An investigation into the relationship between children's ratings of their

engagement in the classroom and their working alliance with teachers

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Declaration

This work has not previously been accepted in substance for any degree and in not concurrently submitted in candidature for any degree

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This thesis is being submitted in partial fulfillment of the requirements for the degree of DEdPsy.

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Summary

This document contains three parts: a review of the literature relating to the subject area; an empirical review; and a reflective account. First, the literature review examines a selection of the literature relating to the conceptualization and measures of teacher-pupil relationships and also literature relating to the association between these relationships and a number of outcomes including children's behaviour, academic attainment and engagement in the classroom. Secondly, the empirical review comprises a quantitative study carried out with a sample of 110 children and four teachers. It examines a specific construction of the teacher-pupil relationship, the classroom working alliance, investigating whether there is an association between children's and teachers' ratings of alliance and children's ratings of classroom engagement. The study also examines whether children's characteristics, specifically gender, have an effect on teachers' and children's ratings of alliance and/or engagement. Finally, the reflective account provides a more reflexive and personal exploration of the process of the research project. It includes: discussion of the inception of the research question and design; ethical and other issues that arose during the course of the study; possible implications for the practice of educational psychologists; and the contribution to knowledge at the level of personal professional development and also the contribution to the wider literature base.

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Literature Review

Introduction

Whilst parental and early care-giver relationships have been implicated in many areas of child development (e.g. Howe, 2011), there has also been interest in the relationship between children's attainment and the possible mediating role of teacher-pupil relationships. There has been a great deal of research carried out over many years which demonstrates that teachers can have an impact on children's attainment and behaviour. Links to children's attainment and behaviour in school have been found with a number of different variables, from the way classroom rewards are structured (Ames, 1992) to the school culture (Maehr & Midgley, 1996); and also the quality of the teacher-pupil relationship as expressed by such constructs as "relatedness" (Sabol & Pianta, 2013), which has been the focus of significant research activity. Psychologists and others working in the field of education have recommended that work should be directed towards improving the quality of teacher-pupil relationships in order to address poor educational outcomes (e.g. Wahl, 2002; Geddes, 2008), although how improvement might be achieved is less clearly articulated. The following literature review aims to provide both an overview and also critical analysis of the literature related to the conceptualization and measurements of teacher-pupil relationships and their links with behaviour, educational attainment and other life outcomes. The particular emphasis of the review will be a focus on teacher-pupil relationships and children's engagement in the classroom, with the overall aim of formulating appropriate research questions relating to the subject area.

The literature review was carried out after extensive literature searches on several databases (ERIC, PsycArticals, PsychInfo & ScienceDirect), using the various search

term combinations of the terms "student-teacher relationships", "teacher-pupil relationships", "attachment", "student engagement", "engagement", "classroom" and "working alliance", carried out over the period from June 2012-January 2014. The review was generally, with a few exceptions, limited to research involving children in the primary/elementary school setting. This is because the majority of studies in the literature have been carried out with primary age children, in part because of the added complexities involved with the shift from individual class teachers to multiple subject teachers in the secondary school. This review will also concentrate on large school quantitative studies which have utilized standardized and reliable measures and which are therefore replicable. There are of course drawbacks to only including quantitative research in the literature review, in that minority opinions may be overlooked and researchers' constructions of relationships privileged. However as the focus of interest in the research project was related to investigation of correlation a review of the quantitative literature was felt most appropriate (e.g. Bryman, 2012).

Teacher-Pupil Relationships

Researchers have variously considered children's sense of connection to their educational institutions as a whole and, also, to specific social partners such as their parents, peers and staff, in relation to the impact of that connection on a number of outcomes including academic attainment, behaviour and later life outcomes (e.g. Birch & Ladd,1994; Pianta, 1997). Research with children has demonstrated that children hold strong beliefs about their relationships with teachers, and believe that teachers have the power to make a difference to children's lives, often affording these relationships higher levels of efficacy than do teachers themselves (e.g. Johnson, 2008). Educational psychologists in practice are often concerned with

identifying areas that are appropriate for intervention in order to improve outcomes for children and young people, and teacher-pupil relationships have been demonstrated to be a process within which such interventions might be enacted.

Some researchers have suggested that a positive relationship with an adult, "not necessarily a parent" (Sabol & Pianta, 2012, p.213) is the most significant protective factor for children who are vulnerable to significant risk factors and have focussed in on what they see to be the pre-eminent importance of positive teacher-pupil relationships (e.g. Hamre et al., 2001). Work on the nature of relationships between children and teachers has been based on a range of research and theory, emanating from across the social sciences. With differing constructions of what it is that constitutes the teacher-pupil relationship, there are implications in terms of the foci of research, how the relationships are measured and how the findings are interpreted.

Teacher-pupil relationships have been conceptualised in a number of different ways, for example from a Foucauldian power perspective (e.g. Gallagher, 2008) through to interpersonal perspectives that utilise ideas of proximity and influence (e.g. Brekelmans, et al., 2005). Davis (2008), for example, has discussed the contribution of theories of motivation which suggest that children's and teachers' relationships are shaped by a number of factors including: teacher characteristics; their interpersonal skills; and their motivations surrounding their teaching and instructional practices. Theories of attachment, social developmental systems, interpersonal theory and social-motivational models are amongst the most in evidence, with feelings of relatedness and/or emotional support a core concept in many (Sabol & Pianta, 2013). Pianta (1999), widely regarded as one of the leading authorities in this area, places teacher-pupil relationships within the context of the ecologically orientated *developmental systems theory* (e.g. Lerner 1998; Sameroff

1995; Bronfenbrenner & Morris, 1998) arguing that children are "embedded in organized and dynamic systems that include multiple proximal and distal levels of influence" (Pianta & Sabol, 2012, p. 214). These systems include individuals' personal characteristics; the way in which these characteristics are represented in the relationship; and the processes within which information is exchanged between the individual and the relational partner and through which the partners "reciprocally influence each other" (Pianta & Sabol, 2012, p. 214). Attention is also drawn to the more "distal" elements, outside the dyadic paradigm, which have a dynamic two-way effect on relational processes and which occur at all levels from the individual to the community. This model acknowledges that developmental outcomes involve the continual interplay of multiple factors in any number of contexts; and within these, researchers have cited the teacher-pupil relationship as a process that plays a particularly important role in children's development.

A key process for consideration by some researchers, which has been incorporated within the organising structures such as that of the developmental systems theory, is the role of *attachment* (e.g. Buyse et al., 2011; Verschueren & Koomen, 2012). It has been suggested that, particularly when young, school age children develop relationships with their teachers that show similarities to those that they have with primary care-givers. Research has found, for example, that nursery age children use teachers as a secure base and show similar types of separation and reunion activity to that which they would display with their parents (Verschueren & Koomen, 2012). Howes & Ritchie (1999) in a longitudinal study demonstrated that children show four kinds of attachment to their teachers that have parallels with parent-child relationships.

Attachment theory, first posited by John Bowlby (e.g. Bowlby, 1969) and later extended by Mary Ainsworth (e.g. Ainsworth, 1982) and a number of other researchers, has been at the centre of a large body of research and theoretical debate around children's relationships with caregivers. The theory, as part of an etiological explanation of development, suggests that babies have an innate capacity to form an attachment bond with their caregivers, which provides an adaptive function allowing for their survival. Over time this 'bond' develops within an environment of differing levels of parental care and sensitivity and forms the basis for children's internal working models of relationships with other individuals. Differences in parental sensitivity and caregiving have an impact on the type of attachment style that a child develops. Four different attachment styles have been posited; secure, avoidant, anxious and disorganised (e.g. Ainsworth, 1982), and research has found that the infant's attachment type often has an impact on how they relate to their environment and form relationships beyond those with their primary caregivers (e.g. Sroufe, 1983).

Attachment theory has drawn criticism from those who, for example, have cited the importance of innate temperament as a factor that impacts on children's ability to form adaptive relationships (e.g. Kagan, 1984). However there is a large body of empirical research that has provided support for the theory and attachment has remained one of the most dominant and influential theories within child psychology and development studies and has had a significant impact on the practice of professions such as psychology, psychiatry and social work. Attachment theory has formed the basis of the development of therapeutic interventions and practice (e.g. Bakermans-Kranenburg et al., 2003), and in the design of early years policies to support the initial attachment relationships of children e.g. the importance of the key

worker in the Early Years Foundation Stage (Elfer et al., 2012). Despite its predominant focus on the nature of a dyadic interaction (between child and care-giver) it can be seen to fit within the framework, as one of the multiple levels of influence, of the developmental systems theory (e.g. Lerner, 1998; Sameroff, 1983).

There is a body of research that links attachment to parental caregivers to a number of outcomes for children (e.g. Sroufe, 1983; Quinton & Rutter, 1998; Warren et al., 1997). Sroufe (1983) carried out a large scale study which found that children who have insecure attachments to their mothers at the age of 12 months are more likely to be seen displaying more unwanted behaviours than their peers with secure attachments. Longitudinal studies such as that of Quinton and Rutter (1998) have suggested long term adverse effects from poor attachment development, including risk-taking behaviour and more problematic relationships in later life. There have also been links made between adolescent mental health outcomes and early attachment experiences (e.g. Warren et al., 1997). What these studies have also identified however, is the possibility of protective factors that make a difference in terms of outcomes, outside of the person's quality of early attachment relationships. Researchers have investigated the conditions that allow children to succeed notwithstanding a number of early risk factors and much of this investigation has been couched in a 'resilience' framework (e.g. Masten, 2001; Rutter, 2008). Amongst other factors and processes that provide a protective function (including cultural and contextual attributes) research has shown that positive relationships formed later on in life, both in school and in adulthood, provide a protective factor against adverse outcomes.

It has been suggested that teacher-pupil relationships may form one of these protective factors. As discussed, attachment to a parental/main care-giver figure has

been shown to be implicated in later-life outcomes. However importantly for the possibility for intervention, are the indications that younger school age children can develop relationships with their teachers that are similar in some respects to their primary attachment relationships (Toste, 2007). Bergin & Bergin (2009) suggest that attachment has at least "two functions pertinent to classrooms" (Bergin & Bergin, 2009, p.142). These are that attachment functions to give children feelings of security which support them in their learning and their exploration of the learning environment and also "form(s) the basis for socializing children" (Bergin & Bergin, 2009, p.142). They argue that insofar as children and adults "interact harmoniously" (Bergin & Bergin, 2009, p.142), then so do children incorporate adults' behaviour and values into a model for their own. This conception of attachment relationships in the classroom fits with social theories of learning (e.g. Bandura, 1977). Other researchers however, do not posit or identify a complete attachment relationship between teachers and children as with parents and children but suggest that, as the relationship is not exclusive or in most cases long lasting, teachers can be considered as "ad hoc" attachment figures (Verschueren & Koomen, 2012).

Parental attachment has been found to be moderately correlated with teacher-pupil relationships (e.g. Howes, 1992; Buyse et al., 2011) with children's prior formation of internal models of relationships with their main caregivers shaping their subsequent interactions with teachers. However as the correlation has only been found to be of moderate strength researchers have suggested that there are other variables that influence the association (Sabol & Pianta, 2013). One possibility that has been investigated by researchers is that certain teacher characteristics may have a moderating effect on children's internal working models of relationships that were previously developed with parent relationships (Sabol & Pianta, 2013). Within

theories of attachment, parental sensitivity to children's needs is implicated in the growth of secure child-adult relationships. There are a number of studies that point to the importance of teacher characteristics in this context. Buyse et al. (2011), for example, found that teacher sensitivity may moderate the effect of parental-child attachment types. Where teacher sensitivity was low, it was found that maternal attachment quality predicted the quality of teacher-pupil relationships; however where teacher sensitivity was high there was no difference found in the quality of teacher-pupil relationships between children with insecure or secure maternal attachments. A recent meta-analysis of 199 studies carried out by Cornelius-White and colleagues (2007) found associations between teacher gender and outcomes for children and young people.

Child characteristics have also been shown to have an impact on the teacher-pupil relationship. Studies have shown that children who are more able in the classroom are likely to receive positive attention from teachers, and experience more sensitive relationships (Pianta et al., 2002).

In addition to theories about the link between teacher characteristics and teacher-pupil relationships, it has been hypothesised that the quality of teacher-pupil relationships has a predictive role in a number of outcomes for children and there is a growing body of research to support this view. It has been found that a good relationship with a teacher can act as a "developmental asset" (Sabol & Pianta, 2012, p. 218) for children and that those who have more positive relationships with their teachers are more likely to perform well academically, have more developed social skills and show fewer adverse externalising behaviours (e.g. Burchinal, 2002; Denham et al. 1997; Ladd & Burgess, 2001). A paper by Burchinal and colleagues (2002) discussed findings, from a study of 511 children, that a closer relationship

with a teacher was positively related to the development of reading skills for children whose parents had rated themselves as having more authoritarian approaches. They argue that the data provide "evidence that social processes in classrooms are important for academic competence for children considered at risk for academic problems" (Burchinal et al., 2002, p.415).

There are, of course, complexities in carrying out research across the educational life-span because of the changing nature of teacher-child interactions, with children typically spending most of their time with one staff member a year in the primary years and moving between a number of subject teachers at secondary. Despite this issue researchers have found associations between the quality of teacher-pupil relationships and aspects of children's social and behavioural abilities across the age span, with some studies suggesting that there may even be an increase in the relative importance of teacher-pupil relationships in secondary school as related to academic achievement (e.g. Roorda et al,. 2011).

Teacher-pupil relationships and behavioural outcomes.

Findings from studies in early childhood suggest that relational difficulties recorded at an early age are significant predictors of difficulties throughout children's schooling. Pianta (1994) found, for example, in a study involving 436 kindergarten children and their teachers, that teacher ratings of negative relationships with their pupils predicted later behavioural and social difficulties. Birch and Ladd (1997) in another large-scale study found that the same measures of teacher-pupil relationships predicted levels of school attendance and co-operative behaviour in the classroom. Even in later childhood and adolescence where students are less likely to see the same teacher throughout the day there have been found to be improved outcomes for those children who seem to have good relationships with staff.

Resnick et al. (1997), for example, from analysis of data from the large-scale *National Longitudinal Study of Adolescent Health* determined that high school students who reported greater connectedness to teachers displayed reduced levels of emotional distress, suicidal thoughts and behaviour, violence, substance abuse and risky sexual behaviour. They found overall that students' perceptions of strong connectedness to teachers were protective against almost every risk behaviour associated with health outcomes (Resnick et al.,1997).

