CHAPTER 1
INTRODUCTION

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1.1 Overview

The problem of classroom discipline is perennial. This chapter provides a brief background for the current research, the aim of which is to provide more information about matters of discipline in New South Wales secondary classrooms, and to explore issues and relationships arising from teacher-student interaction more generally. This introductory chapter provides a context for the research and outlines the scope and structure of this thesis.

1.2 Background

1.2.1 *The Need for Effective Management of Student Behaviour*

It is commonly agreed that effective teacher management of classroom behaviour is a fundamental prerequisite for effective classroom teaching and learning (Brophy, 1985a; Rosenshine, 1971; Wheldall & Glynn, 1989; Wheldall, 1991), being "a necessary, but not, of course, sufficient condition for learning to take place" (Wheldall, 1991, p. 100). Effective classroom behaviour management is even more crucial today than in the past, given our commitment to educating students with a diverse range of special educational needs within the least restrictive environment. The inclusion of students with disabilities within regular classrooms requires teachers to have high-level classroom management skills, as well as the necessary skills to program effectively for all students in the class. Excessive time and energy expended on managing inappropriate and disruptive behaviour is simply not available to teachers engaged in inclusive education.

Moreover, while students with severe behaviour and/or emotional disorders are relatively easily identified (and, as a consequence typically receive special education provision and placement), a substantial proportion of children who experience serious behavioural and emotional difficulties attend regular schools (Harris, Tyre, & Wilkinson, 1993; Swinson, Woof, & Melling, 2003). Ritter (1989) reported that regular classroom teachers were less tolerant of problem behaviour than learning problems, and were significantly less tolerant of externalising types of overt, problematic behaviour than were special educators. Chazan (1994) argued that the *vast majority* of children with emotional and behavioural difficulties are educated in their usual classes in mainstream schools, and "the question of removing them does not arise" (p. 261). These students, as well as typically developing students with more commonplace disruptive behaviours, may well present management challenges to their teachers.

1.2.2 *The New "Excluded"?*

Problems of classroom order and discipline frequently stimulate public interest and debate (Fields, 2000). The role of the media in building and shaping public perception must be continually assessed. In the Australian context, Jacob (2005) argued that:

> ...well publicised violent events in recent years have exaggerated the public's perception of the level of disruptive behaviour in schools, and created the impression that misbehaviour is more pervasive than is the case. (p. 6)

In New South Wales (Australia), in the context of an enquiry into the provision of public education, teachers reported that difficult student behaviour was on the rise, with teachers dealing with students who engaged in confronting behaviour, refusal to cooperate, disobedience, and swearing, making the "day-to-day business of teaching

and learning distressing and difficult" ("More Learning Time Lost Through Disruptive Behaviour", 2002, p. 7). This report was met with a call from the New South Wales Teachers' Federation President that "the first and most immediate step is to provide more placements in special educational programs for students whose behaviour disrupts others" ("More Learning Time Lost Through Disruptive Behaviour", 2002, p. 7). The report of student misbehaviour by the teachers, and the response of the teacher union representative, are both concerning. But how widespread and frequent are these behaviours and how much do they impact on classroom teaching? And is the "first step" really to exclude students who engage in disruptive behaviour?

In the United Kingdom in the 1980s, and also amid claims of escalating violence and disruption in schools, Wheldall and Merrett (Merrett & Wheldall, 1984; Wheldall & Merrett, 1988a) demonstrated empirically that it was the frequent, irritating, and relatively trivial misbehaviours of students that were the main cause of disruption for teachers. Wheldall and Merrett did not seek to minimise the seriousness of the violent acts that occur from time to time in classrooms, but rather to establish which behaviours were of *most* concern to teachers in the day-to-day course of their classroom teaching. Their findings about the nature of troublesome classroom behaviour were subsequently verified in the report of a parliamentary enquiry into discipline in UK schools (Department of Education & Science, 1989). This report was to become known as The Elton Report.

Researchers have an important role to play in informing the debate about matters such as school and classroom discipline with data. This is particularly the case when topics attract media and public interest. Researchers have a responsibility to provide the evidence whereby rhetoric can be challenged or confirmed. It would be a travesty, and an indictment of the teacher preparation institutions, if as quickly as students with intellectual, physical, and sensory impairments were being *included* in

regular classrooms, increasing numbers of students with behaviour problems were being *excluded* from the mainstream and moved into segregated educational settings. The push, often politically motivated, to remove turbulent students from the educational mainstream arguably has potentially dangerous outcomes for, not only the students themselves, but for the community as a whole. Devoid of good role models, these students may not be best served by being thrust together in an environment in which aberrant behaviour is the norm. Parallels with the prison system should not go unnoticed. It must surely be a priority for education systems that as many students as possible are educated in the least restrictive educational environment and we must collectively guard against students with disruptive or troublesome behaviour becoming "the new excluded".

1.2.3 *The Need for Evidence-Based Practice*

The vast majority of troublesome students may well be managed effectively within regular classroom settings provided teachers are given the necessary knowledge and skills to deal with their behaviour and appropriate support as required. The power of teacher behaviour in the research literature is well established. The contribution of applied behaviour analysts in conceptualising and evaluating the most effective instructional practices, initially in special education contexts, then subsequently for all students, has not been acknowledged or embraced by all educationists. In a guest editorial in the *Journal of Behavioral Education*, entitled, "Why data don't matter", Landrum (1997) argued that much of what is done in schools "not only ignores the extant data on effective practice, but often flatly contradicts it" (p. 124). Moreover, he stated:

> our ignorance of data is not limited to traditional special educational hallmarks of direct instruction and applied behavior analysis, both

> frequent targets of criticism despite the rich history of empirical support underpinning both. (Landrum, 1997, p. 124)

In similar vein, Wheldall (2005), lamented, "When will we ever learn?" and provided examples of educational "innovations" where the research evidence (or lack of it) had failed to inform practice. He challenged policy makers, educational bureaucracies, and teacher training institutions to adopt an evidence-based approach to education. Like Landrum (1997), Wheldall (2005) argued that teachers themselves should not be held accountable for using ineffective methods of instruction if those entrusted with their education and training, the universities, were not preparing them adequately in the first place. As a result, and as Chall (2000) warned, educational practice "often went in the direction opposite from the existing research evidence" (p. 3).

1.3 Impetus for the Current Research

In the 1980s in the United Kingdom, Wheldall and Merrett conducted an extensive program of behaviourally oriented research. Some of this research dealt with the prevalence, severity, and typology of classroom behaviour problems in schools, the natural rates of teacher approval and disapproval in classrooms, and the ways in which teachers differentially direct their attention to boys and girls. Subsequently, Houghton, working with Wheldall and Merrett, extended this work to secondary school investigations.

The impetus for the research comprising this thesis was to replicate and extend the work of Houghton, Wheldall, and Merrett in an Australian context. The nature of the extension was principally relating key variables within and between data sets. Additional dimensions were also added to the enquiry into the behavioural interactions of teachers and students in secondary school contexts.

Until recently, there has been relatively little published Australian data reporting the prevalence and nature of classroom misbehaviour in secondary schools, and almost none which directly informs teaching practice in New South Wales. An unpublished study by Nicholls, Houghton, and Bain (1991) reported findings in Western Australian secondary schools, while more recently Arbuckle and Little (2004) and Little (2005) have reported the types of classroom behaviour Victorian middle years and secondary teachers find troublesome. Infantino and Little (2005) have recently added the students' perspectives of classroom behaviour problems, and Conway, Tierney, and Schofield (1990) and Stuart (1994) have reported some findings from New South Wales (see Chapter 2). One major aim of the present research is to add to the relevant Australian classroom data.

When it comes to published studies detailing the naturally occurring rates of teacher approval and disapproval (and associated student on-task behaviour) in Australian secondary schools, there appears to be only one published study, Russell and Lin (1977) (see Chapter 7). Another major aim of this present research is to address in part the absence of relevant Australian data, with particular reference to secondary teachers in New South Wales.

As is the case with the nature of teacher approval and disapproval more generally described above, there is scant empirical work in the area of teacher attention to boys and girls at the secondary school level. The current interest in the way boys participate in schooling in Australia may be informed by the findings of an investigation of how teachers respond to them in the classroom. Another major aim of the present research, therefore, is to redress the paucity of data in this area relating to secondary schools generally and in Australia in particular.

Moreover, the existing troublesome classroom behaviour literature only reports *perceptions* of what happens in classrooms. There is a need for direct observation in

classrooms to substantiate (or, indeed, refute) the perceptions of teachers and to relate problems of student classroom behaviour to teacher behaviour, acknowledging that student behaviour does not occur in a vacuum. Consequently, while this research aims to provide descriptive data regarding the prevalence, severity, and type of classroom behaviour problems experienced by teachers in New South Wales classrooms, it also seeks, in part, to verify (by observations of teacher and student behaviour in classrooms) the perceptions of teachers.

1.4 Aim of the Research

The aim of this research is to provide data relating to classroom behaviour and its management in secondary schools in New South Wales. It should be emphasised at the outset that the present concern is with *classroom* behaviour management rather than the more global concerns of school discipline per se.

The considerable body of previous research on naturalistic (i.e., not experimentally manipulated) classroom behaviour and its management has included: a) the types and prevalence of troublesome classroom behaviour; and b) teachers' use of approval and disapproval (e.g., praise and reprimand) and its relationship to student classroom behaviour. These areas have typically been researched as *discrete* entities. A focus of the present research, in addition to replicating earlier studies within an Australian context, is to examine the relationships between these key areas, a neglected if not unique research domain. Consequently, the main thrusts of this thesis will be to:

1) Replicate, in relation to secondary teachers in New South Wales, the British survey work of Houghton, Wheldall, and Merrett (1988) regarding the classroom behaviour problems secondary teachers say they find most troublesome.

2) Replicate the observational work of Wheldall, Houghton, and Merrett (1989) regarding the "natural" rates at which British secondary teachers typically praise and reprimand students in their classroom (work which also includes observations of student on-task behaviour) in an Australian secondary school context.

3) Replicate the observational work of Merrett and Wheldall (1992) regarding differential teacher attention to boys and girls in secondary classrooms (an enquiry that also includes observations of boys' and girls' on-task behaviour separately) again in an Australian context.

4) Briefly examine two subsidiary areas (subsidiary in terms of the present study only) in order to provide further insights into the dynamics of the classroom. These areas are: the stress teachers associate with managing classroom behaviour; and, student perceptions of the classroom environment.

5) Explore the relationships among the four broad areas outlined in 1), 2) and 4) above. In addition to providing useful descriptive data, *relationships* among teacher perceptions of problems with order and control, teacher stress, the observed classroom behaviour of both teachers and students, and the perceptions of the classroom environment by students themselves, will be explored. By directly relating the observational and self-report (questionnaire) data, the question of whether there are substantive differences in classrooms where behaviour management is more of a challenge compared to those where it is not may be addressed. (For example, one might speculate that teachers who report that they spend more time on matters of classroom discipline than they think they should may have lower on-task levels of student behaviour in their classes.) The results of such an

exploration will, arguably, provide a more thorough analysis of the interactional dynamics and environment in New South Wales secondary classrooms and produce a sharper and denser image of the "snap-shot" provided by the descriptive data only.

