher attitudes (beliefs and feelings), CTE, TSE and behavioural intentions towards the inclusion of CYP with SEMH needs?

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In order to examine hypotheses 2, the relationships between the predictor variables (beliefs, feelings, CTE and TSE) and the outcome variable (behavioural intentions) were analysed; descriptive and inferential analyses followed assumption testing of the whole data set (*n*=101) to explore differences by the length of experience and gender.

4.4.1 Assumption testing

The Kolmogorov Smirnov normality test was used instead of Shapiro-Wilk because it is a more appropriate test with a larger sample size than 50 (Mishra et al., 2019). No significant difference across teacher beliefs, CTE and TSE was found, indicating normal distribution. However, there was significance for teacher feelings and behavioural intentions, indicating the non-normal distribution of these variables.

Further visual distribution analysis was conducted for all variables using histograms, QQ plots and boxplots, which confirmed the Kolmogorov Smirnov analysis. Only a small number of outliers were identified in the boxplots (see appendix J). However, none of these was categorised as extreme (which an asterisk would indicate);

therefore, they were not deemed to impact the analysis significantly, so they were allowed to remain.

Based on the statistical and visual analysis, assumptions for normality for the overall data set were met for beliefs, CTE and TSE but not for feelings and behavioural intentions.

4.4.2 Hypothesis 2 – relationship between beliefs, feelings, CTE, TSE towards behavioural intentions

H2. Teachers' beliefs and feelings, CTE, TSE will each predict behavioural intentions.

4.4.2.1 Association between attitudes, CTE, TSE and behavioural intentions

Table 4.6 Spearman's correlation matrix for key variables

	Feelings	CTE	TSE	Behavioural intentions
Beliefs	.272**	.164	.274**	.356**
Feelings	-	.231*	.430**	.358**
CTE	-	-	.270**	.171
TSE	-	-	-	.349**
Behavioural intentions	-	-	-	-

*p <.05; **p <.01.

Since not all variables were normally distributed, Spearman's correlations were conducted (see Table 4.6) to identify whether there were significant relationships between beliefs and feelings, CTE, TSE and behavioural intentions across the entire teacher sample (n=101). The strength of the relationships was interpreted ((± 0.1), medium (± 0.3) or large (± 0.5) respectively, in line with guidance from Field (2009). A medium positive significant association was found between teacher beliefs, feelings, TSE and behavioural intentions, suggesting that as these three predictor variables increase, so do behavioural intentions towards inclusive behaviours.

Teacher beliefs and feelings had a similar strength of association with behavioural intentions, more substantial than the relationship between TSE and behavioural intentions. CTE had a weak positive and non-significant association with behavioural intentions.

4.4.2.2 Strength of attitudes, CTE and TSE as predictors of behavioural intentions.

Table 4.7 Predicting teachers' behavioural intention from their beliefs, feelings, CTE and TSE.

Predictor variables	***R²***	***Adjusted R²***	***β***
	.25	.22	
Beliefs	-	-	.251**
Feelings	-	-	.213*
CTE	-	-	.054
TSE	-	-	.186

**p* <.05; ***p* <.01; ****p* <.001

To explore the correlations further and examine hypothesis 2, standard multiple regression using beliefs and feelings, CTE and TSE to predict behavioural intentions were conducted. The model specifically investigated the strength of the predictor variables overall and individually towards behavioural intentions.

Assumptions checks were conducted. Multi-collinearity tolerance statistics did not indicate violations of underlying assumptions (Pallant, 2020). A Kolmogorov-Smirnov test of normality indicated normal distribution (.075). One outlier was identified within the dataset in line with guidance from Pallant (2020) and (Tabachnick & Fidell, 2018). However, this did not exceed the Mahalanobis (Rosenblad, 2009) distance critical value (18.47) for the regression model, and therefore the outlier remained in the regression analysis. As a result, assumptions of multi-collinearity, normality, linearity, homoscedasticity and independence of residuals were assessed as being met.

The results of the regression analysis are presented in Table 4.7 above. The regression model positively predicted behavioural intentions towards the inclusion of

CYP with SEMH needs, F (4, 96) = 7.93, $p < .000$, $R^2 = 0.25$. Criteria was met for meeting a medium effect size, $f^2 = 0.33$, where $f^2 = .02$ *(small effect), .15 (medium effect), .35 (large effect)* (Cohen, 2013; Selya et al., 2012; Tabachnick & Fidell, 2014). Therefore, a medium proportion of the variability (25%) seen in teachers' behavioural intention towards the inclusion of CYP with SEMH needs was predicted by their beliefs, feelings, CTE, and TSE regarding practising inclusively with this population of CYP. As the R^2 value (the proportion of the variance in behavioural intention explained by the model based on the study's sample) – and the adjusted R^2 value (the proportion of variance that would be explained based on the wider population from which the sample was drawn) are similar, the regression model could be considered to generalise to the wider population of secondary teachers (Karch, 2020).

Standardised regression coefficients (β) were examined as they indicate the relative predictive value of each predictor in the model showing the number of standard deviations that the dependent variable will change, assuming one standard deviation change in each independent variable (Tabachnick & Fidell, 2018). When controlling for other predictors variables, only teacher attitudes (both beliefs and feelings respectively) individually predicted teachers' intentions to include CYP with SEMH needs in a positive direction based on their normalised beta weights and significance. Therefore, teachers with higher levels of beliefs and feelings reported a stronger intention to behave inclusively towards CYP with SEMH than those with lower levels.

CTE was not found to be a significant contributor to the model. Whilst there was a bivariate correlation between TSE and behavioural intentions (see table 4.5), TSE did not individually predict behavioural intentions.

Hypothesis 2 was partially supported. When considered individually, only teachers' beliefs and feelings significantly predicted teachers' intentions to include CYP with SEMH needs.

4.5 Summary of the Results

Chapter 4 presented the findings of the current study. Table 4.8 below summarises the key findings concerning each research hypothesis. Chapter 5 will reflect on and examine these results in relation to the literature review (Chapter 2) and methodology section (Chapter 3).

Table 4.8 A table summarising the results of the hypotheses explored in this study

Research questions:

1. What is the strength of secondary school teacher attitudes (beliefs and feelings), collective teacher efficacy (CTE), teacher self-efficacy (TSE), and behavioural intentions towards the inclusion of CYP with SEMH needs?
2. What is the strength of secondary school teacher attitudes (beliefs and feelings), collective efficacy (CTE), self-efficacy (TSE) and behavioural intentions towards the inclusion of CYP with SEMH needs?

Hypothesis	Supported?
H1a: Strength of teacher beliefs, feelings, CTE, TSE and behavioural intentions will vary depending on teaching experience, such that teachers with greater experience will present with more negative levels than teachers with less experience.	**X**
H1b: Strength of teacher beliefs, feelings, CTE, TSE and behavioural intentions will vary depending on gender, such that female teachers will present with more positive levels than male teachers.	**X**
H2: Teachers' beliefs and feelings, CTE, TSE will each predict behavioural intentions.	**Partial**

Chapter 5 DISCUSSION

5.1 Chapter overview

The purpose of the current study was, using the TPB, to explore the strength and nature of the relationship between secondary teacher attitudes (beliefs and feelings), CTE (subjective norm), TSE (perceived behavioural control); and teachers' behavioural intentions towards the inclusion of CYP with SEMH needs. In contrast to similar studies, CTE was operationalised as the subjective norm variable. If it was found that these relationships did exist, the research could help emphasise the importance of strengthening teacher attitudes, CTE and TSE, in order to promote the inclusion of CYP with SEMH needs in mainstream secondary schools.

The current chapter summarises and reflects on the study's key findings with critical reference to the existing literature. The methodological strengths and limitations of the current study will then be considered. Consideration of the implications of the findings for future research, educational provision, and educational psychology practice are also set out. Finally, a conclusion of the study is presented.

5.2 Research question 1: the strength of beliefs, feelings, CTE, TSE and behavioural intentions

The first research question and associated hypotheses investigated were:

What is the strength of secondary school teachers' beliefs and feelings, CTE, TSE and behavioural intentions towards the inclusion of CYP with SEMH needs?

H1a: Strength of teacher beliefs, feelings, CTE, TSE and behavioural intentions will vary depending on teaching experience, such that teachers with greater experience will present with more negative levels than teachers with less experience.

H1b: Strength of teacher beliefs, feelings, CTE, TSE and behavioural intentions will vary depending on gender, such that female teachers will present with more positive levels than male teachers.

It was found that teachers held at least moderately positive perceptions across all TPB variables towards the inclusion of CYP with SEMH needs. Length of teaching experience had no significant impact on teacher beliefs, feelings, CTE and behavioural intentions, suggesting that teachers held similar views regardless of years of teaching. However, the most experienced teacher group demonstrated significantly more positive TSE than the least experienced teacher group, suggesting teachers with more experience had the greatest confidence in their ability to implement inclusive practices for CYP with SEMH needs. Gender had no significant impact on any of the variables, suggesting teachers shared similar views concerning the inclusion of CYP with SEMH needs regardless of their gender.

The key findings will now be examined in relation to the existing literature.

5.2.1 Strength of beliefs, feelings, CTE, TSE and behavioural intentions

Descriptive statistics (section 4.2) showed that, on average, secondary teachers reported moderately positive beliefs, feelings, CTE, TSE and highly positive behavioural intentions towards the inclusion of CYP with SEMH needs.

The findings that secondary teachers had overall positive perceptions of the inclusion of CYP with SEMH needs is generally not consistent with previous

literature. Several reviews of studies examining teacher attitudes towards inclusion found that teachers were likely to hold negative attitudes towards CYP with SEMH-type needs, likely related to the associated behavioural difficulties they present (Avramidis, 2010; De Boer et al., 2011; Yada et al., 2019). The finding in this study that participants reported a strong intention to act on their positive beliefs and feelings also provides reassurance that secondary teachers who participated in this study support both the idea of inclusion and its practical application, contradicting concerns of a possible disconnect between theory and practice that has been raised by other studies (Croll & Moses, 2010; Haug, 2017; Hodkinson, 2010).

However, the positive, inclusive staff views found in the current study shows some consistency with the findings of one study. MacFarlane & Woolfson (2013) found that teachers held at least moderately positive views towards the inclusion of CYP with SEBD across all TPB variables. Whilst the MacFarlane & Woolfson study explored the views of primary not secondary school teachers as in this study it was based in Scotland; suggesting that teacher attitudes in the UK towards the inclusion of this population of students may be more favourable than many international contexts where the studies mentioned above were based.

However, in the current study, CTE and TSE had lower positive scores than teacher beliefs and feelings. This finding may suggest that whilst UK secondary teachers have particularly positive attitudes towards the inclusion of CYP with SEMH needs they currently lack the collective and individual beliefs to implement more inclusive practices. This observation is consistent with research that suggests that CYP with SEMH needs are the population of students teachers find more challenging to support in the classroom (Carroll & Hurry, 2018; Dimitrellou & Hurry, 2019; Monsen et al., 2014). Therefore, it appears more work may need to be done to build secondary teachers' capacity and confidence in developing skills and self-efficacy towards implementing inclusive practices that meet the needs of this group of students in mainstream classes (MacFarlane & Woolfson, 2013) (see section 5.3.1.3 for a further discussion of this).

5.2.2 Hypothesis 1a; strength of beliefs, feelings, CTE, TSE and behavioural intentions by teaching experience.

Teacher views and perceptions towards inclusion were examined for any influence of the length of teaching experience. Concerning Hypothesis 1a, results indicated that teacher experience did not significantly affect levels for most variables. Regardless of the length of experience, teachers reported similar attitudes (both beliefs and feelings), CTE, and behavioural intentions towards the inclusion of CYP with SEMH needs. The exception, however, was TSE, where secondary teachers with the greatest experience (over fifteen years) had significantly higher levels of TSE towards including CYP with SEMH needs than those with the least experience (less than five years of experience).