Researchers have found that children who show early adverse externalising behaviours are more likely to engage in anti-social behaviour, perform poorly at school and are at greater risk for later negative life outcomes such as unemployment and engagement in risky behaviour (e.g. Carneiro et al., 2011; Feinstein, 2000; Feinstein & Duckworth, 2006). Consequently there has been an increasing emphasis on early intervention to foster improved later life outcomes for children, including targeted and whole school emotional literacy programmes such as PATHS (Kusche & Greenberg, 1993). It has further been argued that behavioural difficulties and poor teacher relationships are a result of a transactional cycle where behavioural difficulties, particularly those that are externalised, create conflict between teacher and child which may in turn maintain or exacerbate the child's adverse behaviours (Sabol & Pianta, 2012).

However, it is not always the case that children who show adverse behaviour form less positive relationships with teachers. Whilst higher levels of conflict with teachers are reported for children who show higher levels of behavioural difficulties it has been found that some children showing such behaviours form positive relationships with their teachers (e.g. Myers & Pianta, 2008). Children's relationships with teachers may be particularly important for those who exhibit early

behaviour difficulties, with research suggesting that positive relationships between children and their teachers may compensate somewhat for the risk factors related to such early difficulties. Researchers have identified positive relationships between teachers and children as seeming to reduce the harmful effects of risk factors and leading to successful development for children with behavioural difficulties (e.g. Baker, 2006; Ladd & Burgess, 2001; Meehan et al., 2003).

In one example, fourth grade children who showed highly aggressive behaviours who had developed more supportive relationships with their teachers were more likely to be liked by their class mates than children with relatively poorer teacher-pupil relationships (Hughes, et al., 2001). In a study examining children at risk, Pianta, Steinberg, & Rollins (1995) looked at children who in nursery school, had been screened as being at high risk for being referred to special education settings or held back a year because of early behaviour or learning difficulties. They found that, despite earlier predictions, those children who had more "warm, close, communicative relationships" (Pianta et al., 1995, p. 295) with their teachers were less likely to be kept back a year or moved to a different setting. Teacher-pupil relationships have also been implicated in improvements in peer relationships. Studies have found that children who show higher levels of problematic behaviours, but who have more positive relationships with their teachers, are more likely to have positive relationships with their peers than those with similar levels of behaviour difficulties but more negative relationships with their teachers (e.g. Ladd et al., 1999). High quality teacher-pupil relations have also been found to have a relationship with socio-emotional development and reduce adverse behaviours in children with learning difficulties (e.g. Murray & Greenberg, 2001; Pianta et al., 1995). Murray & Greenberg (2001) found that, despite children with learning

difficulties reporting relatively poorer relationships with their teachers than those without recorded learning difficulties, the outcomes of correlational analyses indicated that the quality of teacher-pupil relationships was associated with "social and emotional adjustment variables for children both with and without disabilities" (Murray & Greenberg, 2001, p.25).

The majority of these studies (e.g, Ladd & Burgess, 2001 & Pianta et al., 1995) have measured teacher perceptions of relationships. It seems probable that gaining children's perceptions might also be important as research has shown that teacher and child ratings can differ. A study carried out amongst third grade children, who were rated as being relatively more aggressive than their peers, found that both groups' ratings of relationship quality significantly predicted later teacher ratings of aggression, with the children's ratings found to be more strongly predictive than those of the teachers (Hughes et al., 2001).

Teacher-pupil relationships and academic outcomes.

As well as outcomes in terms of behaviour and peer relationships there is some evidence to suggest that teacher-pupil relationships have an effect on children's academic attainment. Researchers have found links between children's 'liking' of the teacher, their attainment and their level of motivation and persistence in the classroom (e.g. Montalvo et al., 2007).

Some researchers have found that high quality relationships directly protect against poor academic attainment (e.g. Hughes, 2006). Hamre and Pianta (2001), utilizing the *Student Teacher Relationship Scale* (STRS) as a measure of teacher-pupil relationships, in their longitudinal study of children from nursery age to the 8th grade, found that nursery school teachers' ratings of their relationship with children predicted children's academic attainment and learning behaviour throughout primary

school. Birch and Ladd (1997), carrying out research with a sample of 260 nursery age children found, again using the STRS as the main measure, that teachers' perceptions of the level of conflict within the relationship had a positive association with children's school avoidance, and a negative association with children's liking of school, cooperation and self-directedness in learning.

There has even been a suggestion that positive teacher-pupil relationships are more important for future academic success than child-parent relationships. Gregory & Weinstein (2004) found connectedness to teachers to be a stronger predictor of academic achievement in mathematics in adolescents than their feelings of connectedness to their family, suggesting a key role for teachers in outcomes for children. Evidence has also been found that children with high levels of externalizing problems but high quality relationships with their teachers achieve higher academic scores, for example in reading (e.g. Baker & Morlock, 2006). The effects of a positive teacher-pupil relationship are still felt at an older age, despite the overall reduction in teacher-pupil relationship quality over time. Roeser and colleagues (1996) for example, in a study of young adolescents in middle school who rated their relationships with teachers as supported were more likely to be focused on academic goals and attain higher end of year marks in assessment.

The majority of research in the UK context has centered around the link between children's attainment and their emotional wellbeing and levels of school satisfaction (e.g. Gutman & Vorhaus, 2012), one component of which often includes their school relationships including those with their teachers, rather than focusing solely on the teacher-child relationship.

Again, as the majority of research has concentrated on teachers' perceptions of the relationship there are indications that it is important to gain more understanding

of children's perceptions of relationships as there is often variance in teacher and child reports (Wentzel, 2009; Toste, 2011). In a small scale study examining teachers' and children's ratings of their relationships, using the STRS and the Survey of Children's Social Support, Rey and colleagues (2007) found, for example, that among a sample of 89 children, both child and teacher ratings of relationships independently predicted outcomes in terms of school adjustment and classroom behaviour. In addition the researchers found that children's ratings of the relationship predicted academic outcomes over and above teachers' ratings of relationships.

Teacher-pupil relationships and engagement in learning.

Whilst the research discussed above has been concerned with the tentative link between academic achievement and teacher-pupil relationships, there is also a body of research that has examined children's thoughts and beliefs about their classroom experience. Engagement has been posited to be the process by which children achieve academic success. It has been argued that feelings of social relatedness are related to the taking up of goals espoused by social groups or institutions, whereas disaffection can lead to a rebuttal of such goals (Wentzel & Wigfield, 2009). Student engagement questionnaires have been used to demonstrate that children's engagement in the classroom is positively predictive of children's achievement and negatively predictive of the likelihood of their dropping out of school (e.g. Connell et al., 1994; Skinner et al., 1990; Fredricks et al., 2004).

There has been an increasing interest in research into engagement particularly as there is a growing understanding of the relationship between classroom engagement and outcomes such as attainment and school attendance. It has been found that children's beliefs about, and attitudes to, their experiences in the classroom may be

more robust predictors of school-related outcomes (Toste, 2012). Engagement predicts children's academic attainment in assessment in the short term and over the longer term predicts patterns of school completion, academic resilience, and retention and school attendance. There is also some evidence to suggest that engagement in academic activities provides a degree of protection against adverse behaviours including delinquency, risky sexual behaviour and drug and alcohol abuse (Furrer & Skinner, 2003). Research has shown that children's motivation and engagement in school decreases continuously from the early years at school until they leave education (Wigfield et al., 2006) and the drop-off in levels of engagement is particularly significant for boys from lower socio-economic and ethnic minority demographics (e.g. Wigfield et al., 2006; Wooley & Bowen, 2007). Studies in the US have demonstrated that patterns of educational disengagement begin as early as in the third grade which is the equivalent of Year 4 in the UK (Rossi & Montgomery, 1994).

It is argued that children's engagement in school supports their performance and "validates positive expectations about academic abilities" (Furrer & Skinner, 2003, p.149). Engagement is also significant for teachers in that it can be a visible gauge of children's underlying motivation in the classroom (Reeve et al., 2004). Even controlling for socio-economic background, which is a predictor of academic attainment (e.g. Sirin, 2005), researchers have found that engagement predicts achievement (e.g. Connell et al., 1994; Finn & Rock, 1997). It is argued that measuring and assessing levels of engagement is a way of targeting those children and young people who are at risk of disengagement, low achievement and dropping out of education (Fredrick et al., 2011). The link between teacher-pupil relationships and engagement has been shown to be valid across a range of age groups in school

(e.g. Roorda, 2011). Research has shown that in the primary school setting children's ratings of their relationships with teacher are predictive of their levels of school motivation and adjustment (e.g. Ryan et al., 1994), and relationships characterized by high expectations predictive of students' goals and interests in early adolescents (e.g. Wentzel, 2002). The quality of teacher-child relationships have also been implicated in children's school readiness skills, Williford and colleagues (2013) finding, for example in a large-scale study that observers' ratings of teachers' interactions with individuals were associated with gains in children's school readiness. The evidence for a decrease in the importance of the teacher-pupil relationships over time is mixed (Roorda et al., 2013), with some studies finding that although engagement and relationship quality decreases over time (e.g. McDermott et al., 2001), that high quality teacher-student relationships have a stronger effect in the secondary setting (Roorda et al., 2013) i.e. that although teacher-student relationships have a smaller impact for older children overall, where the relationships are strongest they have a more pronounced effect. Wentzel (1997) reported that adolescent students' ratings of teacher caring predicted (even when controlling for student's feelings of psychological difficulties, beliefs about their own self-efficacy and previous levels of motivation and attainment) motivation outcomes. A meta-analysis of the affective qualities of student-teacher relationships and children and adolescents' engagement and achievement was carried out by Roorda and colleagues (2009). It found that for engagement, there was a moderate to strong association with both positive and negative relationships. It also found that effects of negative relationships were stronger in the primary than in the secondary setting.

Engagement has also been shown to be promoted within positive high quality teacher-pupil relationships. It has been suggested that children will engage in

behaviour that will aid their cognitive development and willingness to engage

actively in classroom tasks, "active enthusiastic effortful participation" (Skinner et

al., 2008, p.3), in an environment of high expectations when they feel supported by

their teachers (Toste, 2007; Wang et al., 1994). Evidence has been found to support

these proposals, with research data indicating that good relationships between

children and teachers are related to attributes that support academic success,

including positive feelings about school and also a positive disposition to engage in

classroom activities (e.g., Birch & Ladd, 1998; Pianta & Steinberg, 1992; Toste,

2007). It is likely that the relationship between positive teacher-child relationships

and engagement is reciprocal and that relationships can take the form of a feedback

loop. Research has supported this supposition: Skinner and Belmont (1993) found

that the more involved teachers were with children, the more likely the children were

to be engaged in classroom activities which led, in turn, to increased levels of teacher

involvement. Hamre and colleagues (2003) have argued that the reciprocal nature of

the relationship confers an advantage on children which allows them to "grow

exponentially" in the classroom environment. Conversely it is likely that children

who start in a negative teacher-pupil relationship are more likely to become

disengaged and experience an even more challenging relationship, leaving them at a

significant disadvantage, suggesting the need for the formulation of effective

interventions in this area

In another large scale study, involving a sample of nearly two thousand primary

school children Klem & Connell (2004) found that children who experience their

teachers as being more supportive were significantly more likely to report a feeling

of engagement in the classroom and higher teacher ratings of engagement. Similarly

Hughes et al. (2008) found in an examination of the relationships in a sample of 671

children, an association between teacher-pupil relationship quality, effortful engagement and academic achievement, explaining that these factors all formed part of a "dynamic system of influences" (Hughes et al., 2008, p.1) such that intervention at any point in these relationships might modify children's school experiences. Skinner et al. (1998) in a longitudinal study of 1300 children carried out over three years found that children who experienced their teachers as warm and connected were more likely to develop higher profiles of control, their beliefs supporting more active engagement in the classroom and thus higher levels of academic attainment. They also found that, conversely, those who rated their teachers as unsupportive were more likely to develop a belief system that privileged external causation, predicting increased disaffection in the classroom and thus lower levels of academic attainment. Furrer and Skinner, in their 2003 study, working with a sample of 641 children, found that those children who reported poorer quality relationships with teachers and other relational partners including their peers and parents, through measures of 'relatedness' showed lower levels of engagement. They found that girls reported higher levels of relatedness than boys but that the most significant predictor for boys was their relationship with their teacher.

   Some of the research around teacher-pupil relationships and engagement/ motivation has been framed and examined in terms of instructional styles, with researchers finding that specific teacher characteristics are predictive of children's engagement in the classroom. Skinner & Belmont (1993) for example in a study of the effect of teaching behaviour on children's engagement through a school year found a significant relationship between teachers' levels of classroom structure and guidance and children's engagement in classroom activities. Recent meta-analyses

(Allen et al., 2004 & Witt et al., 2006) found that there are associations between the immediacy of teachers' communication styles and children's achievement.

The weight of research evidence suggests that those children whose relationships with their teachers are rated as positive are more likely to have higher levels of engagement in the classroom and thus become more academically successful. As can be seen, engagement has been a focus of interest as it offers an area of functioning that may be susceptible to intervention, as "a potentially malleable proximal influence shaping children's academic retention, achievement, and resilience" (Skinner et al., 2008, p.2). One of the key concerns about the use of engagement as a focus for research and intervention is that, as with many constructs, it can reflect different conceptual definitions. This notwithstanding, the majority of authors agree that engagement at some level "captures the quality of students' participation with learning activities in the classroom, ranging from energized, enthusiastic, focused, emotionally positive interactions with academic tasks to apathetic withdrawal" and focusses on a person's behavioural intensity and emotional engagement in a task (Skinner et al. 2008, p.2). This purposeful motivated interaction with the learning environment is of interest to researchers as it is directly related to the child's active participation in his or her own learning and this is directly related to successful learning experiences.