1.5 An Overview of the Data

The majority of the data for the present research were collected in the context of a broader commissioned evaluation study conducted for the New South Wales state education department. The majority of these data were from the pre-intervention phase of the evaluation that sought to establish the efficacy of a specific behaviour management package being implemented in departmental schools.

The data take the form of either questionnaire data (self-report) or observational data. The types and prevalence of classroom behaviours that teachers found problematic were explored (detailed in Chapters 3-5). Teachers were also asked to report the sources and levels of stress associated with their classroom teaching specifically in terms of behaviour management issues (also detailed in Chapters 3-5). Students participating in the classroom observational phase (see following) also reported their perceptions of their classroom environment (reported in Chapter 6). A smaller sample of teachers and students were also involved in an observational study of behavioural interactions in the classroom (detailed in Chapter 8). A sub-set of these data formed the sample for the study exploring differential teacher attention to boys and girls (detailed in Chapter 10).

As a result of this approach, a sub-set of data existed whereby teachers' questionnaire data, the observational data from their classrooms, and the student questionnaires relating to the classroom environment could be linked by their (anonymous) code, each class providing a discrete unit of analysis. This provided the

opportunity for the study of inter-relationships that was carried out throughout the thesis (mainly in Section A) and in Chapter 11 (Section C).

1.6 Existing Research Evidence

In Chapter 2 of this thesis a review of the relevant literature on what constitutes troublesome classroom behaviour is presented. The prevalence, severity, and typology of troublesome classroom behaviour is considered. A minor review only of the literature relating to teacher stress associated with managing student behaviour is also included in Chapter 2.

Similarly, a minor review of the literature relating to the classroom environment is embedded in the chapter that presents the study of student perceptions of the classroom environment (Chapter 6). The reviews of teacher stress and the classroom environment are only minor as these are seen as supplementary aspects of the research focus of this thesis, not foci in their own right in the present context.

In Chapter 7, the current literature relating to what teachers do in their classrooms in terms of responses to student behaviour is detailed. Specifically, how teachers typically behave in response to their students' behaviour in terms of approval (e.g., praise) or disapproval (e.g., reprimand) is explored. An examination of these issues provides the context for the data presented in the study into the natural rates of teacher approval and disapproval in New South Wales secondary classrooms.

The final literature review is of the extant literature relating to differential teacher attention to boys and girls presented in Chapter 9. The ways in which teachers direct their attention and respond differently to boys than to girls is discussed in the socio-political context of the last three decades. This review provides the context for the study of differential teacher attention to boys and girls in New South Wales secondary classrooms.

1.7 Structure of the Research

This thesis is organised in three sections (A, B, and C), followed by a summary of the findings and a discussion of the issues arising (Chapter 12). The title and a description of each section follows.

1.7.1 *Section A — Classrooms, Behaviour and Teacher Stress: The Perceptions of Teachers and Students in New South Wales Secondary Classrooms*

This part of the thesis deals with all of the self-report data collected in this program of research. These are self-report data from teachers (two measures) and students (one measure only). The two teacher-report measures dealing with the nature of troublesome classroom behaviour and the stress teachers experience as a result of having to manage student misbehaviour, are considered in Chapters 3-5 (the relevant research literature having been presented in Chapter 2).

Given the large amount of detail, the study of troublesome classroom behaviour (including the sub-study of teacher stress) has been divided into three chapters. The method is presented in Chapter 3. The results and discussion of the findings from this study are detailed in Chapters 4 and 5 respectively. Key variables from the two questionnaires are inter-related to explore, for example, whether teachers who were experiencing more stress in relation to their classroom teaching had a larger number of troublesome students in their classes.

The final chapter of Section A (Chapter 6) presents student-report data regarding their perceptions of the classroom environment. Relationships between key variables of this student report data and the preceding teacher report data regarding troublesome classroom behaviour and teacher stress (presented in Chapters 3-5) are explored.

1.7.2 *Section B — Observed Behavioural Interactions Between Teachers and Students in New South Wales Secondary Classrooms*

Section B presents all the observational data collected in the course of this program of research. The relevant literature relating to the naturally occurring rates of teacher approval and disapproval in secondary classrooms (i.e., non-experimentally manipulated) is reviewed in Chapter 7 and the study in Chapter 8. In the following two chapters the issue of differential teacher attention to boys and girls is explored. Gender issues relating to teacher attention are reviewed in Chapter 9 and the study is reported in Chapter 10.

1.7.3 *Section C — Perceptions Versus Reality In The Classroom: What They Say, What They Do*

Section C explores relationships between teacher reports of troublesome behaviour and student perceptions of the classroom environment with reference to the observational data. Aspects of the self-report data in Section A are related to the observational data in Section B to determine where perceptions may vary or coincide with the findings of the classroom observations. This is an undertaking rarely carried out in educational research. Linking observational data from classrooms (Section B) with the perceptions of teachers and students as they are expressed in self-report data (Section A) is the main aim of Section C.

Chapter 11 explores inter-relationships between various data sets included in this thesis. Selected key variables from the self-report data of teachers and students are related to the larger observational study of teacher and student behaviour to explore relationships not covered elsewhere in earlier parts of the thesis. In this way, teacher and student perceptions are directly related to the observed "reality" of the classroom in the context of secondary classrooms in New South Wales.

1.7.4 *Conclusions*

In Chapter 12, an overview of the research is presented. A summary of issues emerging from the research, including the nature of inter-relationships explored throughout the thesis and in Chapter 11, is discussed. A focus on findings of particular educational significance and future research directions arising from the current research are also articulated in this concluding chapter.

SECTION A

CLASSROOMS, BEHAVIOUR AND TEACHER STRESS:

THE PERCEPTIONS OF TEACHERS AND STUDENTS

IN

NEW SOUTH WALES SECONDARY CLASSROOMS

CHAPTER 2
TEACHER PERCEPTIONS OF TROUBLESOME CLASSROOM BEHAVIOUR

CHAPTER 2[1]

TEACHER PERCEPTIONS OF TROUBLESOME CLASSROOM BEHAVIOUR

2.1 Overview

In this chapter, a review of the literature in relation to troublesome classroom behaviour is presented. The focus is on teachers' perceptions of the *prevalence* of troublesome students in their classes, the extent to which these perceptions of misbehaviour are mediated by student *gender*, and finally the *types* of behaviour teachers consider to be particularly troublesome. The chapter concludes with a brief exploration of the emotional impact ("stress") on teachers of having to deal with the troublesome classroom behaviour of the students they teach. The review provides a context for the study described in the ensuing chapters.

2.2 Background

Given the impact of inappropriate or disruptive classroom behaviour on the effective use of instructional time in classrooms, it is not surprising that the study of troublesome classroom behaviour has long been evident in the educational literature. At the outset, it may be useful to state precisely what is meant by the terms troublesome, inappropriate or disruptive classroom behaviour. Merrett and Wheldall (1984) defined disruptive classroom behaviour as activity that:

1) interferes significantly with the child's own learning or
2) interferes with the other children's learning or responses or
3) interferes with the teacher's ability to operate effectively (p. 88).

This definition of disruptive or troublesome behaviour would seem to be an appropriate definition for the purposes of this chapter and thesis.

[1] An earlier and shorter version of this chapter was published as Beaman, R., & Wheldall, K. (1997). Teacher perceptions of troublesome classroom behaviour: A review of recent research. *Special Education Perspectives, 6,* 49-55.

From an historical perspective, enquiries into the behavioural profile of children in classrooms may be seen to have been largely focused on behaviour not problematic to the child, but problematic to the teacher. Wickman (1928a), for example, in his seminal study carried out in the United States, emphasised the distinction between problematic behaviours within the child per se, as against problematic behaviours within the classroom. Wickman asserted that the general pervading characteristic in the problems enumerated by the teachers in his study was that they represent "disturbances" (Wickman, 1928a, p. 15).

> Behaviour problems, in the teachers' estimations, thus appear to be active disturbances that attack the standards of morality, obedience, orderliness, and agreeable social conduct. In the teachers' list there is a conspicuous paucity of items describing child problems which are indicative of social and emotional maladjustment but which are not directly disturbing to school routine. (Wickman, 1928a, p. 15)

Wickman extended his work to a much larger sample of over 500 primary teachers and found, once again, that teachers' reactions to behaviour problems of children were determined in direct relation to the immediate effect on the teachers themselves (Wickman, 1928b, p. 37). While much of Wickman's terminology is now out of date and value laden, and his methodology may be open to question, his findings have been largely corroborated by subsequent research.

Ziv (1970), building on Wickman's earlier work, investigated the views of psychologists, teachers and children regarding troublesome classroom behaviour in Israeli schools. He found that children's views were largely in line with teachers' (rather than psychologists') views on what constitutes troublesome behaviour. Children's and teachers' rankings of behaviours from a 30-point list (based on Wickman's 50 item list) were highly correlated, in contrast to children's and psychologists' rankings (Ziv, 1970).

While Ziv found similarities between teachers' and psychologists' rankings (unlike the earlier findings of Wickman), he also noted some differences between the two groups when looking at the ten most serious problems selected. He hypothesised that while teachers "consider what disturbs them within the classroom framework (pupil behaviour), the psychologists consider the 'whole'" (Ziv, p. 45). This finding supports Wickman's earlier claim, perhaps rightly, that teachers are concerned by disturbances directly affecting them in the classroom. Walker et al. (1988) confirmed such a view, stating that teachers as a rule are more likely to refer students (for behavioural assessment and intervention) who exhibit "externalising behavior disorders" (p. 9) (such as aggressive behaviour, non-compliance, out of seat behaviour), while they under-refer (or do not refer) students with "internalising behavior disorders" (p. 9) (such as shyness, timidity, and withdrawn behaviour).

From early on, context has been an important consideration when it comes to defining or describing troublesome or disruptive behaviour. When focusing on troublesome *classroom* behaviour from the perspective of teachers, it would appear that they are most concerned with those behaviours that affect them in the course of their teaching, more so than the behaviour problems that cause difficulties for the students they teach. Mertin and Wasyluk (1994) have gone so far as to say that teachers perceive different problems than others involved in the care of children, noting [as did McGee, Silva, and Williams (1984)] that there was little agreement between those problems reported by parents and those reported by teachers.