The finding that teachers, regardless of experience, had similar *attitudes* (both beliefs and feelings) reflects those of Boyle et al., (2013) and Avramadis et al., (2000), who also found teaching experience did not impact attitudes towards inclusion. However, it should be noted that both of these studies examined the relationship between teacher attitudes and SEN more generally. Forlin, Douglas and Hattie (1996) investigated primary school teacher attitudes towards CYP with learning needs in Australia. They found that the most experienced teachers held the *least* inclusive beliefs. However, this may be explained because inclusive schooling in Australia was only in its infancy at the time of the study. Therefore more experienced teachers, who were likely to have had extensive experience of a segregated education system and consequently limited direct experience of CYP with SEN, may have retained a negative view of inclusion when transitioning into a more inclusive education system (Forlin, 2006; Sharma et al., 2018).

More pertinent to the current study, MacFarlane Woolfson (2013), based in the UK, also found that experienced primary teachers of SEBD held more negative feelings and behavioural intentions than less experienced teachers towards inclusive practices. The authors hypothesised that experienced teachers might have had

increased negative experiences with CYP displaying behavioural difficulties, which would have had a detrimental impact on their attitudes. One explanation for the difference in findings to the current study is that MacFarlane and Woolfson (2013) focused on SEBD (a similar term to SEMH, then applied in Scotland), which like England's previous term, BESD, included a reference to ‘behaviour’ and ‘difficulties’. The term used in this study - SEMH - represents a re-conceptualisation of BESD and shifts the focus onto notions of *mental health* and *needs*, thereby promoting the notion that any challenging behaviour should be seen to communicate an underlying mental health need (DfE, 2015). The development of the term ‘SEMH’ in England sits within a broader context of legislative changes in the UK. These changes have aimed to promote a more optimistic notion of inclusion over the last 25 years (Anastasiou et al., 2015; Haug, 2017; Tobin & Tippett, 2014); this may have contributed to the relatively more positive framing of attitudes towards the inclusion of CYP with SEMH needs (and the associated challenging behaviours some can present) across all teaching experience groups.

A number of factors may have influenced the finding in this study of teachers with the greatest amount of experienced reported significantly higher levels of TSE compared to those with the least experience. The higher prevalence of SEMH amongst secondary-aged pupils (Bryant et al., 2018); the greater onus on all schools around early identification and prevention around mental health (DfE, 2018; DfE, 2019a); and the anticipated or perceived exacerbation of this area of SEN through the influences of the Coronavirus pandemic, current at the time of this study (Lee, 2020), may have placed SEMH higher on the agenda of secondary teachers, with positive effects. Therefore, any potential influence of negative teaching experiences with SEMH on attitudes may be counteracted by the increased awareness, leadership, and government directives that secondary teachers have recently experienced.

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The finding that secondary teachers with the greatest experience (over fifteen years) had higher TSE levels than those with less than five years of experience was unexpected given the broader finding in TSE research that TSE beliefs decline as the length of teacher experience increases (Klassen, 2010). However, self-efficacy theory predicts that accumulating mastery experiences is the most effective way to deepen TSE (Bandura, 1978; Yada et al., 2019). The finding in this study suggests that the most experienced secondary teachers may have had successful teaching experiences of CYP with SEMH, thereby potentially strengthening their TSE. The nature of *how* teachers with different amounts of experience adapt their practices may be relevant here too. One study that explored how teachers perceived their self-efficacy towards the classroom management of challenging behaviour could predict their subsequent intervention strategies; Andreou & Rapti, 2010 found that more experienced teachers tended to use more behavioural rewards than less experienced teachers. On the other hand, inexperienced teachers were more likely to focus on strategies that supported the social and emotional wellbeing of their students, e.g. through building confidence or trust in the student, in order to reduce problematic behaviour compared to more experienced teachers.

Given the amount of remote learning that took place during the current study, it may be that more inexperienced secondary teachers have had reduced opportunities for direct relational work that aims to promote social and emotional wellbeing, thereby reducing their mastery experiences and ultimately adversely affecting their TSE. Studies investigating the impact of Covid-19 on education have reported how teachers have bemoaned the disruption to the fundamentally social nature of teaching, including their ability to build trust with students (Kim & Asbury, 2020; Reich et al., 2020). More experienced secondary teachers, on the other hand, might have been more able to practically apply their preferred classroom management strategy during remote working, for example, potentially offering positive incentives for good behaviour (e.g. house points, a phone call home). Therefore, they may have had greater opportunities to develop their mastery experiences and, therefore, self-efficacy.

Moreover, TSE research highlights that efficacy beliefs may be dependent on the teachers' perceptions of available resources and demands within their school setting.

Whilst experienced teachers can draw on their mastery experiences to sustain their self-efficacy when perceived resources within their school reduce and demands increase; inexperienced teachers are likely to be more vulnerable to the loss of support from colleagues and a more challenging school culture (Tschannen-Moran & Hoy, 2007). Given the inevitable disconnectedness from their colleagues during the pandemic, the emotional demands relating from disruption to regular schooling (Ozamiz-Etxebarria et al., 2021), and less mastery experiences to draw on (Lazarides et al., 2020), inexperienced teachers' confidence to implement inclusive practices may have been the most significantly eroded.

Given the domain-specific nature of TSE, self-efficacy towards adapting practices for CYP with SEMH needs could arguably be most at risk of deteriorating in inexperienced teachers. Teachers with lower levels of TSE are more likely to attribute causes of challenging behaviour (associated with SEMH) to external factors (which are not under their control) (Tollefson, 2000; Soodak & Podell, 1993); potentially reducing the likelihood of implementing inclusive strategies such as positive behaviour management and engagement strategies, with teachers instead seeking specialist support or exclusion from the classroom or school (Avramidis & Norwich, 2002b; Brownell et al., 2010; Miller et al., 2000; Podell & Soodak, 1993; Woodcock, 2020; Bibou-Nakou et al., 2000).

5.2.3 Hypothesis 1b; strength of beliefs, feelings, CTE, TSE and behavioural intentions by gender.

Concerning Hypothesis 1b, results indicated that gender did not significantly affect any of the variables. Therefore, regardless of their gender, secondary teachers held similar beliefs, feelings, CTE, TSE, and behavioural intentions towards including CYP with SEMH needs. The literature in this area is limited. Similarly, studies (Avramidis & Norwich, 2002; Woodcock, 2020) have also found no significant effect of gender on inclusive viewpoints. However, Boyle et al. (2013) found that female teachers held a more positive view of inclusion than their male counterparts. In the

current study, it should be noted that males constituted a very small element of the sample (20 participants or just over 21% of the overall sample), which may have influenced the finding and reduced its reliability.

5.2.4 Summary: strengths and degree of teacher beliefs, feelings, CTE, TSE and behavioural intentions

Descriptive analysis of the strength of teacher beliefs, feelings, CTE, TSE and behavioural intention found that teachers generally held positive viewpoints about the concept of and practical implementation of inclusive practices for CYP with SEMH needs. This was broadly inconsistent with literature in the area but importantly supported findings in the most pertinent study to the current research, which was also based in the UK and focused on a similar area of need (MacFarlane & Woolfson, 2013). The finding in the current study may be influenced by the considerable focus in England that has have given over the preceding years to embed better staff awareness of mental health and how behaviour can be a communication of such needs.

The significant finding from inferential analysis was that the most experienced secondary teachers held higher levels of TSE than less experienced teachers was not aligned with the prior research. However, the finding could be explained by the impact of the pandemic, which could have adversely affected inexperienced teachers the most as a result of reduced support and less opportunity to accumulate mastery experiences in their preferred classroom management strategies.

5.3 Research question 2: Relationships between teacher beliefs, feelings, CTE, TSE, and behavioural intentions towards CYP inclusion with SEMH needs.

The second research question and associated hypothesis investigated were:

What is the relationship between secondary school teacher attitudes (beliefs and feelings), CTE, TSE and behavioural intentions towards the inclusion of CYP with SEMH needs?

H2: Teachers' beliefs and feelings, CTE, TSE will each predict behavioural intentions.

The main finding related to the second research question was that only teacher beliefs and feelings predicted behavioural intentions. CTE and TSE were not predictive of behavioural intentions, although a moderately positive relationship was found between TSE and behavioural intentions.

Within the framework of the TPB, correlational analysis was employed to identify the relationship between teacher attitudes (beliefs, feelings), CTE, TSE, and behavioural intentions. Regressions then explored the extent to which different measures contributed to predicting behavioural intentions.

5.3.1 Hypothesis 2; Teachers' beliefs and feelings, CTE, and TSE will each predict behavioural intentions

Beliefs, feelings and TSE were shown to have a medium positive significant association with behavioural intentions (see Table 4.5). However, CTE had a weak positive and non-significant association with behavioural intentions. A significant regression equation was found to predict behavioural intentions based on the four predictor variables (explaining 25% of the variance). However, when controlling for other variables, only teacher beliefs and feelings individually predicted teachers' behavioural intentions and were seen to contribute the majority of the explanation of variance seen in the regression model, β = .251 and β = .213, respectively. Despite having significant correlations with behavioural intentions, neither TSE nor CTE was predictive of behavioural intentions. This finding may suggest that the TPB does not

fully generalise to the inclusion of CYP with SEMH needs. These findings are now discussed.

5.3.1.1 Strength of beliefs and feelings as predictors of behavioural intentions

The finding that secondary teacher beliefs and feelings were predictive of behavioural intentions is broadly consistent with many attitudinal studies of inclusion, albeit focused on primary teachers (Malak, Sharma & Deppeler, 2017; Sharma & Jacobs, 2016, Hellmich et al.; 2019 Ahmmed, 2013). This study, therefore, provides further evidence of the importance of teacher attitudes in influencing their behavioural intentions to adapt their teaching practices, for example, classroom management, instructional, relational strategies, to support positive outcomes for their students (Avramidis & Norwich, 2002; Kurth et al., 2015). Previous studies have expressed concern that while teachers are typically supportive of inclusion and recognise the importance of adapting their practices, various practical barriers have impacted this being realised (Kurth & Keegan, 2014; Roy et al., 2013); the current study challenges this concern. This study also provides novel evidence regarding secondary teachers based in English schools. It offers evidence that those secondary school teachers who hold more positive beliefs and feelings concerning the inclusion of CYP with SEMH needs are more willing to adapt their practices accordingly.

The systematic literature review in Chapter 2.3 identified specific studies that have also applied TPB to investigate the predictive validity of attitudes, CTE and TSE towards behavioural intentions. As with the current study, all four studies reviewed (Hellmich et al., 2019; MacFarlane & Woolfson, 2013; Sharma et al., 2018; Wilson et al., 2016a) found that positive attitudes were predictive of behavioural intentions. Wilson et al. (2016) and MacFarlane and Woolfson (2013) were UK based studies but surveyed primary teachers. All four studies' findings validated the hypothesis drawn from TPB that attitudes predict behavioural intentions to act inclusively. However, MacFarlane and Woolfson (2013) found that only beliefs, not feelings, were predictive of behavioural intentions.

Given the similar focus and context of the MacFarlane and Woolfson (2013) study to the current study, this is an interesting discrepancy. One explanation could relate to the points discussed in Section 5.3.2. This section highlighted an increased awareness of mental health and the positive reframing of challenging behaviour in terms of the underlying needs behaviour communicates, through successive legislative changes since 2014. Since the time of MacFarlane and Woolfson (2013) the implications of these changes may have contributed to more positive feelings towards the inclusion of this vulnerable population, e.g. sympathy and empathy. Another explanation could be that with reduced face to face interactions, resulting from an increase in remote learning, teachers may be less likely to have experienced the negative emotions liable to be triggered when confronted with challenging behaviour (Lazarides et al., 2020). Overall, it can be observed that positive teacher attitudes, both beliefs and feelings, appear to be an essential enabling factor towards behaving inclusively. The current study provides specific evidence that this is also the case for mainstream secondary teachers in England working with CYP with SEMH needs.

