

INSTITUTE OF EDUCATION, UNIVERSITY OF LONDON

**An exploration of the link between pupil motivation and
disruptive behaviour in the classroom**

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Abstract

The relevance of motivation to education and pupils' academic achievement has long been recognised, and research has indicated that the concept of motivation may also be reliably linked to pupils' behaviour in school.

A key aim of the present study is to investigate the link between pupil motivation and disruptive behaviour in the classroom. In particular, the study will examine whether the combination of achievement goal theory and self-determination theory can provide a better explanation for pupils' disruptive behaviour in the classroom than either theory alone. A further aim of the research is to explore how aspects of classroom and school structures might impact on pupil motivation and behaviour.

A mixed methods design was employed in service of the research questions. A sample of 257 pupils aged between 9 and 11 from four primary schools completed a questionnaire containing items related to their perceptions of their classroom goal structures, personal goal orientations, perceptions of teaching and liking for school. Pupils also reported on their engagement in disruptive behaviour in the classroom. Interviews were conducted with class teachers and a member of the senior management team in each school to elicit their views on school practices and processes that they believed to have an impact on pupil motivation and behaviour.

Overall, the study found that the combination of achievement goal theory and self-determination theory provided a better explanation for pupils' engagement in disruptive behaviour, with pupils' perceptions of a classroom performance approach and liking for school being the most significant predictors of disruptive behaviour, along with gender. Class teachers reported the use of practices underpinned by aspects of both theories in their classrooms as a way of motivating pupils and promoting good behaviour. The enhancement of pupil motivation was generally considered as a priority and was featured in school policy documents.

Implications of the findings are discussed in the context of curriculum delivery in schools and the development of whole school practices which aim to encourage pupil motivation and promote positive behaviour.

I hereby declare that, except where explicit attribution is made, the work presented in this thesis is entirely my own.

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1 INTRODUCTION

The main aim of this research is to explore the association between pupil motivation in school and disruptive behaviour in the classroom. These two areas are of considerable interest to both psychologists and educators, and the notion that there is a link between them is widely accepted within the respective fields of psychology and education.

The idea for this particular study stemmed from the author's practice as a trainee educational psychologist. A piece of work that had been identified by the author's employing authority as needing to be undertaken concerned the practice of motivating pupils in schools; where and how this was happening and whether or not schools were experiencing success in their endeavours. This led to the author making a visit to a primary school whose teaching staff considered themselves to be active in the promotion of creating opportunities to motivate their pupils. The school's development plan had been written such that it centred around pupil motivation, and the delivery of the curriculum in this school is such that it is determined by principally by process, namely *how* it is delivered; the content of the curriculum is then made to fit the design.

An approach to teaching and learning such as this has taken a great deal of dedication from the head teacher and members of staff to put in place, and the general feeling is that the school is doing exceptionally well as a result of the changes made over the years. Indeed, the school's most recent OFSTED inspection resulted in a grade of 'good', with outstanding features in areas such as 'working in partnership with others to promote learners' well-being' and 'the extent to which learners make a positive contribution to the local community'. It was highlighted in the report that pupils' behaviour in lessons is good, and pupils with social and emotional difficulties achieve well because of the good attention to their needs.

Educational psychologists regularly receive requests from staff in schools to work with and to assess pupils whose behaviour is regarded as being challenging or disruptive. In the profession of applied educational psychology, one of the aims when working with schools is that of 'capacity building', i.e. working to enable the school as a system (as well as the individuals within it) to become more responsive to the needs of its pupils. In working with those in schools to try to understand the reasons for pupil behaviour in certain contexts, the idea is that they will be able to implement structures and practices within the school system that have been shown to be effective in dealing with and managing issues of concern, i.e. disruptive behaviour. One of the most valuable ways in which this can be done is by identifying what appears to be

working in other, similar settings, and then applying this to the settings in which the concerns have been identified.

The staff who teach at the primary school mentioned above clearly feel that what they do works. It was evident to the author upon visiting that there is some excellent work being done in the school, and that the approach to teaching and learning is not only different to that traditionally adopted in schools, but also that the pupils that were spoken to and observed during the visit appeared to be enthused by and respondent to it. If it is the case that the overall effectiveness of this particular school can, at least to some degree, be attributed to the adoption of an approach that places an emphasis on enhancing pupils' motivation, then this could well have implications for the ways in which the curriculum is delivered, and for educational policy and practice in general.

2 LITERATURE REVIEW

The aim of this chapter is to provide an overview of the literature pertaining to the subject of this study. The first section of this review will consider the theories of motivation in psychology and education, with reference to the development of these theories over time, leading to an explication of the theories that are central to this particular piece of research.

The second section shall focus on the achievement goal and self-determination theories of motivation, as these are the theories upon which this particular piece of research will be based. Research that looks at the relevance of these theories to education will be reviewed, in order to provide a rationale for the research questions posed in this particular study. The reasons for selecting these theories for this particular study over and above other theories of motivation that are considered to be relevant to education will be discussed. This section will also reflect on the notions of teacher and peer support with respect to pupil motivation and learning.

The third section will examine the issue of disruptive and challenging behaviour in the classroom and the development over time of policies relating to discipline in schools. Theories relating to the reasons for pupil engagement in disruptive behaviour in the classroom will also be discussed. The fourth section in this chapter will explore the link between pupil motivation to learn and disruptive behaviour, with an overview and analysis of existing research that has aimed to highlight this association.

Finally, the aims of the research and the specific research questions this study will address will be outlined, with reference to the proposed theoretical model upon which the research questions are based.

2.1 Theories of motivation in psychology and education

Motivation has had many meanings in the history of psychology, and it is recognised that the significance and meaning of the concept are determined by the theoretical perspectives and empirical evidence available at any given time in that history (Ferguson, 2000). What follows is a discussion of some of the earlier theories of motivation, leading to a presentation of how theories of motivation have developed and the relevance they hold with respect to education.

2.1.1 Early theories of motivation: Behaviourism, drives and needs

The study of motivation can historically be traced back to the writings of Socrates, Plato and Aristotle, who began questioning why people pursue certain goals instead

of others. The concept of motivation is first and foremost a theoretical one that is used to explain the initiation, direction, intensity and persistence of behaviour, especially goal-directed behaviour (Brophy, 1999). The earliest theories of motivation inherently treated it as a category for describing the human condition; a need or drive was viewed as the instigator, or 'spring of action' (Ames & Ames, 1984). The idea of organisms being responsive to basic drives or needs was essentially a behaviourist one and this led to the conceptualisation of motivation as drive created by the deprivation of tissue needs (hunger, thirst, etc.) (Brophy, 1999).

Hull (1943) was one of a number of theorists that made attempts to quantify motivation. Hull represented the notion of drive as developed from the concept of instinct, and theorised that it was the source of energy for human behaviour. Hull proposed that drive explained the intensity and duration of behaviour, as distinct from learning, which would explain the direction of a behaviour. Drive was thought to be linked to basic needs, and an individual's level of drive would therefore be dependent upon these needs being met. Hull also saw behaviour as being affected by habit (Galloway, Rogers, Armstrong & Leo, 1998), and that habit strength was increased each time a given response was performed and reinforced, but was reduced each time the response was performed but not reinforced. The relationship between behaviour, drive and habit was proposed as follows: $behaviour = drive \times habit$ (Galloway et al., 1998, p.21), implying that a very low or zero drive level would mean that no appropriate behaviour would be carried out.

Further theoretical developments led to a move away from attempts to quantify motivation, and a de-emphasis in general on the concepts of drive and incentive (Brophy, 1999). The focus of the behaviourists shifted from motivation to the idea of control and the use of reinforcement to bring behaviour under the control of a stimulus, where the stimulus is an external cue that tells the learner that a certain behaviour is expected and that production of the behaviour will elicit reinforcement. Where necessary, behaviours are shaped to bring them to the target level and, once reached, the level of behaviour is maintained through frequent reinforcement. Any undesired behaviours are eliminated through non-reinforcement (or punishment) (Brophy, 1999). This form of behavioural control is very much evident in schools today with, for example, the use of rewards (positive reinforcement) and sanctions (negative reinforcement) to bring about and maintain desired behaviours.

One of the issues that could be taken with the behaviourist theory lies in its proposal that motivation can be explained simply by the effects of external reinforcement. In

essence, this idea is quite a simplistic one and does not seem to go far enough in explaining the internal processes that direct an individual's actions, nor the anticipated outcomes of these actions. It is the case however, that most behavioural models now include some consideration of learners' thoughts and intentions, much like the cognitive models that have developed.

Cognitive models of motivation do include some reference to the concept of reinforcement, but the effects of such reinforcement are seen as being mediated through the learner's thoughts, i.e. the extent to which they value the reinforcer, their expectation of receiving it upon task completion, their belief in their ability to complete the task and their belief that pursuance of the task is worthwhile (Brophy, 1999). That these models began to account for the cognitions of the learner represented a significant advancement, however they still didn't answer questions as to *what* individuals want to do and *why* they might be motivated to produce a desired behaviour, nor did they seek to address the conditions under which these behaviours are most likely to be produced.

As an alternative to the behaviourist theories and concepts of drive came need theories of motivation. These theories explain behaviours as responses to felt needs which are either innate and universal, or learned through cultural experience (Brophy, 1999). Early need theories (e.g. Murray, 1938) fostered research which focused on culturally acquired psychological needs. The concept of 'need' has its relevance in terms of education; and much of the research into motivation that is of interest to educators developed out of early work on the need for achievement (e.g. achievement motivation theory, goal theory).

Although the face validity of the concept of need can be argued for, the difficulty with basing a theory of motivation purely on this concept arises when trying to come up with a definition that allows it to be operationalised and measured independently of the behaviours that it is supposed to predict (Brophy, 1999). The danger of circularity emerges here; a student can have a high need for achievement because they work hard to get good grades, but it could also be said that they work hard to get good grades because they have a high need for achievement. Theories such as this which encompass trait-like concepts have given way to theories which feature concepts that are more situational goal concepts, although the term 'need' is still used within some of these theories.

2.1.2 Developments in theories of motivation: Goal theories

The commonality between behaviourist and need theories is that they conceive people's motivations to act as reactions to pressures, which are brought about either by extrinsic forces or internally felt needs. As noted earlier, the aspects of motivation that these theories do not account for concern the direction, magnitude, persistence and quality of an individual's behaviour. As their name suggests, goal theories specify behaviours with respect to goals; these are essentially what give an activity some purpose or meaning, the incentive or outcome a person is trying to achieve (Kaplan & Maehr, 2007; Maehr & Zusho, 2009). Theories which adhere to such a content-oriented approach to goals include Locke and Latham's (1984) goal-setting theory, Bandura's (1989) discussion of proximal and distal goals as related to self-efficacy, and Wentzel's (2000) work on social goals.

Goal theorists have tended not to focus on issues of intensity and strength with respect to motivation, choosing instead to concentrate on the qualitative differences in the goals that individuals formulate and pursue (Brophy, 1999). This is evident particularly in achievement situations, i.e. in schools. Most of the work that has been done on motivation in the classroom has concluded that 'it is desirable for pupils to focus on mastering the tasks involved in achievement situations rather than on competing with peers or worrying about how their performance will be judged by others' (Brophy, 2010, p 73). This conclusion proved however to be rather one-dimensional, with emerging research showing that performance goals can be, under certain conditions, associated with desirable outcomes (e.g. Valle et al., 2003). The distinction between learning goals (mastering tasks) and performance goals (demonstrating performance) and their effects on achievement in different situations has provided much insight into the attempt to understand students' orientations toward task engagement in classrooms. This distinction will be explored further in the next section.

2.1.3 Developments in theories of motivation: Intrinsic motivation theories

The concept of intrinsic motivation emerged from the notion that individuals engage in activities because they want to, rather than because they feel the need to (Collier, 1994), and it is defined as an 'inherent tendency to seek out novelty and challenges, to extend and exercise one's capacities, to explore and to learn' (Ryan & Deci, 2000, p.70). As seen from a developmental perspective, the existence of intrinsic motivation is argued for when observing young children playing freely. The activities they choose to engage in (e.g. inventing games and rules, imitating each others' actions, counting arranging and displaying objects) provide rich opportunities for learning and

enhancing their development. Play and active learning are intrinsically motivated activities and are engaged in because they are inherently interesting and enjoyable (Ryan & Deci, 2009). Defining intrinsic motivation in this way emphasises the affective quality of an individual's engagement in an activity. Other ways of defining intrinsic motivation encompass more cognitive aspects – the degree to which participation in an activity is thought to be worthwhile or meaningful (Brophy, 2010).

It has also been argued that, in addition to interest and enjoyment, the need to feel autonomy and agency are fundamental to intrinsically motivated behaviour, as is the component of mastery (Ryan, Connell & Deci, 1985). The concept of perceived control over task engagement is central to many views of intrinsic motivation (Pintrich & Schunk, 2002); the notion is that actions must be experienced as having been determined by individuals themselves if intrinsic motivation is to develop (Brophy, 2010). The concept of mastery is linked to early theorising by White (1959), who suggested that individuals act out of the need for competence motivation; that is the need to deal effectively with the surrounding environment and to master the things in it.

2.2 Achievement goal theory and self-determination theory

2.2.1 Achievement goal theory

The achievement goal construct was developed primarily by Carol Ames, Carol Dweck, Martin Maehr and John Nicholls, who researched both independently and together through the mid- to late 1970s (Elliot, 2005). Dweck's aims stemmed from some of her earlier research on helplessness in achievement settings; she was attempting to explain why children of equal ability displayed either adaptive or maladaptive patterns of achievement behaviour (Dweck, 1986). Dweck theorised that children's theories of intelligence orient them towards different goals; children who believe intelligence is a fixed trait tend to orient towards gaining favourable judgements of trait (i.e. performance goals), but children who view intelligence as a malleable quality tend to orient towards that quality (i.e. learning goals)¹. These goals then set up the different behaviour patterns observed (Dweck, 1986).

¹ Other researchers have identified similar goals to those of learning and performance but have used other terms, e.g. task involved versus ego involved (Nicholls, 1984), mastery versus ability focused (Ames, 1992) and task focused versus ability focused (Maehr & Midgley, 1991). It is generally accepted that these goal sets can be treated as conceptually similar constructs (Pintrich & Schunk, 2002), but for the purposes of this research they shall be referred to as 'mastery' and 'performance' goals.

A mastery (learning) goal orientation is defined in terms of a focus on developing one's abilities, mastering a new skill and trying to understand learning materials (Meece, Anderman & Anderman, 2006). When oriented towards this goal, pupils derive satisfaction from the inherent qualities of the task, such as its interest and challenge. In contrast, a performance goal orientation represents a focus on demonstrating high ability relative to others (Meece et al., 2006), and preserving self-perceptions and a public reputation as an individual that has the capability to succeed (Brophy, 2010). The overarching distinction between mastery and performance goals is that the former is about *developing* ability, whereas the latter is about *displaying* ability (Brophy, 2010).

Central to this is the notion of competence, which is assumed by goal theorists to be the goal of achievement behaviour (Maehr & Zusho, 2009). The personal definitions of competence however may vary under the two goal orientations; mastery-oriented pupils would view competence incrementally in reference to their own individual standards (of excellence) whereas performance-oriented pupils would adopt the view that being able to demonstrate competence indicates that one is more able than others (Dweck & Leggett, 1988).

Advancements in the research on goal theory began to suggest that mastery and performance goals could complement each other in some circumstances, such as if the performance goals were focused on achieving success rather than avoiding failure (e.g. Barron & Harackiewicz, 2001; Hulleman, Durik, Schweigert & Harackiewicz, 2008; as cited in Brophy, 2010). The findings from studies such as these led to a distinction between performance-approach and performance-avoidance goals (Elliot & Harackiewicz, 1996; Middleton & Midgley, 1997). Performance-approach goals refer to pupils' orientation to the demonstration of high ability and performance-avoidance goals refer to pupils' orientation to avoiding the demonstration of low ability.

There is a wealth of evidence to suggest that the achievement goal structures that pupils perceive both in the classroom and in the school as a whole are related to their self-perceptions and personal goal orientations (e.g. Ames, 1992a; Ames & Archer, 1988; Midgley, Anderman & Hicks, 1995).

2.2.2 Goal theory in the classroom

In an argument against the idea that motivation is a trait of the pupil and cannot be influenced by their teacher or otherwise, Hickey (1997) discussed research that demonstrated that the context in which a pupil learns may be just as important a

determinant of their motivation and achievement-related behaviours, and Eccles (2004) suggested that schools (along with the family and peer group) are one of the most influential contexts for children's development. Whilst achievement goal theory (AGT) provides a coherent framework for studying individual differences in pupil motivation, it is also useful for analysing the influence that classroom environments have on pupils' motivation and learning patterns.

In a study into the relation between perceptions of the school psychological environment and school-related beliefs, affect and achievement, Roeser, Midgley and Urdan (1996) sampled 296 8th grade (13-14 year old) middle school students from two schools within the same district. Roeser et al. were particularly interested in examining the mediating role of personal achievement goals and feelings of school belonging in the relationship between school environment and student outcomes. Drawing on both AGT research and research that has highlighted the relations between aspects of the learning environment and students' sense of community in school, Roeser et al. aimed to test the following hypotheses: i) perceptions of a school goal structure will predict students' personal goals; ii) perceiving a performance goal structure will be positively related to feelings of academic self-consciousness (mediated through students' personal ability goals), iii) perceiving a mastery goal structure will be positively related to academic self-efficacy, and iv) positive feelings of school belonging will predict increased positive feelings towards school and decreased self-consciousness in learning situations. Roeser et al. provided a thorough review of the literature in service of these hypotheses, and linked these hypotheses to a proposed theoretical model which was again based on previous empirical research in classrooms and schools.

In summarising the analysis of their data, Roeser et al. found support for all four of their hypotheses outlined above. They concluded that middle school environments that are perceived as supportive, caring and as emphasising individual effort and improvement are related to a more adaptive pattern of cognition, affect and behaviour than middle school environments that are perceived as less supportive and as emphasising relative ability and competition.

This study was, overall, well designed and comprehensive. Although there was no mention of the participant recruitment process or eligibility criteria for inclusion in the study, the sample size was adequate, well described and seemingly representative of the population from which it came. In addition, the potential influences of extraneous variables such as socioeconomic status, race and prior academic achievement were

identified and controlled for. This study encompassed different aspects of the literature on motivation in classrooms and schools, such as the perceived goal structures and student-teacher relationship dimensions, which the authors suggested had not previously been examined. Of particular significance is their attempt to focus on the school psychological environment, which they note has been referred to elsewhere as the 'school ethos' or 'school culture'.

Roeser et al. noted that when using the term psychological environment, they are referring to the 'meaning of the environment to the individual [student]' (p. 410). They provided adequate reasoning for their justification for studying the school environment, however their measurement of perceptions of both the goal and relationship dimensions of this environment raises questions as to whether or not this was accurately conceptualised. The authors noted that adolescents 'experience several different classroom environments' (p. 413) during a typical school day but that their study was concerned with 'the psychological environment in the school as a whole' (p.413). Whilst the measures used were generalised as opposed to domain- or classroom-specific, the fact that the perceptions of the school environment were elicited from just the students is potentially problematic.

The very nature of a middle school setting encompasses a myriad of interactions and experiences that would influence pupil perceptions of the school environment. Had the study also elicited perceptions of the staff, these could have been linked with the reports from the pupils, providing a considerably better picture of the perceptions of the school environment and thereby adding weight to the research findings. This limitation was recognised by the authors, and they further added that the link between school policies and practices and students' perceptions could have been examined. This study did, however, produce clear and interesting findings which provide a basis on which further research in this area could easily be conducted.

2.2.3 Self determination theory

Self-determination theory (SDT; Deci & Ryan, 1985, Ryan & Deci, 2000) begins with the premise that human beings are inherently proactive and have a natural tendency to learn and develop as they engage both their outer environments and their inner world of drives, needs and experiences. SDT proposes that the tendencies toward intrinsic motivation and integration are important factors in the inherent motivation an individual possesses with respect to learning (Ryan & Deci, 2009). In essence, SDT focuses on how social and cultural factors facilitate (or undermine) an individual's ability to make decisions or to express their desires and preferences, in addition to

their well-being and quality of performance. SDT therefore has potential relevance to and implications for educational practice and policies, particularly given the culture of focusing on outcomes and the pressure under which schools are placed to produce these outcomes that exists today (Ryan & Brown, 2005).

SDT theory posits that activities which tap into an individual's level of intrinsic motivation are inherently interesting and enjoyable. The idea is that participating in intrinsically motivated activities can result in adaptive learning and competencies, but that this is not the direct or main aim of the activities (Ryan & Deci, 2009). Rather, the activities satisfy 'deep psychological needs to feel competence and autonomy' (Ryan & Deci, 2009, p.172), which when satisfied lead to enjoyment; learning, growing and creating are a by-product of this enjoyment. There is also the notion that, while some educational institutions utilise strategies of monitoring, evaluation and external control which seemingly oppose the inherently active and curious nature that children possess, there are those individual teachers who are able to bring out that activeness and curiosity purely by their approach to teaching and learning (Ryan & Deci, 2009). It is not inconceivable to think that this could happen in the school as a whole.

The idea of autonomy and competence being basic psychological needs as mentioned above is a principal tenet of SDT theory. Deci and Ryan (1985) stated that intrinsic motivation is enhanced when an individual is able to satisfy these needs, whereas when these needs are thwarted, levels of intrinsic motivation are decreased. They link this to the use of rewards and other external motivators in schools such as evaluations and observations. However, when individuals feel that they have some choice about their actions (in the absence of external pressure), they are able to maintain the perception that the locus of causality for their behaviour is internal, thus maintaining a level of intrinsic motivation. In the context of school and education, competence refers to a pupil's need to feel capable of engaging in academic work, and autonomy suggests that a pupil has some choice about their work and an ability to make some decisions. The potential impact of different teaching practices and approaches to teaching on the fostering of pupils' autonomy and competence in schools will be considered in a review of empirical research the next section.

According to some motivational researchers, relatedness is, along with autonomy and competence, a basic psychological need that is essential to human growth and development (Connell & Wellborn, 1991; Deci, Vallerand, Pelletier & Ryan, 1991). Indeed, Deci and Ryan (2000) view relatedness as a key component of SDT, where it is seen as being realised through one's positive interactions with others. Osterman

(2000) notes that the need for relatedness involves the need to feel securely connected with others in the environment and that, in essence, this need for relatedness is the need to experience belongingness or the sense of community². Hamm and Faircloth (2005) defined a sense of school belonging as pupils' perceptions of being liked, respected and valued by others in the school, as well as a perception of being able to rely on (i.e. be supported by) other community members. They stated that sense of school belonging is critical to pupils' adjustment because it meets their developmental need for relatedness. In summarising research studies into school belonging, Cemalcilar (2010) noted that, in general, pupils with a greater sense of school belonging are found, amongst other things, to have better relationships with their peers and teachers. The impact of this peer and teacher support will be considered later in this section.

Pupils' perceptions of their feelings of autonomy, competence and relatedness in relation to school have been shown to be linked to their thoughts about school, i.e. the degree to which they see school as having an affective value and how much they like it. Ireson and Hallam (2005) examined the associations between a measure of pupils' liking for school and their experiences in lessons, their self-concepts and the amount of setting implemented in school. Their research findings indicated that for pupils, the affective value of school was related to both their general self-concept in school (which was affected by their relationships with their peers and teachers) and their perceptions of the extent to which teachers displayed a willingness to help them learn and understand.

2.2.4 Self-determination theory in the classroom

There has been much research linking self-determination in educational settings to adaptive consequences, such as higher concentration in class (Standage, Duda & Ntoumanis, 2005) and effort (Ntoumanis, 2001). Early studies in this area lent further support to the link between autonomy, competence and intrinsic motivation. Deci, Schwartz, Sheinman and Ryan (1981) examined the intrinsic motivation of students in late elementary school classrooms in relation to teacher behaviour. They found that students tended to become more intrinsically motivated in classrooms where teachers reported being more autonomy supportive, whereas in classrooms where teachers

² Sense of school belonging is also referred to in the literature as school attachment, sense of relatedness, sense of school community or school membership (Cemalcilar, 2010). Within the present study, the terms 'sense of relatedness' and 'school belonging' are used interchangeably.

were more controlling, students tended to lose intrinsic motivation, perceived competence and self-esteem.

Further empirical research to investigate this was carried out by Skinner and Belmont (1993) who examined the effects of the involvement, structure and autonomy support dimensions of teacher behaviour on children's behaviour and engagement across a school year. They outlined the framework for their study, namely a motivational model of which a key notion was that the source of motivation is internal to the child, and when the child's basic psychological needs (for competency, autonomy and relatedness) are provided for by the social environment, motivation will flourish. Furthermore, the power of specific teacher behaviours will be determined by the extent to which they effectively provide for student' basic needs. This is consistent with theorising within the literature on SDT. In addition to investigating the relationship between teacher behaviour and student engagement, Skinner and Belmont examined the reciprocal relationship between these variables. They proposed that both student and teacher behaviour in the classroom would be mediated by their perceptions – children would be engaged to the extent that they felt their needs were met, and teachers would modify their behaviour towards students on the basis of their perceptions of student engagement. This study was longitudinal in nature and data were collected at two time points (T1 and T2) over the course of one academic year.

Skinner and Belmont found that, from the correlations between the three teacher behaviours and student perceptions of teacher behaviour between T1 and T2, the only consistent predictor of student perceptions was teacher involvement, suggesting that teachers who were more involved with their students were perceived as being structured and autonomy supportive. Strong relations were also found between all aspects of students' classroom perceptions and their engagement between T1 and T2, suggesting that student engagement was predicted by the extent to which they felt their needs were being met. Although there was a correlation between student reports of engagement at T1 and teacher perceptions of student engagement at T2, further analysis of the data did not show evidence of a causal link. However, teacher perceptions of student engagement at T1 predicted their reports of student behaviour at T2. Overall, the findings showed strong support not only for the relationship between teacher behaviour and student engagement, but also for a reciprocal relationship between the two.

In addition to its longitudinal design, a particular strength of this study was the collection of data from the perspectives of both students and teachers, allowing for the

correlation between the reports from both groups to be analysed. The finding that teachers and students did not agree on their perceptions of teacher behaviour at the beginning of the school year but did towards the end suggests that the relationship a teacher builds with his/her pupils takes some time to become established and be understood on both sides. This is an important finding and should not be underestimated when attempting to assess teacher and student perceptions of teaching and of the classroom environment in general.

2.2.5 Peer and teacher support

As demonstrated earlier, some goal theorists have suggested that teacher behaviour and discourse can communicate to pupils their beliefs about the purposes of achievement, and may therefore affect the goals and achievement-related behaviours that students adopt in class (e.g. Ames, 1992b). From an SDT perspective, studies that have examined the extent to which schools as social contexts influence pupils' sense of belonging have also shown this to be the case. Taking into account both theoretical perspectives and empirical research, Gest, Welsh and Domitrovich (2005) suggest that students who experience close relationships with teachers and peers within a supportive school community report more positive feelings about school and achieve higher levels of academic and behavioural competence. Furrer and Skinner (2003) found that secure social relationships play a central role in pupils' schooling, and Cemalcilar (2010) theorised that trusting and supportive social relations provide a safe base for pupils and this feeling subsequently enables them to engage in activities, motivates them to achieve their potential and acts as a buffer in the face of obstacles.

Teachers are undoubtedly seen as important adult figures within school. Juvonen (2006) noted that much research on teacher-pupil relationships is guided by an assumption that is related to the definition of belongingness put forward by Baumeister and Leary (1995), namely that 'frequent, affectively pleasant interactions' with teachers 'in the context of a temporally stable and enduring framework of affective concern' (p. 497) are important for most pupils. Indeed, studies have shown that high quality relationships with teachers, characterised by mutual respect, support, and care, are strongly associated with higher academic motivation and autonomy, positive attitudes towards schooling, positive self-concept, higher self-esteem and prosocial behaviours (e.g. Furrer & Skinner, 2003; Skinner & Belmont, 1993; Watson & Battistich, 2006).

With respect to peer support, research on the impact of emotional and social support has shown that these factors facilitate school adaptation, particularly during periods of elevated distress such as transition periods (Ladd, 1990; Wentzel, McNamara & Caldwell, 2004). D. W. Johnson, R. Johnson and Anderman (1983) found that student perceptions of peer support were positively related to cooperativeness and frequent participation in cooperative learning situations in the classroom. The same was found for student perceptions of teacher support. The addition of this dimension to studies on motivation in education may provide additional evidence as to the factors that contribute to pupils' motivational orientations and subsequent academic and behavioural outcomes.

2.2.6 Rationale for selecting achievement goal and self-determination theories

The history of the literature on motivation at school reflects a number of rich theoretical traditions that encompass a wide variety of constructs. These traditions include attribution and self-efficacy approaches, expectancy-value and self theories, and theories relating to self-regulation and individual interest (see Wentzel & Wigfield, 2009 for a review). All of these theories can be applied to school-based settings, however this study focuses on the achievement goal and self-determination theories in particular.

The utility of applying both AGT and SDT to educational settings has been well documented. AGT research has shown that pupil perceptions of the school/classroom goal structure can influence their own personal goal orientations, thus having implications for their academic behaviour and approach to learning. SDT research has shown that pupils who are autonomously motivated tend to do well in school, that pupils benefit when teachers support their autonomy and competence, and when they feel a sense of relatedness in school. At a simplistic level of conceptualisation, AGT can be seen as being concerned with 'what' individuals are motivated to do (attain mastery or demonstrate performance); SDT is concerned with 'how' they are motivated to act in a certain way - that is, the conditions under which motivation is present. Both theories answer the question of 'why' individuals are motivated to produce certain behaviours and are in this way complementary to each other.

On a practical level, both of these theories encompass constructs that can be readily operationalised and therefore easily measured. Furthermore, in looking at the implications that research on these two theories could potentially have for educational settings, it is conceivable to imagine that, for example, teachers could be encouraged to alter their modes of instruction such that they are oriented more towards a mastery

goal structure, or to engage in practices that serve to promote pupils' autonomous learning, increase their feelings of competence and also impact positively on their sense of relatedness in school.