Like Wickman (1928), Mertin and Wasyluk (1994) observed that much depends on the nature of the problem and who defines it, with teachers' determination of a problem based more on the practical issues such as classroom management and the more obvious and evident indicators of behavioural and emotional disturbance. Teachers are more likely to define as a problem a behaviour directly related to the

classroom or playground environments (Mertin & Wasyluk, 1994). Safran and Safran (1985) also found that teachers reported that the most disturbing behaviours were the "outer-directed" (p. 21) or disruptive behaviours, which were considered to have a negative impact on other students. Moreover, they highlighted teacher concern for the phenomenon known as "behavioral contagion or ripple effect" (Safran & Safran, 1985, p. 21). They argued that while there is evidence that this perception exists, the "actual phenomenon has not received empirical support" (Safran & Safran, 1985, p. 21). It would appear that teachers fear disruptive behaviour getting out of control in their classes.

The central concern of this chapter is precisely with these same aspects of student behaviour: teachers' perceptions of behaviour that they deem to be problematic or troublesome within the regular classroom. This will, it is hoped, help to inform classroom practice on managing student behaviour on a day-to-day basis, since the precise nature of the problems needs to be known before solutions can be offered.

The focus is not on diagnosed emotional disturbance and behaviour disorder as the vast majority of students nominated by teachers as being problematic could not be considered as having a diagnosed or diagnosable condition. Problematic behaviours are, however, on a continuum and inevitably some of what occurs to distress teachers in classrooms will be the result of some students who manifest behaviours that are consonant with emotional disturbance and behaviour disorder.

While this thesis is primarily concerned with teachers and students in the secondary school, the following review will take into account both primary (or elementary) *and* secondary school studies to provide a broader perspective on the issue of troublesome classroom behaviour. An exclusive focus on studies relating to the secondary school would unnecessarily limit an exploration of the important themes and

issues, many of which transcend the arbitrary division of schooling into primary and secondary levels.

2.3 Prevalence of Behaviourally Troublesome Students

Chazan and Jackson (1971, 1974) explored the extent of behaviour problems in a large sample of children from a variety of socio-economic areas in England and Wales at the point of school entry, and again two years later. They suggested that between 12% and 15% of young children exhibit behaviour difficulties in their first years of schooling (Chazan & Jackson, 1974). Whitmore and Bax (1984), however, found that only 6% of students from inner city primary schools in London had "disturbed" behaviour at school entry, rising to 7% by age seven to eight. In contrast, McGee et al. (1984) found in their study of seven year olds in New Zealand, that about 30% of the sample of 951 children were identified by parent/and or teacher ratings as having a high level of reported problem behaviour, although a much smaller number of the children (5%) were identified by *both* the parent and the teacher as having problems. Using an alternative definition, the authors considered that 12% of the sample (111 children of the sample of 951) had a significant behaviour problem "in that it was long-term, having dated at least from school entry, and/or both parent and teacher agreed that the child showed problem behaviour" (p. 258). They refer to a range of findings from previous studies citing prevalence rates between 6% and 25%, arguing that, despite the variation, it would appear that a "significant proportion of children suffer from behaviour problems during their early schooling" (1984, p. 251-2).

Little, Hudson, and Wilks (2000) reported similar figures in their Australian study of behaviour problems across home and school settings. In their sample of 189 students aged 5 to 14 years, 22.4% of parents reported problems dealing with their children's behaviour, whereas only 10.5% of their teachers did. But as McGee et al. (1984) had also found in New Zealand, a much smaller percentage was evident where

both parents and teachers reported behaviour problems, being 5.6% in the Little et al. study. In a subsequent Australian study, Herrera and Little (2005) reported that 27% of parents of 3-5 year olds reported behaviour problems in their children, whereas only 9% of the children's kindergarten teachers concurred. In this study, the incidence of pre-school behaviour problems agreed by *both* parents and teachers was 9%.

Mertin and Wasyluk (1994) reported that the number of children with emotional and/or behavioural problems in the general population is generally regarded to be in the order of 10%. Those with more severe forms of problematic behaviour, for example conduct disorder, are estimated to represent between approximately 2% to 6% of the population when considering children aged 4 years to 18 years (Kazdin, 1995). Similarly, Jenson, Olympia, Farley, and Clark (2004) estimated that students with externalising disorders (such as non-compliance, aggression, impulsivity, arguing, and rule breaking) make up 3% to 5% of the students in public school classrooms, and "are some of the most difficult students to manage in an educational setting" (p. 67).

Kazdin defined conduct disorder as "a *pattern* of antisocial behavior, when there is *significant impairment* in everyday functioning at home or school, or when the behaviors are regarded as unmanageable by significant others" (1995, p. 1). Kazdin further noted that antisocial behaviour is much more likely to be evident than the more serious clinical condition of conduct disorder and will be present in both clinically referred youths as well as "in varying degrees in most children over the course of normal development" (1995, p. 1).

Many antisocial behaviours, defined as behaviours that reflect social rule violations, acts against others, or both (e.g., acts like fighting, lying and other behaviours whether or not they are necessarily severe), emerge over the course of normal development, with several studies indicating surprisingly high prevalence rates for behaviours among samples of normal children and adolescents (declining over time)

(Kazdin, 1995). Children exhibiting antisocial behaviours are therefore likely to be present in every classroom and may represent a management challenge to nearly every teacher.

A program of continuing research by Wheldall and his associates has also addressed this issue since the 1980s. In a random sample of 198 primary teachers from within one representative local education authority in the UK, Wheldall and Merrett (1988a) found that, on average, teachers perceived 16% of the students in their classes as being behaviourally troublesome. Similar findings were reported in a study by Wheldall and Beaman (1994) which surveyed a representative sample of 161 teachers of primary aged students in New South Wales, Australia. Teachers typically reported that they found 15% of students in their classes to be behaviourally troublesome.

In a nursery school study in the UK following up the earlier work by Wheldall and Merrett (1988a), Merrett and Taylor (1994) found that 15% of 3 to 5 year olds gave their teachers "cause for concern" (p. 290) in terms of their behaviour. Stephenson, Linfoot, and Martin (2000) also explored the behaviours of concern to teachers in the early years of school in western Sydney, Australia. Their study of 130 teachers of Kindergarten to Year 2 students (5-8 year olds) found additional management strategies were considered necessary for 5% of male students and 2% of female students.

In a recent study involving 144 teachers from 10 Hong Kong primary schools, and using a modified version of the questionnaire used by Wheldall and Merrett (1988a), Leung and Ho (2001), also found 15% of the class to be behaviourally troublesome to teachers. In a parallel study involving 187 teachers from 14 Hong Kong *secondary* schools, Ho and Leung (2002) found 15% of the class (again) was behaviourally troublesome.

Houghton et al. (1988) similarly reported the perceptions of a random sample of 251 British secondary teachers, finding that a higher average figure, of 20% of students

in the class, were considered as behaviourally troublesome. An unpublished study of 86 secondary teachers in Western Australia (Nicholls et al., 1991) found that teachers, on average, indicated 13% of the class to be behaviourally troublesome, a somewhat lower figure. But, in an unpublished study including 212 teachers from five high schools in a densely populated inner suburban area of Sydney, Australia, carried out by Crawford (1993), teachers reported that they considered that 31% of the class was troublesome.

Oswald (1995) showed a progressive rise in the percentage of students who were considered to have failed to respond to discipline strategies in a large South Australian study dealing with the number of difficult primary children by school year. Comprising 6% of the sample at Reception (or Kindergarten) this figure rose appreciably and steadily (with the exception of Year 6 when a small decline from the figures for Year 5 was evident) to 16% in Year 7. Consistent gender differences, with boys being identified much more frequently as being difficult to manage, were also evident in this study, an issue to be revisited later.

Arbuckle and Little (2004) similarly reported gender differences and increased incidence in behaviour management challenges as students progressed from primary to secondary schooling in their Australian study. They found that 18.2% of male students and 7.25% of female students were considered by their teachers as requiring additional management support for disruptive behaviour. Moreover, the incidence of disruptive behaviour increased from primary school to lower secondary school, particularly in the case of boys (Arbuckle & Little). The rise in the number of difficult to manage students with increasing age (and the preponderance of boys being troublesome) demonstrated by Oswald (1995) and Arbuckle and Little (2004) supports the statement by Kazdin (1995), that "In general, antisocial behaviors are of the externalising type and are much more evident in boys and adolescents" (p. 10).

By way of introduction to their study relating student heart/pulse rate to teachers' ratings of disruptive behaviour, Maliphant, Watkins, and Davies (2003) stated that, "in very approximate terms, perhaps around 20% of children in any classroom might be rated as disruptive at any point in time" (p. 442). In an earlier study of 7 to 9 year old boys, Maliphant, Watson, and Daniels (1990), found that of the 50 students in their study, teachers considered 11 (22%) to be disruptive. Moreover, in a study of 1,227 elementary school children (aged 6-11 years) in the USA, Kamphaus, Huberty, Distefano, and Petosky (1997) found 20% of the sample was classified within two of seven clusters they identified, namely *Disruptive Behavior Disorder,* which accounted for 8% of the sample and a sub-clinical form of disruptive behaviour problems, which the researchers labelled *Mildly Disruptive,* which accounted for a further 12%, amounting to a total of 20% of the sample for these two clusters. [The other clusters identified were *Well Adapted* and *Average* (together accounting for 53% of the sample), *Learning Disorder* (17%), *Physical Complaints/Worry* (6%), and *Severe Psychopathology* (4%) (Kamphaus et al. (1997)].

The question of whether behaviour problems have become more prevalent and severe over time is a topic that generates strong responses from teachers. In the UK in 1986, information presented by the National Association of Schoolmasters/Union of Women Teachers in a pamphlet entitled, "Pupil Violence and Serious Disorder in Schools", claimed that on the basis of a sample of 3,910 teachers, "more than four out of five respondents said the problems of pupil violence and serious disruption had grown worse over the last decade" (NAS/UWT, 1986, p. 3). (It should be noted, however, that their questionnaire return rate was less than 5% and was thus likely to be highly biased.) Interestingly, Lawrence and Steed (1986) found that of 53 head teachers surveyed in their study, 60% believed that the onset of disruptive behaviour had changed significantly over recent years, and was occurring earlier (62%), although

media impact on teachers' attitudes at this time should be taken into account when considering such findings, the impact of which more generally was mentioned in Chapter 1.

The emotive issue of the rising prevalence and severity of behaviour problems over time was an issue Jacob raised in The Des English Memorial Lecture to The Australian Association of Special Education 2004 National Conference. Jacob, observing that a heated debate would surely be the result of raising the issue of whether the rate of misbehaviour in schools had actually *increased* over time, provided some very interesting detail of education department reports over a 20 year period. Jacob cited a 1984 Departmental Review entitled, "The Incidence and Management of Alienated, Disturbed and/or Disruptive Students in High and District High Schools" indicating:

> ...that there had been a substantial increase in the number of difficult students that secondary schools were dealing with and that the situation was now bordering on a crisis. (Jacob, 2005, p. 6)

Figures in the 1984 report indicated that an average of 3.8% of the secondary school population (with a variation of 1% to 12% between schools) presented with difficult or challenging behaviours.