5.3.1.2 Strength of CTE as a predictor of behavioural intentions

The finding that CTE as the subjective norm variable was not predictive of behavioural intentions should be interpreted within the context of similar inclusive education studies that have applied the TPB. However, inconsistencies with the operationalisation of the subjective norm within the inclusive education literature where the TPB has been employed make comparisons between similar studies and the current study challenging to draw.

In the current study, the subjective norm was conceptualised as CTE, whereas, in most studies, the variable is operationalised as headteacher attitudes towards inclusion. Headteacher attitudes can be measured either indirectly through teacher perceptions of headteacher approval towards inclusive practices (MacFarlane &

Woolfson, 2013) or by directly capturing headteacher attitudes or expectations towards inclusive practices (Hellmich et al., 2019; Stanovich & Jordan, 1998). The MacFarlane and Woolfson (2013) study reported the seemingly paradoxical finding that the subjective norm *did not* predict behavioural intentions but *did* predict self-reported actual behaviour. The finding highlighted how persuasive headteacher views could be for teacher behaviours; the researchers suggested that teachers may have had to suppress their beliefs, feelings, TSE and behavioural intentions to implement teaching practices that would be approved of by their headteacher.

On the other hand, CTE is a multi-faceted concept that aims to measure the collective perception of individual teachers of the ability of staff in their school to make a difference to student outcomes (Tschannen-Moran & Barr, 2004). CTE draws on the three sources of TSE (mastery experiences, vicarious experience, direct social persuasion and affective states of the staff body) but also upon an additional *indirect* psychosocial source (Gibbs & Powell, 2012). This indirect psychosocial source can be seen to represent the implicit effect of everyday staff conversations, which provide commentary and value judgements about certain groups of students, e.g. those with SEMH needs or presenting challenging behaviour (Goddard et al., 2004; Goddard & Goddard, 2001; Stanovich & Jordan, 2003; Tschannen-Moran & Barr, 2004). This shared language may provide a powerful cultural context or social resource for staff to accumulate the mastery experiences and vicarious experiences needed to support the development of their personal efficacy beliefs towards positively responding to students in their classroom (Bandura, 1993; Donohoo, 2017; Gibbs & Powell, 2012; Stanovich & Jordan, 1998).

Teachers working in contexts with a strong collective efficacy may be more likely to attribute causes for challenging behaviour to pupil or parental-based factors and seek exclusion (Gibbs & Powell, 2012). Gibbs and Powell's (2012) study demonstrated a significant relationship between CTE and exclusionary practices. This study did not employ the TPB or measure inclusive behaviours. Instead, it used exploratory factor analysis of the underlying structure of teachers' individual and collective efficacy beliefs towards managing challenging behaviour and bivariate

correlations between these beliefs and the number of students given fixed-term exclusions. It found that high levels of CTE specifically towards mitigating external influences of students presenting challenging behaviour predicts the reduced use of exclusion as a sanction. The authors suggested that this finding highlighted the potential role of CTE as a powerful representation of the inclusive ethos of a school; where teachers have a strong shared belief that they can mitigate the external influences on students, then they are more likely to adapt their practices to manage challenging behaviour themselves rather than seek exclusion as a sanction (Gibbs & Powell, 2012).

Such a cultural context ensures teachers have a collective focus on student outcomes; teachers will see themselves as the change agents collaborating with leaders and staff rather than passively complying with leadership directives (Donohoo, 2017; J. Hattie & Zierer, 2017). Therefore, CTE can represent a cultural endorsement or rejection of headteachers espoused expectations of teacher behaviours (Gibbs & Powell, 2012). If CTE "permits group members some control over the actions of others when those actions have consequences for the group," it places responsibilities on individual teachers to behave in a corporately acceptable way towards students (Goddard & Goddard, 2001, p.4); leading to teachers suppressing attitudes and behavioural intentions that do not align with the staff body's view about how they should respond to students with SEMH needs. Seen in these terms, CTE identifies ‘significant others’ as the wider staff body and their potential persuasive influence on teacher practices. Whilst CTE was not predictive of behavioural intentions in the current study; future research may consider whether the variable influences actual teacher behaviours towards inclusionary or exclusionary practices (see section 5.5.1 for a further discussion on this).

5.3.1.3 TSE as a predictor of behavioural intentions towards the inclusion of SEMH needs.

Whilst there was a significant correlation between TSE and behavioural intentions, TSE was not individually predictive of intentions. This finding did not reflect the

predictions from the TPB or the inclusive education literature. The latter typically identifies that positive behavioural intentions are predicted by high levels of TSE (Amaral et al., 2013; Borg et al., 2011; MacFarlane & Woolfson, 2013; Malak et al., 2018; Pit-ten Cate et al., 2019; Sharma & Sokal, 2016). The findings from these studies were corroborated by the systematic literature review presented in section 2.3; all four studies found that TSE was predictive of behavioural intentions (Hellmich et al., 2019; MacFarlane & Woolfson, 2013; Sharma et al., 2018; Wilson et al., 2016). According to the TPB, TSE is expected to be a vital factor in enabling inclusive teacher behaviours because it represents the belief that teachers have in their competence to create inclusive practices; e.g. classroom management, engagement, and instructional strategies (Gibbs & Powell, 2011; MacFarlane & Woolfson, 2013). Without this belief, it would be reasonable to assume that teachers might lack the motivation, resolve, and conviction to bring about inclusive practices. However, the findings in the current study suggested that attitudes were sufficient to determine inclusive behavioural intentions.

One interpretation of the finding in the current study that TSE was not predictive of inclusive behaviours could relate to the domain specificity of efficacy beliefs. Just as TSE towards the management of students with challenging behaviour has been shown to reflect various underlying causal attributions (Miller, 1995), it could be hypothesised that this would similarly be the case for CYP with SEMH needs. Given the complex and ambiguous nature of the construct of SEMH (Norwich & Eaton, 2014), teachers may make a range of attributions for the success or difficulties experienced by students with SEMH. For example, two studies identified that teachers are considerably more likely to attribute emotional and behavioural difficulties to student or family factors rather than factors within the control and influence of the teacher, reducing the likelihood of them implementing positive strategies to support their engagement and motivation in the classroom (Kleftaras & Didaskalou, 2016; Savina et al., 2014). Moreover, teachers are more likely to view externalised behaviours as problematic (such as physical aggression, work avoidance) than internalised behaviours (excessive shyness, withdrawal) (Poulou & Norwich, 2002; Soles et al., 2008). Such perceptions may lead to different teacher emotional and behavioural responses between students, e.g. empathy and positive

engagement strategies towards students displaying internalised behaviours compared to punitive behavioural responses to students presenting with externalised behaviours (Gaier, 2015; Wang & Hall, 2018; Woodcock, 2020).

Another explanation for the finding that TSE did not predict behavioural intentions is that with positive attitudes, self-efficacy becomes a less relevant determinant for behavioural intention towards CYP with SEMH needs. This interpretation of the findings could be further supported when we re-examine the reported impact of the pandemic on student learning and teaching practices. US teachers have reported that their self-efficacy and professional identity have been reduced (Reich et al., 2020). According to studies in several countries, including England, student motivation has declined, and behavioural difficulties increased (Zancajo, 2021). Reich et al. (2020) found that teachers have found it challenging to maintain student motivation via online learning, not helped by the greater difficulty of identifying and intervening with struggling learners without face-to-face contact (Reich et al., 2020). Given the pandemic context within which teachers had worked when this study took place, it is not surprising that they felt less equipped to identify and meet the needs of CYP, particularly those with SEMH-type needs (Carroll & Hurry, 2018; Dimitrellou & Hurry, 2019; Monsen et al., 2014), potentially adversely affecting teacher self-efficacy towards implementing inclusive strategies.

On the other hand, some evidence suggests that teacher attitudes and intentions to practice inclusively may not have been adversely affected by the pandemic. During the pandemic, some students, particularly those from lower socio-economic backgrounds (disproportionately represented by those with SEMH needs: Graham, 2019), have had reduced opportunities for direct learning, and for some, for any learning at all due to the fragmentation of education, increased remote learning, and potentially a lack of or variability of parental support (Zancajo, 2021). Teachers report that remote learning and reduced social contact has increased their awareness of inequalities between students (Zancajo, 2021; Reich et al., 2020). The greater teacher consciousness around educational and social inequality may have contributed to a greater awareness of and empathy towards the experiences and

emotions students with SEMH need. In the current study, this attunement may have generated new insights and reflections that strengthened teachers' intention to change their practice positively (Hanko, 2002; Turner & Gulliford, 2020).

5.3.2 Summary of the relationship between secondary school teacher beliefs, feelings, CTE, TSE, and behavioural intentions towards CYP inclusion with SEMH needs.

In line with previous studies in inclusive education, the current study provides evidence that positive attitudes – both beliefs and feelings – are predictive of positive behavioural intentions towards CYP with SEMH. In addition, the study provides new insights into the importance of this relationship for secondary teachers based in England teaching CYP with SEMH needs. However, the study provided only a partial validation of the TPB as applied in this study, with CTE (subjective norm) and TSE (perceived behavioural control) not being predictive of behavioural intentions. Possible explanations for this finding included whether CTE was an appropriate conceptualisation of the subjective norm and whether the complexity and ambiguity around the construct of SEMH weakened the relationship between CTE and behavioural intentions. Finally, greater awareness and empathy with educational and social needs resulting from the pandemic may potentially have strengthened teacher beliefs and feelings towards CYP with SEMH, to a degree sufficient to bring about a commitment to act inclusively without the need for TSE.

5.4. Methodological review

The following section will critically examine the design, quality of research, analysis, and measures.

5.4.1 Research design

The researcher adopted a cross-sectional correlational design to explore the strength and relationship between the variables selected in the study at one given point in time using a closed response questionnaire survey, which enabled statistical analysis of the data. This methodology allowed for the more reliable measurements of teacher attitudes, CTE, TSE and behavioural intentions drawn from a large sample, an approach consistent with similar studies in the area of research (MacFarlane & Woolfson, 2013; Wilson et al., 2016). While regression analysis to explore the predictive validity of the key variables towards behavioural intentions enabled inferences of directionality between beliefs and feelings and behavioural intentions, it was not possible to infer causality (Tabachnick & Fidell, 2018).

The cross-sectional nature of the research design meant that only one set of responses were gathered from teachers during exceptional circumstances; teaching through a pandemic. As acknowledged earlier in the discussion, the disruption to student learning and teacher practices is likely to have impacted views towards inclusion. A longitudinal study may help understand how teachers' views of inclusion evolve as they return to more normal schooling. A longitudinal study would allow for a richer picture of how inclusive attitudes, efficacy beliefs and behavioural intentions towards CYP with SEMH needs may respond to regular face to face interactions with students and teaching colleagues.

5.4.2 Quality of research

Researchers can use quality criteria to assess the trustworthiness of their quantitative study (Mertens, 2020). These will be discussed in turn.

5.4.2.1 Reliability of measures

Cronbach's alpha was calculated to assess the internal consistency for each of the measures adopted in the current study. Three of the measures – CTE, TSE and behavioural intentions - demonstrated good internal consistency, $\alpha > .7$ (Taber, 2017). Whilst measures for teacher beliefs and feelings scored below this threshold, they still scored over $\alpha > .6$, which other studies have cited as adequate for attitudinal instruments (Taber, 2017). Moreover, lower Cronbach alpha scores should be expected with scales with fewer items than 10; both the beliefs and feelings measures contained six each, respectively (Cortina, 1993).