2.3 Disruptive behaviour in the classroom

2.3.1. Discipline in schools

The notion of an 'orderly atmosphere' (DES, 1989, p.54) as being necessary in order for effective teaching and learning to take place in schools is one that is overwhelmingly unambiguous. There currently exists the idea amongst many that this orderly atmosphere is absent from a large proportion of schools in the UK today, and the issue of discipline in schools has become one that has gained prominence not only in the field of education, but also in the political sphere, with the major political parties in the UK all having made great claims about the ways in which discipline can be restored to schools.

In 1988, The Committee of Enquiry into Discipline in Schools was established in response to the concern about the problems facing the teaching profession. The task of the Committee was to recommend action to various interested parties aimed at securing this orderly atmosphere (DES, 1989). At the time of undertaking the enquiry, the Committee found that teachers were most concerned about the cumulative effects of disruption to their lessons caused by what was seen as relatively trivial, but persistent misbehaviour. As evidenced by the time at which this enquiry was undertaken and the volume of work that went into producing the report, the issue of disruptive behaviour in schools is clearly a perennial one that causes concern not only to educators, but also to parents and pupils themselves. The evidence gathered by the Committee's enquiry suggested that there was huge variety with respect to the causes of (and 'cures' for) bad behaviour in schools. The Committee rejected the view that bad behaviour is always entirely the fault of the pupil; this is consistent with the definition of 'disruptive behaviour' as proposed by Galloway et al. (1982), in that it is 'any behaviour which *appears* problematic, inappropriate and disturbing to teachers' (p. xv, emphasis added).

This definition explicitly acknowledged that disruption should not be considered to be something that lies within a pupil, but rather in how the pupil is perceived and how the act is interpreted. The Committee reinforced this by proposing that 'events in the classroom are influenced by a complex mixture of expectations, attitudes, regulations, policies and laws which are shaped by forces at work in the classroom, the school, the local community and society as a whole' (DES, p.64). The Committee believed,

however, that many of their recommendations could be implemented within a single classroom, school or Local Education Authority (LEA).

2.3.2 Behaviour policies and government guidance

School behaviour policies in England have developed over the last fifteen or so years, seemingly as a direct result of government policy that has attempted to address the issue of poor behaviour in schools (Rowe, 2006). Every school has a legal obligation to establish a behaviour policy. Specifically, section 88(2) of the Education and Inspections Act 2006 requires a school's governing body to make, and from time to time review, a written statement of general principles to guide the head teacher in determining measures to promote good behaviour. In 2005, a Practitioners' Group on School Behaviour and Discipline was formed. This group was comprised of head teachers and other school leaders with an interest and expertise in issues around pupil behaviour, including representatives of the six main teacher professional associations. The group described some key aspects of school practice, which schools should reflect on in developing their behaviour policies (Steer, 2005). Two of these aspects were directly related to classroom and behaviour management, teaching and learning.

The Practitioners' Group underlined the importance of good teaching and learning as a way of improving behaviour in schools and stressed the importance of approaching behaviour as a whole-school issue. They noted that schools need to ensure that classrooms are effective learning environments and that the quality of the relationship between teacher and pupil is given utmost regard (Steer, 2005). This advice is synonymous with that given by the (then) government in its '*Advice on whole-school behaviour and attendance policy*' (DfES, 2003), which stressed that the school's expectations and the values implicit in the ethos of the school need to be clear and consistently applied, not only through the school's code of conduct but also in the way the taught curriculum is constructed and delivered.

It is not a novel view to suggest that implementation of educational policies is difficult (Spillane, Reiser & Reimer, 2002). Spillane et al. (2002) suggest that what is needed is a cognitive framework to aid in the implementation process. This framework would have particular relevance for educational policy initiatives such as reforms pertaining to standards that call for significant changes to be made to classroom instruction. Spillane et al. (2002) argue that from a cognitive perspective a key dimension of the implementation process is whether, and in what ways, those involved in the

implementation of policies come to understand their practice, with the recognition that a potential shift in their beliefs and attitudes may (need to) occur in the process.

This is in line with the governmental advice given in 2003; in order for school behaviour policies to be effective, they need to be linked in with other areas of the school development. This poses interesting questions as to whether a school's approach to pupil motivation could be linked in with the development of a behaviour policy. In taking a combined achievement goal and self-determination theory approach, schools that promote a positively perceived goal structure, thus attending to pupils' needs for autonomy, competence and relatedness, could incorporate these aspects into a behaviour policy that would have a clear basis for its contents, and a coherent foundation for presentation to school staff and pupils.

2.3.3 Current theories of an endemic problem

Why do some pupils engage in disruptive behaviour at school? This question is one that has been asked repeatedly over the years, with many suggestions proffered in answer of it. References to factors that are external to the school are oft-cited, with causal attributions made to pupils' home and family backgrounds and to individual pupil characteristics such as mental health problems (Charlton et al., 2004) and a lack of or low ability. With respect to home background, whilst the relevance of this is not disputed, the significance of the effect it has on pupil behaviour in school has been questioned. Over forty years ago, Power et al. (1967) challenged the apparent conventional perception that family and social background were the principal influences on children's educational progress and on their social adjustment at school. Additionally, Galloway (1995) has summarised evidence that suggests that home background appears to exert relatively little influence on pupils' behaviour in school provided that the evidence is collected by independent observers who have no knowledge of pupils' backgrounds.

It has also been suggested that a dominant influence on the motivation and behaviour of a large majority of pupils appears to be the teacher (e.g. Galloway, 1995). Galloway (1995) cited longitudinal research by Mortimore et al. (1988) into school influences on disruptive behaviour. A questionnaire (behaviour rating schedule) was completed by the teachers of classes of pupils in three consecutive years. In an analysis of the results, the authors found that school effects only accounted for 10% of the variance in pupils' disruptive behaviour, compared with 13% which was accounted for by home variables. However, the methodological approach adopted in the Mortimore et al. study has been criticised in that it potentially introduced a bias which was likely to

reduce the school's observed impact on pupil behaviour. Teacher knowledge of the pupils' backgrounds could well have affected the attribution or explanation of their behaviour. Furthermore, their results indicated that pupil's behaviour actually changed from year to year with, in the majority of cases, a change of class teacher.

A theory that seems to have garnered much more support from researchers however, concerns the notion of 'standards' and the emphasis placed on this by the government. Such a theory harks back to the reference made to the impending introduction of the National Curriculum in the Elton Report, where the Committee expressed major concerns about its introduction, suggesting that it would make things worse for low achievers, consequently leading to more disruption. Indeed, Charlton et al. (2004), identify the government's standards agenda as having had a particularly deleterious effect on the views many pupils have of school, highlighting how the National Curriculum 'depresses their interests and demotivates them' (p. 263). They continue by pointing out how the problem of pupils being 'turned off' especially in the later secondary years has even been recognised in the DfES publication *Opportunity and Excellence* (2003). This argument is consistent with that put forward by Vulliamy and Webb (2003), who suggested that the introduction of the National Curriculum 'increased the perceived irrelevance of schooling for many pupils' (p.34). Additionally, Morris (1996) cited evidence gained from research with excluded pupils which indicated that an increasing number were being excluded due to their lack of motivation and success within the official curriculum.

These references to the National Curriculum appear to be suggesting that it is the curriculum itself that is the problem. However, it could be argued that it is not the curriculum per se that affects pupil engagement, motivation and behaviour, but rather it is the way in which the curriculum is delivered. Inherent in this are issues related to pedagogy and teaching style, teacher and pupil perceptions about teaching and learning and approaches to behaviour management in the classroom. Brophy (2010) makes the point that students may be motivated to learn from a lesson or activity whether or not they find its content interesting. Perhaps the focus of such arguments levelled at what is going on in schools and classrooms needs to be more on *how* pupils are taught as opposed to *what* they are taught. Research into the effects of various aspects of motivation on teaching and learning is certainly well placed to provide that focus.

Clearly there are many theories relating to the reasons why pupils engage in disruptive behaviour in the classroom. Common to all the literature on pupils'

disruptive behaviour is the notion that it can and does impact adversely on the whole school. Unacceptable behaviour serves as an unwelcome model for peers, teachers' management skills can be challenged to the extent that it generates stress, and pupils' classroom learning can be disrupted (Charlton et al., 2004). It is therefore of great importance to continue to engage in research that aims to provide some direction as to how these problems might be overcome.

2.4 The link between pupil motivation and disruptive behaviour

At the North of England Education Conference in 1995, Sir Christopher Ball claimed that 'there are only three things of importance to successful learning; motivation, motivation and motivation' (as cited in Galloway et al., 1998, p.5). He went on to express regret at the lack of importance placed on motivation in education:

I often wish that we had spent as much time and energy and thought on the issue of motivation, as we have on the question of ability...whatever goes wrong later has much more to do with motivation than ability. For many people the key to faster learning turns out to lie in the strengthening of motivation. (Ball, 1995, as cited in Galloway et al., 1998, p.6).

Whilst Ball's proposition that motivation is a key factor in ensuring that pupils experience success in their learning is appealing, his approach as stated here has been viewed as being somewhat polemical (Galloway et al., 1998). Galloway et al. (1998) suggest that there are three other equally important points about motivation that Ball fails to acknowledge. The first point is that there are some teachers that are far more successful than others, irrespective of children's initial motivation. Secondly, whether a pupil wants to learn depends crucially on the teacher. And third, the unstated implication that pupils who 'do not want to learn' are unmotivated obscures the point that some pupils are not just unmotivated; they are highly motivated to *avoid* engaging in educational tasks at school.

There has been much reference in the literature to the link between pupil motivation and the impact this can have on pupils' learning, with the common intimation being that children who are not motivated to engage in learning will have a propensity towards behaving in a disruptive manner in school (e.g. Baumeister, 1997; Covington, 1992; Kaplan & Maehr, 1999). However, as stated earlier, the link between pupil motivation and learning has been conceptualised differently; the questions being asked now are less about whether or not pupils are motivated (they may be motivated to do things other than to learn), and more about the ways in which pupils experience

motivation and how this encourages them to engage in certain behaviours (learning or otherwise).

Kaplan and Maehr (1999) conducted a study into the effects of achievement goals on students' psychological well-being, looking at the relationship between mastery and performance goals, student perceptions of the school emphases on these goals and indices of well-being and disruptive behaviour. They hypothesised that a perceived school emphasis on mastery goals would be related to a positive pattern of student well-being, whereas a perceived emphasis on performance goals would be related to a negative pattern of student well-being. They did not formulate a specific hypothesis for the relationship between students' personal goal orientations and well-being, but it could perhaps be inferred that they expected this relationship to follow the same pattern as that for student perceptions of the school emphasis on mastery and performance goals. Additionally, although a measure of disruptive behaviour was included and cited as part of the relationship to be examined, there was no review of the literature on the link between goal orientations and disruptive behaviour, nor was there any formulation of an explicit hypothesis with reference to this outcome. However, in order to provide some support for the aims of the study and the hypotheses presented above, Kaplan and Maehr put forward the theoretical model of goal theory proposed by Anderman and Maehr (1994, as presented in Kaplan & Maehr, 1999) as a framework³.

In keeping with the assumption that the hypothesis for the relationship between students' personal goal orientations and well-being would mirror that for school emphasis on goals and well-being, Kaplan and Maehr (1999) reported findings in support of this. Holding personal mastery goals was a significant positive predictor for measures of well-being, and holding personal performance goals was a significant negative predictor for some of the measures of well being. Pupil perceptions of a school mastery goal emphasis were a significant positive predictor for some but not all of the indices of well-being, and pupil perceptions of a school performance goal emphasis were a significant negative predictor for some of the perceptions of well-being.

³ Kaplan and Maehr (1999) also focused on differences between African American and Euro-American students with respect to their goal orientations and relationships with well-being in this study. However, since this is not an aspect relevant to the present study it will not be discussed here.

Although not hypothesised, the findings related to disruptive behaviour were reported; holding personal mastery goals was found to be a significant negative predictor for reports of disruptive behaviour. Performance goals were not found to be significantly related to disruptive behaviour. This result is somewhat surprising as the literature on the relationship between performance goals and various (positive) academic outcomes strongly suggests that it is a negative one. It is also surprising given the finding in the same study that pupil perceptions of the school as emphasising performance goals were a significant positive predictor for reports of disruptive behaviour.

Although the aims of Kaplan and Maehr's study were set out and framed in the context of previous research, there appear to be a number of limitations that potentially undermine its credibility and indeed the validity of the results. As mentioned above, the review of the literature pertaining to the aspects of the theory under investigation could have been more extensive. There was no reference to research on disruptive behaviour and the links between this and achievement goals. Therefore the results found, although of interest, could not be discussed in the context of existing theories, and in this sense do not necessarily add to the overall findings.

With respect to the measures of general well-being employed, the authors selected a questionnaire that assessed the self-image of young adolescents. The questionnaire contained nine scales, but six of these were discarded as the authors did not feel that they were relevant to the purpose of the study. However, they noted that use of the part of the measure 'might compromise validity' (p.337). Although the validity of the scales used was established within the study, the fact that their validity had been compromised from the outset poses potential problems for any interpretation of and attempt to generalise the results. It would have been preferable to have selected alternative scales through which to operationalise the well-being construct, rather than use with measures which were open to questions about their validity.

Further research that has looked at the direct effects of goal structure in the classroom on incidences of disruptive behaviour has been carried out by Kaplan, Gheen and Midgley (2002). They surveyed 388 ninth-grade (14-15 year old) students from five high schools about their perceptions of the school goal structures, their personal achievement goals and their involvement in disruptive behaviour in their maths classrooms. Their maths teachers also responded to surveys asking about their goal-related approaches to instruction. Kaplan et al. (2002) suggested that the emphasis on mastery and performance goals in the classroom affects students'

disruptive behaviour, over and above their personal achievement goals. Specifically, they hypothesised that a mastery classroom goal structure would be related to lower levels of disruptive behaviour, whereas the performance-approach and performance-avoidance classroom goal structures would be related to higher levels of disruptive behaviour, independently of students' personal achievement goals. Kaplan et al. also examined the relationship between students' perceptions of the classroom goal structures and teachers' reports of goal oriented approaches to instruction, although they did not present a hypothesis for this.

The hypothesis presented in this study is well-grounded in a thorough review of the literature and research pertaining to goal theory and disruptive behaviour, the issue of disruptive behaviour in educational environments and, crucially, the link between goal structures in learning environments and disruptive behaviour. Kaplan et al. chose to focus their research at the domain specific-level with respect to classrooms – mathematics – giving the reason for this as being that high school students have different teachers for different subjects. Although previous research in similar settings has focused at the whole school level and done so by ensuring that survey items are related to school in general, Kaplan et al. reasoned for their decision to focus on maths given its characterisation in the literature as being more clearly performance goal oriented.

The overall findings of this study suggested that the classroom goal structure is an important predictor of the variance in the difference between the levels of student disruptive behaviour in different classes. The authors concluded that in classrooms where the perceived goal structure is of a performance orientation, the level of disruptive behaviour is likely to be high. Conversely, where the perceived classroom goal structure is of a mastery orientation, the level of disruptive behaviour is likely to be low. These relations were found after controlling for the effects of students' gender, grades, self-efficacy and personal achievement goals. With respect to the relationship between teachers' goal-oriented approach to instruction and pupils' perceptions of the classroom goal structure, Kaplan et al. found a significant relationship.

In taking an SDT perspective on the issue of disruptive behaviour in the classroom, Nie and Lau (2009) examined how classroom management practices – behavioural control and care – were differentially associated with students' engagement, misbehaviour and satisfaction with school. They outline the benefits of the use of an SDT framework, with respect to the conceptualisation of the constructs of care and behavioural control. Behavioural control is distinguished from external control, which

would not fit with SDT theory as it undermines an individual's sense of authority (Deci, 2008). In essence, the way in which the constructs under investigation are conceptualised by Nie and Lau is consistent with the SDT framework upon which the study is based. Further to this, the stated hypotheses are supported by the literature that is reviewed. Nie and Lau hypothesised that teacher control would be negatively related to student misbehaviour and positively related to engagement in the classroom. A second hypothesis was that teacher care would be positively related to students' engagement in the classroom.

The proposed hypotheses in the Nie and Lau study were borne out by the results. Both behavioural control and teacher care were both significant positive predictors of engagement. Behavioural control was significantly negatively related to misbehaviour, but care was not a significant predictor of misbehaviour. This would suggest that, from an SDT perspective, classroom management practices that do *not* undermine students' autonomy would be effective in reducing disruptive behaviour in the classroom.

This study was in general well-designed and conducted, with appropriate statistical methods employed to analyse the data. However, whilst the findings supported the hypotheses and provided some evidence of the relationship between classroom management practices and disruptive behaviour, this could have been strengthened with the addition of data from teacher reports and other sources of information that would allow for a better understanding of the classroom environment.

2.5 Aims of the research and research questions

The notion that the concept of motivation bears relevance to education has long been argued for. There are two significant strands of research that have studied the effects of pupil motivation on achievement in education, looking at the impact from either from an AGT or an SDT perspective. A search of the literature to date has not revealed any studies that have looked at the combined effects of both theories. In order to address this gap, one of the primary aims of this study is to bring together these theories in order to examine the ways in which dimensions from both impact on pupil motivation.

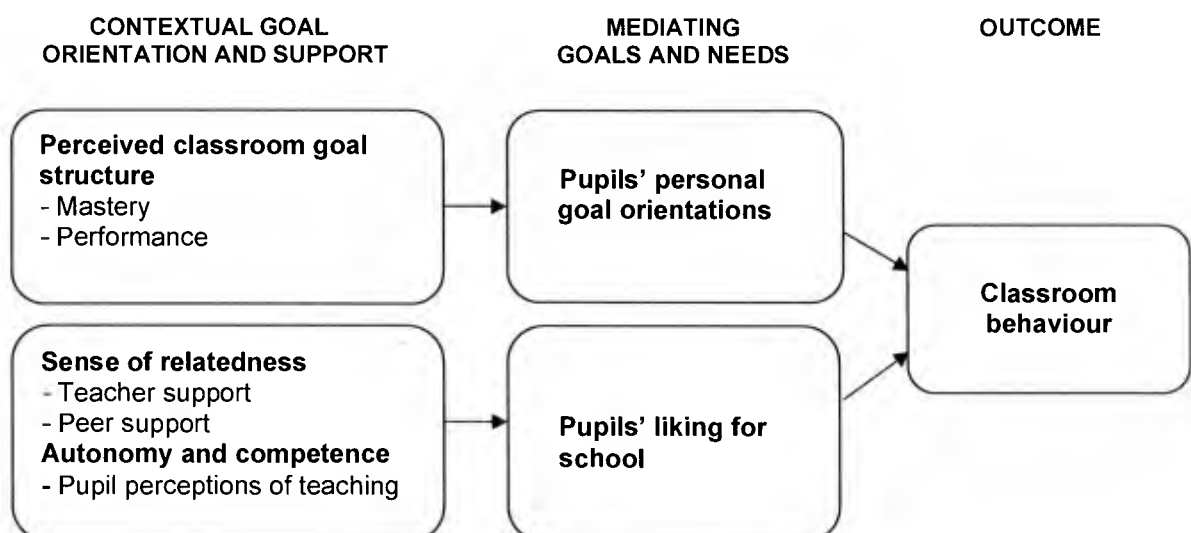
Much of the research on goal structures in education has been focused at the level of the classroom (Ames, 1992b). However the need to consider the perception of goal structures at the school level has been identified (Ames, 1989); indeed intervention research has shown that emphases of goal structures are closely tied to specific school policies and practices (Maehr & Midgley, 1996). Maehr and Midgley (1991)

have also argued for research that studies the perception of goal structures at the school level. To this end, this particular study aims to consider pupil perceptions of goal structures in the classroom within the context of approaches that are promoted at the whole school level.

The link between pupil motivation and disruptive behaviour in schools is an aspect of motivation in education research that is considerably under-researched, particularly in the UK and for primary aged pupils. Given the importance that has been placed on promoting good behaviour in schools in order for teaching and learning to be effective, this is an area in which further research would be of use. This particular study aims to explore the link between pupil motivation and disruptive behaviour in relation to the pupils' perceptions classroom goal structure and support from their teachers and peers, again from the perspectives of both AGT and SDT.

The theoretical model upon which the research questions are based is shown in Figure 1. The contextual variables of perceived classroom goal structure relate to AGT, and the variables of sense of relatedness (as measured by teacher and peer support) and autonomy and competence (as measured by pupil perceptions of teaching) relate to SDT. The associated mediating variables follow from the contextual variables in that pupils' personal goal orientations relate to AGT and liking for school relates to SDT. The selection of variables to include in the model and the hypothesised directions from the contextual variables to the outcome variable follow those suggested by the findings from previous research (e.g. Kaplan & Maehr, 1999; Roeser et al., 1996; Skinner & Belmont, 1993).

Figure 1 Proposed theoretical model and constructs of primary school pupils' perceptions of school and behavioural outcomes.



The research questions (RQs) that this study aims to answer are as follows (with associated hypotheses (Hs) where relevant):

RQ1: How are pupils' perceptions of the classroom goal structures related to pupils' disruptive behaviour in the classroom?

H1: A perceived classroom mastery structure will be negatively related to disruptive behaviour. A perceived performance goal structure (performance approach or performance avoid) will be positively related to disruptive behaviour.

RQ2: Which pupil personal achievement goal orientations are predictive of pupils' disruptive behaviour in the classroom?

RQ3: Does the combination of achievement goal theory and self-determination theory provide an explanation for pupils' disruptive behaviour in the classroom? If so, is it more powerful than an explanation provided by either theory alone?

RQ4: Which aspects of achievement goal theory and self-determination theory are present in teachers' thinking about teaching, learning and pupil behaviour? Are there any additional factors that teachers perceive to have an impact on teaching, learning and pupil behaviour?

RQ5: Are the issues of pupil motivation and behaviour addressed through the curriculum and associated school policies?

3 METHODOLOGY

This chapter will aim to justify the use of a mixed methods design in this study, demonstrating its appropriateness in trying to answer the research questions outlined above. It will begin with an exploration of the epistemological position of research in psychology, as well as addressing issues relating to conducting 'good' research. The design of the study will then be explicated, and the epistemological position will be stated. Details of the procedure will be outlined, including the process of recruiting schools and a description of the participants. Following this, an overview of the quantitative and qualitative instruments will be provided, along with a description of the methods of data analysis. Finally, issues relating to ethical considerations will be outlined.

3.1 Selecting a research method: What constitutes good research?

Research within the field of psychology (and indeed education) is often scrutinised for the accuracy of the findings generated, and also for the methodology employed. The epistemology of 'methodologism' refers to criteria for judging whether research has been conducted according to certain methods, e.g. adequacy of sample size or selection of participants. Salmon (2003) notes that methodologism has traditionally been used within the field of quantitative psychology, but has now begun to influence qualitative psychology. However, there are limitations to this as Salmon points out: '...methodologism is a limited epistemology. It is a forlorn belief that quality can be guaranteed simply by following procedures' (p. 24). Salmon also makes the point that, in order to justify the selection of a particular methodology, researchers may state the epistemological position and that this may well be necessary in order for the researcher to provide clarity about the basis of their work. But the 'inherent circularity' in this has been noted; justification for the value of scientific methods cannot logically emerge from the methods themselves (Feyerabend, 1975, 1978, as cited in Salmon, 2003).

Then there is the issue of whether or not a researcher actually thinks through an epistemological position prior to selecting a method – Salmon (2003) asserts that this rarely happens, and that 'such positions are more often post-hoc rationalisations for what has been done' (p. 25). So how then does a researcher make decisions as to the most appropriate methodological approach to adopt in conducting their enquiries? Guba and Lincoln (1982) argued that whether a researcher chooses to be quantitative or qualitative [or both] in his or her study should be decided by 'fit' with the phenomenon being studied. But Salmon counters this view, suggesting that researchers need to go further than this as what is considered interesting or seems to

'fit' for one researcher may not for another. He therefore suggests the following values that researchers (psychologists) should try to consider both when evaluating and conducting research: the researcher should not try to mislead; methods should be rigorous; analytic work should be done; it should be possible to know when work is worthless; and the work should matter to others, not just the researcher. It is the aim that this particular study will adhere to these values in its planning and design, and subsequently upon being evaluated.

3.2 Research design

This study employs a simultaneous mixed methods design. Newman, Ridenour, Newman and DeMarco (2003) suggest that when the purpose of the research is complex, it is necessary to have multiple questions and this frequently necessitates the use of mixed methods. Furthermore, Johnson & Onwuegbuzie (2004) note the advantages of a mixed method approach in that it recognises the value of both quantitative and qualitative methods, and that drawing from both offers the most effective way of answering specific research questions.

3.2.1 Quantitative component

A significant aspect of the study relates to the measurement of pupils' personal goal orientations and their perceptions of the goal structures in their classrooms. The rationale for this study delineated the potential for research that encompasses both achievement goal theory (AGT) and self-determination theory (SDT), in order to assess their individual and combined predictive power with respect to pupils' engagement in disruptive behaviour in the classroom. Given the complexity surrounding the concept of motivation and the number of factors incorporated into each of the theories, it was deemed appropriate to adopt a multivariate approach, in order to fully examine this complexity whilst also being able to control for other factors. The quantitative aspect allows for the collection of multiple measures of factors relating to motivation, as well as specific pieces of demographic information, in numerical form.

A non-experimental, relational design was employed to address the quantitative aspect of the research (RQ1 to RQ3). Robson (2002) proposes the advantages of a non-experimental design in that it does not have an adverse effect on the phenomena it is seeking to understand. This is particularly important as it serves to increase the internal validity of the research. This study aimed to investigate pupils' motivational orientations, with the suggestion being that they would be influenced by practices relating to both whole school and individual teacher approaches. Given the aims of

the study, it would have been inappropriate to attempt to modify or manipulate any of the classroom practices or approaches adopted by any of the schools taking part.

Much of the literature on pupil motivation suggests that it has the potential to have a real impact on pupil behaviour. A relational design was therefore considered appropriate as it allowed for the relationships between these variables to be explored (Robson, 2002). A note of caution regarding the relationship between the variables must be added here; given the non-experimental nature of the design, acknowledgment must be given to the possible presence and influence of variables that have not been measured or cannot be controlled for. Thus, although this study aimed to identify aspects of motivation that could predict disruptive behaviour in the classroom, no claims with respect to causality can be made.

3.2.2 Qualitative component

The qualitative component of the design relates to research questions 4 and 5. The aim of the interviews was to elicit the views of school staff in relation to the various aspects of motivation, teaching and learning and pupil behaviour that the research aimed to consider. Interviews with the class teachers focused on their teaching practices within the classroom and the efforts they made to motivate their pupils. Questions also asked about their views on the aspects of the school and classroom environments they considered to be most important in enabling pupils to make progress in school. Interviews with the members of the senior leadership team in each school related to the idea of pupil motivation and whether or not this was considered to be a priority focus for the school. In general, the aims of the interviews were to elicit information about the overall school approaches to teaching and learning, the perceptions of individual class teachers with respect to their approaches to curriculum delivery, and to determine the extent to which an overt emphasis is placed on pupil motivation, both in terms of a whole school approach and at the classroom level.

3.2.3 Theoretical and methodological perspectives

At an epistemological level, the primary philosophy of mixed research is that of pragmatism, as it is an approach to knowledge that attempts to consider multiple viewpoints and perspectives (Johnson, Onwuegbuzie & Turner, 2007). It is also possible to define a study as being mixed both in terms of the techniques adopted (quantitative and qualitative), and in terms of the theoretical perspectives associated with each paradigm. To this end, the present study could be considered to be both post-positivist and constructivist. The delineation of an epistemological position is made here with the caveats described earlier in mind. Whilst it may be the case that

the choice of a particular method is influenced by the phenomena under investigation, it has been suggested that by not giving due attention to philosophical ideas and traditions, mixed method researchers are 'insufficiently reflective and their practice insufficiently unproblematised' (Greene & Caracelli, 2003, as cited in Tashakkori & Teddlie, 2003, p. 107).

The post-positivist paradigm is related to the concept of motivation and how pupils view their motivational orientations. It could well be argued that the notion of having goals and aspirations as a child is shaped by what is experienced both at school and at home. The influences of school culture/ethos and of parental support and aspirations cannot be ignored and in this sense a pupil's ideas about their levels of motivation could be said to be socially constructed by their everyday experiences. However, the proposal of a model of motivation and its effect on disruptive behaviour in the classroom presupposes that there are known, identifiable predictor variables (aspects of motivation) and a determined outcome variable (disruptive behaviour); between which there is a possible causal relationship. This aspect of the research is essentially seeking to test hypotheses that have been generated through the findings from previous research, whilst controlling for a number of specific variables.

The constructivist paradigm is linked to the notion that the decisions schools make about the best way in which to deliver effective teaching and learning is shaped by various factors, such as the importance of standards in terms of pupil attainment levels and examination results as against the importance of ensuring that all pupils have positive and enjoyable experiences of school. Do schools, by the very nature of their approach to teaching and learning end up 'teaching to the test'? Or do they consider that it is necessary for pupils to be involved in an interactive process with their teachers in order to learn different skills and develop a deeper understanding of what is being taught, even though this may well reduce the overall body of knowledge that children acquire (Galloway et al., 1998). The qualitative aspect of the research aims to explore these issues.

3.3 Procedure

3.3.1 School recruitment

As stated in the introduction, the idea for this research stemmed from the author's visit to a primary school that had expressed an interest in taking part in some work on pupil motivation, following an invitation from the Educational Psychology Service (EPS). The school is part of a cluster in which there are seven other primary schools. A letter was sent to the other seven schools, with details of the proposed research and inviting

them to take part (see Appendix 3.1). It was decided to restrict invitations to participate to the other schools in the cluster as this would limit the amount of variation in demographic factors such as socio-economic status (SES), and ethnicity.

3.3.2 Participants

The pupil participants were all in Years 5 or 6 in each of the schools, and were between 9 and 11 years of age at the time of data collection and parental consent was sought for their participation prior to data collection (see Appendix 3.2). Whole classes of children were selected to participate and data were collected from 257 children in total. Some children did not participate at the request of their parents/carers, and some children chose not to take part after the aims of the research and the data collection procedure had been explained to them. The characteristics of the pupils by school are shown in Table 3.1.