Nearly 20 years on, Jacob chaired a working group dealing with the policy statement on students with challenging behaviour in Tasmania, Australia. Again, teachers considered the numbers of difficult students had "increased substantially" (Jacob, 2005, p. 6) in recent years. But in 2002, teachers estimated around the *same* proportion of students with extreme behaviour difficulties, around 2% to 4%, with similar wide ranging estimates from school to school, as had been found in 1984 (Jacob, 2005). As Jacob observed:

> In both cases, 20 years apart, teachers reported that there had been a significant increase, yet the estimated percentage of children with difficult behaviour was approximately the same. (2005, p. 6)

Clearly, there is a range of conflicting data available concerning the prevalence of student behaviour problems in schools. McGee et al. (1984) made the valuable point that the huge variation in prevalence rates probably "reflects differences in the ages of the children, differences in geographical location of the populations and varying techniques for identifying children with problems" (p. 251). Suffice to say, a teacher of a high school class could typically expect between three and six students with some level of behaviour problem to be present in his/her class at any one time.

2.4 Time Spent Managing Classroom Behaviour

Research has also explored teachers' perceptions of the *time* they spent managing the behaviour of students in their classes. Merrett and Wheldall (1984) found that 62% of their sample of 119 junior class teachers in the West Midlands in the UK considered that they spent "more time than they ought" (p. 89) on matters of order and control. In the same vein, Wheldall and Merrett (1988a), from a random sample of 198 primary teachers, found that 51% of primary school teachers considered that they, too, spent more time on matters of order and control than they ought. At the nursery school level (3-5 years), Merrett and Taylor (1994) found that 48% of the 29 teachers in their study expressed the same view. In an Australian sample of 161 primary teachers, Wheldall and Beaman (1994) confirmed the British findings, with 48% of teachers reporting that they spent more time than they thought they ought on managing classroom behaviour.

The results of parallel research into secondary teachers' views on time spent managing disruptive behaviour largely mirrors the primary teachers' responses. Houghton et al. (1988) found that 55% of secondary teachers considered that they spent

more time than they ought on matters of order and control. In a study of five high schools in a densely populated inner suburban area of Sydney, Australia, carried out by Crawford (1993), a high 76% of the 212 teachers included in the unpublished study reported that they spent more time than they ought on classroom management. In a more recent secondary school study in Victoria, Little (2005) also found a relatively high percentage of 68% of the 148 teachers in that study considered that they spent too much time on order and control in the classroom. In line with the generally large amounts of time spent on classroom management in the UK and in Australia cited above, Langdon (1997) reported that in a national survey of teachers in the USA, 58% of respondents reported that their lessons were regularly disrupted by student misbehaviour. One exception to the overall trend that a sizeable (more than half) proportion of teachers perceive classroom management as taking more of their time than it ought, was found on the tiny south Atlantic island of St Helena. Jones, Charlton, and Wilkin (1995) found that only 28% of first and middle school teachers considered that they spent too much time on classroom order and control.

The issue of how much time on order and control is *too* much time appears to be an arguable point. In a Victorian study in Australia, Hart, Wearing, and Conn (1995) argued that classroom behaviour management was not a major source of stress for teachers given that teachers, on average, spent 24.5% of their time managing behaviour. Irrespective of whether classroom management is a stressor for teachers or not (to be addressed later in this chapter), it remains to be said that losing nearly a quarter of available time on classroom management represents a very significant loss of instructional time. In their Hong Kong studies, Ho and Leung (Ho & Leung, 2002; Leung & Ho, 2001) found that only 24% of primary teachers used *less than* 10% of their time in class managing behaviour, leaving three quarters of teachers spending more than 10% of their time on classroom management. At the secondary level,

teachers reported spending less time managing classroom behaviour than their primary teacher colleagues (with 46% of secondary teachers spending less than 10% of their time), a finding contrary to the secondary studies referred to above (in terms of perceptions of time spent at least). Suffice to say, and as Leung and Ho (2001) pointed out:

> If we consider spending 20% or more time on classroom management had reached the level of concern, then 39.3% of the teachers we surveyed were confronted with discipline problems. If the criterion was lowered to 10% or more, then almost 76% of teachers could be considered spending excessive time on problems of order and control. (p. 230)

2.5 Gender Differences

Boys have long been the focus of attention when it comes to troublesome or disruptive behaviours. In the UK, Chazan and Jackson (1971, 1974) found that the boys in their sample presented more behaviour problems than the girls, particularly in relation to *restlessness* and *aggression.* This finding was supported by Hartley's (1979) study of gender differences in the classroom behaviour of UK infants, which found that the classroom behaviour of boys was considered less favourably than that of girls by teachers and pupils alike (Hartley, 1979). Confirming these findings, McGee et al. (1984) found that in New Zealand more boys than girls were identified at age 7 years as having a behaviour problem, a finding the authors indicated was in agreement with many other reports in the literature (McGee et al., 1984). Similarly, Stevenson, Richman, and Graham (1985) found from a representative sample of 535 subjects in the UK that at age 8 there were significantly more boys with behavioural deviance than girls.

The classroom behaviour literature also certainly supports such a finding. Merrett and Wheldall (1984) indicated that boys were generally regarded as being more troublesome and disruptive than girls by their sample of British junior school teachers. In the further study of British primary school teachers, Wheldall and Merrett (1988a) found that boys were regarded as the most troublesome, and the next most troublesome student in the class by three quarters of primary teachers. Similarly, Houghton et al. (1988) found that boys were selected 71% of the time by their British high school teachers as being the most behaviourally troublesome individual student in the class, and of 4.1 troublesome students in the class, on average, 2.7 were boys (70%). Similarly, Little (2005) found that of the 5.3 troublesome students in an average class in her study of 148 Australian secondary classes, 3.5 of these students were boys (66%) [see also Arbuckle and Little (2004) referred to in 2.3.] Also in Australia, Crawford (1993) found in his unpublished study of secondary teachers from inner suburban schools in Sydney, that a boy was cited as being the most troublesome student in the class in 84% of classes. For their broader Australian sample of primary teachers, which included both metropolitan and country teachers, Wheldall and Beaman (1994) found that 91% of primary teachers selected a boy as the most troublesome student in the class.

In the nursery study by Merrett and Taylor (1994), 76% of teachers chose a boy as the "most wearing" and 60% as the "next most wearing" child (p. 290). Moreover, in recent Hong Kong studies of primary (Leung & Ho, 2001) and secondary (Ho & Leung, 2002) teachers' perceptions of disruptive classroom behaviours styled after the Wheldall and Merrett studies, boys were found to be the most troublesome students by 93% of primary teachers and 71% of secondary teachers.

Nicholls et al. (1991) provided further evidence of the preponderance of boys as the most troublesome students when they found that 90% of Western Australian high

school teachers considered a boy to be the most troublesome student in the class, and when Fields (1986) requested 30 Australian teachers to select the most difficult student in the class for inclusion in his study on preventative management of behaviour problems, teachers selected a boy without exception (Fields, 1986). Similarly, in another large study on discipline in South Australian primary schools, Johnson, Oswald, and Adey (1993) reported that 80% of teachers considered that only a small minority of students were "difficult to deal with...[but]... students identified as difficult to manage were usually males" (Johnson et al., 1993, p. 301). Interestingly, Stuart (1994), in her Australian replication of Wickman's early research (to be described later), found no sex differences in the data, noting however, that "it was still a fact that more boys than girls are referred to classes for the emotionally disturbed" (p. 227).

Kann and Hanna (2000) (see also Kazdin, 1995; Webster–Stratton, 1996) note that there is a primary difference in the way boys and girls present symptoms of disruptive behaviour disorders and as a consequence are likely to come to the attention of the teacher. They summarised as follows:

> Externally directed behaviours generally associated with boys are acts that are harmful to others or the environment, such as stealing, lying, fighting, and destructiveness. Behaviours that are internally focused are more common in girls and include anxiety, shyness, withdrawal, hypersensitivity and physical complaints. (Kann & Hanna, 2000, p. 268)

In his South Australian study, Oswald (1995) provided a profile for difficult-to-manage children. He observed that they were predominantly male, more likely to be on a "school card" (indicating that the parent was on a government support benefit), were likely to have learning difficulties, had been identified as presenting with behaviour problems early on in their school career, and more likely to be attending a Priority

Project (disadvantaged) school. Oswald's observation of early identification supports the view of others (e.g., Kazdin, 1995) that the more severe behavioural difficulties (such as conduct disorder) are relatively stable over time. He also suggested that disruptive behaviour in classrooms is most often caused by one or two (occasionally more) male students in the class concerned (Oswald, 1995). On this issue at least, the evidence is clear: boys are consistently perceived as more behaviourally troublesome than girls at both primary and secondary levels. This issue is explored in more depth in Chapter 9 of this thesis.

2.6 Types of Classroom Behaviours, Their Severity, and Their Frequency

Turning to the types of classroom behaviours teachers find most problematic, Merrett and Wheldall (1984) found a consensus of opinion among teachers that the most common and the most troublesome classroom behaviours were relatively trivial, a finding that was subsequently to be frequently (and almost universally) replicated. These findings contrast sharply with the information presented by the National Association of Schoolmasters/Union of Women Teachers in the UK in 1986, referred to earlier. The debate about the severity of classroom behaviour in the UK at that time led to a parliamentary inquiry, chaired by Lord Elton. The ensuing Elton report (DES, 1989) confirmed Merrett and Wheldall's (1984) findings. Rather than identifying serious and threatening behaviours, Merrett and Wheldall (1984) identified *talking out of turn*, *disturbing others*, *non-attending*, and *disobedience* as the chief irritants of teachers in junior school classes (Merrett & Wheldall, 1984). Similarly, Wheldall and Merrett (1988a), from a random sample of 198 primary teachers (93% response rate), confirmed that *talking out of turn* (reported by 47% of teachers) and *hindering other children* (reported by 25% of teachers) were considered as the most troublesome behaviours in their classrooms. Very similar findings were obtained for the most

frequent troublesome behaviour and for the *most troublesome* behaviours of the particularly troublesome *individual* children (Wheldall & Merrett, 1988a).

In a similar study of a random sample of 251 secondary teachers, Houghton et al. (1988) found that *talking out of turn* was once again the most troublesome (50%) and the most frequent (49%) misbehaviour of the class as a whole, and of the most difficult individual student in the class (48%). McNamara (1985, 1987) also addressed the problem of inappropriate and disruptive behaviours as perceived by 200 British secondary school teachers using a variant of the original questionnaire employed by Merrett and Wheldall (1984). *Inappropriate talking* was rated as the most disruptive behaviour by most teachers, followed by *orienting behaviours* and then by *non-attending* and *disobeying*. Motor behaviours such as *out of seat* and *aggression* were rarely selected.