Another potential critique of the measures was their self-report nature, giving rise to the potential for social desirability bias (Robson & McCartan, 2016). This is an issue particularly facing attitudinal instruments, which either aim to measure explicit attitudes (reflecting deliberate and intentional responses) or implicit attitudes (judgements that immediately come to mind that may more authentically reflect the feelings of the respondent) (Pit-ten Cate & Glock, 2019). Whilst the former is typically measured by self-report surveys, whereby participants can scrutinise their responses such as those adopted in the current study, the latter is measured by reaction times and can therefore be seen to more accurately reflect the feelings towards the object of the 'attitude', in this case, the inclusion of CYP with SEMH needs (Fazio & Olson, 2003; Krischler & Pit-ten Cate, 2019). Unsurprisingly teachers are more likely to display positive responses when their explicit attitudes are measured (Pit-ten Cate et al., 2019). Given the powerful emotions triggered by CYP presenting challenging behaviour measuring implicit attitudes may offer more reliable insights into teacher perceptions of this population.

A further threat to the reliability relates specifically to the CTE instrument, TSCE (Goddard & Goddard, 2001). An important implication of the change in data collection strategy, to collecting responses from outside the LA where the study was initially begun, removed the requirement to name the participant's school. CTE relates to the shared perception that individual teachers in a given school have about

the ability of the staff group to make a difference to their pupils (Tschannen-Moran & Barr, 2004). The authors of the TSCE (Goddard & Goddard, 2001) have emphasised both the conceptual and psychometric importance of being able to aggregate individual teacher perceptions within a given school in order to generate an overall staff body measure of collective efficacy, which more effectively captures the *influence* of collective efficacy on psychosocial norms within the school compared to the individual teacher perceptions (Goddard, 2001). Unfortunately, this aggregation and analysis was not possible in the current study due to the adapted data collection approach adopted to reach power. This adaptation, whilst necessary, undermined the potential to deploy the measure of collective efficacy as suggested by Goddard within the study. Future studies could consider how to ensure more effective recruitment within individual schools, e.g. through whole-staff INSET days, to seek a group-level measure of collective efficacy.

5.4.2.2 External validity

Whilst the study contained a sample recruited across England and was moderately sized (*n.*> 100), the proportion of male secondary teachers (21.5%) was lower than that according to current national workforce data; 37.1% (Educational Policy Institute, 2020). This discrepancy presents a potential limitation on the generalisability of the study's findings. It should also be acknowledged that the majority of responses (*n*=93) were recruited through social media. As a result, a disproportionate recruitment of participants from likely drawn from active interest individuals and groups (Khatri et al., 2015). For example, the researcher noticed a particular interest in the study from anti-exclusion groups which may have led to an over representation from participants who were pro-inclusion. Whilst the social media strategy proved necessary to recruit the required sample and may have accessed respondents who would not have responded via more traditional channels (e.g. email), a mixed approach would be recommended for future research to seek a potentially more balanced or diverse sample.

5.4.2.3 Construct validity

A particular threat to the validity of the current study's findings relates to conceptualising and measuring internal constructs within the measures employed. The researcher discussed the potential threat to validity earlier in this chapter (Section 5.4.2.1), relating to the CTE measurement as the subjective norm variable. Moreover, the construct of SEMH was examined (Section 5.3.1.3) and interpretations considered of how this potentially ambiguous term may have differed between participants, possibly impacting the responses given.

5.4.3 Statistical significance

Whilst a moderate-sized sample was obtained, statistical analysis was only conducted at the level of gender and teaching experience groups for research question one. More detailed analysis was not possible, e.g. comparing gender groups by teaching experience; the small numbers in teaching experience categories would have meant the likelihood of obtaining a significant result was too small (Cohen, 1988).

5.4.4 Summary

The quality of the study's methodology and the influence it may have had on the trustworthiness of its findings have been critically examined. The following section will explore the implications of the findings for future research, school practice and educational psychology practice.

5.5 Implications of the research

5.5.1 Future research

As indicated earlier in this chapter, it would be valuable for the study to be replicated during normal educational circumstances, where secondary teachers would not have experienced the exceptional disruption and pressure they had done, through the Covid-19 pandemic. It would be expected that, without the particular pressures of the pandemic, a more significant proportion of the sample would be drawn directly from schools, rather than through social media channels, potentially strengthening the study's representative nature and therefore increasing the generalisability of the findings. Recruitment of more significant numbers of teachers within individual secondary schools may be more successful during a more typical schooling context, also enabling the measurement of the group-referent for CTE, supporting construct validity: and examination of the TPB framework.

The methodological review highlighted the significance of the researcher's decision to measure attitudes – particularly the affective aspect – explicitly rather than implicitly (Pit-ten Cate & Glock, 2019). Given the association between CYP with SEMH needs and challenging behaviour and the negative impact this can have on TSE, an implicit measure of attitudes, e.g. the Implicit Association Test (IAT) (Greenwald et al., 1998), could be included in a future study to reduce the risk of social desirability bias, thereby more accurately capturing secondary teacher feelings towards this population when in the classroom (Pit-ten Cate & Glock, 2019). More broadly, a significant limitation in the literature in this area is the reliance on teachers' self-report. Future research could address this limitation by generating triangulated data to explore whether secondary teachers' behavioural intentions or actual behaviour align with students' experience, e.g. sense of belonging and participation in the classroom. This approach could validate whether teachers' perceived inclusive practices positively impact students' inclusive experience in the classroom.

A longitudinal study could be considered for a future study to understand the stability of secondary teacher attitudes, CTE, TSE and behavioural intentions throughout

their career. As identified by both the current and previous studies, teacher experience is a factor in changing perspectives on inclusion. Furthermore, a longitudinal study might hold the potential also to capture how other influential school-based factors – leadership attitudes, internal and external resources and support, professional development opportunities related to inclusion / SEND – may influence teacher-based factors. Such a study would enable a richer understanding of the interactional nature between secondary teacher-based and school-based factors over some time. Therefore, it could provide a pro-active basis for when and to whom targeted support and training might be provided by those seeking to increase inclusive practices in schools for CYP with SEMH.

Furthermore, given that in the current study, the TPB was only partially validated, there could be a case for including additional teacher-based factors into a study of inclusion based upon the TPB to explore whether these have a role in supporting inclusive practices for teachers across all age-ranges (MacFarlane & Woolfson, 2013) either through contributing to a stronger regression equation or interacting with other predictor variables such as TSE (Kunemund et al., 2020; Woodcock, 2020). For example, headteacher approval of inclusive practices has been shown to influence behavioural intentions (Hellmich et al., 2019) and self-reported actual behaviour (MacFarlane & Woolfson, 2013) and could be added as an additional operationalisation of subjective norm. It would also be interesting to investigate the contribution of perceived headteacher approval of inclusive practices compared to the influence of the broader staff's beliefs and practices towards inclusion as measured by CTE.

Additionally, causal attributions about the achievement of or behaviours of CYP with SEMH needs could be investigated, given previous suggestions that teachers' attributions may impact self-efficacy towards managing challenging behaviour (Gibbs & Powell, 2012; Miller, 1995). As CTE has been shown to have a relationship with teachers use of exclusion as a sanction (Gibbs & Powell, 2012), there is an argument for measuring actual teacher behaviours in order to investigate whether perceived CTE may directly influence secondary teacher inclusive behaviours

despite a relationship with behavioural intentions not being found; the finding in the MacFarlane & Woolfson (2013) study that their subjective norm variable influenced actual teacher behaviours but not behavioural intentions provides a further rationale for this suggestion.

Future studies investigating secondary teacher inclusive practices towards CYP with SEMH needs or challenging behaviour range might address the question of whether there are mediating or moderating relationships between TSE and behavioural intentions on the relationship between teacher beliefs and behavioural intentions, and feelings and behavioural intentions. Examination of such relationships might show how TSE could influence beliefs and feelings that determine higher levels of behavioural intentions towards the inclusion of CYP with SEMH needs. These relationships were not the focus of the current study's research questions, and further analysis was not undertaken due to the study's sample size and time constraints.

Finally, any future studies investigating the TPB concerning teachers across all mainstream settings could consider whether the construct of SEMH is an appropriate ‘object’ of teacher attitudes, CTE, TSE and behavioural intentions. It is noticeable that both the current study and a similar study that used SEBD (MacFarlane & Woolfson, 2013) only partially validated the TPB. Given the ambiguity and often multi-faceted nature of the term, differing interpretations of SEMH amongst teachers may have influenced results. A future study could explore the same operationalisation of the TPB but applied to more readily understood constructs such as challenging behaviour or disruptive behaviour and the use of school exclusion as a sanction (Gibbs & Powell, 2012).

5.5.2 School Practice

Pre-service and in-service training could focus on supporting a deeper understanding of SEMH. It was recently reported that only 53% of newly qualified

teachers (NQTs) in England feel equipped to support the needs of CYP with SEND, including SEMH (Graham et al., 2019). Increased awareness of this population's vulnerabilities may support an empathy with the link between emotional and mental health with challenging behaviour (Shucksmith et al., 2005). Increased empathy and attunement with students may lead to staff generating new insights and reflections that provide the basis for intending to positively adapt their practice (Turner & Gulliford, 2020).

A key finding of this study indicated that positive secondary teacher attitudes, both beliefs and feelings, towards the inclusion of CYP with SEMH needs are a significant factor in teachers intending to behave inclusively towards this population. Therefore, school leadership teams, or other staff groupings, might consider how they can both strengthen and sustain positive attitudes in their school. Headteachers seeking to promote the inclusion of the more vulnerable pupils in their school population, those with SEMH, might consider their influential role in impacting teacher attitudes and intentions towards acting inclusively (O'Toole & Burke, 2013; Sharma & Sokal, 2016). They could explicitly express their espoused beliefs and values (Schein, 2004) towards the inclusion of CYP with SEMH needs through highlighting and celebrating effective staff inclusive practices (Billingsley et al., 2018). In doing so, the views of headteachers may be clearly understood and felt to be authentic by staff, increasing the likelihood of them becoming embedded in the school culture in terms of staff's underlying assumptions about the values and behaviour they should display (Carrington & Duke, 2014; O'Toole & Burke, 2013). Whilst the data here did not uphold the place of CTE, the reasons for this are discussed in section 5.3.1.2, and the broader literature on school or collective cultures of practice indicates the place of such norms when responding to behaviour.

While not being found to be predictive of behavioural intentions, TSE did have a significant relationship with it. This relationship and other evidence of its impact on behavioural intentions (Hellmich et al., 2019; MacFarlane & Woolfson, 2013; Sharma et al., 2018; Wilson et al., 2016a) suggests it could be worthy of attention by schools, particularly given previous findings concerning its potential influence on attitudes

(Savolainen et al., 2012; Scheer et al., 2015; Sharma et al., 2012); and upon teacher wellbeing (Muenchhausen et al., 2021). Training and support could focus on assisting teachers in developing instructional, relational and motivational strategies to support their confidence in including CYP with SEMH needs (MacFarlane & Woolfson, 2013). Particular attention might be given to less experienced teachers, which the study has suggested may currently experience lower confidence in their ability to implement inclusive practices for CYP with SEMH needs than those with greater experience.

Given the known differences in preferences between how less experienced and more experienced teachers apply strategies towards the inclusion of students (Andreou & Rapti, 2010), professional learning and development practices could be established to share and collectively develop successful strategies with one another. Forms of collaboration amongst staff such as these have been identified as a critical enabling factor in inclusive cultures (Florian, 2014). Moreover, schools that establish collaborative inquiry structures support staff to draw out the causal link between their actions and student outcomes, provide opportunities for and evidence of mastery experiences which deepens teacher individual and collective efficacy (Donohoo, 2017; Donohoo & Velasco, 2016). Meta-analyses of practices that support student outcomes has suggested that collective efficacy could be the most influential factor in supporting student achievement (Hattie & Donoghue, 2016; Eells, 2011). Whilst the current study does not provide evidence of CTE's influence on inclusive teacher behaviours towards CYP with SEMH, other research has highlighted its potential association with the reduced use of exclusion as a sanction for students presenting challenging behaviour (Gibbs & Powell, 2012). Therefore, establishing collaborative professional development structures for the co-development and evaluation of inclusive strategies that could deepen TSE and CTE warrants consideration by headteachers.