Table 3.1 Characteristics of pupils for each school

School	Number of pupils (N)		Gender (N / %)		Ethnicity (N / %)		Free School Meals (N/% eligible)
	Yr 5	Yr 6	Male	Female	White British	Other	
School 1	38	44	34 / 41.5	48 / 58.5	81 / 98.8	1 / 1.2	28 / 34.1
School 2	38	47	42 / 49.4	43 / 50.6	83 / 97.6	2 / 2.4	15 / 17.6
School 3	22	24	25 / 54.3	21 / 45.7	39 / 84.8	7 / 15.2	25 / 54.3
School 4	26	18	21 / 47.7	23 / 52.3	41 / 93.2	3 / 6.8	5 / 11.4

3.4 Data collection

There were two distinct aspects to the data collection stage, with both quantitative and qualitative data being collected.

3.4.1 Quantitative data

Data relating to the aspects of AGT, SDT and disruptive behaviour in the classroom were collected quantitatively via the use of questionnaires. Pupils were given a questionnaire consisting of scales which assessed their perceptions of the goal structures in their classrooms, their personal goal orientations, perceived levels of peer and teacher support, perceptions of teaching, overall liking for school and their reports of engagement in disruptive behaviour in the classroom (see Appendix 3.2). Multiple measures were used in combination to form the pupil questionnaire; these

measures were all readily available in existing literature, having been constructed and used by various authors in previous research. The questionnaires were piloted prior to administration for the research. Feedback from the pilot stage did not highlight any issues and the questionnaires were therefore deemed suitable for use. An overview of the tools used and the constructs they measure is shown in Table 3.2.

Table 3.2 Tools used and descriptions of the constructs they measure

Construct being measured	Measure(s) employed	Completed by	Administration details
<ul style="list-style-type: none"> • Perceptions of classroom goal structure • Personal goal orientations • Perceptions of teacher goals • Disruptive behaviour 	Patterns of Adaptive Learning Survey (PALS; Midgley et al., 2000)	Pupils	Whole class administration by researcher
<ul style="list-style-type: none"> • Perceived support 	Classroom Life Instrument (Johnson & Johnson, 1983)	Pupils	Whole class administration by researcher
<ul style="list-style-type: none"> • Liking for school • Pupil perceptions of teaching 	Pupil Questionnaire (Ireson & Hallam, 2005)	Pupils	Whole class administration by researcher

3.4.1.1 *The Patterns of Adaptive Learning Survey*

The Patterns of Adaptive Learning Survey (PALS) has been developed and refined over time by a group of researchers using goal orientation theory to examine the relation between the learning environment and pupils' motivation, affect and behaviour (Midgley, Maehr, Huda, Anderman, Anderman et al., 2000). The pupil scales assess: 1) personal achievement goals; 2) perceptions of teacher's goals; 3) perceptions of the goal structures in the classroom; 4) achievement related beliefs, attitudes and strategies; and 5) perceptions of parents and home life.⁴ The scales are responded to on a five-point rating scale, with responses ranging from 'definitely not true' to 'very true'. The development of the scales was based on research which showed that a differential emphasis on 'mastery' and 'performance' goals is associated with adaptive or maladaptive patterns of learning (e.g. Ames, 1992; Dweck, 1986), as well as further research which suggests that a performance goal orientation can be conceptualised in terms of both approach and avoidance components (Elliot & Harackiewicz, 1996; Middleton & Midgley, 1996).

⁴ For the purposes of the present study all of the scales relating to the first three aspects, and one of the scales relating to the fourth aspect were used.

The scales that were constructed in 2000 (and used in the present study) were revised from a previous publication of the scales in 1997. The revision removed items that assessed intrinsic value, and items that referenced specific behaviours. The authors felt that these changes provided more of a direct focus on the goals as orienting frameworks within which pupils function, rather than specific behaviours or interests that pupils exhibit or that teachers encourage. Confirmatory factor analysis was conducted on the 14 personal goal orientation items to examine the factor structure of the three sets of items (mastery, performance-approach and performance-avoid). The authors found that the expected model was confirmed, and specifically that personal mastery, performance-approach and performance-avoid goals all loaded on different factors (Midgley et al., 2000). The revised version of the scales included pupil perceptions of the classroom goal structure. Confirmatory factor analysis was also conducted on the mastery, performance-approach and performance-avoid goal structures in order to validate the use of the classroom goal structure scales. Again, the expected model was confirmed, with the items loading on different latent factors.

The scales have been widely used across a number of school districts in three Midwestern states of America, at elementary, middle and high school levels. The pupil scales have been administered in co-educational public schools, with approximately equal proportions of male and female participants. The samples were also deemed to be ethnically diverse, with up to 55% minority participation (Midgley et al., 2000). The PALS was used in the present study to ascertain pupils' perceptions of the classroom goal structure and their personal achievement goal orientations, in line with AGT. The PALS also allowed for collection of data relating to pupils' perceptions of their engagement in disruptive behaviour in the classroom. In addition, pupils' perceptions of teacher goal orientations were elicited, although this data was not eventually used in subsequent analyses. The individual scales for pupils, a description of what the scale measures, the number of items in each scale and scale reliabilities are shown in Table 3.3. Scale reliabilities as calculated from the sample in this study are shown in bold type. With respect to the reliability of the pupil personal performance-avoid goal orientation scale ($\alpha = .42$), this value was relatively low.^{5,6} The issue of low reliability estimates has been addressed by Roberts and Onwuegbuzie (2000). Roberts and

⁵ The scales for the pupil personal mastery goal orientation, and pupil perceptions of classroom mastery and performance approach goal structures might also be considered to be low (α values of .65, .66 and .67 respectively). However these values are extremely close to the value of .7 as recommended by Nunnally (1972) and, given the large size of the present sample, they were not deemed to be of great concern with respect to their effects on the analyses.

⁶ The scale for pupil perceptions of teacher performance-approach goals variable also had a low reliability, but this scale was not used in any further analyses.

Onwuegbuzie acknowledge the fact that low reliability estimates reduce the statistical power associated with hypothesis tests, however they recommend that in these situations researchers should utilise larger samples, when they expect that their sample is homogeneous, in order to compensate for the corresponding reliability-based loss in statistical power. Whilst there are statistical techniques that could be applied to address the issue of low reliabilities, Roberts and Onwuegbuzie go on to say that increasing sample size 'would probably provide a better correction for attenuated relationships than any statistical correction of the reliability coefficient itself' (pp. 13-14).

The participant sample of the present study may be described as homogeneous, given that all of the participants responding to this section of the PALS were Key Stage 2 pupils, attending primary schools in the same geographical area. Following Roberts and Onwuegbuzie (2000), the homogeneous nature of a sample must be taken into consideration when interpreting reliability coefficients. In line with Roberts and Onwuegbuzie's recommendation, the ideal remedy to this issue may have been to increase the sample size of the present study, but this was not a feasible option due to time constraints. It may however be considered that the sample size was already fairly large. Taking these observations into account, it was decided that the performance-avoid goal orientation scale should be retained for subsequent analyses. In terms of the implications of reliabilities of criterion variables that are less than desirable, the most likely problem to result is a reduction in statistical power. This will be taken into consideration in analyses involving the aforementioned variable.

3.4.1.2 The Classroom Life Instrument

The Classroom Life Instrument (CLI; Johnson, Johnson & Anderson 1983) was designed to measure pupil attitudes towards social interdependence and relationships with peers and teachers; these aspects relate to the concept of pupils' sense of belonging in school. The original measure consisted of 59 items; theoretical and factor analysis of the items revealed 12 factors of which teacher academic support, teacher personal support, peer academic support and peer personal support were relevant to the present study. The items are responded to on a five-point rating scale, ranging from 'definitely not true' to 'very true'. The four scales used in this study, along with the number of items in each scale and scale reliabilities (as reported by Johnson et al., 1983) are shown in Table 3.4. Again, reliabilities for the sample in this study are shown in bold type.

Table 3.3 Pupil PALS scales: description of what each scale measures and scale reliability as reported by Midgley et al. (2000). Scale reliabilities for the present study shown in bold type.

Overall measure	Scale	Description	Number of items	Reliability (Cronbach's α)
Personal Achievement Goal Orientation	Mastery Goal Orientation	Pupils' purpose or goal in an achievement setting is to develop their competence	5	.85 (.65)
	Performance-Approach Goal Orientation	Pupils' purpose or goal in an achievement setting is to demonstrate their competence	5	.89 (.70)
	Performance-Avoid Goal Orientation	Pupils' purpose or goal in an achievement setting is to avoid the demonstration of incompetence	4	.74 (.42)
Perception of Teacher's Goals	Teacher Mastery Goal	Pupils' perceptions that their teacher emphasises engaging in academic work in order to develop competence	4	.83 (.68)
	Teacher Performance-Approach Goal	Pupils' perceptions that their teacher emphasises engaging in academic work in order to demonstrate competence	3	.79 (.56)
	Teacher Performance-Avoid Goal	Pupils' perceptions that their teacher focuses on engaging in academic work in order to avoid the demonstration of incompetence	4	.71 (.71)
Perception of Classroom Goal Structures	Classroom Mastery Goal Structure	Pupils' perception that the purpose of engaging in academic work is to develop competence	6	.76 (.66)
	Classroom Performance-Approach Goal Structure	Pupils' perceptions that the purpose of engaging in academic work is to demonstrate competence	3	.70 (.67)
	Classroom Performance-Avoid Goal Structure	Pupils' perceptions that the purpose of engaging in academic work is to avoid demonstrating incompetence	5	.83 (.74)
Academic-Related Perceptions and Strategies	Disruptive Behaviour	Pupils' self-report of their engagement in behaviours that disrupt the classroom	5	.89 (.89)

Table 3.4 Scales from the Classroom Life Instrument (Johnson & Johnson, 1983). Scale reliabilities for the sample in the present study in bold.

Scale	Number of items	Reliability (Cronbach's α)
Teacher academic support	4	.78 (.77)
Teacher personal support	4	.80 (.77)
Peer academic support	4	.67 (.80)
Peer personal support	5	.78 (.80)

3.4.1.3 Pupils' liking for school and perceptions of teaching

In creating a measure of pupils' liking for school, Ireson and Hallam (2005) considered research which indicates that affective aspects of development provide a basis for autonomous learning. More specifically, the need for affiliation, or relatedness, is considered to be a fundamental psychological need, alongside competence and autonomy (Baumeister & Leary, 1995; Ryan, 1995). Ireson and Hallam (2005) cite the argument that pupils who feel supported within the school community are more likely to be intrinsically motivated and to become more autonomous learners, and that relatedness is an important precursor to engagement and autonomous learning. In the initial construction of the scale, eleven items were included which assessed pupils' liking for school by measuring pupil attitudes towards school and school work, the extent to which they valued the school itself, how close they felt to their school and their teachers, the importance placed on school by their parents and how happy they were in school. Eight of the items are responded to on a five-point rating scale, ranging from 'strongly agree' to 'strongly disagree', and the remaining three items are presented individually, with two offering five responses and one offering four. Scale reliability for the liking for school scale with the present sample was $\alpha = .81$.

Pupil perceptions of teaching were assessed by a set of items which were found to conceptually indicate a supportive and productive learning environment. These items relate to the autonomy and competence components of SDT, by measuring the extent to which teachers listened to pupils, took time to explain work, helped pupils understand, provided appropriately paced work, and were able to control the class. Scale reliability for pupil perceptions of teaching with the present sample was $\alpha = .83$.⁷

⁷ Items 62-69 and 75-77 in the pupil questionnaire used in this study measure pupils' liking for school scale, and items 70-74 measure pupils' perceptions of teaching.

In addition to the above, quantitative data were collected on ethnicity and pupils' socio-economic status (SES). These variables will be assessed for any significant differences with respect to their effects on disruptive behaviour; if any differences are found the variables will be statistically controlled for.

The validity of the constructs as operationalised and measured by the scales described above was considered. Wainer and Braun (1998) describe validity in quantitative research as 'construct validity', where the construct is the initial concept, notion, question or hypothesis that determines the data to be gathered and how this will be done. Construct validity is defined as the degree to which an instrument measures the trait or theoretical construct that it is intended to measure. The scales used in the present study were all pre-existing scales, the construct validity of which had been established by the original authors. In order to determine the validity of the scales with respect to the sample of pupils in this study, the scales were subjected to the procedure of principal components analysis. The results of this are reported in Chapter 4.

3.4.2 Qualitative data

Qualitative data was collected via semi-structured interviews with each of the class teachers of the pupils taking part and a member of the senior leadership team in each of the schools. An interview schedule for class teachers was developed based on the need for information that would enable the research questions to be answered (see Appendix 3.3). The questions related to the different aspects of motivation being explored in the study, teachers' perceptions of the factors that influence pupil motivation, and whole school approaches to encouraging pupil motivation. An interview schedule for the member of the senior leadership team within each school was also constructed (see Appendix 3.4). The aim of this interview was to gain information relating to whole school approaches to promoting pupil motivation, whether or not this was considered to be an explicit part of the school's development plan, and details about whole school approaches to curriculum delivery.

Both the class teacher and senior leadership team interviews were piloted prior to being used in the research. In the case of both interview schedules, two sets of revisions were made following the pilots, based on comments and feedback from the interviewees. The use of semi-structured interviews allowed for a relatively open discussion about teachers' practice and school approaches to teaching and learning, with the opportunity for responses to be followed up in more depth without being constrained by strictly pre-determined questions. Each interview lasted between 15

and 30 minutes, was digitally recorded (with participants' permission) and transcribed manually in preparation for analysis.

3.5 Data analysis

3.5.1 Quantitative data analysis

The quantitative data were analysed in stages in order to answer the research questions posed. Initial exploratory data analysis was followed by correlational (RQ1) and multiple regression analyses (RQ2 and RQ3). Before each analysis was performed, the data were checked to ensure they met the assumptions of parametric testing. In order to answer RQ1, the average score for pupil perceptions of each classroom goal orientation was taken and correlated with the average scores in the disruptive behaviour variable, to determine whether or not a relationship existed between them.

With respect to RQ2 and RQ3, the data were analysed prior to performing the regression analyses to look for significant differences between the disruptive behaviour (outcome) variable and year group, gender, ethnicity and eligibility for free school meals. There were no significant differences between disruptive behaviour and year group, ethnicity or free school meals. There were, however, significant differences between gender and disruptive behaviour. Gender was therefore entered as a variable into the regression analyses for these research questions, as was the school variable in order to control for the fact that there were a number of different schools included in the data.

3.5.2 Qualitative data analysis

The qualitative data were analysed using thematic analysis (Braun and Clarke, 2006; Boyatzis, 1998). A phased process of analysis was adopted, as outlined by Braun and Clarke, and is summarised below:

- Phase 1: Familiarisation with the data

This phase involves repeated reading of the data in an 'active' way, searching for meanings, patterns etc. The data were transcribed by the researcher in order to aid in this process of familiarisation. Interviews were transcribed verbatim, but it was not deemed necessary to record pauses, or other non-verbal utterances. Initial ideas for codes were also noted during this phase.

- Phase 2: Generation of initial codes

During this phase, initial codes that identified interesting features of the data were produced. For this aspect of the coding, the theory-driven method of code development was adopted initially. In this method, the researcher begins with the theory of what occurs and then formulates the signals, or indicators, of evidence that support the theory; the elements of the code are derived from the hypotheses or elements of the theory (Boyatzis, 1998).⁸ However this method did not allow for the coding of the entire data set, as there were some data extracts that did not fit neatly into the theoretical constructs. There was therefore to some extent an adoption of the data-driven (inductive) method, whereby the data were coded without trying to fit it into a pre-existing coding frame (Braun & Clarke, 2006).

- Phase 3: Searching for themes

During this phase the analysis was refocused at the broader level of themes rather than codes; the codes were sorted into potential themes (in this case, some themes were pre-determined from the theories of motivation), and all relevant coded data extracts were collated within the identified themes. This led to a collection of overarching themes and sub-categories within these.

- Phase 4: Reviewing themes

This phase required close inspection of the data within the themes to ensure that they hung together in a coherent pattern, but also that there were clear and identifiable distinctions between themes. Some of the themes identified in phase three were retained, while others were merged together to form a new theme, or dropped altogether. Additionally, in this phase the interview transcripts were re-read in order to ascertain whether there was any additional data that could be coded within the themes that might have been missed in the initial stages. Consideration was also given at this point to the issue of prevalence, that is the number of instances in which a theme occurs across a data set (Braun & Clarke, 2006). Given that the number of interviews was relatively small and represented the views of individual teachers within different schools, some themes and categories were retained even if they were

⁸ It should be noted that the different ways of developing a thematic code (theory driven, prior data or research driven and data driven) can be considered to form a continuum from the theory-driven to data-driven approaches, or vice-versa (Boyatzis, 1998). The development of codes in this research moved along this continuum in the theory- to data-driven direction.

deemed to represent the experiences or perceptions of a minority of interviewees.

- Phase 5: Defining and naming themes

This phase involved the identification of the 'essence' of what each represented (Braun & Clarke, 2006), and identifying what it was about them that was of interest and why. As part of this phase it was also necessary to, for each individual theme, conduct a detailed analysis and consider how each theme fitted into the overall 'story' of the data, in relation to the research questions being answered. By the end of this phase the definition of what a theme was and what it was not was made clear, and names for each theme and associated categories were created in order to present this.

- Phase 6: Producing the report

The final themes are each presented in individual tables (see results section), detailing the sub-categories within each. A brief discussion of each of the themes is also provided. For brevity, selected quotes representing each sub-theme are presented in the tables, and the prevalence of the sub-categories is also included here.

The issue of reliability with respect to the qualitative data was considered in the analysis stage as it is often the case that this is seen to be a necessary condition to satisfy. Where interview data has been collected, reliability is usually established through having interview transcripts read through by another person, and then the different sets of codes generated are compared. It has however been suggested that it may be inappropriate to apply the criteria of reliability to qualitative methodologies (Yardley, 2000). Furthermore, Seidel and Kelle (1995) state that 'where researchers hold a belief that knowledge cannot be objective but is instead shaped by the purposes, perspectives and activities of those who create it, the use of inter-rater reliability as a check on a coding scheme is meaningless' (p. 54). Yardley goes on to say that having two people code the same text does not exclude the element of subjectivity in the interpretation of the data as it simply becomes an interpretation that is agreed upon by two people. During the coding stage of analysis in the present study, the interview transcripts were discussed with a colleague, but in taking account of the issues noted above no formal method of assessing reliability was employed.

3.6 Ethical considerations

The participants in this study were primary school pupils, aged between 9 and 11. Parental consent for pupil participation was sought at the outset and the pupils themselves were given the option to withdraw from the study at any time, without having to give a reason for their decision. The researcher was in possession of an enhanced Criminal Records Bureau check, which was necessary due to the need for direct access to children. There was, however, another adult present at all times during the administration of the questionnaires to the children.

With respect to the administration of the questionnaires, pupils were only asked to indicate their gender, age and date of birth on the front page. This was necessary in order to determine pupils' ethnicities and eligibility for free school meals prior to the data analysis stage. The class and school that each pupil belonged to needed to be identifiable to the author for in order for the data to be analysed in answer to the research questions posed, but this information remained confidential to the author.

4 RESULTS

This chapter will present the research findings in relation to the research questions posed earlier (see section 2.5). It will begin with a description of the data screening and cleaning phase and presentation of the results of exploratory data analyses, including analysis of the scale reliabilities and factor analyses of the pupil questionnaire. Following this, the correlational (RQ1) and multiple regression analyses (RQ2 and RQ3) will be reported. The findings from the qualitative aspect (RQ4 and RQ5) will then be outlined, with a presentation of the main themes identified and illustrative quotes. The chapter is concluded with a summary of the main findings.

4.1 Quantitative results

4.1.1 *Data screening and cleaning*

Prior to the main data analysis stage, the data were screened and checked for errors. The accuracy of data entry was ensured by the researcher; after the scores had been entered into the SPSS data file, they were cross-checked against each individual questionnaire. Additionally, descriptive statistics were generated and the data output was examined for a reasonable range in score values, and plausible means and standard deviations (Tabachnick & Fidell, 2007). With respect to missing values, none of the variables under investigation had more than 5% of responses missing⁹ and, given that the cases that did have missing values were randomly distributed through the data, all cases were retained for the main analyses¹⁰.

4.1.2 *Exploratory data analysis*

The overall data set was initially inspected in order to explore the nature of the variables, and to prepare for the main data analysis stage. The distributions of scores for all of the subscales of the pupil questionnaire were checked in terms of normality, and also for possible outliers. With respect to normality, histograms, normal probability plots and detrended normal probability plots were examined for each variable, as were values for skewness and kurtosis. Although some of the variables appeared to show a departure from normality when assessed graphically, the values obtained for skewness and kurtosis for all variables suggested minimal departures from normality, and it was therefore accepted that the assumption of normality had not been violated.

⁹ Tabachnick and Fidell (2007) suggest that if a large data set has missing values of 5% or less on any variable then this is not deemed to pose a serious problem with respect to data analysis.

¹⁰ Where appropriate, when performing analyses in SPSS, the 'exclude cases pairwise' option was selected so that a case was only excluded if it was missing the data required for a specific part of the analysis.

As with the assessment of normality, the histograms and probability plots were examined along with box plots for possible outliers. The presence of outliers was detected for some of the variables, and the influence of these was assessed by comparing the mean score for the variable with the 5% trimmed mean score for that variable. This difference was not deemed to be large enough for any of the outliers to be considered to be exerting a substantial difference, and so all were retained for subsequent analyses.

4.1.3. Factor analysis

The items from the Patterns of Adaptive Learning Survey (PALS), Classroom Life Instrument (CLI), Liking for School (LFS) and Pupil Perceptions of Teaching (PPT) scales were subjected to principal components analysis (PCA) using SPSS. The purpose of this section of the analysis was to assess the construct validity of the measures employed, through the examination of the relationships among the items and the identification of clusters of items that could be taken together as a construct being measured by the instrument in question. The results obtained were used only to define factors; there were no additional analyses performed using factor scores. Prior to performing PCA on each of the scales, the suitability of the data for factor analysis was assessed. The results for each scale are presented below.

4.1.3.1 Factor analysis of PALS items

Inspection of the correlation matrix for these items revealed the presence of many coefficients of .3 and above. The Kaiser-Meyer Olkin value was .806, exceeding the recommended value of .6 (Kaiser, 1974, as cited in Tabachnick & Fidell, 2007) and Bartlett's test of Sphericity (Bartlett, 1954, as cited in Tabachnick & Fidell, 2007) reached statistical significance, supporting the factorability of the correlation matrix.

PCA revealed the presence of twelve factors with eigenvalues exceeding 1, with the first factor explaining 15.99% of the variance and the twelfth factor explaining 2.33%. An inspection of the scree plot revealed a break after the third component. Parallel analysis was employed to assist in the decision of how many factors to retain, and this resulted in three components with eigenvalues exceeding the corresponding criterion values for a randomly generated data matrix of the same size (44 variables x 257 respondents). It was therefore decided to 'force' a three-factor solution, which explained a total of 34.16% of the variance. Oblimin rotation was performed to aid in the interpretation of the three components. The rotated solution revealed that the three components showed a number of strong loadings, and the interpretation of the

three components was consistent with the conceptual construction of the scale, with performance goal orientation items loading on Component 1, disruptive behaviour items loading on Component 2 and mastery goal orientation items loading on Component 3. The pattern and structure matrix for the three-factor solution of the PALS items can be seen in Appendix 4.1.

4.1.3.2 Factor analysis of CLI items

Inspection of the correlation matrix for these items revealed the presence of several coefficients of .3 and above. The Kaiser-Meyer Olkin value was .915, and Bartlett's test of Sphericity was significant. The correlation matrix was therefore deemed to be suitable for factor analysis.

PCA revealed the presence of two factors with eigenvalues exceeding 1, with the first and second factors explaining 40.74% and 11.08% of the variance respectively. Inspection of the scree plot showed a clear break after the second component and it was therefore decided to retain two factors. The total variance explained by this two-factor solution was 51.82%. Oblimin rotation was performed to aid in the interpretation of the two components, and the rotated solution showed that peer support items loaded onto Component 1 and teacher support items loaded on Component 2. The pattern and structure matrix for the two-factor solution can be seen in Appendix 4.2

4.1.3.3 Factor analysis of LFS items

Inspection of the correlation matrix for these items revealed the presence of coefficients above .3, however three items (65, 67 and 69) each had correlation values of less than .2 with four or more of the other items. The same result was found by Ireson and Hallam (2005) and as in their study, this finding suggested that the construct validity of the scale might be improved by removing these three items, which were concerned with pupils' perceptions of their parent's views about school, and the utility of school for obtaining a job.

PCA revealed the presence of two components with eigenvalues exceeding 1, with the first explaining 36.17% of the variance and the second explaining 11.17%. An inspection of the scree plot revealed a break after the second component. As with the other scales, oblimin rotation was performed and the rotated solution showed that eight items measuring pupils' feelings of closeness to the school and their teachers, happiness in school and the extent to which they valued their school loaded onto Component 1. The three items identified above loaded onto Component 2, which confirmed the suggestion that they were tapping into a construct other than liking for

school. This indicated that it would be appropriate to remove items 65, 67 and 69 from this scale, leaving it with eight items. The pattern and structure matrix for the two-factor solution can be seen in Appendix 4.3.

4.1.3.4 Factor analysis of PPT items

Inspection of the correlation matrix revealed that all variables correlated highly with each other (ranging from $r = .34$ to $.63$). The Kaiser-Meyer Olkin value was $.84$ and Bartlett's test of Sphericity was significant, supporting the factorability of the correlation matrix. PCA revealed the presence of just one factor with an eigenvalue exceeding 1, and this factor explained 60.15% of the variance. Given that only one component was present, it was not necessary to rotate the solution and all items were deemed to be measuring the same construct.

4.2 Descriptive data

Descriptive statistics were generated for pupils in each school for all of the variables contained in the questionnaire. This data can be seen in full in Appendix 4.4. General trends across all four schools indicated that pupils rated themselves, their classrooms and their teachers as being high on a mastery goal orientation or structure. Pupils' personal mastery goal orientation scores ranged from 4.08 (School 2) to 4.39 (School 3). Pupils' perceptions of a classroom mastery goal structure ranged from 4.04 (School 4) to 4.45 (School 3), and pupils' perceptions of a teacher mastery goal ranged from 3.90 (School 2) to 4.50 (School 3).

With respect to the performance approach goal orientation variables, there was a slightly wider range in scores. Pupils' personal performance approach goal orientation scores ranged from 2.46 (School 1) to 2.77 (School 3). Pupils' perceptions of a classroom performance approach goal structure ranged from 3.05 (School 1) to 3.90 (School 4), and pupils' perceptions of a teacher performance approach goal ranged from 2.63 (School 4) to 3.43 (School 1). Pupils' personal performance avoid goal orientations ranged from 2.88 (School 1) to 3.25 (School 3). Pupils' perceptions of a classroom performance avoid goal structure ranged from 2.37 (School 1) to 2.90 (School 3), and pupils' perceptions of a teacher performance avoid goal ranged from 2.49 (School 1) to 3.19 (School 3)¹¹. There was very little variation in the pupils'

¹¹ For the goal structure and orientation variables, 1 is the lowest possible rating (indicating non-agreement of the presence of the variable) and 5 is the highest (indicating agreement of the presence of the variable).

scores on the disruptive behaviour variable; they ranged from 2.37 (School 3) to 2.85 (School 4)¹².

4.3 Quantitative results

4.3.1 RQ1: *How are pupils' perceptions of the classroom goal structures related to pupils' disruptive behaviour in the classroom?*

H1: *A perceived classroom mastery structure will be negatively related to disruptive behaviour. A perceived performance goal structure (performance approach or performance avoid) will be positively related to disruptive behaviour.*

In order to answer this question, correlations were calculated between pupils' perceptions of the three classroom goal structures (mastery, performance approach and performance avoidance) and the disruptive behaviour variable. The data were split by school for this section of the analyses and for each school, preliminary analyses were performed to test the assumptions of normality, linearity and homoscedasticity. All data met the assumptions for parametric testing and so relationships between the variables were explored using the Pearson product-moment correlation coefficient. The results for each school are presented below, with the associated tables of correlations. Where the average scores for each variable are presented, in all cases 1 is the lowest possible score (i.e. the pupil does not engage in disruptive behaviour, or that they do not agree that the goal structure in question is present in the classroom), and 5 is the highest possible score (indicating that a pupil does engage in disruptive behaviour, or that they agree that the goal structure in question is present in the classroom).

4.3.1.1 Classroom goal structures and disruptive behaviour in School 1

The average scores for pupils' perceptions of each classroom goal structure and pupils' reports of their engagement in disruptive behaviour are shown below.

Mastery	Performance Approach	Performance Avoid	Disruptive behaviour
4.22	3.05	2.37	2.56

The correlation between classroom mastery structure and disruptive behaviour was a negative one and the correlation between classroom performance approach structure and disruptive behaviour was positive, and although these findings were in support of the proposed hypothesis, neither of these associations reached statistical

¹² For the disruptive behaviour variable, a score of 1 indicates no engagement in disruptive behaviour; a score of 5 indicates a high level of engagement in disruptive behaviour.

significance. There was a small, significant positive relationship between classroom performance avoid structure and disruptive behaviour ($r = .19$, $n = 78$, $p < .05$), with higher pupil perceptions of a performance avoid structure associated with pupil reports of higher levels of disruptive behaviour. Although the size of this correlation is rather small, this finding supports the proposed hypothesis that a performance avoid goal structure is positively related to disruptive behaviour in the classroom. Table 4.1 shows the Pearson values and significance levels.

Table 4.1 Pearson product-moment correlations between pupils' perceptions of classroom goal structure and pupils' reports of disruptive behaviour (School 1)

Scale	1	2	3	4
1 Classroom mastery goal structure	---			
2 Classroom performance approach goal structure	.19*	---		
3 Classroom performance avoid goal structure	.16	.52**	---	
4 Disruptive behaviour	-.10	.09	.19*	---

* $p < .05$ (1-tailed);

** $p < .01$ (1-tailed)

4.3.1.2 Classroom goal structures and disruptive behaviour in School 2

The average scores for pupils' perceptions of each classroom goal structure and pupils' reports of their engagement in disruptive behaviour are shown below.