Within much of the theorizing about engagement is the idea that motivation does not reflect a child's fixed characteristics; rather, it comes about as a result of the interplay of a number of, often changing, internal and external factors. Engagement has been conceptualized within the self-system process model (see Figure 1 for a simplified diagrammatical representation) developed by Connell and colleagues (e.g. Connell & Wellborn, 1994). The model of motivation describes the relationships

between a person's experience of the social context, the processes within their self-systems and "their patterns of action and actual outcomes" (Klem & Connell, 2004, p. 261).
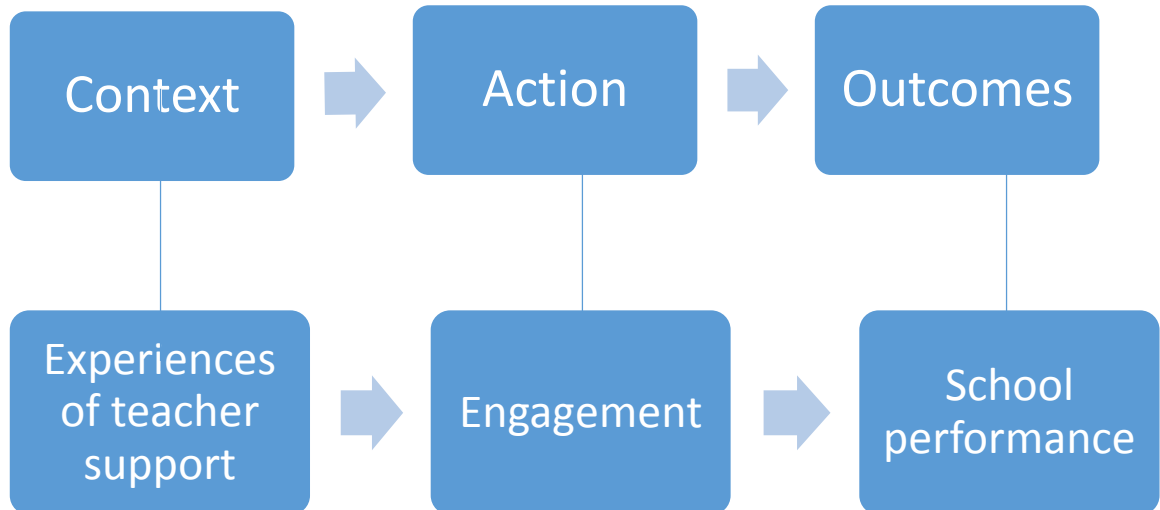
Figure 1: Simplified self-system model (after Klem & Connell, 2004).

Connell's motivational conceptualization has two underlying assumptions; first the theory that engagement incorporates behavioural and emotional participation in the classroom environment, and secondly that the concept of engagement necessitates a "conceptualization of its opposite", which is termed *disaffection* (Skinner et al., 2008, p.3). They argue engagement can be plotted on a continuum with 'disaffection' and 'engagement' at either ends of the scale (Connell, 1994; Connell & Wellborn, 1991). Students who show high levels of engagement demonstrate both behavioural and emotional engagement in their learning whilst disaffected students show low levels of behavioural and emotional engagement and tend to be less resilient and persistent in their learning, more often showing emotions such as boredom and anger

(Connell & Wellborn, 1994). The theory presents an explanation of children and young people's motivation (Connell, 1990; Connell & Wellborn, 1994; Skinner, 1991; Skinner et al., 2009) that incorporates the constructs of engagement (versus disaffection) as important elements of motivated action that result in successful learning outcomes and achievement in education. In this conceptualization of engagement the authors do not presume that children know what it is that motivates them but rather that children know whether they are motivated or not, stating that children are "excellent reporters of their own engagement and disaffection" (Skinner et al., 2008, p.4). They also argue that whilst teachers can be good raters of children's levels of motivation as they interact closely with their pupils and children's motivation is a key focus for teachers, precise assessment can be difficult when children try to hide their disengagement and disaffection by concealing their negative emotions or in behaving in a compliant, rather than authentically engaged way (Skinner et al., 2008).

Measuring engagement in the classroom.

Researchers have measured engagement in two main ways, first in assessing a person's involvement in attempting to take responsibility for their behaviour and secondly through measuring a person's active engagement in a task in terms of positive emotion or effort (Reeve et al., 2004). Those that have examined the first conceptualization have looked at the way "engaged people express their voice and take initiative in trying to produce changes in their environment" (Reeve et al, 2004, p. 148). This construct of engagement whilst applicable in many settings seems less suitable for the classroom environment where there are often limited or more constrained opportunities for children to express their voice or produce changes in their environment. A construction that appears more suited to and applicable in the

classroom environment is that (e.g. Connell et al., 1995; Connell & Wellborn, 1994; Furrer & Skinner, 2003) which expresses engagement as being someone being actively involved in a task through their interest, persistence and focus. "In school settings, engagement is important because it functions as a behavioural pathway by which students' motivational processes contribute to their subsequent learning and development" (Furrer & Skinner, 2003, p.149).

There are a number of different sets of measures of engagement, the majority of which rely upon children's self-reports, including those specifically related to certain academic subjects e.g. *Attitudes Towards Mathematics Survey* (Miller et al., 1996); those that measure students' engagement in the wider school environment e.g. *The School Engagement Measure* (Fredricks, 2005), *Student Engagement Instrument* (Appleton et al., 2006); and those that focus on students' motivation foci and use of learning strategies e.g. *Motivated Strategies for Learning Questionnaire* (Pintrich et al., 1993). In a recent analysis of the measures available, Fredrick and colleagues found 21 measures of engagement currently in use (Fredrick et al., 2011).

In terms of broader measures of children's engagement, Skinner and colleagues developed a set of measures based around the theoretical framework as expressed by Wellborn et al. to measure ratings of engagement and disaffection. The *Engagement versus Disaffection with Learning* measures were developed by Dr Ellen Skinner and colleagues based on original engagement items developed by the University of Rochester as part of a larger assessment package (Wellborn & Connell, 1987; Wellborn, 1991). It has been used over a range of studies with children between the ages of 8-12 (Fredricks et al., 2011). The measures comprise a child self-report, a teacher self-report and for a smaller sample of children, observations in the classroom. Instruments are formulated on the assumption that the construct of

'engagement versus disaffection' in the classroom environment extends from "enthusiastic, effortful, emotionally positive interactions with learning activities to apathetic withdrawal and frustrated alienation" (Skinner et al., 2008, p.2). The measures include both positive demonstrations of behavioural and emotional participation in the classroom environment and also negative aspects including withdrawing of behavioural and emotional participation and estrangement from learning. In terms of reliability it has been reported that the measures are internally consistent and evidence has been found through the use of different methodologies for construct validity for the self-reports (Skinner et al., 2008). A confirmatory factor analysis found "that a four-factor model (distinguishing behavioural engagement, behavioural disaffection, emotional engagement, and emotional disaffection) was the best fit for both student and teacher report data" (Fredricks et al., 2011, p29). The measures have been used in peer reviewed research that explores: the multidimensional nature of engagement (Skinner & Kinderman, 2008); how engagement changes over time and what are the predictive factors of engagement (Skinner et al., 2008); and the relationship between sense of relatedness and engagement (e.g. Furrer & Skinner, 2003).

Working alliance: A new way of looking at teacher-pupil relationships?

One of the weaknesses of research into teacher-pupil relationships is the large number of measures utilised by researchers, the format of which has very much depended on how these relationships are conceptualised. It has been argued that within the literature there is a lack of independent measures of the quality of teacher-pupil relationships, as much of the research has utilised "ad hoc scales" taken from sub-dimensions of wider measures of social support (Toste, 2007). The most commonly used independent scale is that of the previously mentioned STRS (Pianta,

2001) which is based on teachers' perceptions of their conflict, closeness and dependency with each pupil. The tool measures the relationships solely from the teachers' point of view and can be used with children between the ages of 3 and 12 years old. The measures comprise a 28-item scale, within which participants rate each item on a 5-point Likert scale. Overall the STRS has shown good evidence of high internal consistency and good predictive validity and reliability (Pianta, 2001). The measures have been used in a wide range of research ranging from such diverse subjects as teacher-child relationship quality and maths and reading achievement of Chinese American children in immigrant families (Ly et al., 2012) to shyness, teacher-child relationships, and socio-emotional adjustment in school (Arbeau et al. 2010).

One of the criticisms of the measurements is that the majority, including the STRS, are related to a conceptualisation of the relationship that it is based upon absence or presence of conflict and upon feelings of closeness and dependency. The greater body of research around teacher-pupil relationships has focused on the role of teacher-pupil bond in children's behaviour and in their social and emotional functioning (Wentzel & Wigfield, 2009) whilst conceptualizing the teacher-pupil relationship as consisting of varying levels of connectedness, trust, liking and conflict. It has been suggested that the teacher-pupil relationship should be considered in broader terms, to incorporate some aspects related to the work that is undertaken in the classroom and it has also been argued that the 'liking' conceptualisation of the relationship is not conducive to intervention as it is difficult for teachers to know how to go about increasing their feelings of warmth towards a child (e.g. Toste, 2007). Interventions that have been formulated to train teachers from a relational perspective exist, but tend to be time-consuming and involve

intensive one to one time with target children (e.g. *Banking Time,* Pianta & Hamre, 2001)- something that is not likely to be a possibility for a teacher working with a whole class.

Another criticism has been that the vast majority of the measures, including the STRS, rely solely on teachers' perceptions of the teacher-pupil relationships and assess only certain aspects of relationships within a classroom context (Toste, 2007; Wentzel & Wigfield, 2009). "Missing from this literature is description of the same child-teacher relationship from its two participants" (Pianta et al. 2003, p.218). Of most significance is the research that has shown a lack of concordance between teacher and child ratings of the quality of their relationships (Wentzel & Wigfield, 2009) and teachers have been shown to rate boys and girls and ethnic minority and majority children differently on aspects of relationships relating to warmth and closeness (Birch & Ladd, 1998; Hamre & Pianta, 2001). Pianta & Hamre argue that "using any one source of information about relationships almost always results in an indirect and incomplete assessment" (Pianta & Hamre, 2003, p. 55). The latter recommend the use of measures of teacher-pupil relationships in conjunction with other assessment including observations and qualitative methods. Ascertaining and collecting children's perceptions is clearly a neglected information source and utilising both teacher and student perceptions may be a good way of triangulating data.

Using the concept of working alliance to explore teacher-pupil relationships has been promoted as a possible solution to the above discussed weaknesses in measuring the quality of teacher-pupil relationships (e.g. Toste, 2007 & Toste et al., 2012), in that it contains a number of constructs that more accurately reflect a relationship that is not only based on connectedness but is one within which

purposeful activity takes place. Alliance has been an important concept in therapeutic work, particularly from the psychodynamic tradition, and there is a strong argument, grounded in a large body of research, that alliance is the most important element in providing good outcomes for service users (e.g. Elvin & Green, 2008). The various constructions of the 'therapeutic alliance' generally refer to the collaborative aspect of the relationship between therapist and client(s) in therapeutic relationships. Elvin and Green (2008) have traced the development of the alliance construct from early Freudian concepts of transference between therapist and patient. The research literature has suggested that engagement and therapist credibility are predictors of positive treatment outcomes (Elvin & Green, 2008).

Bordin (1979) conceptualised therapeutic alliance to include three constituent parts and his construction is still actively utilized in both practice and research settings (Elvin & Green, 2008). Bordin's three parts of alliance include: the therapist and client agreement on goals of treatment; agreement on the tasks involved in reaching the change goals; and the personal, emotional bond between client and practitioner. There is however no single, agreed construction of what the therapeutic alliance 'looks like'. Hougaard's (1994) bipartite conceptual structure is another development of the model that is commonly cited in the literature. His model puts forward therapeutic alliance as comprising two specific components, first the 'personal alliance' which is related to the relationship between the therapist and their client and secondly the 'task alliance' which is made up of the 'contractual' bond based on a shared understanding of the tasks and goals necessary to enact change. However despite the existence of this model, Bordin's conceptualisation more regularly appears in the research literature.

There have been a number of research projects that have found a correlation between therapeutic alliance and treatment outcome, generally in adult clinical populations (Martin et al., 2000). Two meta-analyses of the research relating to therapeutic alliance conclude a link between alliance and outcome (Horvath & Symonds, 1999; Martin et al., 2000). There is evidence to suggest that the alliance is similarly correlated with outcome for young people in therapy, as with adults (Green, 2006).

A meta-analysis of alliance-outcome associations in individual therapy found that alliance was associated with outcome for both children and adolescents (Shirk et al., 2011). The outcome-alliance association was found to be stronger in therapy with children rather than adolescents, which maps on to the extant findings about the diminishing importance of teacher-pupil relationships as children grown older. However in view of the previously mentioned research (e.g. Roorda et al. 2013),that suggests a stronger effect where teacher-student relationships are of **high quality**, despite the seeming diminishing importance of these relationships to students overall, further research in the secondary school to examine more closely this apparent contradiction would seem desirable. The larger body of literature focuses on the predictive strength of working alliance in treatment outcomes. However there are a few studies that examine the efficacy of interventions to improve working alliance and these have shown positive results for the impact of interventions. The majority of these studies have focussed on the effects of 'role induction', a process whereby patients take part in a session pre-treatment to set expectations, which is shown to result in significantly higher treatment compliance (e.g. Craggier & Ross, 1980; Katz et al., 2007).

There are a number of measures of therapeutic alliance in existence. *The Working Alliance Inventory (WAI)* has been shown to be a reliable measure of alliance and is the most commonly used measure, which has shown evidence of high internal consistency and good construct validity (Horvath & Greenberg, 1989; Tichenor, 1989; Ardito & Rabellino, 2011). It comprises three subscales that measure the components of alliance that are central to the definition proposed above: bond, task and goal. While other scales have been developed to represent the differing theoretical constructs of various schools of psychotherapy, the Working Alliance Inventory was developed as a 'pantheoretical' measure.

Because of its currency in therapeutic work and the nature of the teacher-pupil relationship as a space in which change is enacted within relational terms, psychologists have transferred the concept of working alliance into education to examine the possibilities for strengthening teacher-pupil relationships to improve outcomes for children. Wahl (2002), for example, makes a plea for a focus on working alliance within the school, arguing that whilst there has been a professional emphasis on specific techniques for working with children, not enough attention has been paid to the quality of relationships outside of the research setting. Heather Geddes is another researcher-practitioner who has been influential in this area. Her book *Attachment in the Classroom* (2005) makes much of the potential for teacher-pupil relationships to support children with a poor attachment relationship to their school arguing that the classroom "can be the educational secure base" with the teacher having an important role "supporting uncertainty, resolving confusion and providing safety." Geddes talks about the importance of the "task" (which is an important aspect of the working alliance construct) as a process through which a teacher's sensitivity to a child's needs is enacted and through which a sense of self-

worth and efficacy can be inculcated. "The task, in a school situation, can act as the moderating influence". (Geddes, 2005)

Teachers are often encouraged to attend to the quality of their relationships with children (e.g. Wentzel, 1997); how teachers can be best supported to enhance the quality of their relationships has become a focus for activity. Toste (2003) argues that "…there is a clear indication that the construct of working alliance may [incorporate] some of the features necessary to develop positive classroom relationships" (Toste, 2007, p.31). There is however a dearth of measures that capture the three elements of working alliance in the classroom, which has in part been responsible for the lack of discussion about how actually to go about strengthening working alliance in the classroom. As a response to these concerns Toste has developed an independent set of measures that capture the quality of relationships from both the teacher and student perspective which "broaden(s) the definition currently employed in the literature to consider variables unique to a classroom working relationship" (Toste, 2007, p.37). The Classroom Working Alliance Inventory measures (Toste, 2007) are designed to tap into all three elements of the working alliance from both the teacher and the child perspective. The CWAI (Toste, 2007) is an adapted version of the WAI which, as discussed above, is one of the most widely used of the therapeutic working alliance measures. Toste argues that the WAI is particularly suitable for adaptation because of its pantheoretical basis, allowing the measurement and comparison of alliance across theoretical backgrounds (Toste, 2007). Toste argues that this makes the measures particularly suitable for adaptation for the teacher-child relationship. Toste has also argued its suitability for the classroom environment as it is designed to capture the perceptions

of both participants in the relationships and also "captures something unique to the working relationship" (Toste, 2007, p.31).