5.5.3 Educational psychology practice

The research findings also have implications for how EPs may support schools in developing and implementing inclusive policies and practices. EPs should be aware of how attitudes could influence teacher behaviours in the classroom. They could support schools to understand the role of teacher-based factors as enablers or barriers to inclusion in their school. EPs might provide instruments (such as those used in the current study) to measure attitudes, beliefs or intentions as a basis for identifying and then measuring the impact of targeted support and training.

Teacher attitudes and behavioural intentions could be potentially developed or explored through EPs:

- Working with leadership teams and staff to develop their shared concept of inclusion (Zollers et al., 1999); defining their espoused beliefs and values around inclusion and the artefacts that would provide evidence of those beliefs and values (Schein, 2004), e.g. if their concept of inclusion was successfully implemented, what would visitors observe in the classroom; what would students and parents say about their experience of being part of the school?;
- Contributing to CPD focused on deepening an awareness of and understanding of SEMH and how it influences behaviour, such as trauma-informed practice (Thomas, Crosby & Vanderhaar, 2019);
- Working with the schools to establish and initially facilitate collaborative inquiry groups to provide a context for the sharing and development of inclusive strategies (see section 5.2.2); and
- Working with the schools to ensure available resources are being deployed where they are needed most to support staff to strengthen their perception that they have support to draw on (Forlin et al., 2008; Gibbs, 2007).

The importance of teachers having knowledge of and confidence in pedagogical and behavioural strategies they can implement has been highlighted through this research; EPs could help schools identify a professional development plan to support and embed inclusive practices. Surveys or audits could be conducted to identify which aspects of inclusive practices – instructional, motivational, relational

strategies – staff, feel most and least confident with; this could identify specific training needs and help establish peer-review / support models to share and embed best practice across the school. Targeted training on understanding and managing the likely multi-faceted needs of CYP with SEMH difficulties, drawing on approaches such as trauma-informed practise, could be facilitated by EPs. Such training could help develop greater teacher empathy with such students and increased confidence in implementing inclusive strategies (Thomas et al., 2019).

Follow up group staff supervision, for both leaders and teachers, could also provide a platform for the confidential exploration and emotional containment of their experiences of CYP with SEMH needs (Ellis & Wolfe, 2019; Kennedy & Laverick, 2019). Such a space could also support collective problem-solving that may focus on reframing the attributions that teachers may make for challenging behaviour to depersonalise behaviour from the student to factors within the teachers' control (Lambert & Miller, 2010; Wang & Hall, 2018). Within this supervisory context, EPs would also be well placed to help teachers identify and develop emotional regulation strategies in response to facing challenging behaviour associated with students with SEMH needs e.g. reappraisal (i.e. "I understand where this behaviour might be coming from", "this is not a reflection of my teaching competence" and suppression (of feelings of frustration and resentment towards the students) strategies (Lazarides et al., 2020). Such self-regulation and re-framing strategies could reduce the risk of automatic implicit negative attitudes that can be triggered by challenging behaviour leading to spontaneous non-inclusive or punitive teacher behaviours (Pit-ten Cate & Glock, 2019); helping deepen empathy with student that could provide the basis for teachers positively adapting their practices in the classroom (Turner & Gulliford, 2020).

5.6 Conclusions

The research aimed to investigate the application of the TPB to mainstream secondary teachers' perspectives on the inclusion of CYP with SEMH needs. The rationale for the study was based on the limited inclusive education research into

secondary teacher views, the population of students with SEMH needs and the role of CTE.

Over 100 teachers took part in an online questionnaire survey, most of whom were recruited through social media channels, impacting the generalisability of the findings. The analysis identified that secondary teachers with the most experience had significantly higher levels of TSE than the least experienced teachers. The theoretical framework for the TPB was only partially upheld in this analysis; only teacher beliefs and feelings, not TSE or CTE, predicted behavioural intentions.

The research provides a novel contribution to the field by establishing that positive levels of secondary teacher attitudes towards CYP with SEMH predict behavioural intentions towards these young people, a group disproportionately vulnerable to exclusion. The study, therefore, contributes to the broader field of inclusive education. Inconsistent with previous studies applying the TPB, TSE was not shown to be predictive of behavioural intentions. However, future research may reveal the interactional role in shaping the relationship between attitudes or additional variables and behavioural intentions.

Additional avenues of inquiry for future research include replicating the research design but recruiting more significant numbers of teachers from a fewer number of schools in order to generate a school-level measure of CTE. A longitudinal design could be favoured in the future to capture how changes in teacher experiences and broader school-based developments may impact teacher-based factors towards inclusion. A fundamental issue may relate to the construct of SEMH, which may be a too ambiguous and complex ‘object’ of teachers' attitudes, CTE, TSE and behavioural intentions to measure reliably; the researcher, therefore, proposes a focus on challenging or disruptive behaviour in a future study. Finally, additional variables not included in the TPB in this study nor similar studies could be investigated to understand how they might contribute to behavioural intentions. This

adaptation would provide helpful insights into other teacher-based processes at play that schools and EPs could target to strengthen inclusive practices.

The key implication of the study for leaders is to consider their influential role in strengthening secondary teachers' attitudes, both beliefs and feelings, as this is likely to increase their willingness to implement inclusive practices. Whilst the study did not establish the influence of TSE towards behavioural intentions, broader research highlighting its importance and the finding here that less experienced teachers may be experiencing lower levels of TSE than teachers with the most experience, training and support could focus on strengthening secondary's teachers' confidence in applying strategies that support the needs of CYP with SEMH needs.

The findings have clear implications for EPs supporting schools in developing and implementing inclusive policies and practices. They should be aware of the factors that support positive attitudes, highlighting them and working with senior leaders to facilitate their development. The persisting confusion towards the term SEMH will impact teachers' effectiveness in identifying and managing its needs. Therefore, a deconstruction of the term, including the construct of mental health and various manifestations of it, through training, could be essential in addressing this confusion. EPs are well placed to provide specialist training around supporting an understanding and response to mental health needs, e.g. trauma-informed practices.

As a final concluding remark, the study has highlighted the importance of understanding the influence of what teachers' 'think' and 'feel' on what they 'do' concerning inclusive practices. As the impact of the pandemic is likely to exacerbate mental health difficulties amongst young people, consideration should be given to how we can promote their sense of belonging and participation in their local schools to reduce their vulnerability to exclusion and other poor educational outcomes. In the context of reducing school finances and resources, working to strengthen teacher mindsets offers a powerful vehicle for supporting that aspiration.

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Appendices

Appendix A: Full text articles excluded with reasons

Article	Reason for exclusion
Schultz, E. K., & Simpson, C. G. (2013). Factors Influencing Teacher Behavior with Students with Diverse Learning and Behavioral Needs. Journal of the American Academy of Special Education Professionals, 2013.	The article was a literature review not an individual study.
Soodak, L. C., Podell, D. M., & Lehman, L. R. (1998). Teacher, student, and school attributes as predictors of teachers' responses to inclusion. Journal of Special Education, 31(4), 480–497. https://doi.org/10.1177/002246699803100405	The study did not measure 'attitudes' as a distinct construct.
Ćwirynkało, K., Kisovar-Ivanda, T., Gregory, J. L., Żyta, A., Arciszewska, A., & Zrilić, S. (2017). Attitudes of Croatian and Polish elementary school teachers towards inclusive education of children with disabilities. Undefined.	The study did not measure 'behavioural intentions' or 'behaviour'.
Kormos, J., & Nijakowska, J. (n.d.). Inclusive practices in teaching students with dyslexia: Second language teachers' concerns, attitudes and self-efficacy beliefs on a massive open online learning course.	The study did not measure 'behavioural intentions' or 'behaviour'.
Urton, K., Wilbert, J., & Hennemann, T. (2014). Attitudes towards Inclusion and Self-Efficacy of Principals and Teachers. Learning Disabilities: A Contemporary Journal, 12(2), 151–168.	The study did not measure 'behavioural intentions' or 'behaviour'.
Vaz, S., Wilson, N., Falkmer, M., Sim, A., Scott, M., Cordier, R., & Falkmer, T. (2015). Factors associated with primary school	The study did not measure 'behavioural

teachers' attitudes towards the inclusion of students with disabilities. PLoS ONE, 10(8), 1–12. https://doi.org/10.1371/journal.pone.0137002	intentions' or 'behaviour'.
Malak, M. S., Sharma, U., & Deppeler, J. M. (2018). Predictors of primary schoolteachers' behavioural intention to teach students demonstrating inappropriate behaviour in regular classrooms. Cambridge Journal of Education, 48(4), 495–514. https://doi.org/10.1080/0305764X.2017.1364698	The study was based in a developing country (Bangladesh).
Opoku, M. P., Cuskelly, M., Pedersen, S. J., & Rayner, C. S. (2021). Attitudes and self-efficacy as significant predictors of intention of secondary school teachers towards the implementation of inclusive education in Ghana. European Journal of Psychology of Education, 36(3), 673–691. https://doi.org/10.1007/S10212-020-00490-5/TABLES/4	The study was based in a developing country (Ghana).
Wilson, C., Woolfson, L. M., & Durkin, K. (2019). The impact of explicit and implicit teacher beliefs on reports of inclusive teaching practices in Scotland. Https://Doi.Org/10.1080/13603116.2019.1658813.	The study did not apply the TPB as its conceptual framework.
Engelbrecht, P., & Savolainen, H. (2017). A mixed-methods approach to developing an understanding of teachers' attitudes and their enactment of inclusive education. European Journal of Special Needs Education, 1–17. https://doi.org/10.1080/08856257.2017.1410327	A mixed method approach was adopted.
Sharma, U., & Sokal, L. (2016). Can teachers' self-reported efficacy, concerns, and attitudes toward inclusion scores predict their actual inclusive classroom practices? In Australasian Journal of Special Education (Vol. 40, Issue 1, pp. 21–38). Cambridge University Press. https://doi.org/10.1017/jse.2015.14	The study did not apply the TPB as its conceptual framework.

Sharma, U., & Jacobs, D. K. (2016). Predicting in-service educators' intentions to teach in inclusive classrooms in India and Australia. Teaching and Teacher Education, 55, 13–23. https://doi.org/10.1016/j.tate.2015.12.004	The TPB's subjective norm factor was not included, reducing the overall predictability of participants behavioural intentions.

Appendix B: WoE criteria for systematic review studies

The selected studies were assessed using Gough's (2007) WoE framework. The WoE framework considers four criteria:

- (A) assesses the quality of execution of study where transparency, accuracy, accessibility, and specificity are judged (Gough, 2007);
- (B) considers the appropriateness of the method of the studies in helping to address the aims of the review.
- (C) assesses the evidence generated by the studies and its relevance for answering the review aims; and
- (D), an overall judgment is formed based on an average of the three weightings of A, B & C.

WoE A: Quality of execution of the study

Weighting	Description
High	- The number and population of participants noted. - The complete TPB is explicitly applied as the conceptual framework for the study. The conceptualisation of variables flows logically from the literature. - Sampling, data method, measures, and analysis are appropriate for research questions and sufficiently detailed to support replication. - The naming of and reference to the source for measures provided a clear explanation of any relevant modification. - Reported reliability for all primary measures of at least 0.80 is referenced. - Results and conclusions are presented. - Limitations to the study are set out.
Medium	- The number of participants noted.