Mastery	Performance Approach	Performance Avoid	Disruptive behaviour
4.11	3.53	2.74	2.85

The correlation between classroom mastery structure and disruptive behaviour was negative and the correlation between classroom performance avoid structure and disruptive behaviour was positive and, as with School 1, these findings were in support of the proposed hypothesis but neither association reached statistical significance. There was a small, significant positive relationship between classroom performance approach structure and disruptive behaviour ($r = .25$, $n = 79$, $p < .05$), with higher pupil perceptions of a classroom performance approach structure associated with pupil reports of higher levels of disruptive behaviour. Again, the size of the correlation coefficient is small, but this finding supports the proposed hypothesis that a performance approach goal structure is positively related to disruptive behaviour in the classroom. Table 4.2 shows the Pearson values and significance levels.

Table 4.2 Pearson product-moment correlations between pupils' perceptions of classroom goal structure and pupils' reports of disruptive behaviour (School 2)

Scale	1	2	3	4
1 Classroom mastery goal structure	---			
2 Classroom performance approach goal structure	.10	---		
3 Classroom performance avoid goal structure	-.03	.61**	---	
4 Disruptive behaviour	-.11	.25*	.14	---

* $p < .05$ (1-tailed);

** $p < .01$ (1-tailed)

4.3.1.3 Classroom goal structures and disruptive behaviour in School 3

The average scores for pupils' perceptions of each classroom goal structure and pupils' reports of their engagement in disruptive behaviour are shown below.

Mastery	Performance Approach	Performance Avoid	Disruptive behaviour
4.45	3.90	2.90	2.37

The results for school 3 showed that the classroom mastery and performance approach goal structures were negatively related to disruptive behaviour ($r = -.18$ and $-.10$ respectively), and classroom performance avoid goal structure was positively related to disruptive behaviour ($r = .10$). The finding that a classroom performance approach goal structure was negatively related to disruptive behaviour was not in line with the proposed hypothesis, but the relationships between the classroom mastery and classroom performance avoid goal structures and disruptive behaviour were as expected. However, the sizes of all correlation coefficients were small, and none of the relationships for this school reached statistical significance.

4.3.1.4 Classroom goal structures and disruptive behaviour in School 4

The average scores for pupils' perceptions of each classroom goal structure and pupils' reports of their engagement in disruptive behaviour are shown below.

Mastery	Performance Approach	Performance Avoid	Disruptive behaviour
4.04	3.64	2.60	2.39

The correlation between classroom mastery structure and disruptive behaviour was negative, which is in line with the proposed hypothesis, but the size of the coefficient was small and the relationship did not reach statistical significance. Both the classroom performance approach and classroom performance avoid goal structures

had moderate, positive and statistically significant relationships with disruptive behaviour ($r = .30$, $n = 43$, $p < .05$; $r = .37$, $n = 38$, $p < .05$, respectively). This indicates that higher pupil perceptions of performance approach and performance avoid goal structures in the classroom were associated with pupil reports of higher levels of disruptive behaviour. These findings provide further support for the proposed hypothesis. Table 4.3 shows the Pearson values and significance levels.

Table 4.3 Pearson product-moment correlations between pupils' perceptions of classroom goal structure and pupils' reports of disruptive behaviour (School 4)

Scale	1	2	3	4
1 Classroom mastery goal structure	---			
2 Classroom performance approach goal structure	.13	---		
3 Classroom performance avoid goal structure	-.17	.45**	---	
4 Disruptive behaviour	-.01	.30*	.37*	---

* $p < .05$ (1-tailed);

** $p < .01$ (1-tailed)

4.3.2 RQ2: Which pupil personal achievement goal orientations are predictive of disruptive behaviour in the classroom?

A standard multiple regression was performed in service of this research question. The assumptions of multicollinearity, normality, linearity, homoscedasticity and independence of residuals were all checked, and the data were also checked for the presence of outliers. Prior to performing the main analysis for this question, correlations between the three pupil personal achievement goals (mastery, performance approach and performance avoid) were calculated to determine the strengths of any relationships, as if they were found to be highly correlated with each other ($r < .7$; Pallant, 2010) it would not have been appropriate to use them in a regression analysis. These correlations can be seen below in Table 4.4.

The three variables were all significantly correlated with each other but none of the correlation coefficients exceeded .7 so they were all retained for the analysis. Additionally, the tolerance and Variance inflation factor (VIF) values did not indicate that the assumption of multicollinearity had been violated (tolerance values $> .10$; VIF values < 10).

Table 4.4 Correlations between pupils' personal goal orientations and disruptive behaviour

Variable	1	2	3	4	5	6
1 School	---					
2 Gender	-.06	---				
3 Mastery	.14*	-.02	---			
4 Performance approach	.14*	-.23*	.24*	---		
5 Performance avoid	.13*	-.08	.17*	.40*	---	
6 Disruptive behaviour	-.09	-.26*	-.27*	-.04	.13*	---

* $p < .05$

The remaining assumptions were checked by inspecting the Normal Probability Plot (P-P) and the scatterplot for these variables. The Normal P-P plot showed a reasonably straight diagonal line, suggesting that the variables were normally distributed. The scatterplot showed a roughly rectangular distribution with most of the scores concentrated in the centre, suggesting that the assumptions of linearity and homoscedasticity had not been violated. The scatterplot was also used to check for outliers, defined as cases that have a standard residual of more than 3.3 or less than -3.3 (Tabachnick and Fidell, 2007). There were no cases that appeared to exceed these values, and confirmation of this was provided by checking Mahalanobis distances for each of the variables, using a $p < .001$ criterion.

As mentioned in section 3.5.1, a significant difference was found between gender and the disruptive behaviour variable. School and gender were therefore entered into the regression analysis along with the three pupil personal achievement goal orientation variables. Dummy variables were created for gender, and also for the school variable in order that the effects of school could be controlled for. In each case, School 1 was the reference school. Table 4.5 displays the unstandardised regression coefficients (B) and intercept, the standardised regression coefficients (Beta), and R Square value.

The total variance explained by this model was 19% [$F(7, 220) = 7.39, p < .001$]. With respect to the contribution of the individual variables to the prediction of disruptive behaviour, it can be seen that gender and pupils' personal mastery goal orientations make equally strong, statistically significant unique contributions to the prediction (explaining 7.3% and 6.3% of the variance in disruptive behaviour, respectively), when

the variance explained by all the other variables in the model is controlled for. A statistically significant unique contribution was also made by the performance avoid goal orientation (4% of the variance in disruptive behaviour explained).

Table 4.5 Summary of standard multiple regression of disruptive behaviour on pupil personal achievement goals

Variable	B	SE B	Beta
Gender	-2.78	.64	-.27**
School 2 vs 1	.73	.77	.07
School 3 vs 1	-1.06	.94	-.08
School 4 vs 1	-.85	.94	-.06
Mastery	-.47	.12	-.25**
Performance approach	-.15	.10	-.10
Performance avoid	-.33	.11	.20**

Note: $N = 246$ due to missing data and pairwise deletion of cases. Gender is coded 0 = Males; 1 = Females. School 1 is coded 0 in all cases; other schools coded 1 for comparison. $R^2 = .19$; ** $p < .01$

These results suggest that pupils who report having an orientation towards a mastery goal also report less engagement in disruptive behaviour, but that pupils who report having an orientation towards a performance avoid goal orientation also report a greater tendency to engage in disruptive behaviour in the classroom. These interpretations fit with the preliminary correlational analyses in which the mastery and performance avoid goal orientations were significantly correlated with disruptive behaviour (respectively, these correlations were negative and positive). Furthermore, it appears that boys are more likely than girls to report engaging in disruptive behaviour in the classroom. It should be noted that the performance avoid goal structure variable had a less than desirable reliability (Cronbach's $\alpha = .42$), however this variable was still significantly related to disruptive behaviour. As mentioned previously, it would be expected that a variable with low reliability would have less power. The fact that the performance avoid goal structure variable proved to be significantly related to disruptive behaviour highlights the importance of this finding, as it denotes an effect of even greater magnitude than if the performance avoid goal structure variable had a higher reliability.

4.3.3 RQ3: Does the combination of achievement goal theory and self-determination theory provide an explanation for pupil disruptive behaviour in the classroom? If so, is it more powerful than an explanation provided by either theory alone?

A number of hierarchical multiple regressions were performed in order to test the predictive power of the achievement goal theory and self-determination independent variables on disruptive behaviour. Prior to carrying out the main regression analyses, analyses were performed to establish the effect (if any) of the variables that were proposed as potential mediators of the relationship between the contextual variables and the outcome variable, as outlined in the model presented in section 2.5.

According to Baron and Kenny (1986), a variable is confirmed as a mediator if: 1) there is a significant relationship between the IV and the DV; 2) there is a significant relationship between the IV and the mediator; 3) the mediator still predicts the DV after controlling for the IV; and 4) the relationship between the IV and the DV is reduced when the mediator is in the equation. If the relationship between the IV and the DV goes to zero when the mediator is in the equation, mediation is said to be complete; if the relationship is diminished, but not to zero, mediation is said to be partial (Tabachnick & Fidell, 2007).

4.3.3.1 Analysis of mediator variables

Following Judd and Kenny (1981), hierarchical regression analyses (steps 1 to 4 as outlined above) were performed on the AGT variables to determine the mediating effects of pupils' personal goal orientations on the relationship between their perceptions of the classroom goal structure and their reports of engaging in disruptive behaviour in the classroom. Preliminary analyses were conducted to ensure there was no violation of the assumptions of normality, linearity, multicollinearity and homoscedasticity. In all analyses, school and gender were entered into block 1 of the model in order to control for the effects of these variables on the disruptive behaviour variable. As with the previous analysis, dummy variables were created for gender and school.

Results showed that pupils' perceptions of a classroom mastery goal structure did not significantly predict disruptive behaviour, suggesting that there was no relationship for pupils' personal mastery goal orientations to mediate; these variables were therefore excluded from further analyses. Pupils' perceptions of both a classroom performance approach and a classroom performance avoid structure were significant predictors of disruptive behaviour. The classroom performance goal structure variables were also

found to correlate significantly with their corresponding pupil personal achievement goal orientation variables. However, only the pupil personal performance approach goal orientation variable was found to be a significant predictor of disruptive behaviour after controlling for pupils' perceptions of a classroom performance approach goal structure; the personal performance avoid goal orientation variable did not significantly predict disruptive behaviour after pupils' perceptions of a classroom performance avoid structure were controlled for. Both the classroom performance approach goal structure and personal performance approach goal orientation variables were therefore carried forward to subsequent regression analyses, along with the classroom performance avoid goal structure variable.

The same hierarchical regression analyses were then performed on the SDT variables to determine the mediating effects of the liking for school variable on teacher personal and academic support, peer personal and academic support and pupil perceptions of teaching. Preliminary analyses were conducted to ensure there was no violation of the assumptions of normality, linearity, multicollinearity and homoscedasticity. The results showed that all of the teacher support and peer support variables were significant predictors of disruptive behaviour, as was the pupil perceptions of teaching variable. Furthermore, all variables were significant predictors of liking for school. In the final step, liking for school was found to be a significant predictor of disruptive behaviour, even after controlling for teacher support, peer support and pupil perceptions of teaching. All of these variables were therefore carried forward for subsequent analyses. A summary of the significant relationships can be seen in Appendix 4.5.

4.3.3.2 Analysis of predictive power of AGT and SDT variables

In order to determine the predictive power of the AGT and SDT variables, separate hierarchical regression analyses were performed. Only the variables that were found to be significantly related to disruptive behaviour from the previous mediation analyses were entered into the regression models in this stage. The assumptions of multicollinearity, normality, linearity, homoscedasticity and independence of residuals were all checked, and the data were checked for the presence of outliers. With respect to the AGT variables, they were positively correlated with one another but the correlation coefficient did not exceed .7 so the assumption of multicollinearity was deemed not to have been violated and so the variables were retained for the analysis. This was also the case for the correlations between the SDT variables. The correlations for the AGT and SDT variables can be seen in tables 4.6 and 4.7 respectively.

Table 4.6 Correlations between significant AGT predictors and disruptive behaviour

Variable	1	2	3
1 Classroom performance approach	---		
2 Personal performance approach	.32*	---	
3 Disruptive behaviour	.13	-.04	---

* $p < .05$

Table 4.7 Correlations between significant SDT predictors and disruptive behaviour

Variable	1	2	3	4	5	6	7
1 Teacher academic support	---						
2 Teacher personal support	.67**	---					
3 Peer academic support	.52**	.66**	---				
4 Peer personal support	.39**	.50**	.62**	---			
5 Perceptions of teaching	.61**	.63**	.50**	.44**	---		
6 LFS	.51**	.57**	.45**	.48**	.64**	---	
7 Disruptive behaviour	-.24**	-.23**	-.14*	-.22**	-.31**	-.41**	---

* $p < .05$

** $p < .01$

For both sets of analyses, the Normal P-P plots showed a reasonably straight line indicating a normal distribution of the variables, and the scatterplots showed a rectangular distribution suggesting that the assumptions of linearity and homoscedasticity had not been violated. No outliers were detected in the scatterplots. Unstandardised regression coefficients (B) and intercept, the standardised regression coefficients (Beta) and R Square values for the AGT variables and SDT variables can be seen in Tables 4.8 and 4.9, respectively.

With respect to the models based on AGT theory, school and gender were entered at Step 1, explaining 10% of the variance in disruptive behaviour [$F(4, 227) = 6.51, p < .001$]. After entry of pupils' perceptions of the classroom performance approach goal structure at Step 2, the total variance explained by the model as a whole was 12% [$F(5, 226) = 6.29, p < .001$]. Pupils' personal performance approach goal orientations were added at Step 3, and this final model explained a total of 14% of the variance in disruptive behaviour, [$F(6, 225) = 5.95, p < .001$]. In the final model, the statistically significant theoretical variables were pupils' perceptions of a classroom performance

Table 4.8 Summary of hierarchical regression analyses for contextual and mediating process variables predicting disruptive behaviour in the classroom (based on AGT)

Predictor	Model 1			Model 2			Model 3		
	B	SE B	Beta	B	SE B	Beta	B	SE B	Beta
Step 1									
Gender	-2.65	.65	-.26**	-2.57	.64	-.25**	-2.84	.65	-.28**
School 2 vs 1	1.25	.79	.12	.84	.81	.08	0.79	.80	.07
School 3 vs 1	-1.23	.96	-.09	-1.96	1.00	-.15	-1.90	1.00	-.14
School 4 vs 1	-1.08	.97	-.08	-1.59	.99	-.12	-1.52	.98	-.12
Step 2									
Classroom performance approach goal structure				.29	.13	.15*	.37	.14	.19**
Step 3									
Personal performance approach goal orientation							-.20	.10	-.13*
R ²		.10**			.12**			.14**	
ΔR ²		.10			.02			.02	
ΔF		6.51**			4.92*			3.89*	

Note. N = 246 due to missing data and pairwise deletions of cases. Gender is coded 0 = Males; 1 = Females. School 1 is coded 0 in all cases, other schools coded 1 for comparison.

**p < .001. *p < .05

Table 4.9 Summary of hierarchical regression analyses for contextual and mediating process variables predicting disruptive behaviour in the classroom (based on SDT)

Predictor	Model 1			Model 2			Model 3		
	B	SE B	Beta	B	SE B	Beta	B	SE B	Beta
Step 1									
Gender	-2.64	.66	-.26**	-2.96	.64	-.29**	-2.51	.64	-.25**
School 2 vs 1	1.25	.81	.12	.39	.79	.04	.27	.77	.02
School 3 vs 1	-1.23	.98	-.09	-.89	.98	-.07	-.51	.96	-.04
School 4 vs 1	-1.10	.99	-.08	-1.82	.95	-.13	-2.07	.93	-.15
Step 2									
Teacher academic support				-.03	.16	-.02	-.01	.16	-.004
Teacher personal support				-.13	.14	-.09	-.04	.14	-.02
Peer academic support				.34	.15	.24*	.27	.15	.19
Peer personal support				-.33	.11	-.27**	-.22	.11	-.18*
Pupil perceptions of Teaching				-.29	.11	-.23**	-.15	.11	-.12
Step 3									
Liking for school							-.28	.08	-.30**
R²		.10**			.22**			.26**	
ΔR²		.10			.12			.04	
ΔF		6.29**			6.41**			11.94**	

Note. N = 246 due to missing data and pairwise deletions of cases. Gender is coded 0 = Males, 1 = Females. School 1 is coded 0 in all cases; other schools coded 1 for comparison.

**p < .001. *p < .05

approach goal structure ($beta = .19, p < .01$) and pupils' personal performance approach goal orientations ($beta = -.13, p < .05$). These results suggest that higher pupil perceptions of a performance approach classroom goal structure are associated with higher levels of disruptive behaviour, but that pupils who report higher personal performance approach goal orientations also report less engagement in disruptive behaviour in the classroom. In addition, gender was a significant predictor of disruptive behaviour ($beta = -.28, p < .001$), with boys being more likely than girls to report engaging in disruptive behaviour in the classroom.

With respect to the models based on SDT theory, school and gender were entered at Step 1, again explaining 10.2% of the variance in disruptive behaviour [$F(4, 219) = 6.29, p < .001$]. After the entry of the teacher and peer support variables (emotional and personal) and pupils' perceptions of teaching at Step 2, the total variance explained by the model as a whole was 21.9% [$F(9, 214) = 6.70, p < .001$]. Liking for school was added at Step 3, and this final model explained a total of 26.1% of the variance in disruptive behaviour, [$F(10, 213) = 7.53, p < .001$]. In the final model, the statistically significant theoretical variables were liking for school ($beta = -.30, p < .01$), and peer personal support ($beta = -.18, p < .05$). These findings suggest that pupils who report more favourable opinions about school and higher levels of support from their peers also report less engagement in disruptive behaviour in the classroom. As with the model based on AGT theory, gender was also a significant predictor of disruptive behaviour ($beta = -.25, p < .001$), with boys being more likely than girls to report engaging in disruptive behaviour in the classroom.

4.3.3.3 Analysis of the dual-theory approach

The final regression analysis was performed in order to assess the predictive power of a dual-theory approach to motivation, with the significant predictors from the AGT model being combined with the significant predictors from the SDT model. Unstandardised regression coefficients (B) and intercept, the standardised regression coefficients (Beta) and R Square for this dual-theory approach can be seen in Table 4.10. As with the separate regression analyses for the AGT and SDT variables, school and gender were entered at Step 1, and these variables explained 10.3% of the variance [$F(4, 217) = 6.23, p < .001$]. The significant contextual AGT and SDT variables (classroom performance approach goal structure and peer personal support) were entered at Step 2 and this model explained 17.5% of the variance in disruptive behaviour [$F(6, 215) = 7.62, p < .001$]. Pupils' personal performance approach goal orientations and liking for school were entered into the final model at Step 3, and this model explained a total of 26.7% of the variance in disruptive behaviour. The addition

Table 4.10 Summary of hierarchical regression analyses for contextual and mediating process variables predicting disruptive behaviour in the classroom (based on a dual-theory approach)

Predictor	Model 1			Model 2			Model 3		
	B	SE B	Beta	B	SE B	Beta	B	SE B	Beta
Step 1									
Gender	-2.64	.66	-.26**	-3.03	.64	-.25**	-2.59	.64	-.25**
School 2 vs 1	1.25	.81	.12	.28	.82	.03	-.06	.78	-.01
School 3 vs 1	-1.23	.98	-.09	-1.44	1.01	-.11	-.61	.97	-.05
School 4 vs 1	-1.08	.99	-.08	-1.78	.98	-.13	-2.24	.94	-.16
Step 2									
Classroom performance approach goal structure				.28	.13	.14*	.30	.13	.15*
Peer personal support				-.30	.08	-.25**	-.08	.09	-.07
Step 3									
Personal performance approach goal orientation							-.17	.10	-.12
Liking for school							-.33	.07	-.35**
R ²		.10**			.17**			.27**	
ΔR ²		.10			.07			.09	
ΔF		6.23**			9.43**			13.36**	

Note. N = 246 due to missing data and pairwise deletions of cases. Gender is coded 0 = Males, 1 = Females. School 1 is coded 0 in all cases, other schools coded 1 for comparison.

**p < .001. *p < .05

of these two variables accounted for an additional 9.2% of the variance in disruptive behaviour [$F(2, 213) = 13.36, p < .001$], after controlling for gender, school and the AGT and SDT contextual variables.

However, in this final model, the only statistically significant theoretical variables were liking for school ($beta = -.35, p < .001$) and classroom performance approach structure ($beta = .15, p < .05$). This finding suggests that pupils who hold more favourable opinions about school report less engagement in disruptive behaviour in the classroom, but that pupils who have a higher perception of a classroom performance approach structure report that they display more disruptive behaviour in the classroom. And again, as with the previous models, gender was also a significant predictor ($beta = -.25, p < .001$), with boys tending to report more engagement in disruptive behaviour in the classroom than girls.

The model containing a combination of AGT and SDT variables explains a slightly greater amount of variance in disruptive behaviour than either of the separate models. This suggests that, when looking at the relationship between these two theories of motivation and disruptive behaviour in the classroom, it may be that a dual-theory approach to pupil motivation provides more of explanation for disruptive behaviour in the classroom than either theory alone.

4.4 Qualitative results

4.4.1 RQ4: Which aspects of achievement goal theory and self-determination theory are present in teachers' thinking about teaching, learning and pupil behaviour? Are there any additional factors that teachers perceive to have an impact on teaching, learning and pupil behaviour?

As outlined in the introduction, the idea for this study stemmed from a visit to a primary school whose staff considered that they were particularly committed to the idea of enhancing pupil motivation, and they did so through adopting various practices and approaches. It was then decided to look at other schools in the same area, in terms of their approach to motivation, and to explore whether or not this was something that schools considered to be important in their adopted styles of teaching and learning, and also in relation to promoting good behaviour in the classroom.

The qualitative interview data indicated that the majority of teachers reported that they adopted a mastery and/or performance approach goal orientation to teaching and learning in their classrooms, and there was no evidence of the adoption of a

performance avoid goal orientation in any of the teachers' methods of instruction. Teaching practices that are considered to be mastery oriented are those that aim to promote a level of understanding of what is being taught, and are deemed to be enjoyable for pupils. Practices that are performance-approach oriented aim to enable pupils to demonstrate a level of competence in their work. It should be noted here that the interview data is merely a reflection of teachers' perceptions and intentions of their approaches, and that these may or may not be enacted in their everyday practice.

Thematic analysis of the 11 class teacher interviews, in line with the theory-driven method of analysis, led to the creation of five overarching themes. Two of the themes were related to AGT and three were related to SDT. Each of these themes was further split into categories and sub-categories. The two AGT themes (1 and 2) and three SDT themes (3, 4 and 5) were as follows:

- 1) Mastery approach to instruction and school mastery goal structures
- 2) Performance approach to instruction and school performance goal structures
- 3) Structure
- 4) Autonomy support
- 5) Involvement

The categories and sub-categories contained within each of the themes can be seen in Tables 4.11 to 4.15, along with illustrative quotes from the interviewees. Additionally, for each theme where comments about pupil behaviour were made, these are included at the end of the table. The prevalence of each sub-category is also indicated by the number of interviewees whose comments were reflective of these.

4.4.1.1 Theme 1: Mastery approach to instruction and school mastery goal structures

All of the eleven teachers interviewed made reference to an approach to instruction in their classrooms or an aspect of the school that related to a mastery goal structure. The views of these teachers indicated that they placed a great deal of importance on children experiencing enjoyment in school, and that they tried to ensure that there were opportunities within their classrooms and within the school for this to happen. The idea of enjoyment was linked to behaviour by some teachers, with the general feeling being that if children do not enjoy lessons, this will impact negatively on their behaviour in the classroom.

Table 4.11 Categories and subcategories of Theme 1, illustrative data extracts and prevalence

Theme 1: Mastery approach to instruction and school mastery goal structures			
Category	Sub-category	Prevalence	Illustrative quotations
Emphasis on enjoyment	Enjoyment in school	5	<i>'If they're not enjoying themselves, if they're not having fun, why are they here?'</i>
	Enjoyment in lessons	9	<i>'If I find something boring I've stopped lessons and done something else'</i> <i>'I look at what I've got to do and see how the lesson would appeal'</i>
	Enjoyment linked to learning and achievement	3	<i>'The academic advancement works because they enjoy it'</i> <i>'If they're here and they're enjoying it then their learning is going to improve'</i>
Relating school work to life outside of school	Not just focusing on academics	4	<i>'I don't particularly want to turn out a small set of academics'</i> <i>'...If they've grown in confidence and they're happy, then to me that's an achievement'</i>
	Developing rounded individuals	5	<i>'I'm quite enthusiastic about teaching the 'whole child' and developing their personal qualities and all the other things that make a real person...'</i> <i>'We're trying to recreate real life in the classroom'</i>
	Promoting pupil aspirations	5	<i>'This year we've been to university to kind of motivate them to feel like they want to go'</i>
Behaviour	Boredom in class		<i>'Kids who are bored behave badly'</i>
	Pupils disliking work		<i>'..a child who doesn't like writing and...this leads to work avoidance'</i>

Just over a third of the teachers spoke about their desire to enable children to develop in all areas of their lives, not just in terms of their academic achievement, and there was an acknowledgement of the need to teach children skills that would be useful to them beyond school, rather than simply concentrating on imparting knowledge. The notion of promoting pupil aspirations also featured in half of the interviewees' responses. This was deemed by some teachers to be particularly important as the

area of the city in which this research was conducted is a predominantly white, working class one, and one of the teachers intimated that their pupils might not be encouraged to fulfil their potential by anyone other than at school.

4.4.1.2 Theme 2: Performance approach to instruction and school performance goal structures

As with the mastery approach, all eleven teachers interviewed alluded to the use of a performance approach in their classrooms or in school overall. Rewards were a key theme, with the majority of teachers placing importance on the use of rewards. It was not the case, however, that rewards were given solely to pupils who demonstrated the most achievement overall. Teachers were very clear about wanting to use rewards appropriately and fairly, i.e. to ensure that all children were recognised for their own individual efforts, regardless of whether a piece of work they produced was the best in the class.

It was also not the case that rewards were given just for learning, and one teacher commented that rewards specific to learning were not used in their classroom. Rewards were generally given for a number of things including social skills, working well with others or trying hard. In this sense, although the use of rewards is an overtly performance oriented approach, a mastery approach is incorporated and in doing so the emphasis on competition is somewhat reduced.

The notion of attainment levels and the drive to obtain good results featured in teachers' comments, although for some this was portrayed in a negative light. Year 6 teachers in particular felt that there was a great emphasis on achieving certain levels in order to be judged favourably by external sources. This was linked to target setting for pupils, however it was not always the case that target setting in itself was thought to be detrimental. With respect to behaviour, rewards were seen by a small number of teachers to be a useful way in which to promote good behaviour.

Table 4.12 Categories and subcategories of Theme 2, illustrative data extracts and prevalence

Theme 2: Performance approach to instruction and school performance goal structures			
Category	Sub-category	Prevalence	Illustrative quotations
Rewards	Use of rewards as a motivator	11	<i>'Prizes for the best work are used throughout the school'</i>

	Importance of rewards	8	<p><i>'I think they're really important...it just increases their motivation really'</i></p> <p><i>'Probably more important at the start of the year when you're getting to know the children and want them to pick up certain learning behaviours'</i></p>
	Consideration of how rewards are used	3	<p><i>'...the children's learning, whatever their ability, is rewarded'</i></p> <p><i>'...the idea is that they know what the reward is for'</i></p>
Public celebrations of achievement	Whole school assemblies	4	<i>'We have assemblies where we give out certificates for good work or good behaviour or a good attitude'</i>
	Displaying pupils' work	4	<p><i>'...showing the best of their work on the wall really motivates them'</i></p> <p><i>'...showing great pieces of work off, even if it's not a high level piece, it's a piece they've tried well with...'</i></p>
Importance of attainment levels	Drive to get good results	9	<p><i>'...there's this treadmill you're on with SATs in Year 6'</i></p> <p><i>'My aims are...that they achieve good SATs results and good teacher assessments'</i></p>
	Focus on league tables and OFSTED	2	<p><i>'At the top end, Years 5 and 6, we've got to get the levels as well. With league tables it affects things'</i></p> <p><i>'...doing well in the SATs...that leads into league tables and OFSTED and things'</i></p>
	Target setting	3	<p><i>'...in Year 6 I would say that it is very target focused'</i></p> <p><i>'...we have targets so that the children can focus on one thing they want to work on...'</i></p>
Behaviour	Using rewards to promote good behaviour	2	<p><i>'...[rewards are] really important...I think it raises the profile of behaviour...'</i></p> <p><i>'...the use of rewards is important, especially with children with behaviour problems...'</i></p>

4.4.1.3 Theme 3: Structure

Although the categories in this theme were touched upon by a relatively small number of teachers that were interviewed, it was still deemed to be of importance in the overall analysis of the data. The teachers that did speak about this aspect of SDT made reference to the need for a positive learning environment, having clear expectations of pupils, communicating with pupils and ensuring that all pupils were able to access the tasks set.

In terms of promoting good behaviour, having a degree of structure in their approach was felt by three teachers to be helpful. These teachers believed that positive behaviour could be fostered by ensuring that children were treated with fairness and consistency.

Table 4.13 Categories and subcategories of Theme 3, illustrative data extracts and prevalence

Theme 3: Structure			
Category	Sub-category	Prevalence	Illustrative quotations
Promoting effective achievement of desired outcomes	Learning environment	1	<i>'It's been such a calm atmosphere and learning environment...'</i>
	Expectations	4	<i>'It's about telling them where they are in the scheme of where they've got to get to'</i> <i>'...expectations that have been put in place have made a massive difference'</i>
	Communicating with pupils	2	<i>'...giving them feedback, by talking to them about their work'</i>
	Differentiation	3	<i>'...I think about ways of differentiating because I've got a very able child, so I think of ways I can stretch her, and then I think about what I need to give lower children to support them...'</i>
Behaviour	Openness and consistency	3	<i>'...[Pupil behaviour doesn't often affect teaching and learning] and I think that comes from being straight with the children'</i> <i>'...consistency is the key. So kids who do misbehave, they know what is going to happen'</i>

4.4.1.4 Theme 4: Autonomy support

In relation to this theme, teachers were sometimes convergent in their comments, but divergent at other times. More than two-thirds of teachers interviewed spoke about involving pupils in their learning, and they placed a degree of importance on the need to do this in the classroom. Interestingly, the comments regarding the choices that pupils have or are able to make in terms of what they learn and how they learn it were somewhat mixed. Teachers tended to report that they felt that pupils were less able to exercise choice in what they learn, and this was put down to the need to adhere to the National Curriculum. Some teachers however, believed that it was easier to allow pupils to have more choice in how they learn things, whether in the classroom or when working on tasks at home. Despite the lack of choice that teachers perceive pupils to have in terms of deciding what they learn, comments about the positive aspects of giving pupils choices suggested that this was seen to be a good thing.