The CWAI (Toste, 2007) is a 12-item questionnaire which assesses the teacher-pupil relationship using a 5-point Likert-type scale and is unique in capturing the child as well as teacher perception of the relationship. Parallel teacher and pupil forms measure both perceptions of the relationship. The *Bond* subscale captures the "respect, liking, and trust" between the teacher and their pupil. The *Task* subscale focuses on the "agreement and understanding of task relevance within the classroom setting". The *Goal* subscale measures the extent to which the teacher and pupil feel that they are "collaborating on the goals set within the classroom" (Toste et al., 2012, p.6).

The CWAI (Toste, 2007) has not yet been widely utilised, because of its relatively recent formulation, however early research undertaken in the US has found that the questionnaire has moderate levels of internal consistency across the subscales and also found evidence of the validity of the constructs of both the teacher and pupil scales (e.g. Toste, 2007; Heath et al., 2007 and Toste et al., 2011). Thus far the CWAI (Toste, 2007) has been used to examine the relationship between perceptions of teacher-pupil alliance and levels of school satisfaction, school performance and differences in ratings of alliance between children with and without disabilities (Toste, 2007 and Toste et al. 2012). The research found that children's ratings of alliance were predictive of their own and their teachers' ratings of children's school performance, but teachers' ratings of alliance only predicted teachers' ratings of school performance (Toste, 2007) supporting the need to collect children's own ratings of their relationships, not just those of teachers. Moderate correlations between teacher and child ratings of alliance were found, suggesting that both have

similar perceptions of their relationship. A further study focussed on the possible relationship between classroom working alliance and children's ratings of school satisfaction. The research showed that both children's and teachers' ratings of alliance predicting children's ratings of school satisfaction, with children's ratings of alliance the stronger predictor, the latter again highlighting the need to collect children's own perceptions of the relationship.

In a further study that examined levels of classroom working alliance for children with and without disabilities, the researchers found that teachers rated lower levels of alliance with children who had disabilities. It was also found that high levels of working alliance as rated by children and by teachers predicted school satisfaction and positive social and behavioural outcomes for all children, with and without disabilities (Toste et al., 2012).

The research carried out to date, whilst limited, demonstrates the possible utility of the concept of classroom working alliance in investigating the qualities of, and potential impact, of teacher-pupil relationships. The classroom working alliance concept also offers "an orientation towards positive psychology challeng[ing] us to consider markers of positive adjustment rather than diagnoses of problems, and to engage in preventative rather than reactive models of school services" (Toste, 2007, p.96). This clearly should be of interest to educational psychologists working in ways that move from deficit models in education. There is potential in utilising the CWAI measures (Toste, 2007); because of the dual nature of the rating measures that reflect the bidirectional pupil-teacher relationship, and also because of the expansion of the concept of teacher-pupil relationships to include constructs, which have been proved to be of use in the context of the therapeutic relationship. As a measure of

teacher-pupil relationships it is conceptually richer than those most commonly used and it provides the possibility of increased scope for intervention in practice.

Conclusion

As can be seen from the review of the literature related to teacher-pupil relationships and life outcomes, there are a large number of approaches and foci for theorists and researchers. Children's engagement and their relationship with their teachers are key elements in their academic success. Engagement has been found to predict children's long-term academic achievement (Skinner et al., 1998) and the length of time they remain in education (Connell et al., 1994). Children who show qualities of perseverance, who are able and willing concentrate on learning activities and who show compliant behaviour in school are relatively more able to succeed academically. It is clear from the literature that teacher-pupil relationships also play a significant part in making the difference in terms of children's success in education, and the quality of these relationships has been shown to be related to a number of outcomes, not least their engagement in the classroom. Efforts to understand the processes that underlie the effects of these relationships should be an important area of research as findings may lead to formulations of effective interventions, possibly related to teacher training. "Teachers have opportunities throughout the school day to help change the nature and quality of their relationships" (Hamre & Pianta, 2006, p.56). As researchers and practitioners, this area of focus should be of particular interest to educational psychologists, particularly in relation to the possibilities for opportunity for effective intervention in the educational setting.

In terms of further research, the construct of classroom working alliance has potential to extend our understanding of how teacher-pupil relationships are

operationalized in the classroom, and which, if any, elements of the relationship are particularly appropriate to be targeted for intervention. In terms of outcomes for children in both the long and the short term, engagement in school is an important factor in that it predicts educational attainment and other life outcomes in the long term, rather than providing a 'snapshot' of attainment such as a single assessment result. Considering the lack of literature around the classroom working alliance in practice and the importance of engagement in children's educational experiences there appears to be scope to examine the construct of working alliance as measured by the CWAI (Toste, 2007), in relation to engagement in the classroom, as measured by the Engagement versus Disaffection with Learning questionnaire (Skinner et al., 2008). That the majority of the research reviewed has been carried out within the US school system suggests there may be reason to examine these constructs in the UK setting. Relating future research to the existing literature on teacher-pupil relationships, as previously discussed, it would seem appropriate to examine: whether there is further support for the relationship between classroom working alliance and educational outcomes; whether congruence between children's and teachers' ratings of working alliance impact on children's engagement in the classroom; and whether there is an effect of gender on children's and teachers' ratings of engagement and classroom working alliance.

Empirical Study

Abstract

Research was carried out into the relationships between teachers' and children's ratings of their working alliance and children's ratings of their engagement in the classroom. Participants included 110 Year 5 children and their teachers from three primary schools in England. Children and their teachers completed a questionnaire relating to classroom working alliance and children completed a questionnaire relating to their engagement in the classroom. The study found no effect of gender on child ratings of classroom working alliance or engagement, but there was an effect of gender on teacher ratings of working alliance, with teachers scoring boys lower than girls on ratings of working alliance overall. Support was found for the hypothesis that child ratings of working alliance would be positively associated with ratings of engagement, but only limited support for the hypothesis that teacher ratings of working alliance would be positively associated with children's ratings of engagement. Partial support was found for the hypothesis that congruence in teacher and child scores of working alliance would be positively associated with engagement. Implications of this research are discussed and future research directions considered.

Introduction

Whilst parental and early care-giver relationships have been implicated in the development of children's educational progress (e.g. Moulin et al., 2014) there has also been attention paid to the relationship between children's attainment and the possible mediating role of teacher-pupil relationships (e.g. Pianta, 1994; Roorda et al., 2013). Researchers have consistently found links between high quality teacher-pupil relationships and aspects of educational and other life outcomes for children

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(e.g. Burchinal et al., 2002; Hamre & Pianta, 2001). Consequently there have been recommendations from a number of psychologists, that intervention should be directed towards improving the quality of teacher-pupil relationships in order to address poor educational outcomes (e.g. Wahl, 2002; Sabol & Pianta, 2012), although how this might be achieved in practice is less clear. Some researchers (e.g. Davis, 2003; Toste, 2007) have argued that refining the way that teacher-pupil relationships are both conceptualized and measured may be an important starting point in beginning to understand how these relationships might best be modified.

With these issues in mind, this study aims to investigate a particular theoretical conception of the teacher-pupil relationship, *classroom working alliance*, and its relationship with a pertinent aspect of children's classroom behaviour, engagement, with the ultimate aim of enriching the literature on educational attainment and teacher-pupil relationships. It is hoped that this study will add to the research base, particularly within a UK context, and that it will help inform the direction of future research and the development of effective practice within the educational environment.

Teacher-Pupil Relationships and Outcomes for Children

Researchers have conceptualized teacher-pupil relationships in a number of different ways, referencing various perspectives including theories of motivation (e.g. Ames, 1992), as well as those social, cultural and interpersonal perspectives that utilize ideas of proximity and influence (e.g. Brekelmans, et al., 2005). Feelings of relatedness and/or emotional support have been a core concept in all formulations of teacher-pupil relationships (Sabol & Pianta, 2012). These feelings of relatedness are most commonly measured using rating questionnaires, often from the teachers' perspective (Toste, 2007). Some rating scales are merely subscales embedded within

more extensive questionnaires related to overall school satisfaction or those that are designed to gather information on a number of social relationships (e.g. Skinner & Furrer, 2003). There are a small number of stand-alone scales, the most commonly occurring in the literature (e.g. Pianta, 1994; Birch & Ladd, 1997; Blacher et al., 2009) being the *Student Teacher Relationship Scale* (STRS) (Pianta, 2001), which has been formulated for use with teachers of children between the ages of 3 and 12. The STRS measures teachers' perceptions of conflict, closeness, and dependency with respect to individual children.

It has been hypothesized that children who have positive teacher-student relationships "become more actively engaged in the learning process and thus, experience more positive school experiences" (Toste 2007, p 16) and the research literature tends to support this proposition. Researchers have repeatedly found links between the quality of teacher-pupil relationships and aspects of children's social and behavioural abilities. Pianta (1994), for example, found that teacher ratings of their relationships with their pupils predicted later behavioural and social difficulties. Birch and Ladd (1997), in a large-scale study, found that the same measures of teacher-pupil relationships predicted school attendance and co-operative behaviour in the classroom. There has even been a suggestion that positive teacher-pupil relationships are more important in terms of academic success than positive child-parent relationships (e.g. Gregory & Weinstein, 2004).

Positive teacher-pupil relationships have also been linked to higher ratings of engagement for children in the classroom (e.g. Klem & Connell, 2004; Ryan et al., 1994). Engagement is an important area for investigation in education research as levels of engagement are one of the strongest predictors of long-term outcomes for children. It has been suggested that children will engage in behaviour that supports

their cognitive development in an environment of high expectations, when they feel supported by their teachers (e.g. Toste, 2007; Wang et al., 1994). Researchers have argued that children's engagement in school aids their performance and reinforces positive feelings about their ability to succeed (e.g. Skinner et al., 1998). This assertion has been supported by research that has shown engagement to predict children's academic attainment, and over the longer term to predict patterns of school completion, academic resilience, retention and school attendance (e.g. Eccles et al., 1998; Skinner et al., 1998; Roorda et al., 2013). Research data indicates that good relationships between children and teachers are related to attributes that support academic success, including positive feelings about school and also a positive disposition to engage in classroom activities (e.g., Birch & Ladd, 1998; Toste, 2007). This relationship between teacher-pupil interactions and ratings of engagement has also been found in large-scale studies involving for example, 1846 and 671 primary age children (Klem & Connell, 2004; Hughes et al., 2008). Researchers have further found evidence that suggests engagement in academic activities decreases the risk of young people becoming involved in crime or engaging in risky behaviour such as drug and alcohol abuse (e.g. Furrer & Skinner, 2003).

Engagement is also significant for teachers in that it can be a visible gauge of children's underlying motivation in the classroom (Reeve et al., 2004). Even controlling for socio-economic background, which has been argued to be a predictor of academic attainment (e.g. Sirin & Sirin, 2005), researchers have found that engagement predicts achievement and is an important part of academic resilience (e.g. Connell et al. 1994; Finn & Rock, 1997). Research has demonstrated that children's motivation and engagement in school decreases continuously from the early years at school until the end of formal education (Wigfield et al., 2006) and

that this drop-off is particularly significant for boys from lower socio-economic and ethnic minority demographics (e.g. Wigfield et al., 2006; Wooley & Bowen, 2007). It is argued that measuring and assessing levels of engagement is a way of targeting those children and young people who are at risk of disengagement, low achievement and dropping out of education (Fredrick et al., 2011).

Researchers have measured engagement in two main ways: first in assessing a person's involvement in attempting to take responsibility for their behaviour; and secondly through measuring a person's active engagement in a task in terms of positive emotion or effort (Reeve et al., 2004). Those that have examined this first conceptualization have looked at the way "engaged people express their voice and take initiative in trying to produce changes in their environment" (Reeve et al, 2004, p. 148). This construct of engagement, whilst applicable in many settings, seems less suitable for the classroom environment where there are often limited or more constrained opportunities for children to express their voice or produce changes in their environment. The second conception (e.g. Connell et al., 1995; Connell & Wellborn, 1994; Furrer & Skinner, 2003), has been suggested to be more applicable to the classroom setting, articulating engagement as children being actively involved in a task through their "interest, persistence and focus". This theoretical framework has been utilized to investigate the relationship between classroom and a number of variables, including aspects of teacher-pupil relationship (e.g. Furrer & Skinner, 2003; Klem & Connell, 2004; Skinner et al., 2008), via the *Engagement vs Disaffection with Learning* measures (Skinner et al., 2009) that have been developed from this theoretical position.

Classroom working alliance - a new conceptualization of the teacher-pupil relationship?

It is clear from the research base that teacher-pupil relationships can have a significant impact on outcomes such as academic achievement, behaviour and engagement in the classroom; however, the way these relationships have been conceptualized arguably has led to limitations in the design of measures and limited scope of data collection (Davis, 2012; Toste, 2012). One of the criticisms of the existing conceptualizations and measures of teacher-pupil relationships has been the perceived lack of explanation of the relationship beyond liking and a sense of relatedness. Toste (2012), for example, argues that it is difficult to ask teachers to modify their 'liking' for a child. Another important criticism has been the reliance on the collection of data from teachers' perspectives, and it has been argued that there is a need to gather data from both teachers and children, to reflect the bi-directional nature of the relationships (e.g. Wentzel & Wigfield, 2009).

Working alliance is a concept that has recently been transferred from the therapeutic setting into use in the classroom to explore the teacher-pupil relationships in order to address some of these concerns. Working alliance or therapeutic alliance was first discussed as a potential useful conceptualization of the therapist-client relationship by Bordin in 1979 as made up of three factors: the therapist and client agreement on goals of treatment (*goal*); their agreement on the tasks involved in reaching the change goals (*task*); and finally the personal, emotional bond between client and practitioner (*bond*). There is a large body of research that supports the hypothesis that alliance is the most important element in providing good outcomes for service users (Elvin & Green, 2008) and that the alliance can been improved to increase the possibility of positive outcomes.