	- The complete TPB is explicitly applied as the conceptual framework for the study. - The specific population identified, e.g. teachers, teaching assistants. - Sampling, data method, measures and analysis is appropriate to the research question is described. - The naming of and reference to the source for measures was provided. - Reported reliability for *most* primary measures of at least 0.70 is referenced. - Results and conclusions are presented.
Low	- The number of participants is given. - The TPB is applied as the conceptual framework. - Limited description around sampling, data method, measures and analysis are given. - Reported reliability is reported. - Results are provided.

WoE B: Appropriateness of method

Weighting	Description
High	- Participants are all in-service-teachers in mainstream schooling, teaching in 'inclusive' classes, i.e. CYP with SEN are taught alongside those without). - The quantitative design used drawing on standardised closed survey/ questionnaire. - The statements were rated using a Likert scale of 4 or more points. - Quantitative data generated suitable for statistical analysis. - The sample size is sufficient for statistical analysis. - Data analysis uses both descriptive and inferential statistics
Medium	- Participants are all in-service teachers in mainstream schooling.

	- Statements rated on a Likert scale of fewer than 4 points. - The quantitative design used drawing on closed survey/questionnaires. - Quantitative data generated suitable for statistical analysis. - The sample size is sufficient for statistical analysis. - Data analysis uses descriptive and inferential statistics.
Low	- Data or sample size generated is not sufficient for statistical analysis. - Data analysis only uses descriptive statistics.

WoE C: Appropriateness of evidence for the current review

Weighting	Description
High	- Teacher attitudes and efficacy beliefs towards inclusion was precisely measured and reported. - The relationship of both attitudes and efficacy towards inclusive behaviours was evaluated. Due to these being part of the inclusion criteria during the systematic review process, all studies met the criteria; thus, all weightings were awarded High.

Appendix C; WoE appraisal for systematic review studies

Study	WoE Appraisal
(Hellmich et al., 2019) Germany	WoE A: Medium - A clear description of participants. - TPB applied in full. However, the conceptualisation of the behavioural control variable is not consistent with the literature in the area (focusing on efficacy towards collaborating with others rather than self-efficacy) and acknowledged as a limitation. - Reported reliability across the measures ranged between 0.78 to 0.87. - Sampling method not described - For measures that were adapted, adaptations were not described in total to support replication. - Data analysis set out. - Results, conclusions and limitations described. WoE B: Medium - The mixed sample included teachers who did not teach in ‘inclusive’ schools, reducing findings' generalisability. - Sample sufficient for statistical analysis. - 5-point Likert scales used - Questionnaires used, but some were non-standardised and not empirically tested before the study. - Descriptive and inferential statistics used. WoE C: High - Attitudes and efficacy beliefs and their relationship to both behavioural intentions and actual behaviours towards inclusion precisely measured.

	WoE D: Medium
(Sharma et al., 2018) Australia and Italy	WoE A: Medium - A clear description of participants. - TPB applied. However, the conceptualisation of individual variables not clearly explained concerning the literature. - Reported reliability of 0.65 to 0.94 reported. - The sampling method inconsistently applied across the two countries. - Measures clearly described and source referenced. - Data analysis clearly described. - Results, conclusions and limitations described. WoE B: Medium - Mixed sample. Not clear what proportion of teachers in the sample taught in 'inclusive' schools. - Sample sufficient for statistical analysis. - At least 4-point Likert scales used - Questionnaires were all standardised. - Descriptive and inferential statistics used. WoE C: High - Attitudes and efficacy beliefs and their relationship to both behavioural intentions towards inclusion precisely measured. WoE D: Medium

(Wilson et al., 2016b) Scotland	WoE A: High - A clear description of participants and population was provided. - TPB applied, and variables conceptualised with explicit reference to the literature. - Reported reliability of 0.89 to 0.94 reported across all measures. - Measures clearly described but not clear how they were adapted from the literature cited. - Data analysis clearly described. - Results, conclusions and limitations clearly described. WoE B: Medium - Non-standardised measures used. - Sample sufficient for statistical analysis. - At least 9-point Likert scales used - Descriptive and inferential statistics used. WoE C: High - Attitudes and efficacy beliefs and their relationship to both behavioural intentions and self-reported behaviours towards inclusion precisely measured. WoE D: High
(MacFarlane & Woolfson, 2013) Scotland	WoE A: Medium - A clear description of participants and population was provided. - TPB applied, and variables conceptualised with explicit reference to the literature.

	- Reported reliability of 0.75 to 0.95 reported across measures. - Measures clearly described and original author referenced. Modifications appropriate and clearly explained. - Data analysis clearly described. - Results, conclusions and limitations clearly described. WoE B: High - Standardised measures used. - Sample sufficient for statistical analysis. - At least 5-point Likert scales used. - Descriptive and inferential statistics used. WoE C: High - Attitudes and efficacy beliefs and their relationship to both behavioural intentions and self-reported behaviours towards inclusion precisely measured. WoE D: High

Appendix D: Questionnaire template

For brevity reasons, only the LA version of the survey is included. The national survey differs from the LA survey only because the school's name was not requested, and respondents were requested to confirm they were practising mainstream secondary school teachers based in England.

PARTICIPANT CONSENT FORM and DEMOGRAPHIC INFORMATION

.
The participant should complete the whole of this form himself/herself.

Have you read and understood the participant information sheet?

- Yes
- No

. Have any questions you have been answered satisfactorily?

- Yes
- No

. Have you received enough information about the study?

- Yes
- No

.
Do you understand that you are free to withdraw from the study?

- Yes
- No

.
"This study has been explained to me to my satisfaction, and I agree to take part. I understand that I am free to withdraw at any time."
I confirm my agreement to participate:

- Yes
- No

. Please confirm the following:

The name of your school:

[ ]

. Number of years teaching experience

- Less than 5 years
- 6 - 10 years
- 11-15 years
- More than 15 years

. Your gender

- Male
- Female
- Prefer not to say

Cognitive

Q1. I believe that an inclusive school is one that permits academic progression of all students regardless of their SEMH needs.

Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
○	○	○	○	○

Q2. I believe that students with SEMH needs should be taught in special education schools.

Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
○	○	○	○	○

Q3. I believe that inclusion facilitates socially appropriate behaviour amongst students with SEMH needs.

Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
○	○	○	○	○

Q4. I believe that any student can learn in the regular curriculum of the school if the curriculum is adapted to meet their individual SEMH needs.

Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
○	○	○	○	○

Q5. I believe that students with SEMH needs should be segregated because it is too expensive to modify the physical environment of the school.

Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
○	○	○	○	○

Q6. I believe that students with SEMH needs should be in special education schools so that they do no experience rejection in the regular school.

Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
O	O	O	O	O

Affective

Q7. I get frustrated when I have difficulty communicating with students with SEMH needs.

Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
O	O	O	O	O

Q8. I get upset when students with SEMH needs cannot keep up with the day-to-day curriculum in my classroom.

Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
O	O	O	O	O

Q9. I get irritated when I am unable to understand students with SEMH needs.

Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
O	O	O	O	O

Q10. I am uncomfortable including students with SEMH needs in a regular classroom with other students without SEMH needs.

Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
O	O	O	O	O

Q11. I am disconcerted that students with SEMH needs are included in the regular classroom, regardless of the severity of their SEMH needs.

Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
O	O	O	O	O

Q12. I get frustrated when I have to adapt the curriculum to meet the individual SEMH needs of students.

Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
O	O	O	O	O

Collective Efficacy

Q13. Teachers at this school do not have the skills needed to produce meaningful student learning, specifically for pupils with SEMH needs.

Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
○	○	○	○	○

Q14. If a pupil with SEMH needs does not want to learn, teachers here give up.

Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
○	○	○	○	○

Q15. Teachers in this school do not have the skills to deal with the disciplinary problems of pupils with SEMH needs

Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
○	○	○	○	○

Q16. For pupils with SEMH needs, learning is more difficult at this school because they are worried about their safety.

Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
○	○	○	○	○

Q17. Teachers in this school are able to get through to the most difficult students with SEMH needs.

Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
○	○	○	○	○

Q18. Teachers here are confident they will be able to motivate pupils with SEMH needs.

Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
○	○	○	○	○

Q19. Teachers in this school really believe that every pupil with SEMH needs can learn.

Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
○	○	○	○	○

Q20. Pupils with SEMH needs come to school ready to learn.

Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
○	○	○	○	○

Q21. Home life provides so many advantages these pupils with SEMH needs are bound to learn.

Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
○	○	○	○	○

Q22. The opportunities in this community help ensure that pupils with SEMH needs will learn.

Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
○	○	○	○	○

Q23. Drug and alcohol abuse in the community make learning difficult for pupils with SEMH needs.

Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
○	○	○	○	○

Q24. Pupils with SEMH needs in this school just aren't motivated to learn.

Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
○	○	○	○	○

Self efficacy

Q25. How much can you assist families in helping their children do well in school, specifically children with SEMH needs?

Nothing	Very little	Some influence	Quite a bit	A great deal
○	○	○	○	○

Q26. To what extent can you draft good questions for pupils with SEMH needs?

Nothing	Very little	Some influence	Quite a bit	A great deal
○	○	○	○	○

Q27. How well can you implement alternative strategies in your classroom for pupils with SEMH needs?

Nothing	Very little	Some influence	Quite a bit	A great deal
○	○	○	○	○

Q28.

To what extent can you provide an alternative explanation or example when pupils with SEMH needs are confused?

Nothing	Very little	Some influence	Quite a bit	A great deal
○	○	○	○	○

Q29.

How much can you use a variety of assessment strategies when teaching pupils with SEMH needs?

Nothing	Very little	Some influence	Quite a bit	A great deal
○	○	○	○	○

Q30.

How much can you do to calm a pupil with SEMH needs who is disruptive or noisy?

Nothing	Very little	Some influence	Quite a bit	A great deal
○	○	○	○	○

Q31.

How much can you do to get pupil with SEMH needs to follow classroom rules?

Nothing	Very little	Some influence	Quite a bit	A great deal
○	○	○	○	○

Q32.

How much can you do to control disruptive behaviour of pupils with SEMH needs in the classroom?

Nothing	Very little	Some influence	Quite a bit	A great deal
○	○	○	○	○

Q33.

How well can you establish a classroom management system for pupils with SEMH needs?

Nothing	Very little	Some influence	Quite a bit	A great deal

○	○	○	○	○

Q34.

How much can you do to get pupils with SEMH needs to believe they can do well in schoolwork?

Nothing	Very little	Some influence	Quite a bit	A great deal
○	○	○	○	○

Q35.

How much can you do to help pupils with SEMH needs to value learning?

Nothing	Very little	Some influence	Quite a bit	A great deal
○	○	○	○	○

Q36.

How much can you do to motivate pupils who have SEMH needs and show a low interest in school work?

Nothing	Very little	Some influence	Quite a bit	A great deal
○	○	○	○	○

Behavioural intentions

Q37. I am willing to encourage students with SEMH needs to participate in all social activities in the regular classroom.

Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
○	○	○	○	○

Q38. I am willing to adapt the curriculum to meet the individual needs of all students with SEMH needs regardless of their ability.

Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
○	○	○	○	○

Q39. I am willing to include students with SEMH needs in the regular classroom with necessary support.

Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
○	○	○	○	○

Q40. I am willing to modify the physical environment to include students with SEMH needs in the regular environment.

Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
O	O	O	O	O

Q41. I am willing to adapt my communication techniques to ensure that all students with SEMH needs can be successfully included in the regular classroom.

Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
O	O	O	O	O

Q42. I am willing to adapt the assessment of individual students with SEMH needs in order for inclusive education to take place.

Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
O	O	O	O	O

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Appendix E: Information letter sent to schools within the LA

School of Psychology

Information Sheet for Headteachers

The University of Nottingham
UNITED KINGDOM · CHINA · MALAYSIA

Title of research project: **The relationship of secondary school teacher attitudes and efficacy beliefs to inclusive behaviours towards young people with social, emotional and mental health (SEMH) needs.**

Researcher: John Cronin
Supervisor: Anthea Gulliford
Contact details: lpxjc5@nottingham.ac.uk

Background

This is an information sheet seeking the participation of your school in a Nottingham City Local Authority based research study starting in July 2020. This study aims to understand how staff see the inclusion of children presenting with SEMH needs. Before you decide, it is important to understand why the research is being done and what it will involve. Please take the time to read the following information carefully.

Purpose and aims

This study hopes to gain insights into how teacher-related factors - their attitudes, efficacy beliefs and behavioural intentions – may further support the successful implementation of inclusive practices towards young people with SEMH needs. The overall findings from this study – including any general findings from your school – will be fed back to you by the researcher to help inform your own planning and practices around inclusion.

Consent and practicalities

If you consent to your school participating in the study, all teaching staff will be invited to complete a short online survey (approximately 15 minutes) about their attitudes, efficacy beliefs and behaviours towards the inclusion of young people with SEMH. Each teacher is under no obligation to participate and is free to withdraw at any point before or during the study. No individual teacher can be identified from the study as all data will be anonymised and stored in compliance with the Data Protection Act.

If you have any complaints about the study please contact:

Prof. Stephen Jackson
(Chair of the Ethics Committee)
educationresearchethics@nottingham.ac.uk

Appendix F: Main stage of data collection - information letter and privacy notice form sent to participants

School of Psychology

Information Sheet for participants

The University of Nottingham

UNITED KINGDOM · CHINA · MALAYSIA

Title of research project: **The relationship of secondary school teacher attitudes and efficacy beliefs to inclusive behaviours towards young people with social, emotional and mental health (SEMH) needs.**

Researcher: John Cronin
Supervisor: Anthea Gulliford
Contact details: lpxjc5@nottingham.ac.uk

Background

This is an information sheet seeking your participation in a Nottingham City Local Authority-based research study starting in July 2020. Before you decide, it is important to understand why the research is being done and what it will involve. Please take the time to read the following information carefully.

Purpose and aims

This study aims to understand how staff see the inclusion of children presenting with social, Emotional and Mental health (SEMH) needs. The researchers hope to gain insights into how teacher-related factors - their attitudes, efficacy beliefs and behavioural intentions – may further support the successful implementation of inclusive practices towards young people with SEMH needs.

Consent, anonymity and practicalities

If you consent to taking part, you will asked to complete a short survey (approximately 15 minutes) about your attitudes, efficacy beliefs and behaviours towards the inclusion of young people with SEMH. You are under no obligation to participate and are free to withdraw at any point before or during the study. No individual teacher can be identified from the study as no names will be requested and all data will be anonymised and stored securely in compliance with the Data Protection Act.

If you have any complaints about the study please contact:

Prof. Stephen Jackson
(Chair of the Ethics Committee)

stephen.jackson@nottingham.ac.uk

School of Psychology

GDPR: Research Participant Privacy Notice

The University of Nottingham
UNITED KINGDOM · CHINA · MALAYSIA

Title of research project: **The relationship of secondary school teacher attitudes and efficacy beliefs to inclusive behaviours towards young people with social, emotional and mental health (SEMH) needs.**

Ethics Approval Number; S1262
Researcher: John Cronin
Supervisor: Anthea Gulliford
Contact details: lpxjc5@nottingham.ac.uk

Privacy information for Research Participants

For information about the University's responsibilities with respect to your data, who you can get in touch with and your rights as a data subject, please visit: www.nottingham.ac.uk/utilities/privacy/privacy.aspx.

Why we collect your personal data

Your personal data is being collected as part of a research project. The researcher is part of a doctorate programme in Applied Educational Psychology, at the University of Nottingham. The purpose of the research is to explore:

a) **The relationship of secondary school teacher attitudes and efficacy beliefs to inclusive behaviours towards young people with social, emotional and mental health (SEMH) needs.**

Legal basis for processing your personal data under GDPR

The legal basis for processing your personal data on this occasion is in line with GDPR Article 6(1e) processing is necessary for the performance of a task carried out in the public interest. We hope to understand how staff see the inclusion of children presenting with social, Emotional and Mental health (SEMH) needs. The researchers hope to gain insights into how teacher-related factors - their attitudes, efficacy beliefs and behavioural intentions – may further support the successful implementation of inclusive practices towards young people with SEMH needs.

Where the University receives your personal data from

Some personal data about you will be collected as part of the research, which will be anonymised and kept confidential. This will include the name of your school and your views about the inclusion of young people with SEMH needs (which you will provide in your survey response).

Special category personal data

We will not be collecting any 'special category personal data', in line with GDPR Article 9(2a).

How long we keep your data

The University may store your data for up to 25 years and for a period of no less than 7 years after the research project finishes. The researchers who gathered or processed the data may also store the data indefinitely and reuse it in future research.

Who we share your data with

Extracts of your data may be disclosed in published works that are posted online for use by the scientific community. Your data may also be stored indefinitely on external data repositories (e.g., the UK Data Archive) and be further processed for archiving purposes in the public interest, or for historical, scientific or statistical purposes. It may also move with the researcher who collected your data to another institution in the future.

Appendix G: Ethics approval letter

The University of Nottingham

UNITED KINGDOM • CHINA • MALAYSIA

SJ/tp

Ref: s1262

Tuesday 26th May 2020

Dear Anthea and John

Ethics Committee Review

Thank you for submitting an account of your proposed research **"The relationship of secondary school teacher attitudes and efficacy".**

That proposal has now been reviewed and we are pleased to tell you it has met with the Committee's approval.

However:
Please note the following comments from our reviewers;

Reviewer One:
In the Participant Information & Consent Form

- "LA-based research study" - please spell out
- Stephen Jackson – including title "Prof." is appropriate here
- Do you understand that you are free to withdraw from the study:
  - at any time YES/NO
  - without having to give a reason YES/NO
    THIS IS DIFFICULT TO UNDERSTAND – REPLACE BY ONE TICK BOX

Final responsibility for ethical conduct of your research rests with you or your supervisor. The Codes of Practice setting out these responsibilities have been published by the British Psychological Society and the University Research Ethics Committee. If you have any concerns whatever during the conduct of your research then you should consult those Codes of Practice. The Committee should be informed immediately should any participant complaints or adverse events arise during the study.

Independently of the Ethics Committee procedures, supervisors also have responsibilities for the risk assessment of projects as detailed in the safety pages of the University web site. Ethics Committee approval does not alter, replace, or remove those responsibilities, nor does it certify that they have been met.

Yours sincerely

The University of Nottingham

UNITED KINGDOM • CHINA • MALAYSIA

Professor Stephen Jackson
Chair, Ethics Committee

Appendix H: Recruitment approach

Local Authority recruitment strategy of participants

The researcher initially contacted headteachers in July 2020 with information about the study in secondary schools across the Local Authority where they were based as a TEP, with requests for expressions of interest in the study. Five schools expressed interest in the research and gave consent for their teachers to be contacted in seek their participation. Headteacher consent was necessary due to the request on the survey for the participant to provide their school's name (aggregated teacher responses in each school would allow a group-reference measure of CTE). It was hoped that responses could be sought as part of teacher training or INSET sessions. However, in response to ongoing school closures and disruption related to Covid-19, it was instead agreed that the headteacher or a nominated member of staff would distribute the survey to their teachers in July and a follow up in September 2020. This generated 7 full responses. The recruitment was disrupted by researcher illness during October to December 2021. However, in January 2021, further reminders were sent, which only generated one further full response by April 2021. In discussion with the researcher's supervisor, it was agreed that a national recruitment strategy was needed, by seeking participants on social media.

Social media recruitment strategy of participants

In order to secure the minimum sample required for statistical analysis, a social media strategy was developed. Firstly, the survey was adapted. The requirement to provide the name of participants' school was removed, as it would not be possible to secure sufficient individual school responses to provide a group-reference measure of CTE. As a result of this, headteacher consent on participants recruited on social media would not be required as no identifying information about participants' school would be provided. To mitigate the risk of an individual not in the target sample responding to the survey, potential participants were required to confirm that they

were secondary teachers teaching in a secondary mainstream school in England prior to taking part. The survey platform provided IP information about each participant, which confirmed that all who responded to the survey were based in England. However, as participant consent had not been sought about using IP or address data, it was not included in the analysis.

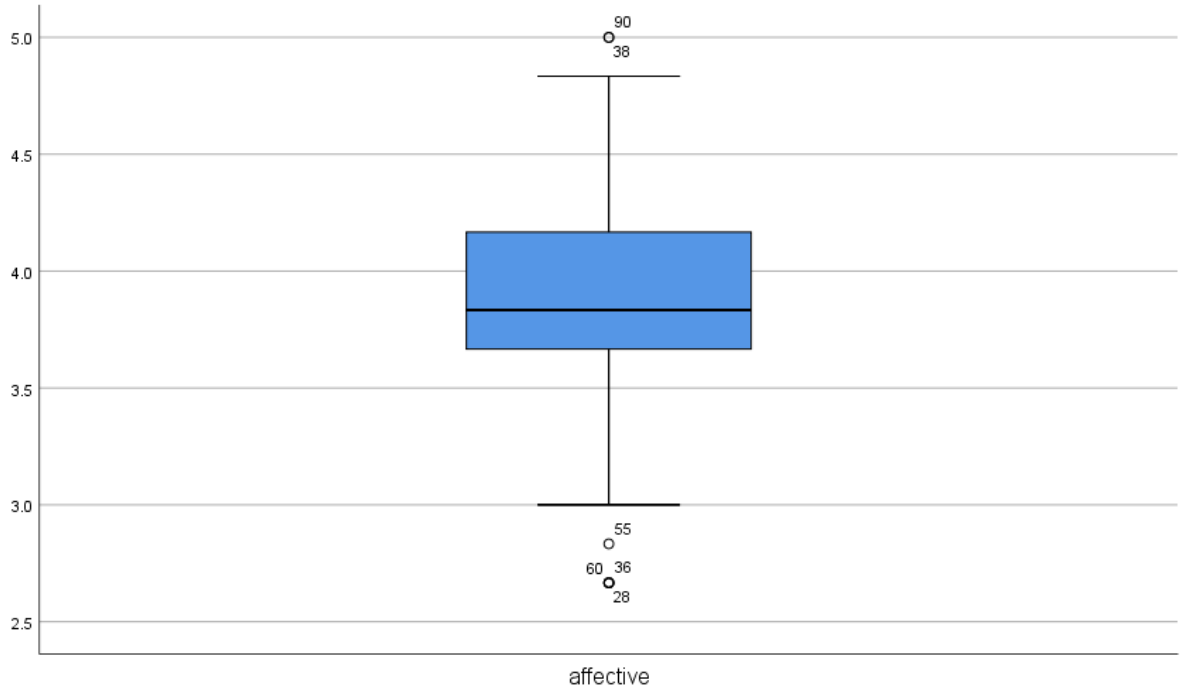
The researcher established a Twitter account for the purposes of the recruitment strategy and initially shared information about their research to their educational network (EPs, TEPs, teachers and school leaders). In addition, a teacher-training provider was approached to distribute information about the researcher to a larger network. The minimum sample was met in July 2022, after which the survey was closed online.