Studies carried out over the course of the last decade or so have largely come to very similar conclusions to those found in the series of studies conducted by Wheldall and colleagues in the UK. Conway et al. (1990) detailed the findings of their study involving teachers from 58 randomly selected New South Wales high schools representing all areas of the state. In the context of a study commissioned by the (then) New South Wales Department of School Education to assess the "Fair Discipline Code" introduced in 1989, the researchers found the majority of behaviour problems faced by teachers were minor in nature.

The primary problems faced by teachers were problems such as *distracting others*, *talking to others*, and *inattentiveness*. The main behaviour problems fell into only a few of the ten clusters of behaviours available, namely *noise* (including talking, noisy behaviour, calling out), *manners* (including inappropriate comments, interruptions, surly/cheeky/lack of manners) and *disinterest* (inattentive/distracted/ disinterest, not working/pace, not working/asleep/lateness/poor organisation). By

contrast, Conway et al. (1990) concluded that major discipline problems such as shouting, ignoring instructions, verbally abusing other students and unsafe behaviour were far less frequent and that the main discipline problems faced by teachers tended to stem from a lack of interest and inappropriate social behaviour, rather than aggression, abuse and defiance. As they stated, these findings were "contrary to popular opinion and political perception" (Conway et al., p. 55).

In South Australia, Johnson et al. (1993), in their study of South Australian primary teachers (N = 777), found that teachers ranked the most difficult student behaviours as *talking out of turn*, *idleness*, and *hindering others*. In a preschool and primary school study in Brisbane, Australia, Burke, Jarman, and Whitmore (1994) found the most frequently occurring disruptive behaviour to be verbal disruptions, defined as inappropriate student talk and interrupting the teacher or another student. They made the point that none of the most frequently occurring disruptive behaviours in the classroom were in any way physically threatening to the teacher or students in the classroom (Burke et al., 1994).

Continuing the work carried out in the UK, Wheldall and Beaman (1994) found very similar behaviours were considered troublesome in the Australian context where *talking out of turn* was reported by 49% of their sample of 161 New South Wales primary teachers as being the most troublesome behaviour of the class as a whole, followed by *hindering other children* (16%). When asked what was the most *frequent* troublesome behaviour of the class, teachers once again nominated *talking out of turn* (57%) and *hindering other children* (14%). Likewise, the most troublesome behaviour of the most troublesome student was *talking out of turn* (reported by 39% of teachers), followed by *hindering other children* (18%). These results replicated the findings of Merrett and Wheldall (1984) and Wheldall and Merrett (1988a) referred to earlier.

Even in Crawford's (1993) study of inner suburban Sydney schools, where 76% of teachers reported that they spent more time on matters of order and control than they ought (perhaps suggesting more entrenched behaviour problems in these classes), *talking out of turn* was still reported by 47% of teachers as the most troublesome behaviour of the class as a whole, followed equally by *disobedience*, *making unnecessary noise*, and *hindering other children*, all scoring 11% of teacher responses. Once again the most frequent misbehaviour was *talking out of turn* accounting for 57% of teacher responses, followed by *disobedience* (10%). In line with most other findings, the most troublesome behaviour of the most troublesome individual student was again *talking out of turn* (46%), followed by *hindering other children* (14%).

More recently in Australia, Little (2005) has explored teachers' perceptions of students' problem behaviour in secondary schools in Victoria. Seeking to replicate aspects of the UK secondary school study of Houghton et al. (1988) in an Australian context (as indeed does the current thesis), Little surveyed 148 secondary teachers using a modified version of the questionnaire used in the UK study. Little found that *talking out of turn* was both the *most troublesome* (35% of teacher responses) and the most *frequent* (37% of teacher responses) troublesome behaviour selected by secondary teachers out of the ten behaviours itemised on the questionnaire. *Idleness* followed *talking out of turn* as the most troublesome (22%) and the most frequent (21%) misbehaviour, followed by *hindering others* at 17% and 13% respectively for the most troublesome behaviour and most frequent troublesome behaviour. While *disobedience* (13%) was another behaviour category that attracted more than 10% of responses for the most troublesome behaviour, no other behaviour registered above 10% for most frequent troublesome behaviour. *Aggression*, which arguably causes some considerable concern for teachers, attracted only 2% of responses for most troublesome behaviour and less than 1% for most frequent troublesome behaviour. Clearly, it is the relatively

trivial but frequent misbehaviours that cause teachers the most concern in Australian secondary schools as well as in UK schools. These recent findings also support those found by Conway et al. (1990) in New South Wales more than a decade earlier.

In an interesting departure from the Houghton et al. (1988) study, Little (2005) asked teachers to consider the questions regarding the most troublesome and most frequent misbehaviours across years they taught. Analysed by year levels (Years 7 & 8; Years 9 & 10; and Years 11 & 12) some differences in the responses of teachers were apparent. While *talking out of turn* was the first choice of teachers of Year 7 and 8 (48%) and Year 9 and 10 (33%) students for the most troublesome behaviour, for teachers of Year 11 and 12 students the most troublesome behaviour was *idleness* (41%), followed by *talking out of turn* (23%). These data suggest that, in the senior years of secondary school, teachers were finding the lack of application on the part of their students more problematic than inappropriate classroom talk. Moreover, in a recent secondary school study by Infantino and Little (2005), *talking out of turn* behaviour (including *talking back*) was the only behaviour perceived by *both* students and teachers as being the most troublesome and most frequent classroom misbehaviour of concern.

The results of these recent Australian studies provide strong evidence that the nature of problematic behaviours in the classroom does not appear to be bound by particular cultural contexts or expectations. The replications of the British findings, while being somewhat tedious to report in the light of their similarity, may be useful when attempting to determine both effective and generic behavioural strategies for the management of classroom behaviour. If teachers, by and large, find the same behaviours problematic, the task of addressing the difficulties faced by them everyday becomes easier to address.

Even where classroom discipline is rarely a problem, *talking out of turn* is the behaviour that teachers consider as being the most troublesome to them. Jones et al. (1995) reported that only 28% of teachers of first and middle school classes on the small Atlantic island of St Helena considered they spent more time than they ought on matters of order and control (reported above). But 42% of teachers still nominated *talking out of turn* as being the most troublesome (and the most frequent) behaviour of the class as a whole, this same behaviour being the most disruptive and the most frequently occurring behaviour of particularly troublesome children in this study (Jones et al., 1995).

Further evidence of the dominance of *talking out of turn* as the principal irritant for teachers was found in a study conducted in a single-sex Jordanian secondary school. Haroun and O'Hanlon (1997) asked 28 male teachers about the kinds of student misbehaviours they had to deal with in the course of their classroom teaching. They were also asked which of the behaviours they nominated were the most frequently occurring and why they thought these behaviours occurred. Seeking the behaviours from the teachers themselves resulted in very similar types of behaviours as those found by Wheldall, Merrett, and Houghton in their studies (Houghton et al., 1988; Merrett & Whedall, 1984; Wheldall & Merrett, 1988a), as noted by Haroun and O'Hanlon. Teachers identified eight misbehaviours with the following frequency (listed here from most frequent to least frequent): *talking out of turn*; *inattention*; *lack of motivation*; *out of seat*; *inappropriate banter*; *non-verbal noise*; *asking to leave classroom*; and, *bullying*. Haroun and O'Hanlon drew attention to the fact that the first seven of these behaviours were similar in that they all "interrupt the planned teaching and learning process in classrooms" (1997, p. 34). This phenomenon is similar to that found by Wickman in his early study, that teachers identify those things as problematic in the classroom that are active disturbances, that is, those things that stop them from getting

on with what they want to be doing. In other words, teachers are troubled by those behaviours that are a problem "not so much related to learning outcomes as to teaching intentions" (Haroun & O'Hanlon, 1997, p. 34).

More recent studies in Hong Kong building on the work of Wheldall and Merrett have been completed at the primary and secondary schools levels (Ho & Leung, 2002; Leung & Ho, 2001). Using a modified version (using 15 behaviour categories rather than 10) of the questionnaire used in Wheldall and Merrett (1988a), 144 teachers from 10 primary schools in Hong Kong rated *talking out of turn* as the most disruptive (42% of teacher responses) and most frequent (54%), followed by *non-attentiveness* as the next most disruptive (14%) and the next most frequent (13%) behaviour. While *forgetfulness* attracted 10% of teacher responses for both most disruptive and most frequent misbehaviour, no other behaviours scored above 10%.

In a subsequent study, Ho and Leung (2002) found that disruptive behaviours in secondary school were a continuation of those found in primary school. *Talking out of turn* was again the most disruptive (30%) and most frequent misbehaviour (39%), followed by *non-attentiveness* for the next most disruptive and next most frequent (both at 19%). As can been seen by the relative percentages, however, the problem with *non-attentiveness* did increase in the secondary years (if not overtaking *talking out of turn*) as a problematic behaviour, a similar finding to that of Little (2005) in Australia. *Forgetfulness* was also quite common with 15% of teacher responses indicating that it was a frequent problem (as well as being considered as most disruptive by 11% of secondary teachers). Other more prominent behaviour problems at the secondary level were *idleness/slowness* (scoring nearly 10% for both most disruptive and most frequent), and verbal abuse which also scored nearly 10% for the most disruptive behaviour in secondary classes, with secondary teachers reporting a wider variety of behaviours than their primary school colleagues.

In the Hong Kong studies *talking out of turn* was perceived as the most disruptive and the most frequent behaviour by the majority of teachers at both primary and secondary school levels. As others had found, disruptiveness and the likelihood of occurrence of the behaviour (frequency) were "very much related" (Ho & Leung, 2002, p. 225). These findings add further weight to the considerable and accumulating evidence from around the world that behaviours that cause the most problems for teachers are of a mild, but constant, nature.

In summary, *talking out of turn* has been shown to be the consistent first choice of teachers in terms of what causes most disruption in the classroom. Irrespective of geographic location or level of schooling, *talking out of turn* is clearly the behaviour at the core of classroom disorder.

2.6.1 *Other Perspectives*

Some researchers have chosen to focus on the *seriousness* of student misbehaviour, rather than its troublesomeness or frequency in investigations of what causes difficulties for teachers. In contrast to the studies described thus far, Borg and Falzon (1989a, 1990) found that *stealing*, followed by *cruelty/bullying* and *rudeness/impertinence* were perceived as being the most serious behaviour problems faced by their sample of 844 primary teachers in Malta. Borg and Falzon (1989) investigated teachers' attitudes towards undesirable behaviours in 79 primary schools in Malta. Rather than being concerned with the frequency of problematic behaviour, Borg and Falzon were seeking to determine the seriousness of certain behaviours. [Seriousness of behaviour notwithstanding, the authors reiterated that they agreed "with Fields (1986) that the great majority of problem behaviours (especially in the primary classroom) are of a relatively mild nature" (Borg & Falzon, 1989a, p. 251)]. Teachers in their study were asked to rate each of the 16 selected problem behaviours in relation to

how serious a problem they would consider such a behaviour to be when it occurred in a boy and in a girl.