Psychologists have transferred the concept of working alliance into education to examine the possibilities for strengthening teacher-pupil relationships to improve educational outcomes. Wahl (2002), for example, makes a case for a focus on adult-child relationships within the school, arguing that whilst there has been a professional emphasis on specific techniques for working with children, not enough attention has been paid to the quality of relationships. Specifically discussing the needs of children with emotional and behavioural difficulties, he states "that forming a reasonably healthy working alliance with such children is often the hardest and yet most essential task we face" (Wahl, 2002, p.64). Toste and colleagues have utilized this construction of the therapist-client relationship in conjunction with one of the most widely utilized measures of working alliance - the *Working Alliance Inventory* (Horvath & Greenberg, 1989), modifying it for use in the classroom setting to capture the perceptions of both teachers and children. They argue that the constructs of the therapeutic working alliance are particularly suited to the classroom environment as the agreement on task and goal and high levels of relatedness (e.g. bond) are important parts of a positive teacher-pupil working relationship.

Thus far, because of its relative novelty, there has been limited research using the *Classroom Working Alliance Inventory* (CWAI). To date the CWAI (Toste, 2007) has been used successfully to examine the relationship between perceptions of teacher-pupil alliance and levels of school satisfaction, school performance and differences in ratings of alliance between children with and without disabilities (Toste, 2007; Toste et al. 2012). The construct and associated measure show initial promise but there is a need for further research. There is also a need for further research into teacher-pupil relationships in the UK setting as the greater part of the literature is based on research carried out in the US. Because of these issues, the

current research project was formulated to further investigate the role of working alliance, utilizing the CWAI, in the classroom environment, using engagement as a dependent variable as it is shown to be a reliable predictor of other school related outcomes. If elements of classroom working alliance are shown to have a relationship with engagement there may be implications in terms of future research directions and interventions for children and young people.

Purpose of the Current Study

The study aims to make a contribution to the literature on teacher-pupil relationships and children's engagement in the classroom by exploring the possibility of a relationship between children's engagement in the classroom (as, as discussed above, a strong predictor of long-term academic achievement) and their and their teachers' perceptions of their relationships utilizing classroom working alliance as a means of conceptualizing and measuring the relationship.

Based on the literature it is hypothesized that in the current study boys will have lower overall ratings of engagement than girls (e.g. Wooley & Bowen, 2007). Considering the research literature that suggests that teacher-pupil relationships predict engagement (e.g. Furrer & Skinner, 2003), it is also hypothesized that in this study both child and teacher ratings of classroom working alliance, task, bond and goal would be positively associated with child ratings of engagement in the classroom. It is further hypothesized that the level of congruence between teacher and child ratings of classroom working alliance would be positively associated with child ratings of their engagement in the classroom. Finally, it is hypothesized that there will be an association between teacher and child ratings of classroom working alliance, as there is some evidence for a level of moderate consistency between

teacher and child ratings of their relationship in the research literature (e.g. Toste, 2007; Rey et al. 2007).

This study aims to provide important data around the relationships between child and teacher perceptions of their relationships and children's engagement. If these hypotheses are found to be supported then they will have implications for future research into whether and in what manner interventions should be targeted at improving teacher/child relationships.

Methodology

Design

The research was designed from a hybrid critical realist/social constructionist paradigm which suggests that whilst there is such a thing as reality; people's own experiences and constructions, including those of the researcher, have an influence on their perceptions of their environment and therefore an influence on that what it is to be measured. Thus, within this understanding that there may be many different constructions of the nature of the teacher-pupil relationship, one of a number of possible constructions- classroom working alliance and a conceptualization of classroom engagement are examined. Compatible with a *pragmatic* view of research (e.g. Mujis, 2004) a methodology most in keeping with the research question was chosen. A quantitative design was used, employing: a) a questionnaire administered to children to capture the children's levels of engagement and motivation in the classroom; and b) a questionnaire administered to both children and teachers in order to capture their perception of the quality of their relationship, as conceptualized within the construct of classroom working alliance.

Participants

The study involved six classes in two mainstream schools with Year 5 children (m=47, f=63) and their classroom teachers (m=2, f=2). The sample size was ascertained using a power analysis calculator. Participant schools were those with which the researcher already had a good working relationship. Year 5 and 6 children were selected as the initial focus for investigation, as an earlier pilot study had determined that children in younger age groups found some of the concepts involved in the engagement questionnaire difficult to comprehend. Following emails being sent to teachers explaining the research and asking for volunteers, Year 5 classes were selected for inclusion in the research project as a higher number of Year 5 than Year 6 teachers expressed a willingness to take part. Excluded from the study were those children for whom informed consent had not been obtained and also those children whose teachers felt that the child's current level of understanding would not allow them to access the questionnaires, even with support.

Ethics

Ethical considerations were informed by the BPS Code of Ethics and Conduct (BPS 2012) and the Cardiff University research guidelines. Informed consent was obtained prior to the study from parents and staff involved, and an information sheet was provided. Verbal consent was obtained from child participants in a discussion with them prior to their filling out the measures. Debriefing sessions were carried out following participation using a debriefing form for all participants and a verbal debriefing for the children. Time was also allocated to allow the children to ask any further questions after the questionnaires had been administered. Documents relating to informed consent can be found in Appendices D-I.

Measures

1.   Teacher-pupil relationship

Classroom Working Alliance Inventory. The CWAI is a 12-item questionnaire which assesses the teacher–pupil relationship, comprising parallel teacher and child forms that investigate both participants' perceptions of the relationship.

The inventory consists of the three subscales that represent the critical components of working alliance: bond, task, and goal. The *Bond* subscale captures the "respect, liking, and trust" between the teacher and their pupil. The *Task* subscale focuses on the "agreement and understanding of task relevance within the classroom setting". The *Goal* subscale measures the extent to which the teacher and pupil feel that they are "collaborating on the goals set within the classroom" (Toste et al., 2012, p.6). The items from the teacher and child report measures are presented in Appendices A and B. Participants scored each item using a Likert-type scale: ranging from 1 (never) to 5 (rarely).

Early research undertaken in the US has found that the questionnaire has moderate levels of internal consistency across the subscales with evidence of validity of the constructs of both the teacher and student scales (e.g. Toste, 2007; Heath et al., 2007; Toste et al., 2012). The CWAI is the only measure currently in existence that measures classroom working alliance between teachers and children.

2.   Children's engagement in the classroom

The *Engagement versus Disaffection with Learning* questionnaire was chosen as a measure to capture different aspects of classroom engagement and motivation. The children rated their engagement versus disaffection in the classroom using the student *Engagement versus Disaffection with Learning* subscale from measures developed by Skinner et al. (2008) based on the previously discussed theory of

classroom engagement developed by Connell and colleagues (e.g. Connell et al., 1994). In terms of reliability it has been reported that the measures are internally consistent, and evidence has been found for construct validity for children's self-reports (Skinner et al., 2009). The measures have previously been used in peer-reviewed research that explores the multidimensional nature of engagement (Skinner & Kinderman, 2008); that explores how engagement changes over time and predictors of engagement (Skinner et al., 2008); and also explores the relationship between sense of relatedness and engagement (Furrer & Skinner, 2003). Child rather than teacher measures of engagement were used as it has been suggested that teachers may be less reliable reporters of children' engagement given that children may "attempt to conceal their disaffection by masking their negative emotions or by presenting compliant instead of engaged behaviours" (Skinner et al., 2008, p.5). Also it has been found that child ratings of their relationships predict school related outcomes over and above those of their teachers (e.g. Hughes et al. 2001; Toste, 2007; Rey, 2007).

Children reported on their own: (i) **behavioural engagement**, scoring five items to reflect their effort, attention, and persistence while initiating and participating in learning activities; (ii) **behavioural disaffection**, scoring five items to reflect their lack of effort and withdrawal from learning activities while in the classroom; (iii) **emotional engagement**, scoring six items to reflect emotions that indicate motivated involvement during learning activities; and (iv) **emotional disaffection**, scoring nine items to reflect their emotions indicating motivated withdrawal or alienation during learning activities (Skinner et al., 2008). The scoring for each item utilised a 4-point Likert-type scale: ranging from 1 (not at all

true) to 4 (very true). The items from the teacher and child report measures are presented in Appendix C.

Procedure

Following consent being obtained, the data were collected early in the spring terms of 2014. Children were asked to complete the CWAI and engagement questionnaires at their school. The administration of the test sessions was split into sessions of a maximum of 45 minutes. The researcher sat with the groups of up to five children, reading the questions aloud. The children completed the questionnaires individually but were offered support and clarification if they found any questions challenging. Teachers were given the questionnaires and were asked to complete these within a week of the children completing their measures.

Data analysis

Correlation tests, t-tests and multiple regression analyses were used to test the research hypotheses:

i)   There would be an effect of gender on children's ratings of their engagement, with boys scoring lower on levels of engagement overall.

ii)   Child ratings of classroom working alliance, task, bond and goal would be associated with child ratings of engagement in the classroom.

iii)   Teacher ratings of classroom working alliance, task, bond and goal would be associated with child ratings of engagement in the classroom.

iv)   The level of congruence between teacher and child ratings of classroom working alliance would be associated with child ratings of their engagement in the classroom.

The distribution of child ratings of engagement was assessed and found to be normally distributed (Kolmogorov-Smirnov test, $p=0.20$). (In)congruence scores

were obtained by calculating the absolute values for the difference between male and female scores for each of the WAI subscales. Partial correlations were carried out, controlling for child and teacher gender as the literature suggests that there is an effect of children's and teacher's gender for teacher ratings of aspects such as classroom behaviour, thoughts and feelings (e.g. Birch & Ladd, 1998). Within teacher variation was also controlled for in the analyses.

Because of issues of multi-collinearity (e.g. Field, 2009) when carrying out a multiple regression on all classroom working alliance scores, individual hierarchical multiple regressions were carried out to assess the effect of:

a) teacher, child and congruence ratings of task on child ratings of engagement;

b) teacher and child ratings of bond and also congruence values on child ratings of engagement; and

c) teacher and child ratings of goal and also congruence values on child ratings of engagement.

Variables that explain engagement were entered in two steps. In step 1, teacher and child gender were the independent variables. In step 2, the relevant teacher and child ratings and congruence values were added to the regression. Before the hierarchical multiple regression analyses were performed, the independent variables were examined for collinearity.

The significance level was taken as $p<0.05$, two tailed. Statistical analyses were performed using SPSS (Version 20, IBM).

Results

Results of independent-sample t-tests relating to possible effects of gender

Results of independent-samples t-test to compare boys' and girls' ratings of engagement (n=110)

An independent-samples t-test was conducted to compare ratings of engagement for male and female participants. There was no significant difference in the scores for male participants (*M*=11.54, *SD*=2.07) and female participants (*M*=11.74, *SD*=1.77); *t* (108)=-0.56, *p* = 0.57 These results suggest that in the current study there is no effect of gender on ratings of engagement.

Results of independent-samples t-test to compare boys' and girls' ratings of working alliance (n=110)

An independent-samples t-test was conducted to compare boys' and girls' ratings of working alliance. There was no significant difference in overall ratings of working alliance for boys (*M*=10.63, *SD*=2.66) and girls (*M*=11.21, *SD*=2.40); *t* (108)=-1.19, *p* = 0.24. There was no significant difference in of task for boys (*M*=3.78 *SD*=0.81) and girls (*M*=3.90, *SD*=0.77); *t* (108)=-1.16, *p* = 0.26. There was no significant difference in ratings of bond for boys (*M*=3.48, *SD*=1.20) and girls (*M*=3.73, *SD*=1); *t* (108)=-2.39, *p* = 0.25. There was no significant difference in ratings of goal for boys (*M*=3.37, *SD*=0.87) and girls (*M*=3.59, *SD*=0.93); *t* (108)=-1.23, *p* = 0.22. These results suggest that in the current study there is no effect of gender on children's ratings of working alliance.

Results of independent-samples t-test to compare teachers' ratings of working alliance for male and female participants (n=72)

An independent-samples t-test was conducted to compare teachers' ratings of working alliance for boys and girls. There was a significant difference in the

teachers' overall ratings of working alliance for boys (M=11.8, SD=1.75) and girls (M=12.7, SD=1.43); t (70)=-2.28, p = 0.03. There was no significant difference in the teachers' ratings of task for boys (M=4, SD=0.7) and girls (M=4.2, SD=0.51); t (70)=-1.85, p = 0.07. There was a significant difference in the teachers' ratings of bond for boys (M=4, SD=0.55) and girls (M=4.27, SD=0.54); t (70)=-2.39, p = 0.02. There was a significant difference in the teachers' ratings of goal for boys (M=3.9, SD=0.66) and girls (M=4.2, SD=0.44); t (70)=-2.28, p = 0.03. These results suggest that in the current study there is an effect of gender on teachers' ratings of aspects of working alliance with their pupils.

Results of partial correlations

Table 1

Partial Correlations, Means and Standard Deviation of Variables for Child Ratings

of Working Alliance, Controlling for Teacher, Teacher Gender and Child Gender

	Mean	S.D.	Child ratings task	Child ratings bond	Child ratings goal	Child ratings of CWAI
Child ratings task	3.85	0.79				
Child ratings bond	3.62	1.09	.76**			
Child ratings goal	3.50	0.91	.70**	.7**		
Child ratings CWAI	10.97	2.52	.90**	.92**	.88**	
Child ratings engagement	11.65	1.90	.66**	.64**	.62**	.71**

Notes: n= 110. *p= 0.05; **p= 0.01

Table 1 presents results of partial correlational analyses between child ratings of

working alliance and engagement in the classroom. It was found that children's

overall ratings of classroom working alliance were strongly positively correlated

with ratings of classroom engagement. Child ratings of task, bond and goal were all

strongly positively correlated with engagement

Table 2

Partial Correlations, Means and Standard Deviation of Variables for Teacher Ratings of Classroom Working Alliance, Controlling for Teacher, Teacher Gender

	Mean	S.D.	Teacher ratings task	Teacher ratings bond	Teacher ratings goal	Teacher ratings of CWAI
Teacher ratings task	4.1	.58				
Teacher ratings bond	4.14	.56	.85**			
Teacher ratings goal	4.06	.55	.84**	.75**		
Teacher ratings CWAI	12.3	1.62	.96**	.93**	.92**	
Child ratings engagement	11.3	1.97	.32**	.22	.25*	.28*

Notes: n= 110. *p= 0.05; **p= 0.01

Table 2 presents partial correlations, means and standard deviation of variables for teacher ratings of working alliance, controlling for teacher, teacher gender and child gender. It was found that teachers' overall ratings of classroom working alliance, goal and task were weakly positively correlated with engagement. Teachers' ratings of bond were not significantly correlated with engagement. Teacher ratings of task were moderately positively correlated with child ratings of engagement and teacher ratings of goal were weakly positively correlated with child ratings of engagement.