Table 4.14 Categories and subcategories of Theme 4, illustrative data extracts and prevalence

Theme 4: Autonomy support			
Category	Sub-category	Prevalence	Illustrative quotations
Co-construction in the classroom	Involving pupils in their learning	7	<i>'And asking them during the lesson... how they think their learning is – is the pitch of the lesson right, what do they think of the activities?'</i>
	Pupil choice in what and how they learn	8	<i>'...<u>what</u> they learn is probably quite restricted [compared to how]'</i> <i>'...learning logs [done at home] have given them more choices than they have in school'</i> <i>'...giving them choice is difficult...we do try to give them choice wherever possible'</i>
	Importance of giving pupils a choice	2	<i>'...[choice is important]. This idea that making everybody do exactly the same thing at the same time, that's the problem with SATs'</i> <i>'...in having that choice, its really stuck in their memories, they've recalled a lot more...because they've taken it in a way that's more interesting to them'</i>
	Pupils taking responsibility for their learning	4	<i>'...make the children want to learn so that they take control of their own learning really'</i>
	Promoting independence	3	<i>'And try to give them more independence with their work, so you're kind of facilitating the work'</i>

Over a third of teachers interviewed believed that children would benefit from taking more responsibility for their learning, and one teacher commented that some pupils know (or can at least be made aware of) what it is they need to do in order to make progress in their learning. The associated notion of encouraging children to become independent learners was expressed by three teachers as a particular aim.

4.4.1.5: Theme 5: Involvement

In relation to this theme, all eleven teachers interviewed spoke about the importance of having a good relationship with their pupils. This was a scaled question in the interview, with teachers asked to rate the importance of having a good relationship on a scale of 0 (not at all important) to 10 (very important); all teachers gave a rating of 8 or above, with the majority scoring it at 10.

The idea of promoting a sense of belonging to school was also quite prevalent, with over a third of teachers making reference to this. These teachers seemed to believe that school was more than just a place where children go to learn, and that the creation of an environment where pupils feel happy and safe confers additional benefits for them over and above the opportunities for academic achievement.

The formation of positive relationships between pupils and teachers and pupils and their peers was seen to be crucial in terms of the potential impact these can have on pupils' behaviour. Several teachers cited their positive relationships with pupils as reasons for the absence of disruptive behaviour in their classrooms, whilst those teachers who did experience disruption by pupils in class tended to attribute this to less well formed relationships amongst the pupils themselves.

Table 4.15 Categories and subcategories of Theme 5, illustrative data extracts and prevalence

Theme 5: Involvement			
Category	Sub-category	Prevalence	Illustrative quotations
Teacher-pupil relationships	Importance of teacher-pupil relationships	11	<i>'If you've got a challenging class, it's important to have a good relationship'</i> <i>'...you're a pivotal person in their lives'</i> <i>'For me it's the be all and end all'</i>
	Time to get to know pupils	1	<i>'...the way that I've worked with these children has changed over the two years I've had them'</i>

Pupil-peer relationships	Friendships	1	<i>'...they've mixed well together and really nice friendships have been formed'</i>
	Working together	2	<i>'...there's a lot of interaction...the children are given time to talk with each other'</i>
Relatedness	Promoting a sense of belonging	4	<i>'...the head has got that idea...that it's important to be part of this school. You're not just coming to learn, it's like a family'</i> <i>'I think they [the children] feel comfortable with me'</i>
Behaviour	Positive behaviour	5	<i>'I think the positive relationship I have with all the children really helps with those behaviour issues where there are any'</i>
	Negative behaviour	6	<i>'This class is challenging...they're lacking in 'team spirit' '</i> <i>'...[disruptive behaviour attributed to] friendship issues, when they're falling out...'</i>

The final two themes were generated following the data-driven method of thematic analysis, that is the themes emerged from the data and as opposed to being fitted into a pre-existing theoretical framework. These themes (6 and 7) were as follows:

- 6) Curriculum delivery
- 7) Restrictions on teaching

4.4.1.6 Theme 6: Curriculum delivery

More than half of the teachers interviewed made reference to the adoption of a creative approach to curriculum delivery, and this number included teachers from three of the four schools. On the whole, the creative curriculum was spoken of in a positive way, with teachers feeling that creativity is something that all children should be exposed to, and that it tends to lead to higher standards and higher levels of pupil enjoyment and engagement. One teacher mentioned the time factor, in that they felt it takes longer to 'do' the creative curriculum, but this did not seem to be an overt criticism of the approach.

One of the schools in the study has had a focus in recent years on raising standards, as these have historically been low. The teachers that spoke about this appeared to

contrast the need to raise standards with the adoption of a creative curriculum approach, suggesting that the two were somewhat incompatible. Whilst this was the view of a small minority, it is an interesting finding and raises questions about the perception of the ways in which schools that have a need to focus on raising standards go about doing this.

Table 4.16 Categories and subcategories of Theme 6, illustrative data extracts and prevalence

Theme 6: Curriculum delivery			
Category	Sub-category	Prevalence	Illustrative quotations
Creativity	Creative curriculum	6	<p><i>'We have gone onto the creative curriculum and the emphasis is on enjoyment...'</i></p> <p><i>'...what we've been trying to do is make the curriculum more creative'</i></p>
Standards	Emphasis on basic skills	2	<p><i>'...we historically have low standards , so we have had to put a lot of emphasis...on basic skills'</i></p> <p><i>'...hopefully as the basic skills become more embedded, we are going to try to become more creative with the rest of the curriculum'</i></p>

4.4.1.7 Theme 7: Restrictions on teachers

This theme was quite prevalent amongst the teachers interviewed, with more than half referring to the National Curriculum and the need to cover it with their pupils. This in itself was not always seen as a negative thing, but when combined with other pressures such as standards and reaching certain levels of attainment, it seemed to leave teachers feeling like they were very much directed in terms of what they teach. This in turn to some teachers meant that they were further restricted in terms of *how* they are actually able to teach. The pressure to 'cover everything' for some teachers leads to a clash between needing to get through it all and being more creative in their approaches, as was seen in the previous theme.

Although only referenced by three out of the eleven teachers, the frustration at the lack of freedom they experience as teachers was evident. Again, the comments made were not suggesting that teachers shouldn't be given an agenda to follow, but that they should be able to feel that they have the freedom to do what they are required to do in a way that suits them and their pupils.

Table 4.17 Categories and subcategories of Theme 7, illustrative data extracts and prevalence

Theme 7: Restrictions on teachers			
Category	Sub-category	Prevalence	Illustrative quotations
National Curriculum	Adhering to the curriculum	7	'...obviously we do have to cover the National Curriculum' 'What they learn is partly restrained by the [National] curriculum'
Teacher autonomy	Lack of freedom	3	'...I think we're quite prescribed and possibly shouldn't be' 'I'd love to see more freedom for teachers to get on and teach how they and the children want it to be done'

4.4.2 RQ5: Do schools attempt to address the issues of pupil motivation and behaviour through the curriculum and associated school policies?

Interviews were conducted in each of the four schools with a membership of the senior leadership team, in order to understand the extent to which the issues of motivation and behaviour were approached as 'whole school' issues. More specifically, the main aim was to find out whether these issues were being considered with respect to the development of the school overall, and if so, what structures were in place to support this.

There were two overarching themes that emerged from the four interviews, which were mainly elicited by the questions asked, and linked to this particular research question. They were:

- 1) Curriculum
- 2) School policies

Within each theme were two categories, relating to motivation and behaviour. The themes and categories contained within each of the themes can be seen in Tables 4.18 and 4.19, along with illustrative quotes from the interviewees. The prevalence of each category is also indicated by the number of interviewees whose comments were reflective of these.

4.4.2.1 Theme 1: Curriculum

All four interviewees spoke about the curriculum in terms of how it can be delivered so as to increase levels of motivation amongst pupils. Comments were made about creativity in the curriculum, and how this can serve to make lessons more enjoyable and therefore be more engaging for pupils. Associated with this was the idea of involving pupils to a greater degree and taking on board their ideas in terms of what lessons should look like and what they would be most interested in learning. The move towards a more creative approach to curriculum delivery was prevalent in all four interviews, with interviewees seemingly quite convinced about the benefits of such an approach in terms of promoting enjoyment and engagement; the feeling was that a by-product of this would be an improvement in levels of attainment and higher standards.

Table 4.18 Theme 1 category, illustrative data extracts and prevalence

Theme 1: Curriculum		
Category	Prevalence	Illustrative quotations
Motivation	4	<p><i>'What we have been doing...is to develop the curriculum to make it more relevant to the children, so that it would improve pupil motivation'</i></p> <p><i>'We have tried to go down the creative curriculum approach, what we're trying to do is give the children a voice in that. By giving them the pupil voice, you get the pupil motivation'</i></p> <p><i>'We've listened to [pupils]...asking them what sorts of things they would like to do, and therefore trying to mould the curriculum around their interests...'</i></p>
Behaviour	3	<p><i>'...we feel that some of the [disruptive] behaviours we have are because the children either don't feel that they own some of the curriculum or that it isn't quite right for them'</i></p> <p><i>'Definitely the delivery and content will affect behaviour'</i></p>

4.4.2.2 Theme 2: School policies

Again, all four interviewees spoke about school policies, both in terms of their relevance to pupil motivation and behaviour. For one school out of the four, pupil motivation was not overtly present in the school development plan, although in this school it was felt that pupil motivation was recognised within a raising standards agenda. For the other three schools, pupil motivation was a feature in the development plan, either conceptualised as motivation or as pupil engagement.

With respect to behaviour, again there was only one interviewee that did not see this as a something the school needed to focus on within their development plan. The other three interviewees spoke about the links between the development plan and the behaviour policy, in that there is a need for the behaviour policy to be embedded within the school in order for the children to be in a position to learn. One interviewee explicated the link between behaviour and school development in terms of a raising standards agenda, and not just from an attainment perspective, but by looking at the 'whole child' and recognising that pupil engagement and behaviour are extremely closely linked.

Table 4.19 Theme 2 category, illustrative data extracts and prevalence

Theme 2: School policies		
Category	Prevalence	Illustrative quotations
Motivation	4	<p><i>'Pupil motivation is not a specific target [in the school development plan], we're always looking to raise standards...and within that we would maybe look for incentives to raise pupil motivation'</i></p> <p><i>'Pupil motivation does feature explicitly in the school development plan...part of the plan is to develop a more engaging curriculum...'</i></p>
Behaviour	4	<p><i>'Yes [the school development plan and behaviour policy are linked]...in terms of raising standards...'</i></p> <p><i>'I don't think behaviour is a huge priority on our development plan; we don't really have many behavioural issues as such...'</i></p> <p><i>'[Each year] we look at the development plan and analyse how successful we've been on it...one of the things that came up...was the behaviour...so we've started to train people on Webster Stratton'</i></p>

4.5 Summary of results

4.5.1 Summary of quantitative results

The correlation analyses carried out in service of RQ1 indicate that, in general, the results confirmed the proposed hypothesis. In all four schools, pupils' perceptions of a classroom mastery goal structure were negatively related to their reports of engagement in disruptive behaviour in the classroom, although these particular results were not significant. With the exception of School 3, pupils' perceptions of a classroom performance approach structure were positively related to their reports of engagement in disruptive behaviour, although for School 1 this relationship did not reach statistical significance. With respect to pupils' perceptions of a classroom

performance avoid goal structure, this was positively related to pupil reports of disruptive behaviour in all four schools, although the results for Schools 2 and 3 were not statistically significant.

In terms of pupils' personal achievement goals, possession of a mastery goal orientation was found to be a significant negative predictor of pupils' engagement in disruptive behaviour in the classroom, such that pupils who had higher perceptions of their orientation towards a mastery goal reported less engagement in disruptive behaviour. Possession of a performance avoid goal orientation was a significant positive predictor of pupil engagement in disruptive behaviour, in the sense that pupils who had higher perceptions of their orientation towards a performance avoid goal reported more engagement in disruptive behaviour in the classroom.

An exploration of the mediating effects of pupils' personal goal orientations on the relationship between pupils' perceptions of their classroom goal structures and disruptive behaviour revealed that only pupils' personal performance approach goal orientations significantly mediated the relationship between their perceptions of a classroom performance approach goal structure and their reports of engaging in disruptive behaviour in the classroom. In terms of the SDT variables, pupils' liking for school was found to have a significant mediating effect on the relationship between all of the contextual SDT variables and their reports of disruptive behaviour in the classroom.

The regression model containing the classroom and personal performance approach variables provided a significant fit for the data overall, indicating that these variables were significant predictors of pupil engagement in disruptive behaviour in the classroom after controlling for the effects of gender and school. Interestingly, pupils' perceptions of a classroom performance approach goal structure were a positive predictor of disruptive behaviour, whereas pupils' personal performance approach goal orientations negatively predicted disruptive behaviour. The regression model containing the SDT variables also provided a significant fit for the data overall. Pupils' perceptions of peer personal support and pupils' liking for school were identified as significant predictors of disruptive behaviour in the classroom, after controlling for the effects of gender and school. It was of interest to note that pupils' perceptions of peer academic support and pupils' perceptions of teaching were both significant predictors after controlling for gender and school, but the addition of liking for school to the model had a deleterious effect on their significance.

Finally, the regression model based on a dual-theory approach (combined AGT and SDT) again provided a significant fit for the data overall, explaining more of the variance in disruptive behaviour than the separate AGT and SDT models. The variables that contributed most significantly to the prediction of disruptive behaviour in the classroom (in order of importance) were pupils' liking for school, gender and pupils' perceptions of a classroom performance approach structure.

4.5.2 Summary of qualitative results

Interviews with the class teachers in all four schools generated themes that were reflective of both AGT and SDT as well as other factors that teachers believed to be having an impact on teaching, learning and behaviour; namely curriculum delivery and the restrictions they felt that were placed on them as teachers. All interviewees made reference to the use of both a mastery and a performance approach to instruction in their classrooms, as well as in their schools overall. In terms of the performance approach, teachers' descriptions of practices that occurred in their classrooms and in their schools overall indicated that these were combined with elements of a mastery approach, such that there was very little (if any) emphasis on competition between pupils.

The structure, autonomy support and involvement facets of SDT were all touched upon by teachers in their interviews. With respect to structure, fewer than half of the teachers made comments that related to this theme, however those that did made reference to the factors they felt had contributed to the achievement of positive outcomes for pupils, such as having a calm learning environment, communicating expectations clearly to pupils and ensuring that they were always able to access the work given, whatever their level of attainment. In terms of autonomy support, the idea of teachers working collaboratively *with* pupils and actively involving pupils in their learning was a very prevalent theme, commented on by the majority of teachers interviewed. There were many different ways in which the teachers tried to make this happen in their classrooms, however the view as to whether or not this was something they believed to be easily achievable was not unequivocal. Regarding the involvement theme, all teachers made reference to the importance of teacher-pupil relationships, and it was clear that they all felt that this was a crucial element of school life. The notion of peer relationships also came up here, as did the need for pupils to feel like they were part of the school, with teachers citing these things as being necessary for pupils to be successful at school, both academically and in their personal development.

Comments relating to pupil behaviour featured in all of these themes with the exception of autonomy support. For many of the teachers interviewed, they reported that disruptive behaviour in their classrooms was not a major issue that they had to deal with. Reasons given for this included strong teacher-pupil relationships, interesting and engaging lessons and the use of rewards. Where disruptive behaviour did occur, teachers cited boredom, a dislike of work and difficulties with peer relationships as reasons for this.

The last two themes generated from the teacher interviews were related to the lack of freedom felt by teachers, and the degree to which they felt they had control over the curriculum aspect of teaching. A number of teachers mentioned having taken a more creative approach to curriculum delivery and this was seen as a positive thing, albeit somewhat hampered by the need to focus on standards and pupils' levels of attainment. In some respects these two things were seen as incompatible. Having to follow the National Curriculum was something that featured in teacher comments, and this was in some cases related to a feeling of being restricted in terms of what they were then able to do in the classroom.

Interviews with the members of the senior leadership teams generated themes related to the curriculum and to school policies. References to the curriculum were framed in terms of pupil motivation, and how this was being promoted via the curriculum. The issue of pupil behaviour was also linked in here, with the intimation being that the curriculum has notable effects on behaviour, both in terms of its content and the way in which it is delivered. Pupil motivation and behaviour were also linked to interviewees' comments about school policies and plans for school development. There was some variation among the schools as to whether pupil motivation was seen as a key aspect of school development, and in the same vein some of the schools saw the promotion of positive behaviour through their behaviour policy as being linked to school development overall, whereas others did not feel that they were necessarily linked.

5 DISCUSSION

One of the main aims of this study was to combine the achievement goal and self-determination theories of motivation, and to determine whether this dual-theory approach was more predictive of pupil engagement in disruptive behaviour in the classroom than either theory alone. The study also aimed to look at whole school contexts with respect to the issue of pupil motivation, and what impact this and other related factors may have on pupil motivation.

In this chapter, the main findings of the study as presented in Chapter 4 will be discussed, with each research question being addressed in turn. This will be followed by reflections on the study – its limitations, implications for professional practice, suggestions for future research and concluding comments.

5.1 Interpretation of quantitative findings

5.1.1 RQ1: How are pupil perceptions of the classroom goal structures related to pupils' disruptive behaviour in the classroom?

The analysis for this research question was conducted separately by school, however given that the pattern of results was broadly similar across all four schools, they will be discussed together here. Where there were differences in results between schools, these will be also be commented on.

With respect to pupils' perceptions of a classroom mastery goal structure, this was negatively related to pupils' reports of engagement in disruptive behaviour in all four schools, which follows the proposed hypothesis and is in line with the findings of previous research. None of the relationships reached statistical significance however, which is of interest given that the comments from interviews with school staff in all four schools (as will be discussed later) seemed to intimate that their approaches to teaching and learning tended to encompass a mastery orientation. This non-significant mastery/disruptive behaviour relationship result is similar to that in a study by Kaplan and Maehr (1999), who found that for Euro-American students, a perceived school emphasis on mastery goals, whilst being a negative predictor of disruptive behaviour, was not a statistically significant one.

The results for pupils' perceptions of a performance goal structure were again similar for schools 1, 2 and 4, with perceptions of a performance approach goal structure being positively related to reports of disruptive behaviour in schools 2 and 4, and

pupils' perceptions of a performance avoid goal structure being positively related to their reports of disruptive behaviour in schools 1 and 4. Where the relationship between perceptions of a performance approach goal structure and disruptive behaviour is a positive one, this would suggest that in classrooms where there is an emphasis placed on the need to demonstrate competence, pupils are more likely to report engaging in more disruptive behaviour. Indeed, previous research has suggested that avoidance behaviours such as self-handicapping (i.e. behaviours that have a negative effect on the production of work or work rate) and avoidance of help-seeking are associated with pupils' perceptions of a performance goal structure in the classroom (e.g. Ryan, Gheen & Midgley, 1998; Urdan, Midgley & Anderman, 1998).

With respect to the finding in schools 1 and 4 of a significant positive relationship between pupils' perceptions of a classroom performance avoid goal structure and pupils' reports of engaging in disruptive behaviour, this was as expected and follows that of previous research. It has been suggested that where there is an emphasis on goals that are related to competence (i.e. performance goals), there is a greater likelihood of the creation of learning problems or, more specifically, 'behavioural problems' (Kaplan & Maehr, 1999, p. 351). Where there is a perception of a goal structure that is ability focused, pupils will more likely be directed to evaluate themselves and begin to make attributions based on their notions of their abilities (Anderman & Maehr, 1994; Nicholls, 1984).

As noted by Covington (1992), a concern with self-evaluation coupled with attributions to ability might result in apprehension, perception of threat to one's worth and negative emotion, and will likely to lead to coping strategies that focus on protecting the self. In classrooms where there is a perceived emphasis on the importance of *not* displaying incompetence or difficulty with completing a set task (i.e. a performance avoid goal structure), pupils who have tendencies towards being worried about their levels of attainment or who are more inclined toward social comparison could well be motivated to find ways of overcoming this, one such way being to behave in a manner that prevents them from having to deal with any difficulties they face.

Related studies that have looked into the effect of pupils' perceptions of classroom goal structures have suggested that these perceptions are related to pupils' emotions and behaviour in school (e.g. Anderman & Maehr, 1994, Maehr & Midgley, 1991), such that when pupils perceive an emphasis on effort, understanding and learning, they are also likely to have positive feelings about school. However, if they perceive an emphasis on demonstrating performance relative to others, they are likely to have

negative feelings about school (Kaplan & Midgley, 1999). These findings clearly have implications for considering how whole school and individual classroom environments might be best structured to be most beneficial for pupils. Practices such as grouping pupils according to ability, or holding special assemblies to award prizes for pupils who produce the best work in their class serve to place importance on relative ability and comparative performance. Kaplan and Midgley (1999) suggest that this may be related to pupils' perceptions of ability goals in the learning environment, and thus to negative emotions towards school.

It must be noted that although the findings reported here that were significant in statistical terms are of interest and broadly in line with previous research, their significance in *practical* terms, i.e. what they mean in the context of the schools overall cannot be said to be of great importance, given the small effect sizes they produced. This is not to suggest that a classroom that adopts a performance approach or performance avoid goal structure is not having a negative effect on pupil outcomes such as behaviour, but rather that in these particular schools, their effects are such that they may in fact be being compensated for by a degree of emphasis on a mastery approach.

The fact that this research was conducted with pupils at the end of Key Stage 2, where there is a focus on working towards formal end of key stage assessments could in part be an explanation for this. The subjects in which the pupils are assessed are likely to be taught in such a way that prepares them to be able to answer test questions, and this may give rise to a performance goal structure in the classroom during these lessons. However, it is common in primary classrooms for subjects that are not formally assessed to be taught in a much more relaxed manner, which may give greater opportunities for the adoption of a mastery goal structure.

5.1.2. RQ2: Which pupil personal achievement goal orientations are predictive of disruptive behaviour in the classroom?

The regression model that was tested in order to answer this question was significant; the variables of gender, pupils' personal mastery goal orientations and pupils' personal performance avoid goal orientations were all found to be significant predictors of disruptive behaviour. These findings indicate that: i) boys are more likely than girls to report engaging in disruptive behaviour; ii) holding a personal mastery goal orientation may decrease the likelihood of engaging in disruptive behaviour; and

iii) holding a personal performance avoid goal orientation may increase the likelihood of engaging in disruptive behaviour in the classroom.

The finding that gender was a significant predictor of disruptive behaviour is in line with much of the literature relating to gender differences with respect to behaviour. It has been suggested that boys tend to be more disruptive than girls, and that their modes of disruption tend to be more aggressive (Wheldall & Merrett, 1993; Wright & Dusek, 1998). Additionally, Leo and Galloway (1994) found that boys were significantly more likely to be seen by their teachers as difficult or impossible to motivate, and that girls were rated significantly higher than boys by their teachers for having a mastery orientation. Leo and Galloway suggested that the gender bias that was evident in the teacher perceptions elicited in their study raises some interesting questions, including how these perceptions might impact on boys' own perceptions of themselves and their motivation to succeed at school. The finding from the present study would also suggest that there are implications for schools in terms of how they cater for the potential difference in motivational orientations according to gender.

The findings for the relationships between the personal mastery and performance avoid goal orientations and disruptive behaviour were in line with previous research (e.g. Kaplan & Maehr, 1999), and followed the directions of the correlations found in RQ1. The consideration of the classroom context is deemed to be an important precursor to the personal goal orientations that pupils adopt (Linnenbrink & Pintrich, 2001), and it is widely accepted that pupils' perceptions of a classroom goal structure relate to pupils' adoptions of personal goal orientations (e.g. Blumenfield, 1992; Meece, 1991). Although the data were split by school for RQ1 and therefore cannot be compared directly to these findings, it can be seen that there is a pattern in the ways in which the different goals (both goal structures and goal orientations) are related to disruptive behaviour.

Kaplan et al. (2002) suggest that it is reasonable to think that pupils' personal achievement goals would be related to their disruptive behaviour. Mastery goals are likely to facilitate a focus on learning that will result in more investment in an academic task, and subsequently increased 'on-task' behaviour (Kaplan et al., 2002). Conversely, performance avoidance goals are associated with anxiety (Middleton & Midgley, 1997), and holding these goals may lead pupils to engage in behaviours that serve to alleviate this anxiety (when felt because of difficulties with task completion), such as being disruptive in class. Baumeister (1997) further suggests that being disruptive publicly may also provide a reason other than low ability for being

unsuccessful in school, i.e. pupils may engage in disruptive behaviour in order to avoid demonstrating incompetence. As stated earlier in Chapter 2, this thinking was echoed by Galloway et al. (1998), who proposed that pupils who are seen as not wanting to learn should not simply be described as unmotivated, but rather as being highly motivated to avoid engaging in educational tasks at school.

The negative effects of a performance avoid goal orientation or performance avoid classroom goal structure have been well documented and are widely accepted by researchers in the field (e.g. Elliot, 1997; Elliot & Church, 1997; Elliot & Harackiewicz, 1996). However Brophy (2005) makes the point that learners will match their goals to the contingencies of situations, and where there is an emphasis on competition, test preparation and the need to achieve certain levels, learners will tend to pursue performance goals. This proposition needs to be given careful consideration when thinking about the classroom environment, particularly at the end of Key Stage 2, and efforts should be made to find ways of preparing for formal assessments that do not induce feelings of competition and anxiety.

Overall, this model explained a reasonable amount of the variance in disruptive behaviour, suggesting that pupils' personal mastery and performance avoid goal orientations are important factors to consider, as well as the potential impact of gender. Clearly, they do not provide a complete explanation for why pupils engage in disruptive behaviour in the classroom, but there are implications from this finding for thinking about how schools and classrooms can foster pupils' personal goals to be of the most benefit for them. These implications will be discussed later.

5.1.3. RQ3: Does the combination of achievement goal theory and self-determination theory provide an explanation for pupil disruptive behaviour in the classroom? If so, is it more powerful than an explanation provided by either theory alone?

It was necessary to begin the analysis for this question with a test of the mediating effects of the process variables in the model of pupils' perceptions of different aspects of motivation and their relationships with disruptive behaviour as an outcome (see model as presented in section 2.5). It was of interest to note that the only mediating effect found was that of pupils' personal performance approach goal orientations on the relationship between pupils' perceptions of a classroom performance approach goal structure and their reports of engaging in disruptive behaviour in the classroom. The relationship between pupils' perceptions of a classroom mastery goal structure and their reports of engaging in disruptive behaviour was negative but not significant,

and so the pupil personal mastery goal orientation variable was not examined for any mediating effects. This finding, although surprising, is consistent with the results of the correlational analyses in RQ1.

That there was no significant relationship found between pupils' perceptions of a classroom mastery goal structure and pupils' reports of engagement in disruptive behaviour does not necessarily suggest that a mastery goal structure is not present in these classrooms, but perhaps that there may be classroom practices that are indicative of a performance goal structure which are being picked up on by pupils more than those practices that are indicative of a mastery goal structure. Much of the research on pupils' personal goal orientations has concluded that it is possible for pupils to endorse both mastery and performance goals, and different levels of these goals (e.g. Meece & Holt, 1993; Pintrich & Garcia, 1991). Given the influence that environmental goal structures are believed to have on pupils' personal goal orientations, it would follow then that it is possible for pupils to perceive multiple goal structures within their classrooms. And goal theory would suggest that any concern with performance, whether of an approach or avoid dimension, could have negative effects on involvement due to distractions fostered by the attention being paid to comparisons with others or to negative judgements about the self (Pintrich, 2000). Under these conditions, the overall level of involvement fostered by a mastery goal structure would be less when pupils simultaneously perceive a performance goal structure. This multiple goal perspective is an important one to consider, and particularly in Key Stage 2 classrooms for the reasons mentioned earlier.

The model that tested the significant AGT predictor variables contained only pupils' perceptions of a classroom performance approach goal structure and pupils' personal performance approach goal orientations, and both of these variables continued to significantly predict pupil reports of disruptive behaviour even after the effects of gender and school were controlled for. More specifically, pupils who perceived a higher emphasis on a performance approach goal structure within the classroom reported a greater tendency to engage in disruptive behaviour. Again, this follows the pattern of results for RQ1. A more surprising result from this model was the relationship between pupils' personal performance approach goals and disruptive behaviour, which was significant but negative. This would suggest that pupils who held a high personal performance approach goal reported lower levels of engagement in disruptive behaviour in the classroom. This is in contrast to the findings for RQ2 which, although not statistically significant, showed the relationship between pupils' personal performance approach goals and disruptive behaviour to be a positive one.

The approach dimension of the performance goal orientation is an interesting one that has been given much attention by researchers since the distinction between the performance approach and performance avoid dimensions was made. Some researchers posit that it is likely that performance approach goals could have some negative consequences (Elliot & Moller, 2003), whereas others have suggested that classrooms that emphasise a performance approach goal structure are advantageous in relation to certain pupil outcome measures, such as adaptive help-seeking (Tanaka, Murakami, Okuno & Yamauchi, 2002) and persistence (Elliot, McGregor & Gable, 1999).

One of the major difficulties with trying to assimilate and compare findings from research on the effects of performance approach goals is the way in which they are operationalised in different studies. Harackiewicz, Barron, Pintrich, Elliot and Thrash (2002) note that some researchers define and assess performance-based goals in terms of self-presentation (e.g. trying to appear a certain way to others), while others focus on a norm-referenced definition of competence (e.g. trying to do well *relative* to others). Harackiewicz et al. go on to say that norm-referenced goals and goals that include a self-presentation component may yield 'somewhat different consequences, with the self-presentation component producing a less positive empirical profile' (p. 639). The pupil personal performance approach scale taken from the PALS and used in this study seems to comprise a mixture of both norm-referenced (e.g. *'It's important to me that I look clever compared to others in my class'*) and self-presentation statements (e.g. *'One of my goals is to show other children that I'm good at my class work'*). Although the internal consistency of this scale for both the PALS sample and the sample in this present study suggested that the items were measuring the same construct, the fact that it was essentially being measured in different ways could have contributed to this finding.