When the data were analysed overall (boys and girls combined), as indicated above, Borg and Falzon (1989) found that *stealing*, *cruelty/ bullying* and *rudeness/ impertinence* were perceived as being the three most serious behaviour problems faced by primary teachers in Malta, with *talkative* well down the list (ranked 14th in a list of 16 specified behaviours). When the data were analysed separately for boys and for girls, the same three behaviours (in the same order) were nominated as the most serious for a boy and for a girl. In addition, *talkative* was again ranked 14th from the list of 16 for both a girl and a boy in terms of seriousness.

In contrast to the findings of Borg and Falzon (1989), Poulou and Norwich (2000) reported that the 170 Greek primary school teachers in their study rated as most *serious* " 'work avoidance', 'depressive mood', 'negativism', 'school phobia' and 'lack of concentration'" (p. 184). While these more internalising behaviours caused the most concern to teachers, it was, however, "'lack of concentration', 'talking without permission', 'untidiness' and 'fidgeting'" (p. 181) that were the most frequent behaviour problems encountered by these teachers.

Following the earlier studies by Borg and Falzon (1989a, 1990), Borg (1998) investigated secondary school teachers' perceptions of the seriousness of students' undesirable behaviour. This study, involving 605 randomly selected teachers (302 female teachers and 303 male teachers) from 16 state secondary schools (all secondary schools in Malta are single sex schools), comprised roughly equal numbers of teachers drawn from girls' and boys' schools (47% from girls' schools, 53% from boys' schools). At the secondary level, Borg found *drug abuse*, *cruelty/bullying* (in common with the primary study) and *destroying* to be the top three ranked most serious behaviours. *Stealing*, which had ranked as the most serious behaviour problem in the

primary school study, was again ranked highly (fourth of out 49 behaviours), thereby still considered to be a problem at the secondary level. [Stuart (1994) had found similar findings in her Australian study (i.e., *stealing*, *destroying school property*, and *cruelty and bullying* being the three most serious or undesirable behaviours faced by NSW secondary teachers) to be discussed below.]

Borg (1998) also found significant grade level differences in perceived seriousness of behaviour, as well as a number of significant pupil sex and teacher sex differences. He argued that certain teacher, pupil and school characteristics acted as "moderators" of the perceived seriousness of problem behaviours, adding further evidence to the effect of certain variables on teacher perceptions of problematic behaviour found in the earlier primary school studies in Malta (Borg & Falzon, 1989a; Borg & Falzon, 1990). In contrast to the findings of other researchers at both the primary and secondary levels (e.g., Conway et al., 1990; Houghton et al., 1988; Little, 2005; Merrett & Wheldall, 1984; Wheldall & Merrett, 1988), *interrupting* and *talkative/tattling* (both of which could be considered as *talking out of turn* behaviours) were *not* considered serious for these Maltese teachers and were ranked a long way down the list in terms of perceived seriousness, ranking 37/49 and 43/49 respectively in this secondary school study (Borg, 1998).

Kyriacou and Roe (1988) had also found that in their study of 64 teachers in a single comprehensive secondary school in the UK, teachers' perceptions were dominated by "disruptive" (p. 171) behaviours, describing aggressive and antagonistic personality traits as being the behaviour problems teachers find most difficult to manage. They asked teachers to answer two questions with reference to a list of 23 behaviours, "As a teacher how serious, or undesirable, is this behaviour in any child in its *first* year (and *fifth* year) at this school?" (Kyriacou & Roe, 1988, p. 168). Moreover, in an Australian study seeking to determine if the findings of Wickman's

study (1928) were stable over time and culture, Stuart (1994) surveyed 105 New South Wales secondary school teachers. Utilising the 50 items from Wickman's list (1928), Stuart asked teachers how serious or undesirable each of the behaviours was in any Year 8 boy or girl. She found *stealing* (ranked second on Wickman's list), *destroying school property* (ranked 10th on Wickman's list) and *cruelty and bullying* (ranked eighth on Wickman's list) to be the three most serious or undesirable behaviours faced by teachers.

These findings may appear to be somewhat at odds with the general pattern of findings from the UK, Australian, and other studies in the area. The framing of the question focussing on *seriousness* should be borne in mind here, however. It could be argued that the terminology used by researchers such as Wheldall, Merrett, and Houghton in terms of signifying the degree or severity of the problem behaviour (*most troublesome)* (as opposed to frequency - *most frequent*) may well be interpreted differently by teachers than a request to consider what is the most *serious* problem behaviour of the student or class. Interestingly, Stuart commented that teachers' responses were similar regardless of whether they were asked to rate the behaviour of a particular student or to consider student behaviours more generally, a finding consistent with those found by Wheldall, Merrett, and Houghton in their studies where the troublesome behaviour of the most troublesome *individual* students was invariably the same as those nominated for the class as a whole (Houghton et al., 1988; Merrett & Wheldall, 1984; Wheldall & Merrett, 1988).

Stephenson et al. (2000) surveyed 130 K-2 teachers from 21 primary schools in Western Sydney, Australia about which child behaviours concerned them, as well as their needs for support in dealing with such behaviours. They found that the cluster of behaviours described as *distractibility or attention span a problem/does not listen* caused the most concern. This was followed, in equal proportions, by the behaviours

described as *physically aggressive with others/bullies*; *excessive demands for teacher's attention/does not work independently*; *does not remain on-task for a reasonable time*; and, *disrupts the activities of others.* Notwithstanding the relatively non-threatening nature of the behaviour they found to cause the most concern (*distractibility*), the concern with *physical aggression/bullying* is contrary to that found by Burke et al. (1994) in their preschool/primary school study but similar to that found by Borg and Falzon (1989, 1990) at the primary level.

Stephenson et al. (2000) did note, however, that their results may reflect some high levels of concern about relatively infrequent behaviour. Again, the manner in which a research question is framed may influence the findings. For instance, if one asks a teacher what might be the *serious* classroom behaviours with which they have to deal, the more dramatic even dangerous behaviours might be provided. The frequency of these types of behaviours, however, may be extremely low. In terms of the everyday impact on the teacher with regard to them "getting on with their job" it might be quite small. This is not to say that incidents of serious classroom behaviour are not a cause for concern. They clearly are. What is of concern here, however, is the behaviour that causes day-to-day disruption in the classroom.

The differences in findings in terms of the occurrence of low-level but irritating behaviours (e.g., *talking out of turn*) and the more defiant and severe behaviours as being the main problems faced by teachers may be explained in part by Fields' (1986) useful distinction between classroom behaviour problems and behaviour occurring outside the classroom. The more severe forms of misbehaviour, such as theft, vandalism, aggressive and defiant behaviours, are more likely to occur in corridors, lunchrooms and outside school buildings rather than within the classroom (Fields, 1986). But Stephenson et al. (2000) challenge this view as they found in their Australian study that teachers were concerned about serious behaviours like aggression

even though they specified that *classroom* (not playground) behaviours were the focus of their research.

Without seeking to diminish the impact of isolated and infrequent serious events in schools, it could be argued that it is the daily, high frequency, trivial classroom behaviours that are wearing for teachers over time. It is likely that it is these troublesome, but not serious behaviours, that are responsible for the stress related to classroom teaching, a phenomenon to which the focus is now turned.

2.7 Troublesome Classroom Behaviour as a Contributor to Teacher Stress

Apart from the obvious loss of instructional time in the classrooms of teachers who spend more time than they ought on problems of order and control (thereby delivering a negative impact on students and their learning), there is also the negative impact on teachers themselves. That the problems of concern to teachers are relatively trivial does not take away from the fact that the persistent and relentless irritation caused by student misbehaviour is ultimately exhausting for teachers and can indeed be very stressful.

Having to deal with troublesome classroom behaviour on a regular basis is commonly cited by teachers as a major cause of teacher stress (Borg & Falzon, 1989b; Boyle, Borg, Falzon, & Baglioni, 1995; Brenner, Sorbom, & Wallius, 1985; Kyriacou, 1987; Kyriacou, 2001). Since 1978 (Kyriacou & Sutcliffe, 1978), an extensive research literature has grown around this topic. While it would be outside the scope of this thesis to provide extensive coverage of the generic teacher stress literature (see, however, Kyriacou, 2001 for a recent review of this research), it is important to review briefly the findings to date linking teacher stress to troublesome classroom behaviour since this is one of the variables examined in the following chapters. More than a quarter of a century after he started exploring the area of teacher stress, and in his review of the state of teacher stress research, Kyriacou (2001) identified five directions for future

research in this area. One area was the impact of teacher–pupil interaction and classroom climate on teacher stress.

Kyriacou and Sutcliffe (1978) conducted a principal components analysis of the sources of stress in a sample of 257 teachers in 16 medium-sized, mixed comprehensive schools in England. The analysis indicated that the sources of stress may be described largely in terms of four orthogonal factors: *pupil misbehaviour*, *poor working conditions*, *time pressures*, and *poor school ethos* (Kyriacou & Sutcliffe, 1978). Their work suggested that sources of stress were multidimensional rather than unidimensional (Kyricou & Sutcliffe, 1978) and that student misbehaviour is a major stressor.

Wallius (1982, as cited in Brenner, et al., 1985) argued that investigations had shown that the dominant sources of occupational teacher stress appeared to be the quality of interpersonal relations, especially with students, but also relations with supervisors and colleagues. Abel and Sewell (1999) reported that stress from pupil misbehaviour, as well as time pressures, was significantly greater than stress from poor working conditions and poor staff relations for both rural and urban teachers, thereby reducing the emphasis on co-workers and colleagues as potential stressors for teachers. In a similar vein, Boyle et al. (1995) found that teacher stress was primarily a direct function of workload and student misbehaviour. In support, Greene, Abidin, and Kmetz (1997) argued that interactional problems with students had been shown to be "*the most significant and universal* of teaching stressors" (p. 240) (current author's emphasis). Moreover, Brenner et al. (1985) claimed that the daily interaction with students in the classroom, particularly the immediate or short-term teacher reactions to inappropriate student behaviour, to a large degree determined the level of strain experienced by the teacher. It would seem, then, that student behaviour and the interactions between teachers and students are one key to understanding and managing teacher stress.

The size of the problem has been variously estimated. Kyriacou and Sutcliffe (1978) found that about one-fifth or 20% of the 257 teachers in 16 mixed comprehensive schools in their UK study rated teaching as being either "very stressful" or "extremely stressful". In the following year, Kyriacou and Sutcliffe (1979) reported a slightly higher figure of 23.4%. But in elementary classes in Israel, Smilansky (1984) found a somewhat lower figure of 14%, while Capel (1987) stated that 19% of a sample of 78 teachers in 4 UK secondary schools showed medium levels of stress. Rather more dramatically, Borg and Falzon (1989) reported that 30% of Maltese primary school teachers rated their jobs as either very stressful or extremely stressful.