Table 3

Partial Correlations, Means and Standard Deviation of Variables for Incongruence

in Ratings of Working alliance, Controlling for Teacher, Teacher Gender and Child

Gender

	Mean	S.D.	Incongruence in ratings-task	Incongruence in ratings-bond	Incongruence in ratings-goal	Incongruence in ratings-CWAI
Incongruence in ratings-task	0.7	0.53				
Incongruence in ratings-bond	1.07	.079	.51			
Incongruence in ratings-goal	0.91	0.76	.43**	.54**		
Incongruence in ratings-CWAI	2.50	1.87	.75**	.83**	.80**	
Child ratings engagement	11.28	1.97	-.28*	-.58**	-.42**	-.53**

Notes: n= 110. *$p= 0.05$; **$p= 0.01$

Table 3 presents partial correlations, means and standard deviation of variables

for incongruence in ratings of classroom working alliance, controlling for teacher,

teacher gender and child gender. It was found that incongruence between child and

teacher overall ratings of classroom working alliance was strongly negatively

correlated with engagement. Incongruence between child and teacher ratings of

bond were strongly negatively correlated with child ratings of engagement;

incongruence between child and teacher ratings of goal were moderately negatively

correlated with child ratings of engagement; and incongruence between child and

teacher ratings of goal were weakly negatively correlated with child ratings of

engagement.

Results of multiple regressions

Results of multiple regressions relating to task (n=72).

Results of the variance inflation factor (all less than 2.78), and collinearity tolerance (all greater than .36) suggest that the estimated βs are well established in the following regression model.

The results of step 1 indicated that teacher and child gender were not significantly associated with the child ratings of engagement. In step 2, the change in variance accounted for (ΔR^2) was equal to .55, which was significantly different from zero ($F_{(5,66)}=16.62$, $p<.001$). Child ratings of task and congruence in teacher and child task scores contributed significantly to the explanation of child ratings of engagement in the classroom. Child ratings of task was the strongest significant predictor of child ratings of engagement $\beta= -.98$, $t(78) = 2.8$, $p < .001$ and congruence of teacher and child scores also significantly predicted child ratings of engagement $\beta= -.34$, $t(78) = 7.2$, $p < .01$.

Results of multiple regressions relating to bond (n=72).

Results of the variance inflation factor (all less than 3.74), and collinearity tolerance (all greater than .27) suggest that the estimated βs are well established in the following regression model.

The results of step 1 indicated that teacher and child gender were not statistically significant independent variables. In step 2, child and teacher ratings of bond and congruence values for bond were entered into the regression equation. The change in variance accounted for (ΔR^2) was equal to .50, which was significantly different from zero ($F_{(5,66)}=13.85$, $p<.001$). Child ratings of bond was the only significant predictor of child ratings of engagement $\beta= 0.66$, $t(78) = 4$, $p < .001$.

Results of multiple regressions relating to goal (n=72).

Results of the variance inflation factor (all less than 4.75), and collinearity tolerance (all greater than .22) suggest that the estimated βs are well established in the following regression model.

The results of step 1 indicated that teacher and child gender were not statistically significant independent variables. In step 2, child and teacher ratings of goal and congruence values for goal were entered into the regression equation. The change in variance accounted for (ΔR^2) was equal to .43, which was significantly different from zero ($F_{(5,66)}=13.85$, $p<.001$). Child ratings of goal was the only significant predictor of child ratings of engagement $\beta=0.81$, $t(78) = 4$, $p < .001$.

Discussion

The hypothesis that children's gender would have an effect on child ratings of engagement, with boys rating lower than girls, was not supported by the data analyses. As previously discussed, research has suggested that boys report lower levels of engagement than girls, however this disparity increases over time and is strongest in the secondary school environment. As the participants were drawn from Year 5 of primary school, these results may have been reflective of the children's relatively young age, and differences may evolve further over time. Whilst there was no effect of gender on children's ratings of their working alliance with teachers, there was however, an effect of children's gender on teachers' ratings of their classroom working alliance with children, with teachers being more likely to rate lower levels of overall classroom working alliance- and within this bond and goal- for boys rather than girls. Research has shown that teachers tend to rate boys lower than girls in a range of areas including academic performance and behaviour (e.g. Cornwell et al., 2012) and the results of this study would fit with this. This may be

related to the tendency amongst boys to display more adverse externalising behaviours than do girls (e.g. Sylva et al., 2007), behaviours that are more likely to raise difficulties for teachers. Research has also found that boys' relationships with their teachers tend to be rated by teachers as being less close and containing more conflict than those of girls (Birch & Ladd, 1997 & 1998; Silver et al., 2005). This study did not collect information on the ethnic origins of the participant sample and bearing in mind that there is research that has shown an effect of ethnicity on the impact of the teacher-pupil relationship on various school-related outcomes (e.g. Meehan et al., 2003), future studies might include such demographic information when considering how such characteristics affect classroom working alliance ratings.

The hypothesis that children's ratings of working alliance, task, bond and goal would be associated with children's ratings of engagement in the classroom was supported. Task, bond and goal were all found to be strongly positively correlated with engagement and a strong association with engagement for all was found through the regression analyses. The hypothesis that teachers' ratings of working alliance, task, bond and goal would be associated with child ratings of engagement in the classroom was supported, however the association was only found to be weak for overall ratings of alliance, task and goal, and bond was not significantly correlated. None of the teacher ratings of aspects of working alliance were found to be associated in regression analyses of children's ratings of engagement. This reflects some previous research that found that children's self-rated classroom performance was not significantly predicted by teachers' perceptions of alliance, although it was predicted by their own perceptions of working alliance (Toste, 2007). This may have been partly due to a halo effect in terms of children filling out both the independent and dependent variable measures (e.g. Roorda et al., 2007). The high correlation

between children's ratings of engagement and working alliance may also be due to the repeated measures design. It would therefore be helpful to replicate this study with an increased sample size and also gather additional ratings of children's engagement, for example researchers may wish to utilize an additional observation schedule and teachers' ratings of children's engagement, in order to triangulate findings.

However these results differed from the previous study in finding task to be the most important construct for children, as the previous research found the bond and goal subscales to be significant contributors, and task not. Another key finding in this research is in relation to the role of congruence in children's ratings of engagement. Toste et al. (2012) argued that if congruence between teacher-pupil expectations was demonstrated to be a critical variable in enhancing working alliance, as has been shown in counselling research, schools could focus on the implementation of training to assist teachers in reducing these discrepancies. In this study incongruence in teacher and child ratings of overall working alliance was found to be strongly negatively associated, which supports the above assertion. Incongruence in bond ratings was found to be strongly negatively correlated; incongruence in goal ratings moderately negatively correlated with engagement; and incongruence in task ratings found to have the strongest association with ratings of engagement. The importance of congruence in teacher and child ratings of the task element of working alliance has potentially important implications for interventions and further research. Working to align teacher and child expectations around working alliance may prove an important way of improving outcomes for children. This is supported by research from the therapeutic literature that suggests that therapist and client agreement about expectations is key to forming a positive

working alliance (e.g. Shaw et al., 2004). The majority of these studies have focussed on the effects of "role induction", a process whereby patients take part in a session pre-treatment to set expectations, which is shown to result in significantly higher treatment compliance (e.g. Craigie & Ross, 1980; Katz et al., 2007). This might prove an area of interest to educational psychologists involved in training school staff.

The data showed that the task, bond and goal sub-scales were highly correlated; there is a possibility that they are measuring overlapping aspects of the relationship, although it is also likely that children with high ratings of one aspect are more likely to have high ratings on another. Some more qualitative research to unpick children's and teachers' views of the working alliance constructs may shed light on whether they are measuring the same facets of the relationship. In this study, children's actual performance was not measured in terms of standardized measures of achievement. It is therefore possible that engagement ratings represented subjective perceptions of their feelings about their school experience which may not translate into actual performance, however the research literature suggests that children's ratings of their own engagement are good predictors of their performance in standardized tests. Despite this, further investigation into the role of classroom working alliance in children's performance in standardized assessment may be of benefit.

This research re-affirms the importance of the teacher-pupil relationship as a valid area for intervention in terms of school related outcomes. Despite the limitations, the study has yielded findings that add to the existing literature and offers opportunities for designing future research and ultimately interventions into teacher-pupil relationships. Results specifically relating to the effects of gender on teachers' ratings of their relationship with their pupils are one key finding. Taken with the

existing literature, an enhanced understanding of the effect of children's gender may be important in terms of developing teachers' understanding of how their own expectations around classroom behaviours may influence their reading of their relationships with children and thus possibly outcomes for children. Child perceptions of their relationship with teachers have been shown to have a clear relationship with their perceptions of their own engagement in the classroom; and consistency between child and teacher understanding of the relationship has also been shown to be of importance. Classroom working alliance offers a new and potentially valuable construct from which to investigate the relationship further, particularly because of its proven utility in the therapeutic context, and also in that it offers an understanding of the working relationship beyond a sense of liking and bond and therefore increases the potential for intervention. Overall, the results suggest that classroom working alliance has a key role to play in children's levels of engagement, and that it is a concept which educational psychologists might usefully employ to guide research and potentially to inform intervention in their practice.

Major Research Reflective Account: Contribution to Knowledge and Critical Account of Research Practitioner

Formulating a Research Question

The conception and shaping of my thesis proposal came about through a number of reflections on my experiences as a trainee, both in terms of practice, University sessions and my own reading. I had become interested in why, despite a number of risk factors, some children did well at school when the majority of the research literature around risk factors and educational outcomes suggested that they would not. I began to read around concepts of resilience (e.g. Rutter, 1999; Johnson 2008) and found that one of the protective factors for children was good relationships with teachers. This chimed with my anecdotal experience in my practice experience of some teachers who were able to provide safe and nurturing environments for children who had experienced difficulties, allowing them thus to thrive. In conjunction with this, I had also started to think about children's motivation and engagement in the classroom, becoming very interested in why some children chose to take an active part in their learning whilst others seemed to become disengaged and disaffected. I had also looked at engagement in the classroom as part of a wider study related to an on-line learning package that I, as part of a small group of other trainees, had evaluated as part of the collaborative research project in the first year of the course.

My specific idea for the research project developed in the context of my work in practice and my own further research. Through my reading (e.g. Sabol & Pianta, 2013) I had noted that good relationships between teachers and children produce better outcomes but, that knowing how to support interventions to improve relationships was less clear. In my early research into this subject I found that much

of the conceptualisations of teacher-child relationships were based on concepts such as trust, liking and absence of conflict. I felt that these are attributes that it was difficult to know how to go about improving, and this was in part reflected by the lack of research around what successful interventions into teacher-child relationships might look like. As a trainee practitioner psychologist, part of a profession that's raison d'etre is to improve outcomes for children and those who work with them, and this was an area in which I thought there was potential for intervention.

I began to think more about how teacher-pupil relationships are conceptualised. An important source that framed my thinking early on was a paper written by Heather Davis (2003) that attempted to synthesize research on the nature of teacher-child relationships. She noted that there are several dominant conceptualisations of the relationship, which often overlap, and that each conception has implications for the foci of investigation and also research design. This led me to begin to think about other, useful conceptions found outside of the usual focus of studies into student-teacher relationships.

The possible utility of the concept of classroom working alliance in the classroom had arisen in one of the University sessions relating to "Theme 4: The Psychology of Behaviour: Managing Change". One of the readings for this session was that of Wahl (2002) who argues the need for an increased focus on classroom working alliance within the school, stating that there has been insufficient attention paid to the quality of relationships outside of the research setting. I had also written an essay on the concept of therapeutic alliance and these two experiences led me to attempt to find more literature based around the concept of classroom working alliance between teachers and children. I felt that some research based around the concept of classroom working alliance in the classroom might have some utility for the work of

applied psychologists, particularly as a possible area for teacher development using psychology. A literature review uncovered very little research related to this area until I came across a short news article about a researcher at McGill who had won a prize for some innovative work around reconceptualising the teacher-child relationship within the framework of classroom working alliance (Canada Education, 2012). Dr Toste had argued that was a construction ideally suited for investigating classroom relationships. I followed this link up by reading her authored research papers (which I had not come across in the course of my previous literature reviews) relating to the topic. The classroom working alliance conceptualisation was interesting to me as I felt that there was scope for using this concept in practice, a key consideration for me being the importance of psychology as *applied* in the educational context.

The literature review was a critical part of the process in identifying gaps in the existing research base. During the review of the literature I found that no-one had specifically looked at the relationship between children's and teachers' relationships, as conceptualised as the classroom working alliance, and engagement in the classroom. I felt that this would be an interesting area of research, particularly since research has shown that working alliances can be improved between therapists and clients (e.g. Thompson et al. 2007). The literature review proved a challenging process, but it was difficult not to become overwhelmed with the sheer quantity of research papers on related subjects and I had to work hard to maintain focus on my research area.

Research Design

The research was designed from a hybrid critical realist/social constructionist paradigm, holding that there is such a thing as reality but that people's own

experiences and constructions, including those of the researcher, have an impact on

their perceptions of the world and therefore an impact on what it is that is to be

measured. Whilst my position as a trainee psychologist and researcher tends to be

rooted within a relativist framework, a position that is usually associated with more

qualitative research, in this study I felt that quantitative research was most

appropriate for my research. This is probably most consistent with a *pragmatic* view

of research (e.g. Mujis, 2004) where researchers choose the methodology they feel

most appropriate to the research question. The *pragmatic* school of thought puts

forward the idea that "the meaning and the truth of any idea is a function of its

practical outcome(s)" (Mujis, 2004, p.6). This idea is interesting in the privileging

of research that is of use to the profession in practice by the Cardiff programme's

thesis requirements. If we privilege research work that has a practical outcome it

will follow that the meaning of any ideas formulated is intrinsically linked to ideas

about and the actuality of their meaning in practice.

Qualitative methods such as interviews may have uncovered more about

participants' differing construction of what it is that is important in the teacher-pupil

relationship and added a different richness to the literature base. I was however in

this study interested in finding out more about the impact of the construct of

classroom working alliance within the CWAI measures on a specific dependent

variable, thus within a 'pragmatic' framework, a quantitative approach was more

appropriate. Once I had decided that the CWAI measures were appropriate, I

contacted Dr. Toste to ask for permission to use the measures. Dr. Toste sent me

further literature and gave permission for the use of her measures after I had sent her

a short summary of what I hoped to achieve in my research. I felt this step was

important, in not only making connection, but also in checking out the way I

intended to use the measures was appropriate. This was partly because there is such a small research base relating to the measures. This contact also gave me access to some unpublished material which helped formulate my ideas further. In the previous collaborative work I had carried out (Charles et al., 2012), the group had similarly contacted the author of other measures and had received some invaluable advice from him. These experiences gave me a sense of the existence of a wider research community and highlighted the importance of making links with other researchers in similar fields to exchange ideas and transfer knowledge.