Furthermore, it has been suggested that performance approach goals may not actually be a pure representation of an approach dimension, but rather a motivational hybrid of both approach and avoidance motivational concerns (Harackiewicz et al., 2002), such as being motivated to achieve but also motivated to avoid failure. If it is the case that within this hybrid the motivation to avoid failure is attended to over the motivation to achieve, the adoption of a performance approach goal could become detrimental to the pupil. Alternatively, if the motivation to achieve is given more attention by a pupil, this would have a positive impact. This theory seems to provide some explanation for the relationship between pupils' personal performance approach goal orientations and disruptive behaviour for this particular section of the analyses.

With respect to the SDT contextual variables, significant relationships were found between them all and disruptive behaviour. Pupils' liking for school had a mediating effect on all variables and, when added to the regression model the amount of variance explained was increased significantly. It was of interest to note that neither teacher personal nor teacher academic support were significant predictors of disruptive behaviour after controlling for the effects of gender and school. Although somewhat surprising, this finding is in line with that in a study by Nie and Lau (2009), who also found that teacher care (conceptualised as teachers' sensitivity to pupils' needs for relatedness) was not a significant predictor of disruptive behaviour. However, this particular regression model also contained variables measuring peer support and pupil perceptions of teaching, which were both significant predictors of disruptive behaviour at this stage.

The significant predictors in the third step of the regression model based on SDT theory were pupils' liking for school and their reports of the personal support they received from their peers. Gender was again a significant predictor, with boys reporting a higher level of engagement in disruptive behaviour in the classroom. Interestingly, when pupils' liking for school was added to the model, pupils' perceptions of teaching was no longer a significant predictor of disruptive behaviour. This result points to the highly influential nature of pupils' opinions about school, as highlighted by Ireson and Hallam (2005), who proposed that pupils' liking for school was closely related to affective aspects of pupils' life in school.

When related to the literature on SDT, and in particular the component of relatedness, liking for school stands as an important construct in terms of non-academic outcomes for pupils, as does peer support. The literature on relatedness and school belonging highlights the importance of pupils holding positive views about school and having positive interactions with their peers (and teachers). Cemalcilar (2010) suggested that pupils who were satisfied with the general school environment reported a greater sense of belonging to their schools. Additionally, the importance of pupils' perceptions of the quality of relationships they had with their peers emerged as an important factor in the development of a sense of belonging.

Combined psychological and educational theories of motivation espouse the notion that the source of motivation is internal to the pupil, and when the social environment (the school) provides for their basic psychological needs (i.e. for relatedness, competency and autonomy), then motivation will flourish (Skinner & Belmont, 1993).

These theories would also suggest that the extent to which pupils' basic psychological needs are met or ignored in the school context will be reflected in their self-system processes, that is their attitudes and beliefs about themselves. Following this, it can be seen that pupils' reports of liking for school and positive perceptions of peer support would be negatively related to reports of their engagement in disruptive behaviour, as was the result of this analysis.

The final part of this research question concerned the predictive power of a dual-theory approach – a combination of AGT and SDT variables – on disruptive behaviour in the classroom. The final regression model showed that, along with gender, pupils' perceptions of a classroom performance approach goal structure and pupils' liking for school were the two theoretical variables that were predictive of disruptive behaviour, after all other variables had been controlled for. Moreover, the addition of the liking for school variable greatly increased the amount of variance explained by the model. It was of interest that pupils' perceptions of a classroom performance approach structure were positively and significantly related to disruptive behaviour in this model. The complex nature of the approach dimension of performance goals has already been discussed, and this finding adds further weight to the implications for schools in considering how to create classroom environments that are most conducive to enabling pupils to achieve positive outcomes, academic or otherwise.

These results suggest that some consideration needs to be given to the validity of the theories of motivation that are the subject of the present study, particularly SDT. The facets of 'peer support' and 'liking for school' are not directly referred to within the literature on SDT, however the links between these variables and SDT have been outlined in the literature reviewed for this study, and it could well be argued that these factors can be seen as a reflection of the theory. Studies have shown that pupils' relationships with their peers and the subsequent support that they receive is linked to positive adaptations to school (e.g. Ladd, 1990), as well as increased levels of cooperation and participation in learning (D. W. Johnson, R. Johnson & Anderman, 1983).

Liking for school, defined as enjoyment of and commitment to schooling (Hawkins, Catalano, Morrison, O'Donnell, Abbott, & Day, 1992) has been shown to be related to pupils' general self-concept in school (Ireson & Hallam, 2005). Both of these concepts link to the notion of relatedness, which has been conceptualised in a variety of ways, including relatedness to specific social partners (e.g. peers) and having a view about the social world as trustworthy (Furrer & Skinner, 2003). Furthermore, previous

studies have tapped into pupils' feelings of relatedness through measures of school climate and quality of relationships (e.g. Battistich et al., 1995; Roeser et al., 1996). That the peer support and liking for school variables can be seen to be representative measures of pupils' sense of relatedness reflects the validity of the SDT construct and the way in which it is operationalised in this study.

The number of variables that were deemed to be significant enough to be entered into the regression model for the dual-theory approach was relatively few compared to the number of variables that originally represented each theory; of the six AGT variables and four SDT variables, only two of each were entered into the combined regression model. That this model explained more of the variance in disruptive behaviour than either of the single theory models adds to its significance. However this result should not lead to the conclusion that the omitted variables are not of importance, and the implications of all of the results of this study when taken together point to the influence of the individual variables and the ways in which they can potentially have an effect on the classroom environment.

5.2. Interpretation of qualitative findings

5.2.1. RQ4: Which aspects of achievement goal theory and self-determination theory are present in teachers' thinking about teaching, learning and pupil behaviour? Are there any additional factors that teachers perceive to have an impact on teaching, learning and pupil behaviour?

Data from the interviews with teachers showed that aspects of both AGT and SDT were present in their thinking about teaching, learning and behaviour, and that they were engaging in practices in their classrooms that were underpinned by the principles of these theories in a combined fashion as opposed to either a pure AGT or SDT approach. Additionally, where teachers did incorporate approaches related to either theory, their uses were not mutually exclusive. For example, several teachers spoke about the use of rewards for pupils when they demonstrated that they had done well. This is essentially a practice associated with a performance approach goal structure, however it was evident that the rewards seemed to be more of a personalised nature for the pupils, i.e. they would be given if a child performed well by their own standards, rather than because they were the best in the class.

This combination of a mastery/performance approach goal structure is one that has been given some attention in the theoretical literature and in empirical research, and it has been posited that pupils may in fact need something more than or different from

just mastery goals to enable them to succeed in certain achievement situations (Brophy, 2005). In a study which addressed the role of both mastery and performance approach goals, Pintrich (2000) found that performance approach goals, when coupled with mastery goals, were just as adaptive as mastery goals alone. The implication here is that the adoption of a performance approach goal in addition to a mastery goal does not come at any cost to the pupil in terms of motivation, affect, cognition or achievement (Pintrich, 2000). When it is considered that, by their very nature, classrooms do engender some form of competition or social comparison, focusing pupils on approaching this competition with a simultaneous mastery approach to their work does not have to have detrimental effects.

Teachers spoke of their use of practices related to a mastery approach in terms of trying to ensure that their pupils enjoy their lessons and find them interesting. The psychological state of being interested has long been thought to play a major role in pupils' motivation and learning (Pintrich, 2003; Urdan & Turner, 2005), and it has been shown that pupils experience more interest in lessons where they perceive the classroom climate to be more autonomy-supportive and less controlling (Tsai, Kunter, Lüdtke, Trautwein & Ryan, 2008). Furthermore, Ames and Archer (1998) stated that perceptions of a learning environment that emphasises mastery and understanding will likely lead pupils to display an adaptive pattern of cognition and affect. It could be inferred from this that pupils who experience positive affect in school generally hold more favourable opinions of school and of their experiences there.

With respect to the themes relating to SDT that came up in the teacher interviews, it was clear that the majority of teachers felt these to be important. The notion of structure, although not the most prevalent theme, was talked about in the sense of trying to create an atmosphere and provide the right conditions for pupils to learn and to make progress. Pupils' perceptions of teacher structure has been shown to be an important variable in the prediction of pupils' behavioural engagement (Skinner & Belmont, 1993). This suggests that pupils who experience their teachers as providing clear expectations and strategic help are more likely to be more effortful and persistent (Skinner & Belmont, 1993).

The autonomy support theme proved to be more prevalent amongst the teachers than the structure theme, however there was less agreement between the teachers about whether or not autonomy was something they were able to fully promote for pupils in their classrooms. The general feeling was that teachers wanted to be able to let their pupils have more choice and be more actively involved in their learning, but they felt

that this was difficult to achieve for a number of reasons, not least because what pupils have to learn is already set in place. The notion of the 'co-construction of knowledge' occurring between teachers and pupils in the classroom is not a novel one, neither is it one that has definite support. However the data from this present study seems to suggest that it is something that teachers consider to be positive and ultimately beneficial for pupils. Indeed, the literature on autonomy supportive teachers suggests that they teach and motivate by identifying and supporting pupils' interests and by supporting their internalisation of the school's values and agenda (Reeve, Bolt & Cai, 1999). The incorporation of pupils' interests has already been shown to be related to a classroom mastery goal structure. It also seems that where pupils are able to internalise the ethos of a school in a positive manner, it would be expected that they would ultimately feel that they were a part of the school and that they belonged there.

The idea of pupils feeling like they 'belong' and that their needs for relatedness are fulfilled in school is also an important factor when it comes to promoting positive pupil outcomes. All of the teachers interviewed spoke of the importance of having a relationship with their pupils, and many related this to pupils' behaviour in the classroom and around school. They also spoke about pupils' relationships with one another; this too was recognised as a factor that could have a significant impact on pupil behaviour. Ireson and Hallam (2005) argued that pupils who feel more supported within the school community are more likely to be intrinsically motivated and to become autonomous learners, and that pupils who feel supported by their teachers and peers are less likely to become alienated and disengaged from their work. The implications here for schools are clear; where the environment is such that pupils feel positive about their interactions with their teachers (and other pupils), they are likely to experience more positive affect in school (Roeser, Midgley & Urdan, 1996), and will tend to follow a more adaptive pattern of cognition, affect and behaviour (Maehr & Fyans, 1989).

The themes of curriculum delivery and restrictions on teachers are somewhat cyclically related in the sense that the teachers tended to speak about what they would ideally want to do with the curriculum, i.e. be more creative, but that they felt unable to do this to the extent that they would like because of a perceived lack of freedom in terms of what and how they teach. This lack of freedom was in turn linked to the need to raise standards, and a drive to raise standards fed back into a perceived inability to be creative with the curriculum. The emphasis placed on a particular mode of instruction by teachers can have important implications for the

ways in which pupils perceive the goal structures in their classroom environment, as has already been discussed. Where teachers feel that they are able to exercise a degree of freedom in their teaching, to involve pupils in choice and decision making, to assign pupils to groups based on their interests and needs and to define success in terms of effort and progress, a mastery focus is more likely to develop (Ames & Archer, 1988), the benefits of which have been hitherto outlined. In contrast, where teachers feel restricted in terms of their teaching and therefore unable to provide pupils with choice about learning tasks, or where ability grouping is heavily adopted and interaction among pupils is not encouraged, a performance focus is likely to develop (Maehr & Midgley, 1991).

In trying to integrate these notions within categories that encompass various facets of classroom management, and following Epstein (1988), Ames and her colleagues (Ames, 1990; Ames & Maehr, 1988; Powell, Ames & Maehr, 1990) used the facets of task, authority, recognition and reward, grouping, evaluation and time (TARGET) to create a programme aimed to introduce classroom environment change. The idea is that within each of these TARGET areas, teachers can use strategies that emphasise either a task focus or an ability focus. Such an approach would appear to be beneficial given the conflict faced by the teachers interviewed in this study in terms of their express desires to teach in a certain way as against the requirements they are expected to meet. The TARGET approach would allow teachers to define the nature of academic *tasks*, to make decisions about how they will share *authority* or distribute responsibility to pupils in the classroom, and to *reward* and *recognise* pupils for different reasons. Furthermore, it allows teachers to *group* children differently, thereby emphasising or de-emphasising interpersonal competition, to *evaluate* in various ways and on various bases, and finally to use the *time* they have to control the scheduling of learning.

It is widely recognised that pupil behaviour and attitudes in school have something to do with how the class is organised and what pupils are required or permitted to do (Epstein, 1988). With respect to the facets of the TARGET programme, whilst there may be much of this happening already in the classrooms in the schools that took part in this study, it is easy to see how it would be beneficial to structure these facets into a framework that would help to clarify the different perspectives associated with what might be the most positive classroom processes for a teacher to adopt.

In general, the qualitative data from the teacher interviews seems to mirror the quantitative findings, in that the variables that were found to be the most significant

predictors of disruptive behaviour are deemed to be important to and espoused by teachers in their everyday practice. The adoption of a classroom performance approach goal structure in the use of rewards for pupils was very evident, but what was of importance here was the way in which rewards were used, i.e. not to encourage competition between pupils but to foster a motivational orientation to achieve. Additionally, the promotion of a sense of belonging to school and a sense of relatedness to others within school was something that all teachers recognised as being crucial in enabling pupils to have positive experiences of school.

5.2.2. RQ5: Are the issues of pupil motivation and behaviour addressed through the curriculum and associated school policies?

Three out of the four schools in this study seemed to place a level of importance on the promotion of pupil motivation and positive behaviour, to the extent that they were given consideration in school plans and policies, although to varying degrees in each of the schools. In one of the schools, neither pupil motivation nor behaviour was explicitly evident in, nor linked to the overall development plan. With respect to the curriculum, all four interviewees spoke of the need to deliver the curriculum in such a way that it motivates pupils, i.e. by adopting a creative approach, and the impact of curriculum delivery on pupil behaviour was acknowledged.

The questions of whether or not there is such a thing as a school learning environment or whether a school as a whole tends to stress different purposes for learning have been asked by motivation and education researchers (Maehr & Midgley, 1991). Early research into how a school environment could be conceptualised such that the actions taken by school leaders in attempting to enhance pupil motivation and behaviour could be systematically observed defined 'school culture' as the stress that the school is perceived to place on certain goals (Braskamp & Maehr, 1985; Krug, 1989). In short, the underlying assumption was that school culture greatly influences the motivation and learning patterns of pupils. What this work indicated was that the school environment could be defined in goal theory terms, just as individual classrooms could, but that it was 'entirely possible for the psychological environment of a school to be different from the sum of its classroom counterparts' (Maehr & Midgley, 1991, p.407).

The impact of school culture and climate has also been addressed in the literature on school effectiveness (e.g. Good & Weinstein, 1986), which suggests that a school is very much defined by its policies, procedures and practices. Additionally, what pupils

are to do and how their activities are managed and organised all contribute to the characterisation of a school. Ames (1990) somewhat echoed this notion by pointing out the importance of creating motivational change not just at the classroom level, but also at the whole school level. She suggested that efforts at the classroom level could easily be undermined by school wide policies and procedures, and that a given teacher in a classroom could work extremely hard to make learning intrinsically meaningful for pupils, only to have a whole school policy based on rewards for academic performance introduced. In the context of pupil behaviour, Learoyd-Smith (2010) proposed that the organisational structure at the whole-school level impacts on micro-interactions at the classroom level, and these differences do result in variations in expected ways of behaving. For these reasons, it is necessary to see individual classrooms as part of a broader social system, and to acknowledge that unless the wider school environment is dealt with, it will be difficult to develop and sustain changes within classrooms (Maehr & Midgley, 1991).

5.3. Limitations

5.3.1 Confounding variables

One of the main aims of this study was to explore the effects of two aspects of motivational theories on disruptive behaviour in the classroom, bringing the two theories together in a way that previous research has not done. Whilst this aim was achieved to a degree of success, it must be acknowledged that all possible factors that may contribute to pupils' engagement in disruptive behaviour in the classroom were not (and in some cases could not) be controlled for.

Whilst it would not have been feasible to attempt to control for every factor that could have a potential influence on pupils' behaviour, it is perhaps most notable that this study did not include a measure of pupil attainment. Most studies that have explored the effects of motivational theories on pupil outcomes have taken a measure of pupil attainment in some form and either controlled for or assessed the influence of this statistically, as it is fairly well established within the sphere of education that pupil attainment is associated with disruptive behaviour. However, the phase of education in which this study was carried out does not provide any standardised assessment scores until the end of the academic year. Additionally, these scores would only have been available for one of the two year groups of pupils that participated in this study. If pupil attainment is to be measured reliably then any scores obtained would need to be standardised as opposed to taking a measure of attainment based on teacher assessments. Whilst there are alternative ways in which standardised assessment results could be obtained (e.g. cognitive assessments), the time frame in which this

study was conducted would not have permitted the collection of this data, and so it was not included.

The influence of factors external to school that would also have been difficult to control for could also be seen as a limitation of the study. The messages pupils receive from home or elsewhere regarding the importance (or otherwise) of school could conceivably influence their motivational orientations and the subsequent goals they adopt. However, it would not have been feasible to collect information on parental views, in part due to the large number of pupils that took part in the study. Additionally, and even though the influence of parental or other external factors are acknowledged, it must be recognised that it would be extremely difficult for educational professionals to have any impact or influence change in parental perceptions that might be seen to be negative or detrimental to pupils levels of motivation. Given that this study sought to concentrate on school and classroom factors, the focus was kept to those factors that could be identified and worked on within schools.

This study was based largely on self-report responses and it has been noted that with this type of measurement method, people may be prone to distorting their responses to create a more favourable impression (Barrick & Mount, 1996). Although it is generally accepted that self-report measures are both useful and accurate in conducting empirical research, there still remains the possibility that the responses given could reflect those that pupils see as being socially desirable, particularly when they are being asked to report on their engagement in disruptive behaviour in the classroom. In an attempt to minimise the chances of this occurring, it was stressed to the pupils that their responses would remain anonymous and that they should attempt to answer the questions as honestly as possible. The possibility of a child giving responses that they think they should give, however, can never fully be eliminated, and it is only through the replication of studies such as this that the results can be corroborated and therefore supported.

The measurement of pupils' perceptions of classroom goal structures and of their own personal goal orientations however, can only be done through measures employing self-reporting. It is also the most ideal way in which to elicit information about pupils' engagement in disruptive behaviour in the classroom, bearing the caveat above in mind. Teacher perceptions of a pupil's motivational orientations could certainly be sought, but it could never be the case that a teacher can give an accurate account of the way in which a pupil is motivated to learn, and so a measure of an individual's

goal orientation as assessed by others would be inappropriate. Furthermore, as Watson (2000) notes, in the event of any incongruity between data from self-reports and objective measures in the study of affect, self-report data must always take precedence.

5.3.2. Design

The mixed methods approach adopted in this study was suited to its aims and to the collection of data in order to answer the research questions posed. However, it is acknowledged that in the interviews with teachers and members of the senior leadership team in each of the schools, their comments had to be taken at face value, as being accurate in terms of what was going on in their classrooms and schools. This is a limitation that was recognised by Patrick, Anderman, Ryan, Edelin and Midgley (2001), who investigated teachers' communications of goal orientations in classrooms using survey data with pupils, and observational data in classrooms. Had it been possible to combine classroom observational data with teacher interviews, this would have added a useful dimension to the study.

5.4 Implications for professional practice

The findings of the present study contribute to the understanding of the ways in which pupils might be motivated to engage in certain behaviours at school, adaptive or otherwise. They therefore have the potential to provide scope for educational psychologists (EPs) in working not only with schools, but with educationalists and researchers in the wider arena, with respect to thinking about how schools can work to create and promote positive environments in which children can enjoy and be fully engaged in their learning. The implications of this research for EP practice can be considered both in working at the school level in terms of developing their practice and drawing up policies, as well as at a higher level of policy making that involves thinking about broader issues such as what the focus of a national curriculum should be, and the variety of approaches that schools may be able to take in delivering this to pupils.

A vast number of requests made by schools for EP support are for issues relating to pupils' behaviour. Whilst some of these requests are around behavioural concerns that encompass issues that are much wider than what goes on in school, there are those that relate to pupils who have a tendency to engage in behaviours within the classroom that teachers find to be detrimental not only to these pupils' learning but to the learning of others. This thesis aimed to explore the link between pupil motivation and disruptive behaviour in the classroom. It is of course acknowledged that pupil

behaviour can be influenced by a number of different factors, but in using the findings from research on pupil motivation (including the findings of the present study), EPs will be able to support staff in schools to better understand the interactionist nature of factors such as classroom goal structures, pupil's personal goal orientations, teacher-pupil and pupil-pupil relationships and the extent to which the school ethos engenders a sense of belonging in pupils.

There is the potential for EPs to work not only with school staff, but also with pupils to aid their understanding of the concept of motivation, the different ways in which their teachers can motivate them, and the impact of their personal motivational orientations on their progress in school. Involving pupils in discussions about their learning, how it occurs and what they would ultimately like to see happening in their classrooms with respect to how they learn would also serve to support schools in thinking about how to design and create the most beneficial classroom and whole school environments for pupils. The research skills that EPs possess would aid in the collection of the necessary data, e.g. through focus groups with pupils, that would inform the development of plans for how to proceed with this.

EPs are also well placed to assist with the development of policies within schools. Although it was the view of only one interviewee, it was interesting to note that because pupil behaviour was not considered to be an issue within that school, it was not part of nor linked to the school development plan. In viewing school development from an interactionist perspective, EPs would be in a position to work with schools to see that the areas covered by a school's plan, e.g. the school environment and ethos, pupil outcomes and resources can all influence and be influenced by pupil behaviour. Indeed, if it is the case that a school does not have major issues with behaviour, this may even be more reason for considering it within the development of the school overall, in the sense that a good plan would be based on a careful appraisal of what the school does well.

At a higher level, EPs could further be involved in reviewing policy related to the curriculum, particularly focusing on connections between the way in which it is delivered and the potential impact this has on schools and their pupils' levels of motivation. In combining this with skills in planning and conducting research, EPs would be able to promote the idea that pupil and teacher autonomy within schools is just as important as an attainment or standards agenda. Working collaboratively with educationalists and education researchers to look more closely at pupil motivation and

how this can be encouraged by schools in the most beneficial way would also serve to aid this aim.

5.5 Future research

This study resulted in some interesting findings and it provides a valuable contribution to the literature on motivation in education, not least because of the unique way in which it combined two of the theories of motivation considered to be most applicable to education. Of course, the findings presented here cannot be thought to be entirely definitive or conclusive; clearly further research which incorporates this dual-theory approach is needed.

Conducting a similar study in a wider geographical area with a more varied demographic sample would be of some benefit. There was very little variation amongst the pupils in this study in terms of their ethnic or socioeconomic background. Given that previous research has found that these factors can have a differential effect on the relationship between pupil motivation and school-related outcomes, these variables could do with being considered in future research, particularly in the UK where it is somewhat scant. Such an extension could potentially add to the evidence base for a dual-theory approach by establishing whether the predictors deemed to be significant in the present study are replicated with different samples and in different contexts.

This study explored the link between pupil motivation and just one school-related outcome. There are of course a vast number of ways in which pupils can be judged to have performed in school, both academic and non-academic. Whilst the academic achievement of pupils will always be an important outcome to consider, there is a growing emphasis in schools today on considering the impact that various within-school factors can have on pupils' social and emotional well-being. Future studies could be developed to look at the effects of a dual-theory approach on a number of different pupil outcomes, such as pupils' levels of self-esteem, affect in school and academic self-efficacy, as well as academic achievement.

That there was no data collected for pupil attainment has been highlighted as a limitation of this particular study, and reasons for this have been given. However, the finding that gender has a significant impact on disruptive behaviour in the classroom, when coupled with the fact that the nature of requests for EP support around behavioural needs tends to be for boys with low levels of attainment, suggests that it would be relevant to look at how a measure of attainment could be incorporated into

future studies. Previous research that has used attainment as a predictor found that it was positively related to pupils' personal mastery goals and negatively related to pupils' personal performance goals (Kaplan & Maehr, 1999). If it could be shown to be the case that pupils' levels of attainment somehow influence or are influenced by their personal goal orientations or their perceptions of the classroom goal structure, this would potentially have important implications in terms of the ways in which EPs might support teachers to deal with disruptive behaviour in the classroom.

The phase of schooling in which this study was carried out is a key one in primary education. The administering of the end of key stage assessment tests has in the past had its critics, but more recently there have been growing calls to end the practice of this testing, with many schools deciding to boycott the Key Stage 2 SATs last year. The qualitative findings pointed to some of the frustrations felt by teachers over the fact that preparation for these tests seems to clash with a desire to deliver the curriculum in a way that pupils will find interesting and enjoyable. In light of this, it would be of interest to conduct a longitudinal study that looks at pupils' motivational orientations in relation to disruptive behaviour (and any additional school-related outcomes), following pupils throughout Key Stage 2. If different patterns in pupil perceptions of classroom goal structures, personal goal orientations, their experiences of support are highlighted, this would have implications for schools in thinking about the processes they engage in during this key stage, and how they can ensure that these do not become detrimental for pupils.

5.6 Conclusion

The potential implications of the dual-theory model with its combination of theoretical variables is a very interesting one, and potentially adds a new dimension to the existing literature on motivation in education. Much of the research to date on the aspects of motivation that have an impact on pupil outcomes has tended to treat motivational theories separately, even when more than one is considered within a single study. But it is almost intuitive to suggest that pupils are unlikely to be motivated by a component (or components) of a single theory at any one time. Schools are incredibly complex organisations in which the interactions between pupils, teachers and the school environment itself are continually contributing to and being affected by each other. It is therefore quite plausible that a multiple theoretical approach would provide more of an explanation for an identified pupil outcome than would a single theory alone.

The qualitative data from the interviews with class teachers also seems to support the notion that a classroom environment that would be most supportive of teaching, learning and behaviour is one that promotes a combination of achievement goals and components of self-determination theory. It has been suggested that, in terms of achievement goal theory, the most optimum combination of goals is that of mastery and performance approach. When it is considered that aspects of a mastery approach are extremely closely aligned with the autonomy support component of self-determination theory, it becomes clear that this is also an important factor to incorporate into the school and classroom environment. Additionally, when it is considered that teachers who provide pupils with choice and the opportunities to become actively involved in their learning within the classroom are likely to be the ones seen by pupils to be enthusiastic, nurturing and trustworthy, it follows that their pupils will be more likely to hold positive attitudes towards school – their 'liking for school' will be high.

Embedded in all of the above is the idea that disruptive or challenging behaviour should not be looked at as something that is inherent within pupils, or even as a weakness in a teacher's ability to control or manage a classroom. Additionally, it must be acknowledged that the wide use of behaviourist strategies to target disruptive behaviour, whilst successful to a degree, do have their limitations. They can also be viewed as being something of a reactive approach to dealing with the issue of disruptive behaviour. What much of the literature (and indeed the findings within the present study) point to is the need for a preventative approach, and one that incorporates a more holistic and ecosystemic perspective. Evidence of the relationship between classroom goal structures, school environments and incidences of disruptive behaviour should be given consideration when thinking about what might be most effective in pursuing the aim of reducing the levels of disruptive behaviour within the classroom.

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APPENDIX 3.1

Headteacher
Primary School

Please reply to:
Name: Nneka Ikeogu
Tel No.
Fax:
Email: nneka.ikeogu@xxxx.co.uk

Date: 25th June 2010

Dear Headteacher

As part of my studies for my doctoral training in Professional Educational Psychology, I am conducting some research into the links between pupil motivation to learn and their behaviour in the classroom. One of my main aims in carrying out this research is to make the findings available to those schools taking part, focusing on the different ways in which pupil motivation can be enhanced so as to have a positive impact on behaviour in the classroom. This research also links with the priorities identified in the Inclusive Learning Strategy.

My aim is to survey pupils in Years 5 and 6 from a number of schools in the XXXX area of the city. This would be done by administering a questionnaire to the pupils which would ask them about their thoughts about motivation, their perceptions about their learning and also their perceptions of teacher and peer support for their learning. I will be fully responsible for administration of the questionnaires, and would only require that the class teacher be present whilst the pupils complete them; the questionnaire would take about 30 minutes to complete. I would also like to survey and interview the teachers of any classes that take part in the study. The teacher survey could be completed in class at the same time as the pupils. Additionally, I would like to interview either yourself or a member of the school's leadership team that has an overview of the school's development plan. Interviews with school staff would last for approximately 20 minutes and would be conducted at the most convenient time for staff.

Should you be happy for pupils in your school to take part, I would be grateful if you could contact me to let me know. I will require parental consent in order to involve pupils in the study, and I enclose a copy of a letter that will be sent to parents asking them to 'opt-out' by return should they not wish for their child to take part.

I do hope that this research will be of interest to you, and that you would consider participating. XXXX (XXXX Primary) has already agreed to take part and I am therefore very keen to work with yours and other schools in the area. If you have any questions or would like further clarification on any aspect of the study then please do not hesitate to contact me. If you decide that you would like your school to be involved then dates and times for administration of the pupil questionnaires can be arranged to suit and to fit with your current timetable.

I look forward to hearing from you.

Kind regards

Nneka Ikeogu
Trainee Educational Psychologist

APPENDIX 3.2

Please reply to:
Name: Nneka Ikeogu
Tel No.
Fax:
Email: nneka.ikeogu@XXXX.co.uk

Date:

Dear Parent/Carer

I am a student currently training to be an educational psychologist and as part of my training I am required to carry out some research in schools. I have chosen to look at the area of pupil motivation to learn and the link this has with behaviour in the classroom. The head teacher of your child's school has agreed to take part in this research and I am therefore writing to seek parental permission for pupils in Years 5 and 6 to be involved.

The study will require pupils to complete a questionnaire about their levels of motivation, their behaviour in the classroom, their thoughts about how they are taught, and their perceptions of the support they receive with their learning in school. The questionnaires will be given out by myself, in school at an agreed time with the head and class teachers.

If you **do not** want your child to take part in this study then please could you return the slip below to school. If you are happy for your child to take part then there is no need to reply. All pupil questionnaire responses will be kept anonymous, and their individual responses will only be seen by me. Once the results have been analysed, neither the pupils nor the school they attend will be able to be identified.