One of the difficulties in obtaining accurate estimates of the prevalence of elevated teacher stress is the diverse measures used to assess either job stressors or strain manifestations (Cooper, 1995). As Cooper has pointed out, most studies rely almost exclusively on self-report data. He has suggested that further work is needed to show a clear association between individual perceptions of stress and independent objective indicators (1995). Kyriacou (1987) pre-empted the measurement problem highlighted by Cooper, stating that the whole teacher stress research is plagued with problems of measurement. He does, however, suggest that self-report appears to be the best form of measurement (Kyriacou, 1987).

Kyriacou (1987) has highlighted the fact that studies worldwide have indicated that, compared to other professions, a large proportion of teachers report:

> one of the highest, and often *the highest*, levels of occupational stress .....despite this, there is no evidence generally of greater stress-related ill-health amongst school teachers compared with other professions. (Kyriacou, 1987, p. 148)

Kyriacou (1987) has suggested that the phenomenon described may be due to the fact that teachers may over-report stress, or as seems more likely to him, "the

holidays save them" (p. 148). There is also the important issue of the considerable variability in the manner in which teachers perceive and respond to various student behaviour and situations (Greene et al., 1997).

Huberman and Vandenburge (1999) have commented on the dangers of teacher-burnout from the students' perspective. Given that burnout is predictive of "minimalist" responses on the part of the teacher (lowered effort, involvement, and investment) they argued that the frequency with which teachers respond encouragingly to their students' accomplishments could be inversely related to their burnout level (Huberman & Vandenburge). According to them, the consequences of undue stress and resultant teacher burnout are likely to lead to teachers' reduced thoroughness of preparation and involvement in classroom activities, and being more critical of students. In turn, students are likely to change their perceptions of, and feeling towards, the teacher, as well as their behaviour in the classroom. "In the long run, the threat is consequential: pupils' disidentification with schooling" (Huberman & Vandenburge, p. 5). Kyriacou (1987) has argued that teacher stress may "significantly impair the working relationship a teacher has with his pupils and the quality of teaching and commitment he is able to display" (p. 147).

Clearly, teacher stress is an important factor in the complex interactions in the classroom and an issue about which educational administrators and researchers should be concerned. In the following chapters, relationships between teacher perceptions of troublesome classroom behaviour and (self) reports of the stress teachers experience as a result of their classroom teaching will be explored.

2.8 Conclusion

The perceived impact and severity of student misbehaviour has remained an emotive issue for teachers. Recently in New South Wales, and as mentioned in Chapter 1, reports by teachers to the Vinson Inquiry of "confronting behaviour, refusal to

cooperate, disobedience, swearing and low levels of abuse from a small number of students [making] the day-to-day business of teaching and learning distressing and difficult" were supported by the NSW Teachers' Federation President. Her response was to call for more placements in special educational programs for students whose behaviour disrupts others as "the first and immediate step" ("More Learning Time Lost Through Disruptive Behaviour", 2002, p. 7). As was the case in the UK in the mid 1980s, teacher union concerns have not necessarily reflected the data collected in classrooms. In the recent Australian study by Little (2005) reported above, very similar findings to those found by Merrett and Wheldall (1984), Houghton et al. (1988) and Wheldall and Merrett (1988a) (and others) have confirmed the relatively trivial nature of the most troublesome classroom behaviours.

In the Elton report on "Discipline in Schools" (DES, 1989), the official report of a formal public inquiry in part prompted by the claims of the NAS/UWT document of 1986, no evidence was found for increased incidence of disruption. As the deputy chair of the investigating committee made clear: "There simply does not exist the kind of historical database which would enable comparisons to be drawn with any confidence" (Bennett, 1992, p. 1). Rather the Committee was impressed by the weight of research evidence that most teachers were "concerned about the cumulative effects of disruption to their lessons caused by relatively trivial but persistent misbehaviour" (DES, 1989, p. 11).

It is clear from the literature reviewed above that while the evidence concerning estimates of the prevalence rates of behaviourally troublesome students is somewhat equivocal, there is consistent evidence to show that teachers perceive boys as more behaviourally troublesome than girls. There is also convincing and mounting evidence to suggest that the classroom misbehaviours that teachers find most troublesome are relatively innocuous but occur so frequently as to be a recurrent cause for concern.

There is a relatively small body of published Australian data directly addressing these issues (see Arbuckle and Little, 2004), particularly at the secondary school level (notwithstanding the recent contribution of Little, 2005), and very little directly relating to the classroom environment in New South Wales secondary schools (with Conway et al., 1990 and Stuart, 1994 being the only *published* data in relation to New South Wales). The aim of the present research is to redress this deficiency. Building on the earlier work of Houghton et al. (1988) in an Australian context will add to the body of information already in existence. In the following chapters of this thesis (Chapters 3-5), matters such as the types of classroom behaviours that teachers consider problematic, the prevalence of these behaviours, and the sex and behaviour of the most troublesome students in the class are investigated. Analyses of the effects (if any) of key variables such as teacher sex, teacher age and experience, as well as consideration of the age of the students and the subject they are taught are also explored. Some further analysis of key variables will add to our extant knowledge regarding the nature and impact of troublesome classroom behaviour, including the impact on teachers in terms of the occupational stress associated with dealing with student misbehaviour.

CHAPTER 3
TROUBLESOME CLASSROOM BEHAVIOUR IN NEW SOUTH WALES SECONDARY CLASSROOMS: PART I – BACKGROUND AND METHOD

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CHAPTER 3

TROUBLESOME CLASSROOM BEHAVIOUR

IN

NEW SOUTH WALES SECONDARY CLASSROOMS:

PART I – BACKGROUND AND METHOD

3.1 Overview

Given the relative paucity of Australian data regarding the prevalence and type of classroom behaviours that secondary teachers find most troublesome, the present study seeks to add to this particular body of evidence by extending the work of Houghton et al. (1988). In this and the following two chapters, perceptions of troublesome classroom behaviour and teacher stress in New South Wales secondary classrooms is explored. In the current chapter, the background and method employed in the study will be presented. In Chapter 4 the results of the study will be detailed, and the findings discussed in Chapter 5.

This chapter describes a study of 145 secondary teachers from metropolitan and country New South Wales. A questionnaire similar to that used by Houghton et al. (1988) in their research in the United Kingdom investigating troublesome classroom behaviour in secondary classrooms was employed. The questionnaire explored the extent and nature of troublesome classroom behaviour and whether teachers considered that they spent more time than they ought on problems of classroom order and control. In addition, a second and supplementary questionnaire explored the effect of having to manage troublesome classroom behaviour on teacher stress levels.

The study described in this chapter is largely an extension of Houghton et al. (1988) by including more in-depth analyses, relating some of the findings to others

within the same data set. Moreover, the supplementary questionnaire relating to teacher stress and troublesome classroom behaviour provides an additional dimension to the current program of research not covered in the UK studies.

3.2 Background

As detailed in Chapter 2, Wheldall and Merrett (1988a), in their work in the United Kingdom, found that primary school teachers perceived 16% of their class as being behaviourally troublesome, whereas Houghton et al. (1988) found that secondary teachers indicated a slightly higher proportion of the class as troublesome, at 20%. In a subsequent but unpublished Australian study by Nicholls et al. (1991), however, secondary teachers indicated that 13% of the class was behaviourally troublesome, while in another unpublished study, Crawford (1993) reported 31% of the class was considered troublesome in a study of inner city secondary teachers in Sydney.

Other researchers (e.g., Ho & Leung, 2002; Leung & Ho, 2001; McGee et al., 1984; Merrett & Taylor, 1994; Oswald, 1995; Stephenson et al., 2000; Whitmore & Bax, 1984) have found a range of incidence of behaviour problems in children, and while estimates vary, it is agreed that all teachers would expect to have at least a small percentage of students in their classes who present as more behaviourally troublesome than others. While there may be variations in the literature concerning the prevalence of classroom behaviour problems, there is much more consensus regarding the gender of the most troublesome students in the class. Boys are consistently nominated as being the most troublesome students (Chazan & Jackson, 1971, 1974; Fields, 1986; Hartley, 1979; Ho & Leung, 2002; Houghton et al., 1988; Kelly, 1988; Leung & Ho, 2001; McGee et al., 1984; Merrett & Taylor, 1994; Myhill; 2002; Oswald, 1995; Stuart, 1994; Wheldall & Beaman, 1994; Wheldall & Merrett, 1988a) and data from a large study carried out in South Australian primary schools (Johnson et al., 1993) confirmed that

while 80% of teachers reported that only a small minority of students was difficult to deal with, those who were more problematic were typically male.

The perceptions of teachers regarding the nature of the behaviours they find troublesome in the classroom appears to be another area of broad consensus. Rather than citing serious incidents of violence or aggression, teachers consistently nominate relatively trivial but persistent misbehaviour as being the main cause of disruption to their teaching (Conway et al., 1990; Department of Education & Science, 1989; Houghton et al., 1988; Johnson et al., 1993; Little, 2005; Merrett & Wheldall, 1984; Wheldall & Merrett, 1988a). Some exceptions to this do exist in the literature but may relate to the behaviour problems that exist in school settings generally, including the playground and corridors, not just the classroom. In the present study, teachers were concerned with the dynamics of the classroom, an environment over which they can exercise some control, particularly if they are trained to deal with classroom behaviour effectively.

In the context of the larger evaluation study outlined in Chapter 1, a group of secondary teachers provided data to establish the prevalence of classroom behaviour problems in secondary schools in New South Wales and the types of classroom behaviour they found particularly troublesome. In addition, a further aspect was investigated with a supplementary questionnaire on the stress levels of teachers having to manage student behaviour. Having to deal with troublesome classroom behaviour on a regular basis has commonly been cited by teachers as a major cause of teacher stress (Abel & Sewell, 1999; Boyle et al., 1995; Brenner et al., 1985; Kyriacou, 1987; Kyriacou, 2001; Kyricou & Sutcliffe, 1978).

Given that it is highly likely that all teachers will have to deal with troublesome students, it is important that we have evidence of the incidence and typology of classroom behaviour in schools. Data relating to New South Wales secondary

classrooms not only adds to the relatively sparse international literature in this area, but also provides information of interest at the local level. In the present study, the perceptions of secondary teachers in New South Wales classrooms in relation to classroom behaviour management are explored. Specifically, the following questions are posed:

1) What proportion of the class is considered troublesome by New South Wales secondary teachers?
2) What proportion of teachers consider that they spend more time than they ought on problems of classroom order and control?
3) Are boys or girls the most troublesome students in the class?
4) What are the most troublesome types of classroom behaviour? Are they different from the most frequent misbehaviours? What are the behaviours the most difficult students engage in?
5) Are there any gender differences in teacher perceptions of troublesome classroom behaviour? For example, do male teachers consider they spend more time than they ought on problems of order and control than their female counterparts, or vice versa?
6) Does the age of the teacher or the amount of teaching experience have an influence on the rate of reporting troublesome classroom behaviour?
7) Does subject taught or year taught influence the way teachers report troublesome classroom behaviours?
8) Do teachers who perceive themselves as spending too much time on problems of order and control in the classroom report a higher prevalence of troublesome behaviour to those teachers who do not consider classroom control to be an issue? Do they report different types of behaviour?