In terms of design, all of my previous research (apart from aspects of the collaborative research project) has been qualitative and I also felt that utilising quantitative methods would be a good learning opportunity for my professional development. When reading research literature I have been more comfortable in critically appraising qualitative than quantitative research, and I felt this was an area in which I could improve my feelings of self-efficacy (e.g. Bandura, 1997) as an evidence based practitioner. Through my review of the literature I had found that the majority of research carried out in the field of child and teacher relationships was quantitative in methodology; I wanted to address what I saw as a gap in the existing research base rather than carrying out more explorative qualitative work in addition to quantitative work given the constraints of the dissertation.

In terms of capturing demographic data I decided to capture just data around children's gender firstly because of pragmatic reasons relating to issues around parental questionnaire return, however this may be a potential avenue for future research considering the existence of literature that suggests a role for ethnicity and minority background in explaining some of the variance in teacher-pupil relationships (e.g. Hughes & Kwok, 2007).

I used the *Engagement versus Disaffection with Learning* questionnaires (Skinner et al., 2008) as these were something that I had used successfully in the past, and felt comfortable with, particularly as I had previously used them with a younger age group so felt confident that my sample would be more than capable of understanding them. The advantages of using questionnaires rather than, for example, interviews for the teachers meant that the teachers could fill them out at any time which proved helpful when there were conflicting demands on their time. Having piloted some of the measures in the past gave me increased confidence in my methodology and piloting is something that I will try to build into future research. Using independent measures that have already been widely used meant that I was using materials that were already well validated and reliable. In order to find out the appropriate sample size and tests on SPSS I consulted the school quantitative analysis tutor. She was very helpful and it was good to have some reassurance that my research project was viable from an analysis point of view as, as mentioned above, I am less experienced in the use of quantitative data and analysis. Reflecting on the support I received during the research process I have come to realise that successful research design and process often relies on not just having expertise oneself, but also knowing one's own limitations and where and when it is appropriate to access support, something I will be mindful of in any future research I carry out.

Ethical issues

One pertinent ethical issue that arose during the process was related to maintaining children's anonymity. One of the difficulties has been the schools' keenness to see the data in its un-anonymised form. This was partly because I was collecting data on individual relationships and the school felt that this information would help them to better support children. This led me to reflect on the idea that

research is not value free and to think about how people have different conceptualisations of what it is that research is for. The schools with which I was engaged often use data at a local level to inform local interventions and target settings, whilst my research focussed on a more general application for the data and was based around the anonymity of the participants. The schools were happy to accept that they would not have access to the un-anonymised data once I re-explained the ethics behind my research but it has made me think about how there may be pressures to share information, particularly when one works regularly in a school, and that how one might deal with these issues should be part of the planning process.

I was also very mindful of the fact that whilst parents had agreed to their children taking part in the research this did not mean that I could automatically assume consent on the part of the child. I also thought about one of the Health Profession Council requirements- that "educational psychologists understand the power imbalance between practitioners and service users and how this can be managed appropriately" (HPC, 2009, p.6). I was therefore very careful that I was clear with children that they did not have to take part and that they could discontinue at any point. I was also mindful of being watchful for any signs of the children becoming discomforted by their experience as recommended by the British Psychological Society (BPS) in their *Code of Human Research Ethics.* "In the case of very young children, and persons with very limited competence, their assent should be regularly monitored by sensitive attention to any signs, verbal or non-verbal, that they are not wholly willing to continue with the data collection" (BPS, 2010, p.17). The children in my study were older than those that the BPS allude to in their guidance, however in the development of my own research practice I feel that this kind of awareness of

people's expression of their levels of comfort through both verbal and non-verbal means is important to incorporate into research with participants of any age.

I also spent some time at the beginning and end of the data collection with the children discussing issues of confidentiality and ensuring clarity in their understanding of the research process and aims. It was during these discussions that I realised how rarely children are asked for their opinion about what happens to them in school and the act of engaging them in the process of research opened up lots of questions for them about issues surrounding anonymity and participation. I felt this attention to the needs of participants was one of the more successful features of my research design. This experience has led me to be mindful of the importance of allocating sufficient time to do this kind of work with participants, particularly in light of the importance of ethical participatory practices raised in methodologies such as those used in *action research* which privilege a democratic and collaborative approach to research activities (e.g. Brydon-Miller et al., 2003).

Another practical issue around confidentiality was the suitability of the spaces that I was allocated in which to work with children. In one school I was given a table in a corridor. As the children often discussed their answers to some of the questions with me I did not feel that this was appropriate as I could not be sure that their anonymity could be maintained. When I raised these concerns the school were happy to find me a private space. I will however ensure in future research that I am clear about my needs before carrying out research in a school as part of the project planning stage.

Procedure and Analysis

Carrying out the research was one of the most challenging aspects of the project. The first school that I worked with were initially very keen to take part in the project.

After collecting the data in the school I found it difficult to get in touch with staff there to pick up the teachers' questionnaires. It later transpired that the office had shredded the teachers' data by mistake and had not wanted to tell me. This is something I had not foreseen whilst planning the research and this is where having built in some time for unexpected events in the planning stages paid off as I was eventually able to get in touch with the school and find out what had happened. The other two schools I worked with were places with whom I had previously worked and therefore had a much stronger relationship. Whilst this benefitted me in terms of ease of access to 'gatekeepers' it also meant that I needed to reflect further on my status as possible 'insider' and the tensions between the practitioner/research role this position might bring. On reflection I felt that my position was as hybrid outsider/insider (e.g. Kerstetter, 2012), not a member of staff with direct loyalties to the institution, but someone who had an understanding of the school culture and how best to navigate it. Had I been the schools' regular educational psychologist, better known to the children I think this may have resulted in more difficulties in terms of separation of my role as practitioner and researcher.

Going into the school to carry out the research was a challenge at times as I was only available on Fridays to collect the data. In primary schools Fridays are often taken up with special events or trips, and in one case was the day in which OFSTED gave notice of an impending visit. These experiences, whilst very frustrating at times, have been an important learning experience in having gained an appreciation of the complexities and issues involved in 'real life' research. It also has made me more mindful of the immense pressures that schools work under and the conflicting demands, both internal and external, that they must manage.

What stood me in good stead when things went wrong during the process was attention to the initial planning stages using project management tools such as Gantt charts. This meant that I had built in contingencies in terms of time and resources, something that I was very thankful that I had done when the data collection was held up. This is something I will continue and build upon in future, and considering the difficulties encountered during the course of the research I would consider building risk assessment in some form into initial planning stages.

The analysis of the data was particularly challenging as my experience of working with quantitative data thus far has been limited. I was very aware of the theory of learning relating to the four stages of competence (e.g. Lindon, 2012) during this part of the research process and felt that I made the shift from conscious incompetence to partial conscious competence in some areas of statistical analysis. I also felt that I had met some of my own professional development goals around increasing my efficacy in terms of understanding of quantitative methodology.

Contribution to Personal Knowledge/Professional Development

The process of carrying out the research has supported my development as an applied psychologist, and I will apply a number of the things I have learned to both future research and practice opportunities.

My ability to rapidly build up rapport with children has improved as has my ability to explain my own role and answer questions about a range of issues in an authentic and accessible way. Carrying out research as a practitioner is something that I would like to continue as a core part of my practice. It has also made me even more aware of issues of consent and power, reflections that I will not only take to my research activities but also to my practice. From this and other experiences, I have come to realise that attending to ethical issues requires an enquiring and nuanced

approach. Using COMOIRA (e.g. Gameson et al., 2003), for example, as a theoretical framework for my research practice (and other work on the course) has encouraged me to be reflexive and take a questioning approach to my own and others' constructions and narratives.

The research also afforded me opportunities to reflect on the process of research in the context of a number of theories of learning. As mentioned above, the four stages of learning theory, offered me a way to rationalise my experience particularly at times of stress when trying to analyse data and feeling conscious of my level of competence and then feelings of relief when getting to grips with the methodology. Also in the course of my reading around quantitative methodologies I was able to reflect on what type of materials and mode of presentation that I respond to best in my own learning, in this case about learning quantitative methodologies. I found that for this subject matter I preferred clarity and linearity of presentation (e.g. Dancey & Reidy, 2004) to texts that involve story-telling and characterization which have been much appreciated by many others (e.g. Field, 2009). This was surprising to me; given the value I place upon narrative explanations and metaphor in much of my thinking. It has led me to think more about how in practice, children should be considered individuals as learners and I am even more aware that they may respond differently to information presented in different contexts. I think it is important not to stop identifying myself as a learner as an educational psychologist in my professional development, and also to keep one in touch with what it is like to struggle with concepts and to work through these difficulties. I think my own experience of feeling vulnerable about my abilities help me empathise better with children and young people who might be struggling at school.

What was particularly interesting about the process of conceiving a research question was how my own research/reading, experiences in practice and my experiences at University had all come together through a reflective process. It has highlighted to me the importance of keeping interested in and abreast of new developments in research whilst working as a practitioner, as recommended by the HPC and BPS and as part of *Informed and Reasoned Action* within the *Constructionist Model of Informed and Reasoned Action* (COMOIRA) framework (e.g. Rhydderch & Gameson, 2010). It was the synthesis of my experiences of trainee practitioner and trainee student/researcher that was important, rather than considering these roles as distinct and isolated from one another.

It is clear that the decisions I took around research design impacted upon the results and analysis e.g. in my choice of a quantitative methodology for example and my 'pragmatic' response to data analysis. The information gathered was that of the perceptions of the individual participants but it is important to acknowledge and reflect upon the impact of me as researcher in process. In designing and guiding the research I have made an implicit statement of what I feel are important concepts and constructs to be investigated and I also determined whose voices should be included and who's excluded. The experience has also helped me move towards the British Psychological Society's required competency 4- the application of evaluation, research and enquiry in supporting my development in terms of planning and conducting research, development of my critical understanding of the philosophy of research, of research methods and design. This is a competency that I would feel that I am better equipped to work towards, and I will aim to keep an element of research in the majority of my practice.

Contribution to knowledge/relevance to practice and future directions

The increasing focus on evidence based practice and accountability to a range of bodies such as local and central government means that educational psychologists are being increasingly asked to carry out evaluation in educational and community settings, "evaluation has become increasingly important in the contexts in which educational psychologists (EPs) practice" (Dunsmuir et. al., 2009, p.53). Indeed it is not only important but also a requirement of the HPC to "use research, reasoning and problem solving skills to determine appropriate actions" (Standards of Practice 2b.1). Carrying out research as an educational psychologist is an important end in itself. If we accept the construction of the role of educational psychologist as partly researcher/enquirer then carrying out pertinent research and paying attention to developing research expertise can only bolster the role of the profession.

More specifically, the results of my study have implications both for further research, and also to some extent practice, although one must not over-generalize the reach of the results. Firstly the data adds to the small existing literature base linked to investigating the workings of classroom working alliance in the classroom and has also pointed towards some possibilities for further research and also possibilities in terms of intervention. The study has given weight to the utility of the CWAI as a measurement tool in that it was easily understood by the teachers and children to whom it was administered, and that it was relatively straightforward to administer and analyse. Use of the measure has supported claims that the construct of classroom working alliance has utility in the classroom environment, in that it shows that child ratings of classroom working alliance predict children's ratings of their engagement. It has also provided some data relating to the CWAI for the first time in a UK setting and also is possibly the first time that the construct of classroom

working alliance has been explored in this country. It has leant weight to findings that demonstrate lack of concurrence between teacher and child ratings of relationships and findings that demonstrate the predictive nature of the classroom working alliance measures around a number of outcomes for children and young people. The research has also taken into account children's views of their relationships with teacher which was something that was lacking within the existing research literature.

In terms of practice, the research suggests that the concept of classroom working alliance offers some opportunity for developing interventions to improve outcomes for children by focussing on aspects of teachers' relationships with their pupils. The classroom working alliance construct offers researchers and practitioners a new way 'in' to the teacher-pupil relationship, and the construct has a strong research base in the therapeutic setting. It has also provided an opportunity for the utilization of research expertise and ideas formulated internationally within a local context.

The results surrounding lack of gender difference in ratings of classroom working alliance for children but their presence in teachers' ratings has implications for the practice of educational psychology. Firstly the results reinforce the constructionist understanding (e.g. Burr, 1995; Gameson et al., 2005) that underpins the practice of many educational psychologists, that people can construct the world differently and that these differing constructions lead people to act in different ways. They are a reminder that educational psychologists must acknowledge and work with these differences. Secondly the results, along with other research literature relating to how teachers perceive children differently depending on attributes such as gender and ethnicity, provide an opportunity where educational psychologists can utilise the research base to appropriately and sensitively support teachers in practice

development. This could be done through training that supports teachers to understand how their own and others' preconceptions can impact upon their reactions to and practice with children.

Another contribution to practice might be as an example of how COMOIRA (e.g. Rhydderch & Gameson, 2010) can be used to support educational psychologists in navigating complex ethical issues, as discussed at a personal level above. "By viewing power as something which is created rather than manifest in different actors, children are not necessarily, nor permanently, less powerful than adults. Methods and ethics should be considered in light of the research questions, the research participants, and the social and cultural context of the research (Davies, 2008, p. 24)". If this assertion is taken to represent the complexities of the research process then the adoption of a framework for practice that acknowledges that practice is not static is key. A model that allows for reflective and reflexive practice that keeps practitioners alert to the different constructions at play at any one time and is flexible enough for ethical considerations to be approached "on-site in response to specific needs" (Gameson et al., 2001, p.101) is likely to be a good starting point when approaching ethical issues in practice. Indeed, the model proved helpful in framing and guiding my thinking in the research process.

These possible implications, however, are tentative and the value in this research seems to be particularly related to pointing toward possible pathways for further research, for example qualitative explorations of the working alliance concept, that might lead towards changing practice and developing interventions. As suggested in the empirical review, I felt that it might be of value to do some interviews around children's understanding of the nature of the teacher-pupil relationship to see whether their views are congruent with the construct of classroom working alliance.