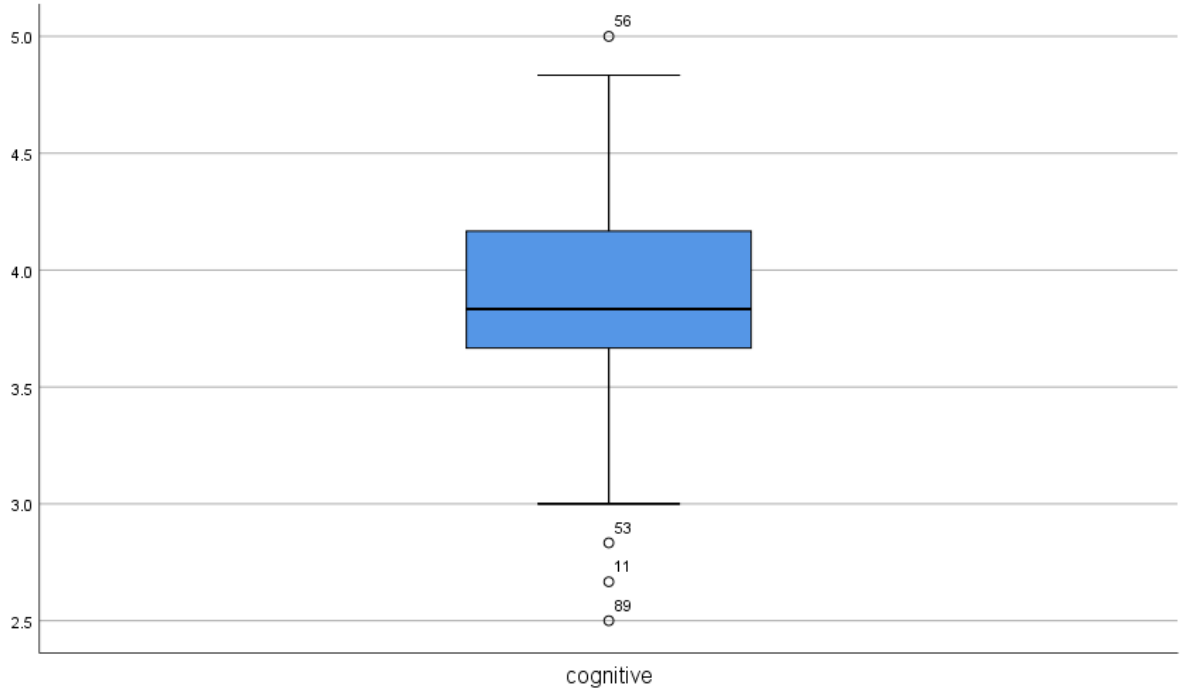
Appendix I: Shapiro-Wilk tests for normality by teaching experience and gender groups

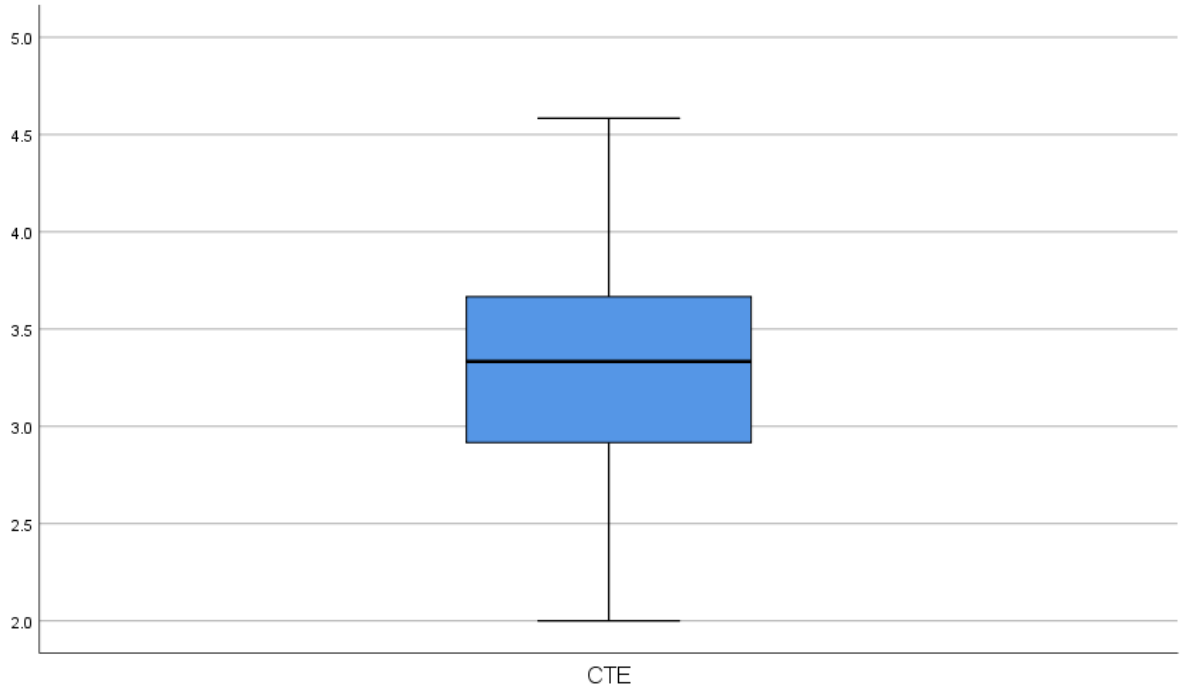
		Shapiro-Wilk		
	Teaching experience	Statistic	df	Sig.
affective	Less than 5 years	.951	27	.227
	6-10 years	.963	15	.752
	11-15 years	.958	18	.560
	More than 15 years	.961	33	.273
cognitive	Less than 5 years	.925	27	.051
	6-10 years	.911	15	.139
	11-15 years	.971	18	.824
	More than 15 years	.951	33	.145
CTE	Less than 5 years	.967	27	.527
	6-10 years	.943	15	.418
	11-15 years	.939	18	.282
	More than 15 years	.962	33	.287
TSE	Less than 5 years	.958	27	.329
	6-10 years	.962	15	.723
	11-15 years	.884	18	.030
	More than 15 years	.966	33	.384
BehInt	Less than 5 years	.900	27	.014
	6-10 years	.923	15	.214
	11-15 years	.863	18	.014
	More than 15 years	.868	33	.001

		Shapiro-Wilk		
	Gender	Statistic	df	Sig.
affective	Male	.940	20	.239
	Female	.970	73	.083
cognitive	Male	.948	20	.343
	Female	.983	73	.449
CTE	Male	.969	20	.735
	Female	.990	73	.856
TSE	Male	.960	20	.551
	Female	.988	73	.728
BehInt	Male	.841	20	.004
	Female	.896	73	.000

Appendix J: Graphical outputs generated from assumption testing of the whole data set



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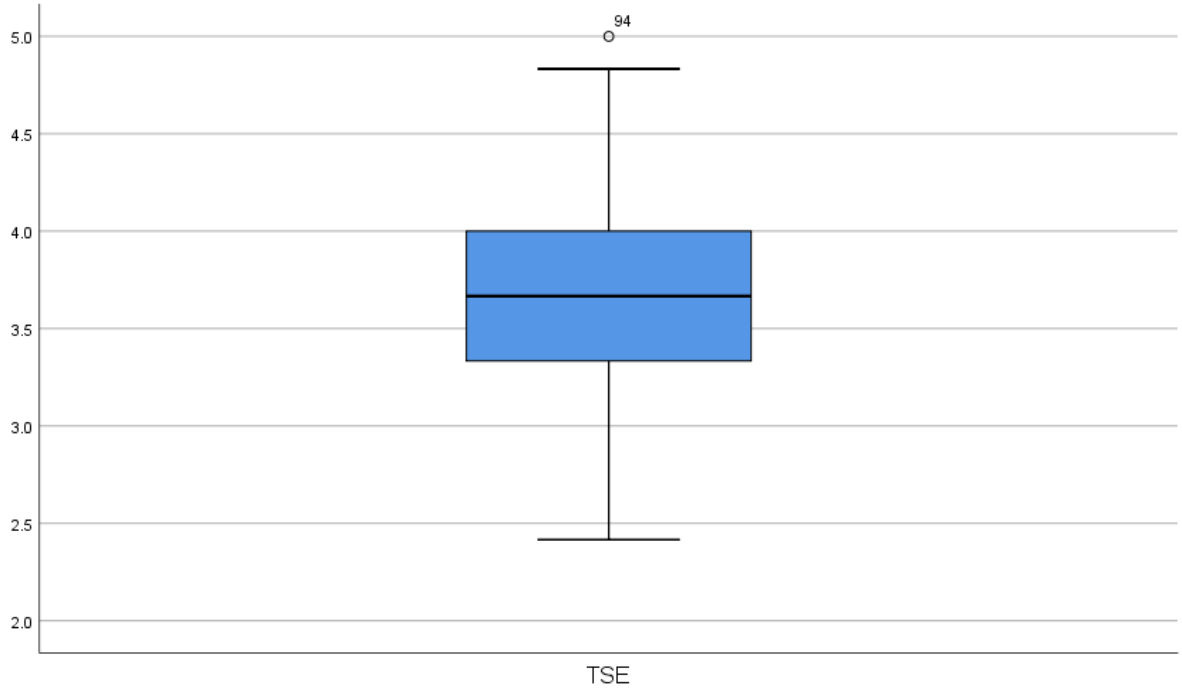
4.5
4.0
3.5
3.0
2.5
2.0
CTE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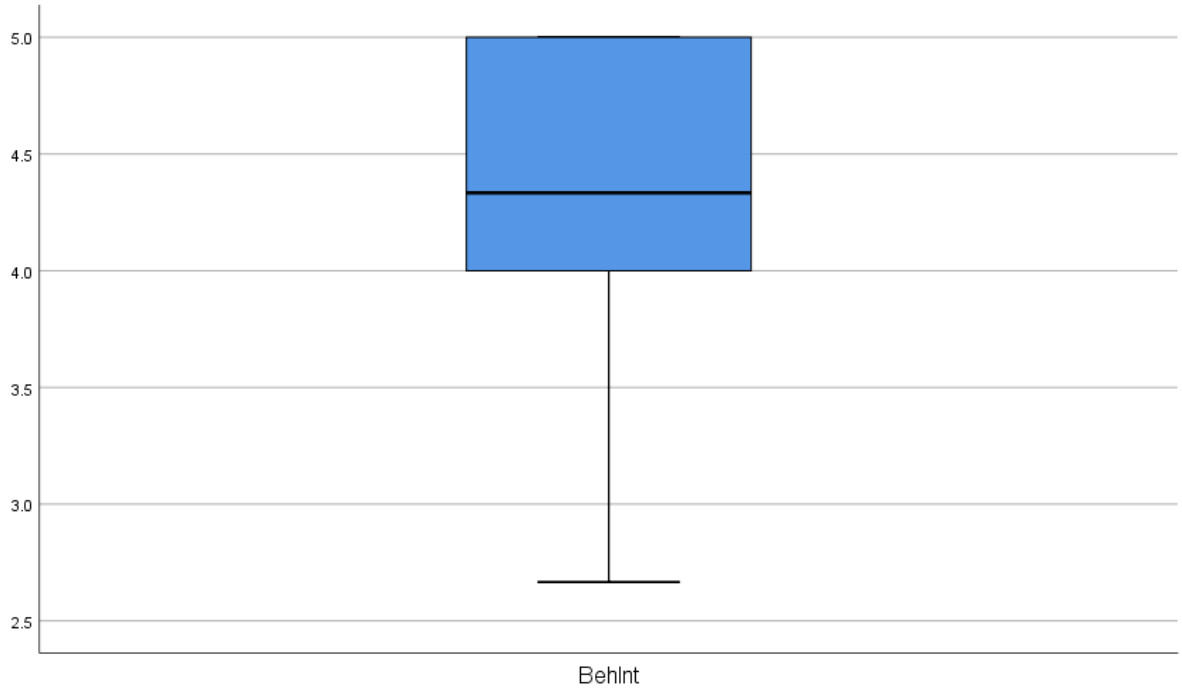
4.5
4.0
3.5
3.0
2.5
2.0
TSE


5.0
4.5
4.0
3.5
3.0
2.5
BehInt