If you have any questions about the research or would like further clarification on any aspect of it then please do not hesitate to contact me either by email or telephone.

Kind regards

Nneka Ikeogu
Trainee Educational Psychologist

I/We do not wish for our child to take part in the research on motivation and behaviour.

Child's name

Class.....

Signed

PLEASE RETURN THIS SLIP TO YOUR CHILD'S CLASS TEACHER.



WHAT DO YOU THINK ABOUT YOUR LEARNING?



This questionnaire asks about your learning, things that happen in your classroom to do with your work, and how you think your teacher and other children in your class help you. Listen to each sentence carefully, and put a circle around the answer that describes what you think. It's important for you to be honest, and no one at home or school will see your answers.

****THIS IS NOT A TEST AND THERE ARE NO RIGHT OR WRONG ANSWERS****

Please try and answer every question, but if there are any questions you don't want to answer then you don't have to. If you make a mistake then just cross it out and put a circle around the right one.

This question is an example.

	Definitely not true	Not true	A bit true	True	Very true
I like strawberry ice cream	1	2	3	4	5

Before you start, please fill in the details below:

Are you a: Boy or Girl

How old are you?

When is your birthday? (Date, month and year)

Please now turn over to start the questionnaire.

HERE ARE SOME QUESTIONS ABOUT YOURSELF AS A PUPIL. PLEASE CIRCLE THE NUMBER THAT BEST DESCRIBES WHAT YOU THINK.

		Definitely not true	Not true	A bit true	True	Very true
1	It's important to me that I learn a lot of new things this year	1	2	3	4	5
2	It's important to me that I don't look stupid in class	1	2	3	4	5
3	It's important to me that other children in my class think I'm good at my work	1	2	3	4	5
4	I sometimes annoy my teacher during class	1	2	3	4	5
5	One of my goals in class is to learn as much as I can	1	2	3	4	5
6	One of my goals is to show other children that I'm good at my work	1	2	3	4	5
7	One of my goals is to be good at a lot of new things this year	1	2	3	4	5
8	I sometimes get into trouble with my teacher during class	1	2	3	4	5
9	One of my goals is to keep other children from thinking I'm not smart in class	1	2	3	4	5
10	I sometimes behave in a way during class that annoys my teacher	1	2	3	4	5
11	It's important to me that I fully understand my class work	1	2	3	4	5
12	One of my goals is to show other children that my class work is easy for me	1	2	3	4	5
13	One of my goals is to look cleverer than the other children in my class	1	2	3	4	5
14	It's important to me that I look clever compared to other children in my class	1	2	3	4	5
15	It's important to me that I improve my skills this year	1	2	3	4	5
16	I sometimes don't follow my teacher's directions during class	1	2	3	4	5
17	It's important to me that my teacher doesn't think that I know less than other children in my class	1	2	3	4	5
18	I sometimes disturb the lesson that is going on in class	1	2	3	4	5
19	One of my goals in class is to avoid looking like I have trouble doing the work	1	2	3	4	5

THE FOLLOWING QUESTIONS ARE ABOUT THIS CLASS AND THE WORK YOU DO IN CLASS. THEY ARE ALSO ABOUT THE THINGS YOUR TEACHER DOES WHEN TEACHING YOU. REMEMBER TO SAY HOW YOU REALLY FEEL. NO ONE AT SCHOOL OR HOME WILL SEE YOUR ANSWERS.

		Definitely not true	Not true	A bit true	True	Very true
20	In our class, trying hard is very important	1	2	3	4	5
21	My teacher tells us how we're doing compared to other children	1	2	3	4	5
22	In our class, showing other children you are not bad at class work is really important	1	2	3	4	5
23	In our class, really understanding the work is the main goal	1	2	3	4	5
24	My teacher tells us it is important to answer questions in class, so it doesn't look like we can't do the work	1	2	3	4	5
25	My teacher really wants us to enjoy learning new things	1	2	3	4	5
26	In our class, how much you improve is really important	1	2	3	4	5
27	In our class, getting good marks is the main goal	1	2	3	4	5
28	My teacher thinks its ok if we make mistakes as long as we're learning	1	2	3	4	5
29	My teacher points out the children who get good marks as an example to the rest of the class	1	2	3	4	5
30	In our class, getting the right answers is very important	1	2	3	4	5
31	My teacher tells us it is important that we don't look stupid in class	1	2	3	4	5
32	My teacher recognises us for trying hard	1	2	3	4	5
33	My teacher lets us know which children get the highest marks in tests	1	2	3	4	5
34	In our class, it's important that you don't make mistakes in front of everyone	1	2	3	4	5
35	In our class, it's important to understand the work, not just memorise it	1	2	3	4	5
36	My teacher tells us it's important to join in discussions and answer questions so it doesn't look like we can't do the work	1	2	3	4	5
37	In our class, it's very important not to look stupid	1	2	3	4	5
38	My teacher gives us time to really explore and understand new ideas	1	2	3	4	5
39	In our class, it's ok to make mistakes as long as you're learning	1	2	3	4	5
40	In our class, one of the main goals is to avoid looking like you can't do the work	1	2	3	4	5

		Definitely not true	Not true	A bit true	True	Very true
41	In our class, learning new ideas and new things is very important	1	2	3	4	5
42	My teacher says that showing other children that we are not bad at class work should be our goal	1	2	3	4	5
43	In our class, it's important not to do worse than other children	1	2	3	4	5
44	In our class, it's important to get high marks on tests	1	2	3	4	5

THE NEXT QUESTIONS ARE ABOUT HOW YOUR TEACHER AND OTHER CHILDREN IN YOUR CLASS HELP YOU. PLEASE CIRCLE THE NUMBER THAT BEST DESCRIBES WHAT YOU THINK.

		Definitely not true	Not true	A bit true	True	Very true
45	My teacher cares about how much I learn	1	2	3	4	5
46	My teacher thinks it is important to be my friend	1	2	3	4	5
47	In this class, other children like me the way I am	1	2	3	4	5
48	My teacher likes to help me learn	1	2	3	4	5
49	In this class, other children want me to do my best class work	1	2	3	4	5
50	In this class, other children want me to come to class every day	1	2	3	4	5
51	My teacher really cares about me	1	2	3	4	5
52	My teacher likes to see my work	1	2	3	4	5
53	In this class, other children think it is important to be my friend	1	2	3	4	5
54	My teacher likes me as much as he/she likes other children in the class	1	2	3	4	5
55	In this class, other children care about my feelings	1	2	3	4	5
56	In this class, other children like to help me learn	1	2	3	4	5
57	My teacher wants me to do my best in class work	1	2	3	4	5
58	In this class other children really care about me	1	2	3	4	5
59	In this class, other children care about how much I learn	1	2	3	4	5
60	In this class, other children like me as much as they like others	1	2	3	4	5
61	My teacher cares about my feelings	1	2	3	4	5

THESE FINAL QUESTIONS ASK ABOUT YOUR SCHOOL AND YOUR TEACHER. PLEASE CIRCLE THE ANSWER THAT BEST DESCRIBES WHAT YOU THINK. REMEMBER, NO ONE WILL SEE YOUR ANSWERS SO PLEASE BE HONEST AND TRY TO ANSWER THEM ALL.

		Strongly agree	Agree	Not sure	Disagree	Strongly disagree
62	I am very happy when I am in school	1	2	3	4	5
63	School is a waste of time for me	1	2	3	4	5
64	School work is worth doing	1	2	3	4	5
65	My parents think school is a waste of time	1	2	3	4	5
66	This is a good school	1	2	3	4	5
67	School work doesn't help you get a job	1	2	3	4	5
68	Most of the time I don't want to go to school	1	2	3	4	5
69	My parents think it is important for me to do well in school	1	2	3	4	5

		Always	Most of the time	Sometimes	Not a lot	Never
70	My teacher goes through work at the right pace for me	1	2	3	4	5
71	My teacher is able to control this class well	1	2	3	4	5
72	My teacher really listens to what I have to say	1	2	3	4	5
73	My teacher takes the time to explain things	1	2	3	4	5
74	My teacher helps me understand	1	2	3	4	5

75. This term, I have got on well with:

All my teachers	Most of my teachers	About half of my teachers	Less than half of my teachers	None of my teachers
-----------------	---------------------	---------------------------	-------------------------------	---------------------

76. To me, the work I do in school is:

Very important	Quite important	Not really important	Not important at all
----------------	-----------------	----------------------	----------------------

77. This school and I are like:

Good friends	Friends	Distant relatives	Strangers	Enemies
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YOU'VE FINISHED! THANK YOU VERY MUCH!



APPENDIX 3.4

Introduction:

Thank you for agreeing to be interviewed today. I will tell you in a very broad sense what my research is about, as I do not wish to influence your responses in any way – I am really keen to hear about your thoughts and perceptions in response to my questions. In order to ensure that I have an accurate record of the interview and do not misrepresent your views, I will need to record it. The recording will be stored until my thesis has been submitted (May 2011). Please be assured that you will not be able to be identified in any way once the data has been analysed, and that I am the only person (other than my research supervisor) that has access to this raw data. If at any point during this interview you wish to cease participating then please just let me know – you do not have to give a reason. All recording up to that point will be deleted and not used in the study.

Once the interview is over, I will be able to give you more detailed information about the research, should you wish to hear more about it. You will also be offered the opportunity to receive a record of your interview once it has been transcribed.

(Give a brief overview of research, ask if happy to proceed and if any questions before starting).

1. What do you understand by the term 'motivation'?
How would you say you use motivation (as you understand it) in your classroom?
2. What are the whole school approaches to encouraging pupils to learn - is there a consistent approach throughout the school? *(Prompt: would you say the overall emphasis is on teaching so that pupils enjoy learning and really understand concepts or teaching so that pupils reach certain levels?)*
Thinking about the answer you have just given, what would you say is your personal aim as a class teacher with respect to your teaching?
3. What would you say is your personal aim as a class teacher?
4. What factors would you say you consider when planning your lessons?
5. Are any 'external rewards' used in your classroom that are specifically related to learning, e.g. prizes for the best work?
How important is the use of these rewards to you?
How do you feel your pupils respond to external rewards for doing well in class?
6. How do you support motivation for learning in your classroom other than through the use of external rewards?
7. On a scale of 0 to 10, where 0 is not at all important and 10 is very important, how would you rate the importance of having a good relationship with your pupils?
Why would you rate it an 'X'? *(Prompt: what are your views on the impact this has on teaching and learning?)*
8. How much choice do you feel your pupils have in their learning, both in terms of what they learn and how they learn it?

9. I often work with teachers who find that their pupils' behaviour sometimes gets in the way of teaching and learning in the classroom. Do you find that this happens in your class?

Which behaviours do you see that you would describe as having a negative impact on teaching in your classroom?

Do you find that this occurs in some lessons more than others/at particular times?

Is there anything you could think you could attribute this behaviour to?

10. To what extent do you feel you can influence the levels of motivation of your pupils, over and above what they have when they come into your classroom?
(Prompt: do you feel that there may be other factors influencing them that you cannot change/control?)

APPENDIX 3.5

Introduction:

Thank you for agreeing to be interviewed today. I will tell you in a very broad sense what my research is about, as I do not wish to influence your responses in any way – I am really keen to hear about your thoughts and perceptions in response to my questions. In order to ensure that I have an accurate record of the interview and do not misrepresent your views, I will need to record it. The recording will be stored until my thesis has been submitted (May 2011). Please be assured that you will not be able to be identified in any way once the data has been analysed, and that I am the only person (other than my research supervisor) that has access to this raw data. If at any point during this interview you wish to cease participating then please just let me know – you do not have to give a reason. All recording up to that point will be deleted and not used in the study.

Once the interview is over, I will be able to give you more detailed information about the research, should you wish to hear more about it. You will also be offered the opportunity to receive a record of your interview once it has been transcribed.

(Give a brief overview of research, ask if happy to proceed and if any questions before starting).

1. Does 'pupil motivation' feature explicitly in your school's development plan? *(Prompt: does the plan mention developing/enhancing pupil motivation as a specific aim?)*
If so, how is 'motivation' conceptualised?
If not, do you feel that it is perhaps more implicitly stated?
2. What whole school approaches do you have in place to encourage pupils to learn – is there a specific, consistent approach to teaching and learning that is promoted? *(Prompt: would you say the overall emphasis is on teaching so that pupils enjoy learning and really understand concepts, or teaching so that pupils reach expected levels?)*
3. Would you say that there is a link between your school's development plan and the school behaviour policy?
4. Do you feel that the way in which the curriculum is delivered has an impact on pupil behaviour? *(Prompt: is behaviour a factor that is considered when curriculum delivery is being planned?)*

APPENDIX 4.1

Pattern Matrix^a

	Component		
	1	2	3
Item 37	.638		
Item 43	.630		
Item 42	.621		
Item 40	.613		
Item 36	.594		
Item 24	.594		
Item 22	.566		
Item 30	.565		
Item 34	.554		
Item 31	.551		
Item 44	.550		
Item 27	.537		
Item 13	.536		
Item 14	.528		
Item 6	.509	.316	
Item 12	.480		
Item 21	.468		
Item 19	.440		
Item 17	.363		
Item 3	.333		
Item 2	.307		
Item 29			
Item 33			
Item 9			
Item 10		-.836	
Item 18		-.793	
Item 4		-.784	
Item 8		-.779	
Item 16		-.649	
Item 11		.437	
Item 5		.397	
Item 39			.666
Item 38			.633
Item 25			.631
Item 28			.618
Item 41			.614
Item 35			.611
Item 32			.549

Item 20			.463
Item 26	.309		.426
Item 23	.354		.420
Item 15			.395
Item 7	.309	.345	.368
Item 1			

Extraction method: Principal Component Analysis. Rotation Method: Oblimin with Kaiser Normalization
a. Rotation converged in 10 iterations

Structure Matrix

	Component		
	1	2	3
Item 37	.638		
Item 43	.630		
Item 42	.621		
Item 40	.613		
Item 36	.594		
Item 24	.594		
Item 22	.566		
Item 30	.565		
Item 34	.554		
Item 31	.551		
Item 44	.550		
Item 27	.537		
Item 13	.536		
Item 14	.528		
Item 6	.509	.316	
Item 12	.480		
Item 21	.468		
Item 19	.440		
Item 17	.363		
Item 3	.333		
Item 2	.307		
Item 29			
Item 33			
Item 9			
Item 10		-.836	
Item 18		-.793	
Item 4		-.784	
Item 8		-.779	
Item 16		-.649	
Item 11		.437	

Item 5		.397	
Item 39			.666
Item 38			.633
Item 25			.631
Item 28			.618
Item 41			.614
Item 35			.611
Item 32			.549
Item 20			.463
Item 26	.309		.426
Item 23	.354		.420
Item 15			.395
Item 7	.309	.345	.368
Item 1			

Extraction Method: Principal Component Analysis. Rotation Method: Oblimin with Kaiser Normalization.

APPENDIX 4.2**Pattern Matrix^a**

	Component	
	1	2
Item 58	.857	
Item 60	.731	
Item 55	.712	
Item 47	.693	
Item 59	.686	
Item 53	.679	
Item 56	.611	
Item 50	.580	
Item 49	.418	.397
Item 45		.795
Item 48		.790
Item 52		.776
Item 61		.731
Item 51		.677
Item 57		.588
Item 46		.569
Item 54		.495

Extraction method: Principal Component Analysis. Rotation Method: Oblimin with Kaiser Normalization
 a. Rotation converged in 8 iterations

Structure Matrix

	Component	
	1	2
Item 58	.857	
Item 60	.731	
Item 55	.712	
Item 47	.693	
Item 59	.686	
Item 53	.679	
Item 56	.611	
Item 50	.580	
Item 49	.418	.397
Item 45		.795
Item 48		.790
Item 52		.776
Item 61		.731
Item 51		.677
Item 57		.588
Item 46		.569
Item 54		.495

Extraction Method: Principal Component Analysis. Rotation Method: Oblimin with Kaiser Normalization

APPENDIX 4.3

Pattern Matrix^a

	Component	
	1	2
Item 62	.808	
Item 66	.787	
Item 77	.730	
Item 68	.597	
Item 75	.576	
Item 63	.546	.443
Item 64	.534	
Item 76	.458	
Item 65		.663
Item 67		.653
Item 69		.612

Extraction method: Principal Component Analysis. Rotation Method: Oblimin with Kaiser Normalization
 a. Rotation converged in 6 iterations

Structure Matrix

	Component	
	1	2
Item 62	.763	
Item 66	.758	
Item 77	.680	
Item 63	.677	.605
Item 68	.632	
Item 75	.599	
Item 64	.585	.330
Item 76	.545	.429
Item 67	.370	.705
Item 65	.325	.701
Item 69		.562

Extraction method: Principal Component Analysis. Rotation Method: Oblimin with Kaiser Normalization

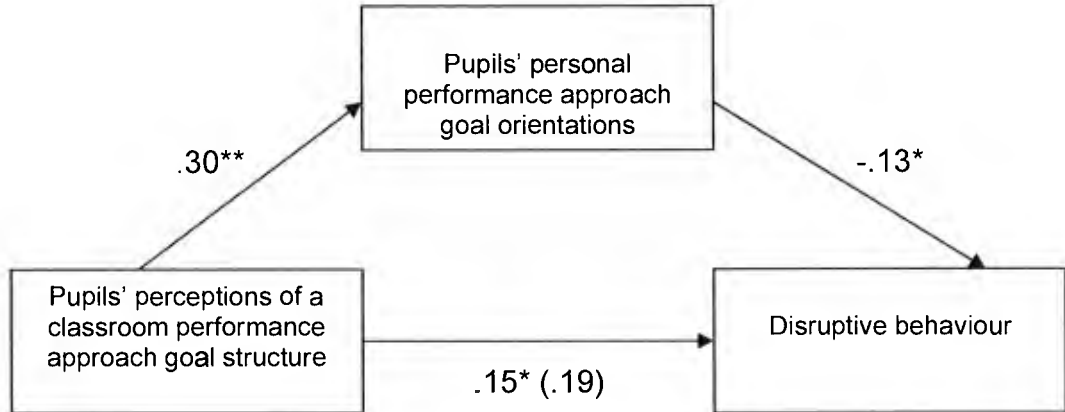
APPENDIX 4.4

		N	Mean	SD	Min	Max
PAGMAS (Personal mastery goal orientation)	School 1	80	4.19	.57	3.00	5.00
	School 2	82	4.08	.54	2.80	5.00
	School 3	41	4.39	.40	3.40	5.00
	School 4	40	4.34	.57	2.80	5.00
PAGPAPP (Personal performance approach goal orientation)	School 1	78	2.46	.59	1.00	3.80
	School 2	83	2.55	.68	1.00	4.20
	School 3	36	2.78	.77	1.40	4.60
	School 4	42	2.69	.81	1.20	4.60
PAGPAVOID (Personal performance avoid goal orientation)	School 1	79	2.88	.69	1.25	4.50
	School 2	82	3.12	.76	1.25	5.00
	School 3	42	3.25	.80	1.00	5.00
	School 4	43	3.10	.77	1.50	4.75
PERCCMAS (Perception of classroom mastery goal structure)	School 1	81	4.22	.52	2.17	5.00
	School 2	82	4.11	.49	2.83	5.00
	School 3	44	4.45	.43	3.17	5.00
	School 4	39	4.04	.67	2.00	5.00
PERCCPAPP (Perception of classroom performance approach goal structure)	School 1	81	3.05	.93	1.00	5.00
	School 2	80	3.53	.69	1.33	5.00
	School 3	43	3.90	.69	2.33	5.00
	School 4	43	3.64	.96	2.33	5.00
PERCCPAVOID (Perception of classroom performance avoid goal structure)	School 1	81	3.05	.93	1.00	5.00
	School 2	80	3.53	.69	1.33	5.00
	School 3	43	3.90	.69	2.33	5.00
	School 4	43	3.64	.96	2.33	5.00
PERCTMAS (Perception of teacher mastery goal)	School 1	82	4.26	.73	1.00	5.00
	School 2	81	3.93	.56	1.50	5.00
	School 3	44	4.51	.44	3.50	5.00
	School 4	41	4.14	.77	1.75	5.00
PERCTPAPP (Perception of teacher performance approach goal)	School 1	81	3.43	.85	1.67	5.00
	School 2	83	3.42	.80	1.00	5.00
	School 3	41	3.25	.92	1.00	4.67
	School 4	43	2.64	.99	1.00	5.00
PERCTPAVOID (Perception of teacher performance avoid goal)	School 1	79	2.49	.89	1.00	4.75
	School 2	81	2.77	.79	1.00	5.00
	School 3	38	3.19	.90	1.00	4.50
	School 4	39	2.68	1.05	1.00	5.00

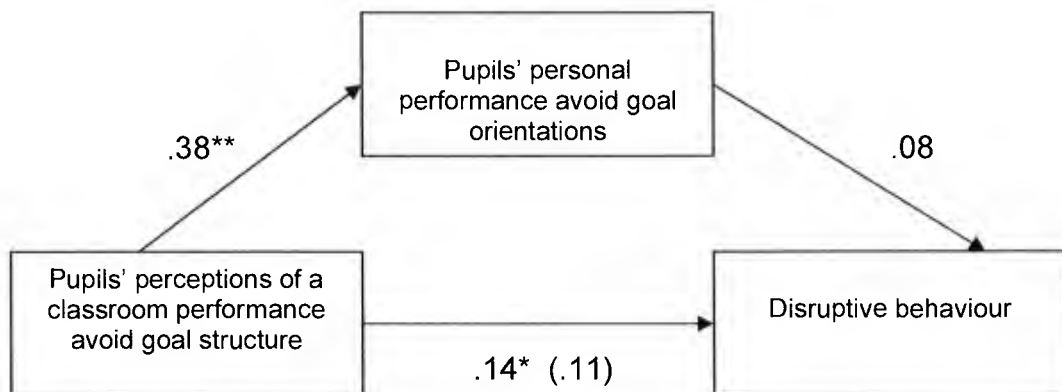
		N	Mean	SD	Min	Max
PERCTAS (Perception of teacher academic support)	School 1	79	4.26	.68	2.00	5.00
	School 2	81	4.07	.67	1.25	5.00
	School 3	44	4.68	.36	3.75	5.00
	School 4	41	4.23	.81	1.50	5.00
PERCTPS (Perception of teacher personal support)	School 1	78	3.83	.87	1.50	5.00
	School 2	79	3.42	.85	1.00	5.00
	School 3	43	4.33	.48	3.25	5.00
	School 4	41	3.62	1.03	1.00	5.00
PERCPAS (Perception of peer academic support)	School 1	78	3.30	.77	1.00	5.00
	School 2	79	2.91	.81	1.00	4.50
	School 3	43	4.09	.64	2.75	5.00
	School 4	40	3.23	1.10	1.00	5.00
PERCPPS (Perception of peer personal support)	School 1	78	3.52	.87	1.00	5.00
	School 2	78	3.16	.78	1.00	5.00
	School 3	43	3.89	.58	2.60	5.00
	School 4	38	3.41	.98	1.00	5.00
LFS (Liking for school)	School 1	78	4.08	.58	1.50	4.90
	School 2	76	3.80	.63	1.30	4.70
	School 3	40	4.44	.46	2.80	4.90
	School 4	38	3.86	.76	2.40	4.90
PERCTEACH (Perceptions of teaching)	School 1	81	4.15	.76	1.00	5.00
	School 2	81	3.79	.69	1.20	4.80
	School 3	41	4.53	.41	3.20	5.00
	School 4	44	3.80	1.09	1.40	5.00
DISBEH (Disruptive behaviour)	School 1	79	2.56	1.17	1.00	5.00
	School 2	84	2.85	.88	1.00	5.00
	School 3	39	2.37	.93	1.00	4.20
	School 4	44	2.39	1.00	1.00	4.40

APPENDIX 4.5

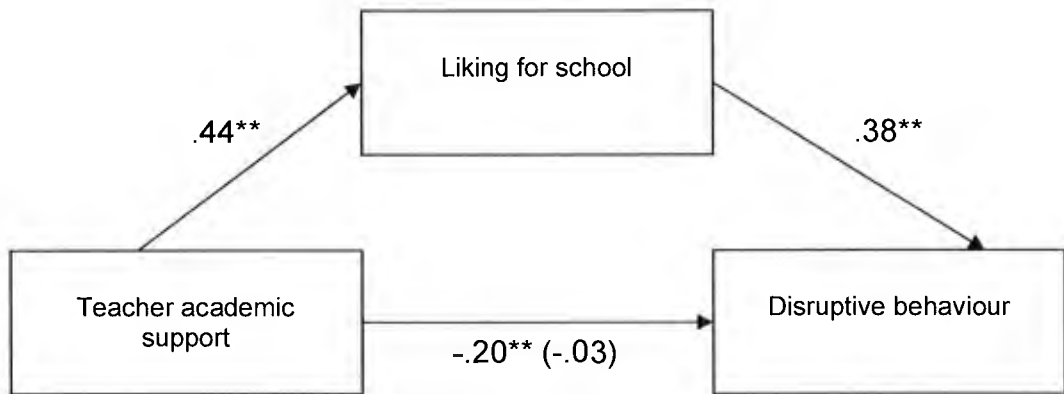
Standardised regression coefficients for the relationship between pupil's perceptions of a classroom performance approach goal structure and disruptive behaviour as mediated by pupils' personal performance approach goal orientations



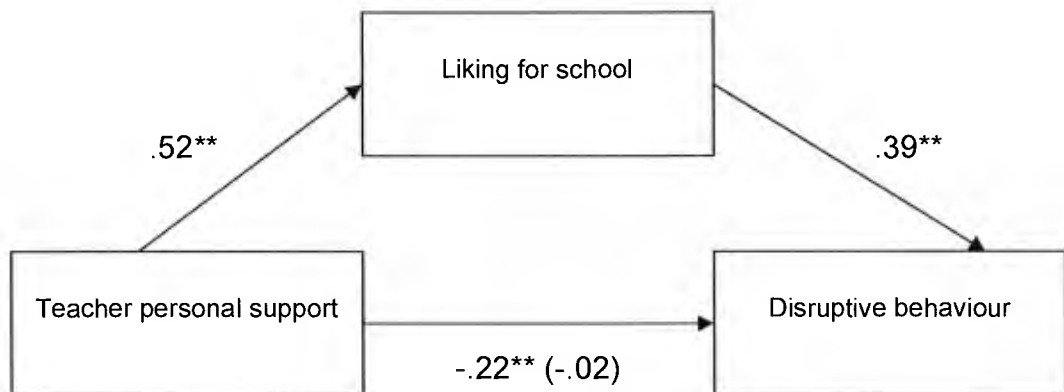
Standardised regression coefficients for the relationship between pupil's perceptions of a classroom performance avoid goal structure and disruptive behaviour as mediated by pupils' personal performance avoid goal orientations



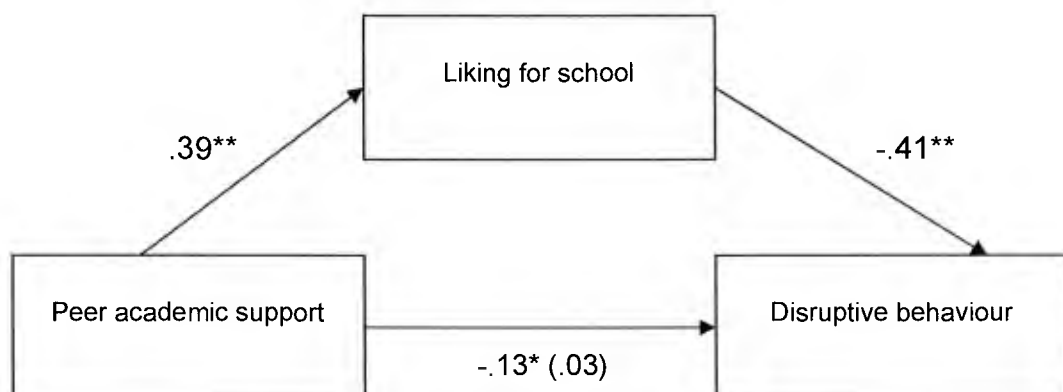
Standardised regression coefficients for the relationship between pupils' perceptions of teacher academic support and disruptive behaviour as mediated by pupils' liking for school



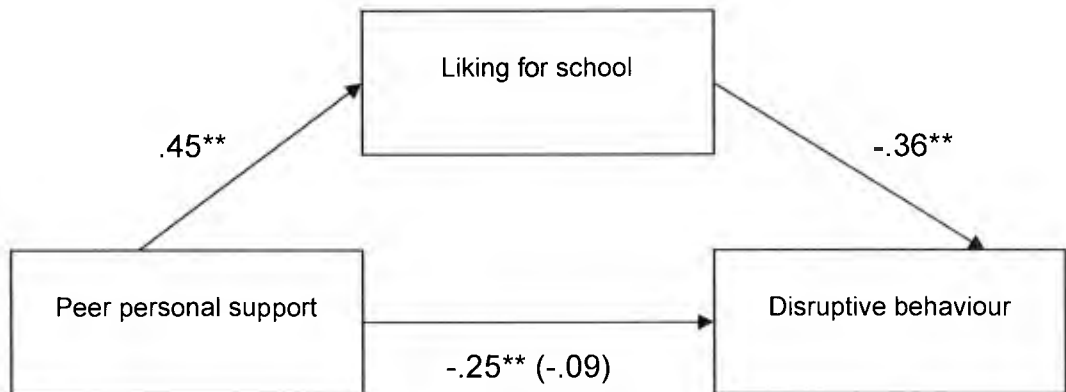
Standardised regression coefficients for the relationship between pupils' perceptions of teacher personal support and disruptive behaviour as mediated by pupils' liking for school