As part of the debriefing sessions with the children, I gave them an opportunity to ask any questions or discuss any issues arising from the questionnaires. The children often had interesting things to say about their relationships with their teachers and their engagement in the classroom, and many commented that sometimes they felt different things in different situations. These views however could not be recorded as they were not part of the initial ethics proposal. A qualitative questionnaire designed to unpick the impact of context upon the constructs of engagement and working alliance might also prove of use. Whilst the engagement and working alliance measures have been shown to have validity of constructs as separate entities, there is a possibility that the measures are in fact measuring the same thing, and that the validity of the constructs and therefore the validity of the results of the correlational study might be called into question. Qualitative research may also be of use here to assess the validity of the constructs of engagement and working alliance for children and their teachers as to whether these are separate 'things' that can be measured. Equally further quantitative research with a larger sample would be an appropriate avenue for further research

As with many pieces of research the study seems have led to more questions than answers, and it seems appropriate to extend the concept of *contribution of knowledge* to include *contribution to the pursuit of knowledge*. ty

Summary

There has been much conversation about what is the unique role of the educational psychologist (e.g. Ashton & Roberts, 2006; Burnham, 2013). My experience of the research process has led me to reflect that one of the possible conceptions of the role as unique, lies within an understanding of the role as one that consciously integrates and synthesizes research, practice and personal development.

In terms of my own development as a researcher the experience of carrying out the project both reconfirmed some of my preconceptions about doing research but also provided me with opportunities to reflect on and improve my practice in future. I feel I have grown as a researcher in: further recognizing the impact that I as a researcher have on decisions about what it is that is important to research, decisions about who should be included; and how the data is interpreted. It has also made me think about the privileges and responsibilities inherent in being in a position to carry out research that may have an impact on children and young people's lives and those that work with them. The experience has helped me to develop a greater awareness of research design and the implications of this, aiding me in more critical readings of the research literature around psychology in education. It has also made me more aware of what ends to research is carried out and how the data might be used and interpreted by practitioners, that the reading and interpretation of research is an active process. "To conceive of knowledge as a collection of information seems to rob the concept of all of its life... Knowledge resides in the user and not in the collection. It is how the user reacts to a collection of information that matters." (Churchman1971, p. 10). What was the most rewarding experience of the process overall was how seriously the children who were involved in the research took their involvement. I was also surprised by the children's obvious enjoyment of the experience and their appreciation that their opinions were being sought. They were interested in why I was doing the research and what would come of it, and their questions often made me think more deeply about the possible implications of my work.

Returning to Dunsmuir's (2009) assertion that "evaluation has become increasingly important in the contexts in which educational psychologists (EPs)

practice", it is worth noting that throughout I have reflected on the roles of researcher and practitioner as distinct. I think on balance that this is an artificial separation. The pressure to demonstrate the impact and value of our contribution means that as a profession there is an increasing demand that we build in research and evaluation to interventions, in whatever forms they may take. Educational psychologists are uniquely positioned as professionals who have privileged access to educational and community settings andwho are experienced in working with and advocating for children. The research process has not given me specific answers to questions related to issues such as ethics and research design, rather it has made me more cognisant of the importance of asking myself questions about my motives and the impact of the research on those around me in each piece of research or evaluation I carry out.

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Appendix A:

Classroom Working Alliance Inventory- Student Version

Adapted with permission from WAI-SF (Horvath & Greenberg, 1986, 1989; Tracey & Kokotowitc, 1989) © Heath, Toste, Dallaire, & Fitzpatrick, 2007

===

1. _____ and I agree about the things I need to do to help me improve my schoolwork.

1	2	3	4	5
Never	Rarely	Sometimes	Often	Always

2. What I am doing in school helps me learn better in the areas that I have difficulty.

1	2	3	4	5
Never	Rarely	Sometimes	Often	Always

3. I believe _____ likes me.

1	2	3	4	5
Never	Rarely	Sometimes	Often	Always

4. _____ understands what I want to get out of school (what I want to learn and why).

1	2	3	4	5
Never	Rarely	Sometimes	Often	Always

5. I am confident in _____'s ability to help me at school.

1	2	3	4	5
Never	Rarely	Sometimes	Often	Always

6. _____ and I are working towards goals that we both agree on.

1	2	3	4	5
Never	Rarely	Sometimes	Often	Always

7. I feel that _____ enjoys working with me.

1	2	3	4	5
Never	Rarely	Sometimes	Often	Always

8. We agree on what is important for me to work on.

1	2	3	4	5
Never	Rarely	Sometimes	Often	Always

9. _____ and I trust one another.

1	2	3	4	5

    Never   Rarely   Sometimes   Often   Always

10. _____ and I agree about what my difficulties are.

    1   2   3   4   5

    Never   Rarely   Sometimes   Often   Always

11. We agree about what I need to do differently in school.

    1   2   3   4   5

    Never   Rarely   Sometimes   Often   Always

12. I believe that what I work on in school with _____ is useful.

    1   2   3   4   5

    Never   Rarely   Sometimes   Often   Always

Appendix B:

Classroom Working Alliance Inventory - Teacher Version

Adapted with permission from WAI-SF (Horvath & Greenberg, 1986, 1989; Tracey & Kokotowitc, 1989) © Heath, Toste, Dallaire, & Fitzpatrick, 2007

===

1. _____ and I agree about the things I need to do to help improve his/her schoolwork.

1	2	3	4	5
Never	Rarely	Sometimes	Often	Always

2. I am confident that what _____ is doing in school will help him/her learn better in the   areas that he/she has difficulty.

1	2	3	4	5
Never	Rarely	Sometimes	Often	Always

3. I believe _____ likes me.

1	2	3	4	5
Never	Rarely	Sometimes	Often	Always

4. I believe that _____ and I agree on what he/she needs to get out of school (what he/she needs to learn and why).

1	2	3	4	5
Never	Rarely	Sometimes	Often	Always

5. I am confident in my ability to help _____ at school.

1	2	3	4	5
Never	Rarely	Sometimes	Often	Always

6. We are working towards goals that we have agreed upon together.

1	2	3	4	5
Never	Rarely	Sometimes	Often	Always

7. I enjoy working with _____.

1	2	3	4	5
Never	Rarely	Sometimes	Often	Always

8. I think _____ and I agree on what it is important for him/her to work on.

1	2	3	4	5
Never	Rarely	Sometimes	Often	Always

9. _____ and I trust one another.

1	2	3	4	5
Never	Rarely	Sometimes	Often	Always

10. _____ and I agree about what his/her difficulties are.

1	2	3	4	5
Never	Rarely	Sometimes	Often	Always

11. We agree about what _____ needs to do differently in school.

1	2	3	4	5
Never	Rarely	Sometimes	Often	Always

12. I think that _____ believes that what we work on in school is useful.

1	2	3	4	5
Never	Rarely	Sometimes	Often	Always

Appendix C: Engagement vs. Disaffection with Learning
Student Report

<u>How I Feel About School</u>

1. I try hard to do well in school.

A) Not at all true   B) Not very true   C) Sort of true   D) Very true

2. I enjoy learning new things in class.

A) Not at all true   B) Not very true   C) Sort of true   D) Very true

3. When we work on something in class, I feel discouraged.

A) Not at all true   B) Not very true   C) Sort of true   D) Very true

4. In class, I do just enough to get by.

A) Not at all true   B) Not very true   C) Sort of true   D) Very true

5. Class is fun

A) Not at all true   B) Not very true   C) Sort of true   D) Very true

6. In class, I work as hard as I can.

A) Not at all true   B) Not very true   C) Sort of true   D) Very true

7. When I'm in class, I feel bad.

A) Not at all true   B) Not very true   C) Sort of true   D) Very true

8. When I'm in class, I listen very carefully.

A) Not at all true   B) Not very true   C) Sort of true   D) Very true

9. When I'm in class, I feel worried.

A) Not at all true   B) Not very true   C) Sort of true   D) Very true

10. When we work on something in class, I get involved.

A) Not at all true   B) Not very true   C) Sort of true   D) Very true

11. When I'm in class, I think about other things.

A) Not at all true   B) Not very true   C) Sort of true   D) Very true

12. When we work on something in class, I feel interested.

A) Not at all true   B) Not very true   C) Sort of true   D) Very true

13. Class is not all that fun for me.

A) Not at all true   B) Not very true   C) Sort of true   D) Very true

14. When I'm in class, I just act like I'm working.

A) Not at all true   B) Not very true   C) Sort of true   D) Very true

15. When I'm in class, I feel good.

A) Not at all true   B) Not very true   C) Sort of true   D) Very true

16. When I'm in class, my mind wanders.

A) Not at all true   B) Not very true   C) Sort of true   D) Very true

17. When I'm in class, I participate in class discussions.

A) Not at all true   B) Not very true   C) Sort of true   D) Very true

18. When we work on something in class, I feel bored.

A) Not at all true   B) Not very true   C) Sort of true   D) Very true

19. I don't try very hard at school.

A) Not at all true   B) Not very true   C) Sort of true   D) Very true

20. I pay attention in class.

A) Not at all true   B) Not very true   C) Sort of true   D) Very true

Appendix D: Parent Information Letter

Dear Parent/Guardian

Re: Research

My name is Andrea Honess and I am in the final year of training to be an educational psychologist at Cardiff University. As part of my training I am undertaking a research project.

I am interested in finding out whether children's engagement in the classroom has any relationship with aspects of their relationship with staff (things like shared understanding of goals). I would really appreciate your help with this project in allowing me to ask your child to complete two questionnaires about their engagement in the classroom and their working relationship with their teacher.

The children's names and the name of the school would be kept confidential and the only people who would have access to the named data would be myself and my supervisor, Dr Simon Griffey (griffeysj@Cardiff.ac.uk). Your child can withdraw from the study at any point during the process, without consequences up until the data is anonymised in July 2014.

If you are not happy for your son or daughter to take part, please sign the attached form and return it to school by 15th November.

If you would like to know more about the project, please contact either myself or Ms ??, the deputy head at the school.

Many thanks for taking the time to read this letter and for your help.
Yours sincerely,
Andrea

Researcher contact details:
YardleyHonessAJ@cardiff.ac.uk

In case of complaints please contact:

Dr Simon Griffey
School of Psychology
Cardiff University
029 208 70366
griffeysj@Cardiff.ac.uk

Appendix E-Parent Consent Form

Please return this form to school by 15th November if you do not want your child to take part in the study

School of Psychology, Cardiff University
Consent Form - Confidential data (Parents)

Research into the relationship between working alliance and children's engagement in the classroom.

I understand that my child's participation in this project will involve completing two questionnaires which will require approximately 40 minutes of their time. I understand that my child's participation in this study is entirely voluntary and that they or I can withdraw them from the study at any time without giving a reason.

I understand that I am or my child is free to ask any questions or discuss my concerns at any time with Andrea Honess or Dr Simon Griffey.

I understand that the information provided by my child will be held confidentially, such that only Andrea Honess and Dr Simon Griffey, can trace this information back to them individually. I understand that my child's data will be anonymised at the end of July 2014 and that after this point no-one will be able to trace my information back to them. The information will be retained until July 2014 when it will be deleted/destroyed.

I understand that I can ask for the information they provide to be deleted/destroyed at any time up until the data has been anonymised and I can have access to the information up until the data has been anonymised.

I also understand that at the end of the study I will be provided with additional information and feedback about the purpose of the study.

If you **do not** wish your child to take part please return this letter to school by (to be filled in when exact dates known).

I, _____(NAME) **do not** wish my child to participate in the study conducted by Andrea Honess, School of Psychology, Cardiff University with the supervision of Dr Simon Griffey.
Signed:
Date:
Researcher contact details:
YardleyHonessAJ@cardiff.ac.uk
Supervisor contact details:
Dr Simon Griffey
School of Psychology
Cardiff University
029 208 70366
griffeysj@Cardiff.ac.uk

Appendix F: Teacher Consent Form

Dear Teachers

Re: Research

My name is Andrea Honess and I am in the final year of training to be an educational psychologist at Cardiff University. As part of my training I am undertaking a research project.

I am interested in finding out whether children's engagement in the classroom has any relationship with aspects of their relationship with staff (things like shared understanding of goals). I would really appreciate your help with this project by completing questionnaires about your relationship with individual children in your class. Involvement in the project would take approximately two hours of your time.

Teachers' names, children's names and the name of the school would be kept confidential and the only people who would have access to the named data would be myself and my supervisor, Dr Simon Griffey (griffeysj@Cardiff.ac.uk). If you agree to take part you can withdraw from the study at any point during the process, without consequences, up until the data is anonymised in July 2014.

If you are happy to take part, please sign the attached form and return it to Ms ? by 15th November.

If you would like to know more about the project, please contact either myself or Ms ??, the deputy head at the school.

Many thanks for taking the time to read this letter and for your help.
Yours sincerely,
Andrea

Researcher contact details:
YardleyHonessAJ@cardiff.ac.uk

In case of complaints please contact:

Dr Simon Griffey
School of Psychology
Cardiff University
029 208 70366
griffeysj@Cardiff.ac.uk

Appendix G: Teacher consent form

Consent Form - Confidential data (Teachers)

Research into the relationship between children's engagement in the classroom and teacher-pupil working alliance.

I understand that my participation in this project will involve completing one questionnaire for each child in my class for whom informed consent has been obtained and that this will require a maximum of approximately 2 hours of my time.
I understand that participation in this study is entirely voluntary and that I can withdraw from the study at any time without giving a reason. I understand that I am also free to leave out questions in the questionnaires that I don't feel happy answering.

I understand that I am free to ask any questions at any time. I am free to withdraw or discuss my concerns with Andrea Honess or Dr Simon Griffey.

I understand that the information provided by me will be held confidentially, such that myself and my supervisor, Dr Simon Griffey, can trace this information back to me individually. I understand that my data will be anonymised at the end of the study in July 2014 and that after this point no-one will be able to trace my information back to me.

I understand that I can ask for the information I provide to be deleted/destroyed at any time up until the data has been anonymised and I can have access to the information up until the data has been anonymised.

I also understand that at the end of the study I will be provided with additional information and feedback about the purpose of the study.

I, _____(NAME) consent to participate in the study conducted by Andrea Honess with the supervision of Dr Simon Griffey.

Signed:
Date:

Researcher contact details:
YardleyHonessAJ@cardiff.ac.uk

In case of complaints please contact:
Dr Simon Griffey
School of Psychology
Cardiff University
029 208 70366
griffeysj@Cardiff.ac.uk

Appendix H: Debriefing Document Teachers and Parents

Study Title: **Research into the relationship between children's engagement in the classroom and teacher-pupil relationships.**

About this Study:

This research project aimed to fill a gap in the research literature by looking at the relationship between children's ratings of their engagement in the classroom and their relationship with their teacher. Data collected included a questionnaire for children about their engagement in the classroom and a questionnaire for teachers and children about their working relationship. The research was carried out order to inform directions for future research and also to inform the design of strategies for enhancing children's learning in the classroom.

If you have questions, please contact me, Andrea Honess, at YardleyHonessAJ@cardiff.ac.uk or my research supervisor:

Dr Simon Griffey
School of Psychology
Cardiff University
029 208 70366
griffeysj@Cardiff.ac.uk

Thank you for your participation!