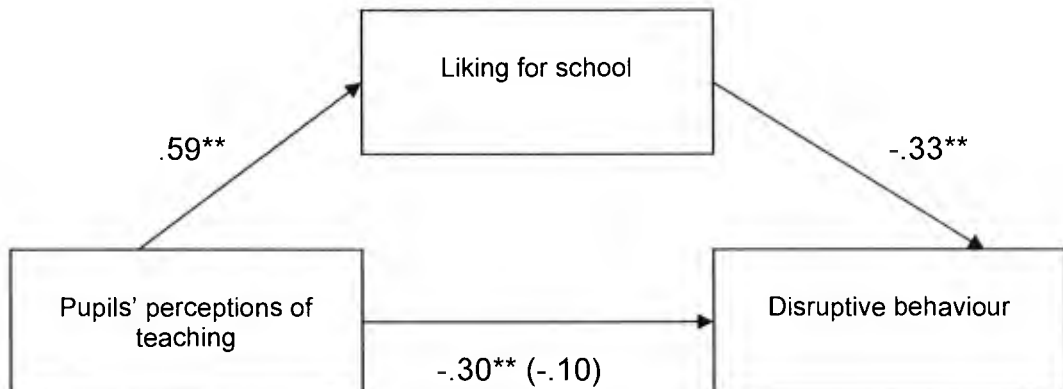
Standardised regression coefficients for the relationship between pupils' perceptions of peer academic support and disruptive behaviour as mediated by pupils' liking for school



Standardised regression coefficients for the relationship between pupils' perceptions of peer personal support and disruptive behaviour as mediated by pupils' liking for school



Standardised regression coefficients for the relationship between pupils' perceptions of teaching and disruptive behaviour as mediated by pupils' liking for school



Note:

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

Standardised regression coefficients for relationship between IV and DV after controlling for mediator in parentheses

APPENDIX 4.6

School 1 (Year 5X)

CODE	DATA EXTRACT
Making lessons enjoyable	5,14,22
Importance of attainment levels	14,15
League tables/getting good results	15,16
Teaching children so that they understand concepts	28,29
Use of rewards/prizes as motivation for learning	5,32
Use of praise/encouragement as motivation for learning	39
Importance of teacher-pupil relationships	43,44,45
Actively involving pupils in their learning	50,51
Adopting a creative curriculum approach	13
Instilling self-motivation in pupils	2,6
Differences in teachers' teaching styles	11
Learning as the school priority	11
CC takes a lot of time to do	17,18
Teachers feel under pressure to cover everything	18,19
Getting children to want to learn	24
Ability levels are irrelevant	25
Instilling pride in the children	5,6,39,40
Importance of teacher-pupil relationships	43,44,45
Attention seeking behaviours	57
Things happening at playtime coming into the classroom	58
Children's home life affecting their behaviour	63
Friendship issues affecting children's behaviour	65
Teachers can only do so much within school	71
Hope to be able to influence pupils' levels of motivation	69

School 1 (Year 5Y)

CODE	DATA EXTRACT
Making lessons enjoyable	39,40
Use of rewards/prizes for learning as motivation	46
Use of praise/encouragement for learning as motivation	5,30
Trying not to let behaviour interfere with learning	11
Recreating real life in the classroom	10
Not about scores and marks	20
Making academic expectations of pupils clear	49,50
Using pupils' work as examples for other children	61
Creating home-school links	108,109
'Carrot more than stick' approach	6
Praise is the best motivator	7
Let children know it's ok to make mistakes	8
Differences in teachers' teaching styles	15
School ethos appears different in each classroom	16
Helping children do their best/achieve their potential	21
Wanting children to feel happy at school	26
Different children respond differently to rewards	52
Pupils being responsible for their learning	35,36
Importance of teacher-pupil relationships	67,60,73,74
Incorporating pupils' interests	85
Adopting a creative curriculum approach	40,85,86
Actively involving pupils in their learning	83,84,85
Lack of co-operation affecting pupil behaviour	94
Pupils' dislike for work affecting their behaviour	97,98,99
Home life affecting behaviour	100,102

School 1 (Year 6X)

CODE	DATA EXTRACT
Making lessons enjoyable	3,11,93,94
Incorporating pupils' interests	11,12,13,31
Adopting a creative approach throughout the school	6,7,16
Making lessons purposeful	8,9,17
Curriculum based on skills	22,27,28,31,69
Skills base is more important than the content	27,28
Focusing on skills is more motivational for pupils	32
Use of rewards/prizes for learning as motivation	43,44
Rewards given regardless of ability	45,46
Rewards given for positive 'learning behaviours'	43,44
Use of rewards is important	49
Important to let parents know when children do well	49
Use of praise/encouragement as motivation	52,53
Using pupils' work as motivation for other children	59
Importance of teacher-pupil relationships	64
Need to be able to relate to children to get the best of them	64,65
Move away from focus on content in curriculum	68,69
Actively involving pupils in planning their learning	69,70,71
Difficult to involve pupils in literacy/numeracy planning	74,75
Behaviour not an issue because children have got on	81
Consistency is key to managing behaviour	82,83
Boys' behaviour generally worse than girls	85,86
Spent time trying to motivate boys	86,87
Boredom leads to bad behaviour	87
Children like structure and routine	98,99
More difficult to motivate older (Y6) children	102,103

School 1 (Year 6Y)

CODE	DATA EXTRACT
Getting children interested	2
Giving children a chance to show their skills	3
Don't need to be 'showy' with motivation	4,5
Different types of motivation for different children	8
Some children are self-motivated	10
Difficult to do 'whole school' motivation	10,11
Motivation is an important thing to have	13,14,165,166,167
Can motivate children in lots of different ways	15
If the teacher is having fun, children will want to as well	15,16
Stop lessons if they're boring and do something else	19,20,21
Looking at things from pupils' perspective	21
Promoting pupil aspirations	22,23,24
Teacher enthusiasm	27,32,33,38,66
Staff cohesion	38,42,43,49,50
Promoting a sense of belonging	43,44,45,49,50,117,118
Teacher-pupil relationship	47,48,112,113,114,151
School ethos is about enjoyment	54
Drive to get good results	54,55
Children should enjoy school	56,57
Making lessons enjoyable/appealing	60,61, 67,68,74,77
Enjoyment leads to academic achievement	61,62
Adhering to the National Curriculum	80
Pupil understanding is down to the teacher	83,84
Use of rewards/prizes as a motivator	88
Teachers have different approaches (to rewards)	89
Using praise/encouragement as a motivator	93,94,102,106

Easy to over-use 'external' rewards	94,95
High importance placed on external rewards	97,98
Need to have more rewards than punishments	99,100
Saying well done can mean more than a certificate	102,103
No such word as 'can't'	106
Personalised approach to motivation	107,108,109
School is like a family	117,118
Good relationship means discipline is not a problem	120
Restrictions on teachers (from government)	125,132,133,144,145
Difficult to give children choices about their learning	129
Try to give children choice wherever possible	130
Important for children to have choices	136
Want teachers to have more freedom in how they teach	139,141,142,144
Changing style of discipline to suit the children	154
Getting involved as much as possible in school life	160

School 2 (Year 5X)

CODE	DATA EXTRACT
Children taking control of their own learning	2,3
Use of rewards/prizes for learning as a motivator	9,10,11
Children have targets to focus on	11
Celebrations when targets are reached	13
Working as a team in class	14
Importance of self-motivation for pupils	15,16
Use of praise/encouragement for learning as a motivator	20
Promoting pupil aspirations	24,25,27
School behaviour policy motivates children to behave	34
Drive to make curriculum more creative	37,38,43,44
Creativity leads to higher standards	39,40
Teaching skills more than facts	40,41
Making lessons enjoyable/exciting	41,42,59,61,62
Importance of children being happy and enjoying school	48
Wanting children to get good results	51
Differentiation in lessons to reach all children	56,57,58
Importance of 'external' rewards	66
Using rewards increases motivation	67
Using rewards raises the profile of behaviour	67,68,96
Importance of teacher-pupil relationships	72,73
Breakdown in relationships leads to difficulties	75
Ensuring children aren't afraid to make mistakes	77
Actively involving pupils in their learning	80,81
Adhering to the National Curriculum	82
Enabling children to be more independent in their work	84,85
Teacher being more of a facilitator	84
Good behaviour is down to good T-P relationships	93,94
Children know what to expect and therefore how to behave	93
Teachers can influence pupils' levels of motivation	100

School 2 (Year 5Y)

CODE	DATA EXTRACT
Use of praise as a motivator	4
Praising one child motivates others	4,5
Use of rewards as a motivator	6
Motivating parents to motivate their children	7,8
Teachers are always aware of attainment levels	16
Drive towards increasing pupils' understanding of concepts	16,17
Making school enjoyable	21

Developing life skills whilst at school	22
Differentiating work to reach all children	26
Importance of external rewards	29
External rewards shouldn't be so important	29
Pupils don't have much self-motivation	30,31
Doing what is necessary to motivate children	31,32
Instilling sense of pride in children	36
Promoting pupil aspirations	38
Importance of teacher-pupil relationships	43
Good behaviour is down to good T-P relationships	45,46
Pupils don't have that much choice in how they learn	51
Teachers are quite prescribed – they shouldn't be	54,55
Part of development is finding preferred ways of learning	56,57
Have tried to give them more choices	57,58
Pupils retain knowledge when they choose how to learn	63,64
Positive relationships help deal with behaviour issues	68,69
Having a sense of humour is important	70
Factors outside of school can influence levels of motivation	74
Teachers can have an impact on levels of motivation	75
School provides a steady, secure environment	76

School 2 (Year 6X)

CODE	DATA EXTRACT
Motivation means enthusing and exciting children	2
Encouraging children's success and development	2,3
Teacher enthusiasm transferring to children	5, 7, 8, 9
Motivation/enthusiasm is built into some children	9
School emphasises things pupils do well	17
Using pupil's work as examples for other children	18
Celebrating achievement of targets	20
Personalised approach to motivation	21
Peer marking used	22
Making children aware of their successes	23
Levels are all important in Year 6	30
Consideration of league tables and OFSTED judgements	31
Very target focused in Year 6	32
Focusing on targets works as well as promoting enjoyment	34, 35
Teaching the 'whole child'	41
Not just about academics	42, 43
Making lessons interesting	48
Encouraging children to work independently	49, 50
Supporting children's needs	50
No specific rewards for learning	54
Team points given for anything positive	54
Star of the week assemblies have different emphases	58,59
Use of rewards depends on the needs of the class	66, 67
Pupil self-motivation due to positive attitude in class/school	70
Children have supportive home backgrounds	71
Motivation supported through use of AfL	74
Liking a subject increases motivation	75, 76
Importance of teacher-pupil relationships	82, 84, 85
Pupils don't have much choice in what they learn	90
More choice in how they record things	90
Good T-P relationships key factor in good behaviour	100
Teachers can influence pupils' levels of motivation	105
Having sufficient length of time to get to know children	105, 106
Making pupils aware of where they need to get to	109, 110

School 2 (Year 6Y)

CODE	DATA EXTRACT
Motivation is something internal	3
Motivation affects all areas of life, not just academic	4,5
Promoting pupil aspirations	11,12
Getting children to set their own goals	12,13
Whole school approach varies between classes	16
Need to do more citizenship work	23
Ideally want to teach children skills	27
Constrained by government standards agenda	28,29
Pressure to attain narrows the curriculum	31,32
Ideally be looking at more than just league tables	33
Don't want to focus solely on academics	37,38
Want children to be rounded individuals	38
Making lessons interesting	42
Encouraging collaboration and discussion	45
Actively involving pupils in their learning	47,48,49
Use of rewards/prizes as a motivator	53
Most children motivated by rewards	55
Rewards more important at start of the year	57,58
Good relationship is more important than rewards	61,62
Use of praise/encouragement as a motivator	65,66
Praising specific things	70
Importance of teacher-pupil relationships	73,110,116
Important to have relationships with challenging class	76
Teachers need to model learning and social behaviours	77,78
Children need to be happy and confident to learn	81
Helps to involve parents over challenging behaviour	85
Creating home-school links	86,87
Challenging behaviour not independent of ability	89,90
Teaching linked to behaviour	95,96
Children get bored if not being stretched fully	96

School 3 (Year 6X)

CODE	DATA EXTRACT
Encouraging children to do their best	2,3, 72, 75
Try not to push children too hard	8
Talking about SATs and exams can put some children off	9
Children motivated by academic target setting	11,12
Balance between results and developing as individuals	12,13,14
Motivate Year 6 to get ready for high school	15
Different things used to motivate children	18
Personalised approach to motivation	20, 132,133
Use of rewards/prizes as a motivator for learning	22,23
Possible to have tangible rewards and personal ones	27,28
Whole school rewards system – points and prizes	33,34
Trying to get pupils to achieve their personal potential	40
Emphasis on basic skills because of low standards	48,49
Children should have creativity in the curriculum	50
Less creativity because of focus on raising standards	49,50
Making lessons interesting/enjoyable	54,55, 85
Teacher approach, strategies, resources and interaction	57,58
Drive to become more creative in the curriculum	59,60
Finding balance between raising standards and creativity	61,62
Important to give children confidence	71
Not just focusing on academics	76,77,78

Differentiating work so all children can access it	82
Ensuring children understand the work	83
Importance of external rewards, esp. with difficult behaviour	90
Rewards are good for getting children's attention	92
Rewards not crucial but they work	95
Giving children quality feedback on work to motivate them	99,103,108,109
Using other pupils' work as examples	100
Children can be competitive	103
Importance of teacher-pupil relationship	112,113,116,117
Level of disruptive behaviour irrelevant	119,120
Pupils don't always have a choice in their learning	126
Sometimes traditional (less fun) methods work	128
Trying to use different methods in teaching	131
Creating a context for learning	132
Calm learning environment fosters good behaviour	137,138
Children have formed good friendships	142,143
Teachers can impact on pupils' self-belief	149,150

School 3 (Year 6Y)

CODE	DATA EXTRACT
Making lessons exciting/enjoyable	5,48,49
Enjoyment improves learning	6
Use of rewards/prizes as a motivator for learning	9,10,54
Focus is on results in Year 6	17,18
Move towards enjoyment and understanding	21,22
Children are part of target setting	26
Staff focus and cohesion	31,32
Staff expectations filtering through to children	33
Children able to identify and rectify mistakes	40,41
Want children to feel safe and enjoy school	46
Rewards are important because children enjoy them	89
Teacher enthusiasm	64
Children feel comfortable in class	65
Actively involving pupils in their learning	65,66
Importance of teacher-pupil relationships	78,79,80,115,115
Less choice for pupils in what they learn	86,88
More choice for pupils in how they learn	89
Pupils know what they need	96
Being straight with children fosters good behaviour	101
Make an effort to motivate all pupils	

School 4 (Year 6)

CODE	DATA EXTRACT
Making lessons interesting/exciting/challenging	8
Actively involving pupils in their learning	9,10
Use of rewards/prizes as a motivator	11
Children like to have their work recognised	12
Staff try to work together	15,16
Importance of attainment levels	18,19
Achieving levels through enjoying learning	19,20
Personalised learning	23,24
Children working in teams in class	29
Ensuring children know what a reward is given for	32,33
Rewards help with less enthusiastic learners	34
Pacing lessons well	40
Encouraging children to work together in class	41,42,43

Importance of teacher-pupil relationships	47
Good relationships make children want to do well	50,51
Pupils have a choice in how they learn	54
Curriculum restrains what they learn	54
Use AfL to keep their learning progressing	55
Children are challenging towards each other	64
Lack of team spirit contributes to negative behaviour	65
Behaviours worse in afternoons as less structured	67,68
Teacher positivity can influence levels of motivation	74
Use of praise as a motivator	75
Having high expectations	74
Providing high quality resources	76
Impact of external factors that can't be controlled	78,79

APPENDIX 4.7

School 2 (Year 6X)

(I = Interviewer; T = Teacher)

1 I: What do you understand by the term motivation?

2 T: Motivation to me means enthusing and exciting children, getting them
3 wanting to work because they want to succeed and develop, and produce the
4 work that's going to improve their knowledge and understand, it's all about my
5 enthusiasm transferring to them.

**5 I: And how would you say that you use motivation as you understand it
6 in your classroom?**

7 T: I have tried to be enthusiastic about things that we do, the things I have
8 enthusiasm for seem to go well, therefore I think that enthusiasm is
9 transferable, it comes from the teacher. Also I think its built into the children;
10 one or two of them are particularly motivated in their own way without me
11 having to do anything. But for those that aren't, my enthusiasm and my
12 excitement about a particular subject is transferred, sometimes more
13 successfully than others!

**14 I: What would you say are the whole school approaches to encouraging
15 pupils to learn – is there a consistent approach throughout the school?**

16 T: We have a positive approach. We talk about catching people doing things
17 well and talking about it, and emphasising the things that they do well and
18 showing great pieces of work off, even if its not a high level piece, it's a piece
19 they've tried well with or achieved their target with. All the children's targets
20 are different but we celebrate the achieving of those targets whether it's a 2c
21 or a 5c. So its based on the children's movement between the levels. We use
22 AfL as well quite a lot, that tends to work in terms of enthusing the children and
23 transferring their successes to them, they can see it in their books. Often we
24 use peer marking as well, the children are often good at highlighting things
25 they think are good about other children's work. So those are all whole school
26 policies.

**27 I: And would you say that there is more of an emphasis on encouraging
28 pupils so that they enjoy and understand or on teaching to reach certain
29 levels?**

30 T: In Year 6 I would say that levels are the all important things in terms of
31 doing well in the SATs because that leads into league tables and OFSTED
32 and things, so in Year 6 I would say that it is very target focused..

33 I: And do you see a difference between the two kinds of approaches?

34 T: They both work. Because they've made the targets, they've made the
35 levels, and they've enjoyed it. Because when I got them in Year 5, they hated
36 writing. Now we've just finished some work on Kenzuki's Kingdom and they've
37 produced some spectacular pieces of writing. So they both work, I couldn't
38 criticise either system, they both have their good points and their bad points.

39 I: What would you say is your personal aim as a class teacher?

40 T: I suppose I've been focused this year on the targets, but working in 4 and 5,
41 I'm quite enthusiastic about teaching the 'whole child' and developing their
42 personal qualities and all the other things that make a real person, not just the
43 academics. Obviously this year its been about the academics but I've tried to
44 mould them as well, tried to teach them ways of being with others.

45 I: What factors do you consider when planning your lessons?

46 T: First and foremost it's where they're at, the lessons are targeted at
47 individual children so that everyone has got the appropriate work for their
48 ability. Then it comes down to interest, catching them with a hook to get them
49 enthusiastic and wanting to know, trying to encourage independence for the
50 task. Children's own needs, special needs, emotional needs are supported,
51 planning based on what's gone before.

**52 I: Which rewards would you say are used that are specifically related to
53 learning?**

54 T: Don't do it. We have team points, and they're for anything and everything, it
55 can be for a beautiful piece of work, it can be for someone who's tried extra
56 hard and done better than they normally do, doesn't matter what the level is.
57 Team points can be for anything, we don't have specific awards for a good
58 piece of work as such. They have a star of the week assembly, but the
59 emphasis on those changes – to can be politeness or behaviour or attitudes,
60 anything. Sometimes it has a literacy focus but again, a good piece of work for
61 one person might get it because they're trying hard.

**62 I: And how important would you say that the use of those rewards is to
63 you?**

64 T: To me, not a huge amount to be honest, because the children have been
65 hugely motivated this year. With classes that aren't as motivated I make a
66 bigger show of the team points, so it just depends on the class and what their
67 needs are.

**68 I: Is there anything you think you can attribute their feelings of self
69 motivation to?**

70 T: I think that the constant positive attitude here has contributed to that, I think
71 these children are very well motivated, they have supportive backgrounds.

**72 I: How would you say that you support motivation for learning in your
73 classroom other than through the use of external rewards?**

74 T: There's the AfL, that's quite motivating, especially if you're giving your work
75 to your partner. They're motivated by team points, by enthusiasm, if they like a
76 subject they're more motivated towards completing the task and doing well at
77 the task, particularly with some of the literacy where they've really enjoyed the
78 story or the genre.

**79 I: On a scale of 0 to 10, where 0 is not at all important and 10 is very
80 important, how would you rate the importance of having a good
81 relationship with your pupils?**

82 T: It's really important. If they don't like you it's hopeless. They've got have
83 respect and like for their teacher otherwise it just doesn't work. You could ask
84 them what they think now and they'd probably say that we have a good
85 relationship. If you don't understand them and they don't understand you, then
86 its not working, its not teamwork. So if you don't have a good relationship with
87 the kids they're not going to work for you.

**88 I: How much choice do you feel your pupils have in their learning, both in
89 terms of what they learn and how they learn it?**

90 T: Not a great deal. The way that they record things, they have more choice,
91 they can use a laptop, or paper, but its more managed by the teacher than
92 anything else. Who they work with is sometimes a choice, sometimes when
93 they do things is a choice, if they have an integrated day.

**94 I: I often work with teachers who find that their pupils' behaviour
95 sometimes gets in the way of teaching and learning in the classroom. Do
96 you find that this happens in your class?**

97 T: No, not at all. They've been exceptionally well behaved. We've had very few
98 distractions to learning. In fact I think I've raised my voice twice this year.

99 I: And what would you put that down to?

100 T: A good relationship. There's been very little need for discipline this year.
101 They can do it without my enforcement.

**102 I: To what extent do you feel you can influence the levels of motivation of
103 your pupils, over and above what they have when they come into your
104 classroom?**

105 T: I'd say I think it can be quite effectual, the way that I've worked with these
106 children has changed over the two years I've had them. When they came to
107 me there was a lot of unmotivated performance. But particularly over this last
108 year, they've been much more motivated, they've seen their targets
109 approaching, they know what they've got to do. Its about telling them where
110 they are in the scheme of where they've got to get to. As long as they know
111 their position then they tend to pull themselves towards that target.

END OF INTERVIEW

APPENDIX 4.8

School 1 (SMT)

CODE	DATA EXTRACT
Pupil motivation features in SDP	2
Plan is to develop a more engaging curriculum	2,3
Involve pupils in planning topics	4
Giving children ownership of topics	5, 6
Incorporating pupil interests	7
Hope to increase motivation by involving pupils in planning	12,13, 14
Having an end product/purpose is motivating	15, 16
School trips are motivating	20
Personalised approach to learning increases motivation	26, 29, 30
Focusing on children's learning rather than the teaching	37
Teachers becoming facilitators	38, 39
Aim to encourage independence in children	42, 43
Talking to children about the purpose of learning	47, 48
Behaviour policy needs to be embedded for learning to occur	54
Behaviour policy not a key feature in SDP	61
Recognising pupils' successes is part of behaviour	63, 64
Curriculum delivery impacts on behaviour	67
Need to engage children to keep them on board	57, 68
Instilling sense of pride in children	71, 72
Raising aspirations	73
Moving from content to skills driven curriculum	64, 75
Social skills (SEAL) have higher profile than knowledge obtained	76, 79, 80

School 2 (SMT)

CODE	DATA EXTRACT
Motivation previously played a big part in SDP	2,4
Making curriculum more relevant to children	5,6,
Trying to improve pupil motivation through curriculum	6
Move towards creative curriculum	8
Positive feedback from parents and pupils re CC	10
Trying to be more creative in Years 5 and 6	14,15
School council involved in decisions about rewards	19
Discussions in class with teachers about rewards	19,20
Star of the week based on different themes	22,23
Child of achievement chosen by teacher	25
Prepare children for life after school	28
Rewards for well behaved children	29,30
SDP is linked to behaviour policy	36
Looking at ways of improving behaviour across the school	43,44
Curriculum delivery can impact on pupil behaviour	47
Some behaviours due to children not owning curriculum	47,48,49
Curriculum might not be challenging or relevant enough	49,50
More exciting classes tend to have less behaviour issues	54,55
Adapting curriculum to needs of the children	56,57

School 3 (SMT)

CODE	DATA EXTRACT
Pupil motivation not explicit in SDP	2
Pupil motivation underlying in other actions (raising standards)	5
Rules and school code used to encourage learning	9
No whole school rewards system – individual to classes	10,11,12
Older children involved in developing rewards system	12,13
Shift towards enjoyment and pupils learning for themselves	18,19
Trying to develop more creative approaches	21
Supporting independent learning	22
Teachers becoming facilitators	22
Takes a while to embed this	23,24
Changes towards self-led learning	28
Emphasis on making lessons enjoyable	32
Behaviour not a huge priority in SDP	42
Clear behaviour policy	44
Curriculum delivery impacts on behaviour	51
Pupil engagement is crucial	51,52
Behaviour is the first thing to go if pupils not interested	53
Need to adapt planning to suit cohort	55
Delivery and content affects behaviour	57,58
Children more excited and involved during 'theme week'	59,60
Learning complex things	61,62
Creativity helps but some structure still needed	66

School 4 (SMT)

CODE	DATA EXTRACT
Motivation stated implicitly in SDP	3
Focus on raising achievement	4
Focus on raising standards	5
Motivation comes into focus on teaching and learning	5,6
Pupil motivation interpreted as pupil engagement	7
Pupil engagement listed as success criteria for T&L	7,8
Behaviour charter links to promotion of good learning	10,11
Behaviour management system promotes good learning	12,13
Sole attainment agenda wouldn't work	17
Enjoyment and understanding underpins attainment	16
SDP is linked to behaviour policy	20
Looking at the 'whole child'	21
Link between pupil engagement and behaviour	22,23
Need pupil voice to achieve motivation and engagement	23,24
School council provides means for hearing pupil voice	24
Giving children opportunity to impact on curriculum content	25,26
Trying to go down creative curriculum approach	27
Having a theme and letting children run with it	31
No lesson planning	32
Basing lessons on where children want to go	33
Giving pupils a voice does increase motivation	35
Thematic, creative, topic based approach increased engagement	37,38
Moulding curriculum around pupil interests	40
Adhering to NC	40,41
Hard to get embedded but trying	41,42
Children more willing to engage with writing through a theme	42,43

APPENDIX 4.9

School 1 (SMT)

(I = Interviewer; S = SMT)

1 I: Does pupil motivation feature explicitly in the school development plan?

2 S: Yes it does, we're part of Creative Partnerships, and part of the plan is to
3 develop a more engaging curriculum, definitely, definitely. And within that, the
4 idea is to involve pupils more in the actual planning of the class topics and get
5 more and more feedback and reflection from the pupils so that will hopefully
6 give them some ownership, you know, to the topic, and sort of find out the
7 kinds of things, activities they would like to do and see if we can get them into
8 the children's learning really. So I think that's the main part of the development
9 plan that that comes up in.

10 I: And so how would you say that motivation is conceptualised within that?

11 S: Well first of all its like, you know, finding out - asking the children what they
12 want to know from doing the topic, what are the questions they want to answer
13 from the topic, and agin you'll hope that they'll be, because they've actually
14 suggested the questions they'll be more motivated wont they. And then how
15 are you going to find out about them,. What also motivates them quite well is if
16 there's some sort of end product to the topic, so if they're going to do a
17 performance, or make a film, or invite the parents in to see their work, so
18 there's a kind of a purpose. Because I've found that our children do like to do
19 that bit of 'show and tell' and that's very motivating isn't it. And other things,
20 things like trips are highly motivating. Whenever you do a questionnaire with
21 the children that's one of the things they always highlight: the trips that we do
22 at [this school]. So I think its becoming well embedded really.

**23 I: What whole school approaches do you have in place to encourage
24 pupils to learn – is there a specific, consistent approach to teaching and
25 learning that is promoted?**

26 S: Definitely. I suppose it fits in with this personalised learning agenda doesn't
27 it. Thinking about your children in your class, going back to the bit I said about
28 'how would you like to find the answer to this question', because of children's
29 different learning styles and preferred way of learning, hopefully they're going
30 to be more engaged in that.

**31 I: And would you say that, in terms of an overall emphasis on how
32 teaching and learning is delivered, would you say that it is more to
33 encourage pupils to really enjoy and understand concepts or would you
34 say that there is perhaps more of an emphasis on teaching so that they
35 attain and reach certain levels?**

36 S: Well its interesting because when you do your lesson observations now,
37 you focus on the children's learning rather than the teaching, are you with me?
38 So, I think it is getting, I think teachers are becoming more of a facilitator than

39 the person that stands at the front of the class and gives all the knowledge. So
40 I think it has swapped a little bit in that respect. Because I think, especially with
41 our children, they will be very passive if you let them, and they will just sit
42 there, they almost sometimes want too much from the teacher, rather than
43 taking on that independence. And that's beginning to work.

44 I: And there's an importance for you in that is there? That children are
45 more independent and are more, have a bit more freedom and autonomy
46 in their learning?

47 S: Exactly. And I think it all goes back to talking to them about the purpose of
48 their learning, especially for some of our children who aren't sure what school
49 is going to actually give them.

50 I: Would you say that there is a link between your school development
51 plan and the behaviour policy?

52 S: Well I think the behaviour policy is there all the time and the emphasis on
53 the school development plan changes each year, but you've got to have the
54 behaviour policy fully embedded for the children to be in a position to learn.
55 But certainly there's been, the teachers and teaching assistants in KS1 have
56 been going on the Webster Stratton training, which seems to have a good
57 effect. Where the children are focused and ready to listen and paying attention
58 to the teacher, well if you haven't got those things right, you can have the most
59 marvellous curriculum planned but the children aren't going to get anything out
60 of it. So were always looking at our behaviour policy, although its not, if you
61 read the school development plan it's not a key feature, we're always looking
62 at it and reviewing it and seeing what's working and what's not working. And
63 certainly, giving the children lots of positive praise for their successes and
64 recognising their successes is all part of that plan.

65 I: Do you feel that the way in which the curriculum is delivered has an
66 impact on the behaviour of the pupils in school?

67 S: Oh yeah, definitely. Definitely because you really have got to engage some
68 of our children to keep them on board with their learning. They've got the
69 potential to be easily distracted, or seek attention in some other way.

70 I: So you think it's necessary to have that enjoyment or to engage them?

71 S: Oh yes. And being proud of what they're doing, making them feel proud of
72 what they're doing and maybe achieve some things they don't think are
73 possible, because some of their aspirations can be quite low. In fact its quite
74 interesting because we were thinking about, we're moving more from a content
75 driven curriculum to a skills based curriculum, and a school like ourselves, we
76 think a lot of the social skills like the SEAL aspects of learning, which can be
77 embedded in all topics, things like the teamwork, supporting each other,
78 recognising themselves what they've done, the good things they've done, and
79 also recognising what next steps they need to take, in many ways that's a

80 higher profile in this school than the actual knowledge that they obtain in a
81 history lesson or something.

82 I: And what would you say has driven that, what are the drivers for going
83 down that route?

84 S: Just from observing the children in class, talking to class teachers and
85 being involved in the SEAL project. There is a big drive nationally to embed
86 SEAL into the whole curriculum so that's been quite good.

END OF INTERVIEW