9) Does managing difficult classroom behaviour cause teachers to experience increased stress?

3.3 Method

3.3.1 *Participants*

The sample comprised 145 teachers from 13 schools from both metropolitan and country New South Wales. This is an incidental sample of teachers, comprising those who had volunteered to be involved in the evaluation study referred to in Chapter 1 within which the bulk of these data were collected and those who, while not participating in the study, had completed sample questionnaires sent to the school. As a consequence, this sample is not a representative sample and the caveats regarding a self-selecting population of teachers should be applied here. This is particularly the case given the subject matter of the study. It could be argued that only teachers confident in their ability as classroom managers would agree to participate in a study that involved the subject of classroom behaviour management and, that also involved for some, direct classroom observation (reported in Chapter 8).

While not being a representative sample, the data can nevertheless provide us with some valuable insights into the situation in New South Wales secondary schools as there is a good cross-section of the population represented in this sample of 145. In terms of the data collected in the Sydney metropolitan area, for example, data are included from the metropolitan north region, metropolitan west region, and metropolitan south-west regions. These areas represent a diversity of populations in terms of socio-economic status.

3.3.2 *Teacher Characteristics*

3.3.2.1 *Teacher Gender*

In terms of teacher characteristics or demographics, male teachers comprised 53% ($n = 77$) of the sample, resulting in a roughly equal number of male and female

(n = 67) teachers. Since teacher gender functions as a key variable in this study, the comparability of the two gender groups in terms of other key demographic characteristics likely to influence the variables under study will be examined further.

3.3.2.2 *Teacher Age*

Close to half of the teachers in the study were aged 30 to 39 years (48%). Twenty two percent (22%) of teachers were under 30 years of age; a further 23% were aged between 40 and 49 years; and, 8% were aged between 50 and 59 years.

3.3.2.3 *Teacher Experience*

The vast majority of teachers (64%) had over ten years' teaching experience; 20% had between five and ten years' experience; 9% had between one and four years' experience; and, 7% were in the first year of teaching.

3.3.2.4 *Subject Taught (Faculty)*

Subjects taught were divided into six faculty areas: English, Mathematics, Science, Social Science (which included History, Geography, Commerce, Economics), Art/Design (which included Art, Industrial Arts, Technical Drawing, Home Economics, Technologies and Applied Studies) and Other (which included Language Classes, Library, Music, Careers, Physical Education/Health, Special Education and Resource Classes). Subjects included as "Other" were low frequency subjects in this particular sample. Subject categorisation as Other is in no way intended to diminish the status of the individual subjects within it, merely their infrequency within this data set. Teachers of English accounted for 16% of the sample; 14% taught Mathematics; 13% taught Science; another 13% taught Social Science; 21% taught Art/Design; and, 22% taught subjects classified as Other.

3.3.2.5 *Year Taught (Age of Students)*

The year or grade taught by teachers (for the purposes of the questionnaire completion) ranged from Years 7 to 12, with about half (45%) of the teachers teaching Year 8 (23%) and Year 9 (22%) students. Nineteen per cent (19%) of teachers taught Year 10 students; 16% taught Year 7 students; a further 13% taught Year 11 students; and, 6% of teachers taught Year 12 students.

3.3.2.6 *Class Size*

The average class size in this sample, based on 139 responses, was 21.1 students ($SD = 5.85$) of whom 11.7 ($SD = 5.15$) were boys and 9.5 ($SD = 4.82$) were girls. Three classes included fewer than 10 students while the largest class comprised 32 students.

3.3.2.7 *The Effect of Teacher Gender*

Teacher gender is an important variable in later analyses and hence any possible gender effects in the demographic variables of teacher age, teacher experience, subject taught, and year taught have been explored. No statistically significant differences were evident for male and female respondents in terms of teacher age, χ^2 (3, $N = 143$) = 3.495, $p > .01$, with roughly equal numbers of male and female teachers in the under 30 and 30-39 years groups. In both the 40-49 years group and the 50-59 years group there were, however, fewer female than male teachers. (*Note.* 1% alpha level has been applied throughout – see section 3.3.5.)

Male and female teachers were also similar in terms of years of teaching experience. There were no statistically significant differences for teacher experience in terms of gender, χ^2 (3, $N = 128$) = 1.530, $p > .01$), with roughly equal numbers of male and female teachers in their first year of teaching (five females and four males); seven males and five females with one to four years' experience; 14 females and 11 males

with five to ten years' experience; and, 46 males and 36 females with over ten years' experience (information was missing on 17 cases).

Similarly, for year taught no statistically significant differences were apparent between male and female teachers, χ^2 (5, N = 140) = 0.991, $p > .01$, with 14 males and 9 females teaching Year 7; 18 males and 15 females teaching Year 8; 16 females and 15 males teaching Year 9; equal numbers of females and males teaching Year 10 (13); 10 males and 9 females teaching Year 11; and, an equal (small) number of male and females teaching Year 12 (4).

For subject taught, however, there was a highly significant difference between male and female respondents, χ^2 (5, N = 140) = 29.086, $p < .001$. Teacher gender is clearly confounded with subject taught. In the case of Mathematics, Science, and Other, there were large discrepancies between the proportions of male and female teachers, unlike English, for example, where roughly equal proportions of teachers were male and female. There were many more males teaching Mathematics and Science than females in this sample, and teachers of the subjects classified as "Other" were predominantly female.

Consequently, we may conclude that the groups of male and female teachers were broadly comparable in terms of the major demographics except for the confounding of gender and subject taught as detailed above. This should be borne in mind in any subsequent interpretation of any findings based on teacher gender differences. (Data for all demographic variables analysed according to the gender of the respondent are presented in full in Appendix A.)

3.3.3 *Instruments*

3.3.3.1 *Classroom Behaviour Problems Checklist and Questionnaire*

The primary questionnaire instrument for the present study was the *Classroom Behaviour Problems Checklist and Questionnaire* (see Appendix B). A slightly

modified version of Wheldall and Merrett's (1988a) *Classroom Behaviour Problems Checklist and Questionnaire* was used to ascertain, among other things, what teachers identify as the most troublesome and the most frequent misbehaviours occurring in their classroom from a list of ten behaviour categories.

Wheldall and Merrett devised the *Classroom Behaviour Problems Checklist and Questionnaire* as part of their program of behaviourally orientated research into classroom management carried out in the 1980s. Their particular emphasis was influenced by the fact that much of the previous research had primarily been concerned with identifying the *incidence* of behaviour problems rather than its typology (Merrett & Wheldall, 1987; Schwieso & Hastings, 1987). They further determined that there was a need to define and describe what troublesome behaviour actually was in objective terms. They concluded that while ever "vague, catch-all phrases" (Merrett & Wheldall, 1987, p. 40) were used to describe the student behaviour that teachers find troublesome, variations in the reporting of the incidence of behaviour problems would continue to be found (Merrett & Wheldall, 1987; Schwieso & Hastings, 1987).

To this end, Merrett and Wheldall set about devising and trialing a suitable questionnaire instrument that identified groups of behaviour that they based initially on the categories of behaviour used by Becker, Madsen, Arnold, and Thomas (1967). In the first study, conducted in 1984, Merrett and Wheldall attempted to determine what teachers working in junior school classrooms believed to be the most frequent and most troublesome disruptive behaviours displayed by students (Merrett & Wheldall, 1984). Further studies involving both primary (Wheldall & Merrett, 1988) and secondary teachers (Houghton et al., 1988) were conducted. By means of the questionnaire, teachers were asked to identify the most troublesome and most frequent troublesome behaviours they encountered from a list of ten categories of behaviour. In response to teacher feedback in a pilot study, the list was identical for both primary and secondary

teachers, with the exception of one category. For primary teachers, the first category (Category A) was "eating", whereas in the secondary version it was changed to "verbal abuse", which was clearly distinguished from Category D ("talking out of turn") (Houghton et al., 1988). The categories and examples of each category are presented in Table 3.1.

Table 3.1

Categories of Behaviour in the Classroom Behaviours Problems Checklist and Questionnaire

Letter	Category	Some examples of category
A	Verbal abuse	Making offensive or insulting remarks to staff or other pupils likely to lead to confrontation (as distinct from D below)
B	Making unnecessary noise (non-verbal)	Banging objects/doors, scraping chairs, moving clumsily
C	Disobedience	Refusing/failing to carry out instructions or to keep class or school rules
D	Talking out of turn	Calling out, making remarks, interrupting and distracting others by talking/chattering
E	Idleness/slowness	Slow to begin or finish work, small amount of work completed
F	Unpunctuality	Late to school/lessons, late in from recess or lunch break
G	Hindering other children	Distracting others from their work, interfering with their equipment or materials
H	Physical aggression	Poking, pushing, striking others, throwing things
I	Untidiness	In appearance, in written work, in classroom, in desks
J	Out of seat	Getting out of seat without permission, wandering around

Teachers were asked to indicate, in general terms, whether they thought they spent more time than they ought on problems of order and control in their classrooms (Question 1 of the questionnaire). Other information (apart from teacher details regarding sex and age, year of class, and subject taught) gained from this questionnaire included class size and the number of students in the class the teacher considered troublesome. Teachers were asked to nominate from the list of ten behaviours in Table 3.1 the *most troublesome* and the *next most troublesome* behaviour they found with the class as a whole (Question 2 of the questionnaire). They were then asked to nominate the *most frequent* and *next most frequent* troublesome behaviour they found with the class as a whole (Question 3 of the questionnaire). Finally, teachers were asked to nominate the sex of the most troublesome student and the second most troublesome student in the class and the most troublesome and next most troublesome behaviours for each of these individual students (Question 4 of the questionnaire).

For secondary teachers in the Houghton et al. (1988) study, the teacher chose one of his/her most frequently taught classes. In the present study, while this was the case for about half of the teachers involved, where teachers had agreed to be involved in the observational study as well (reported in Chapter 8) the class selected for observation was also the class the teacher had in mind when completing the questionnaire. (This made the linking of observational and teacher report data possible. The results of these analyses are reported in Chapter 11.)

3.3.3.2 *The Teacher Stress and Classroom Teaching Questionnaire*

The second questionnaire completed by teachers was the *Teacher Stress and Classroom Teaching Questionnaire.* This questionnaire (see Appendix C), adapted and drawn from a much larger scale devised by Kyriacou and Sutcliffe (1978) for their research investigating the sources and prevalence of teacher stress, was used to ascertain the sources and prevalence of teacher stress associated with managing student

behaviour in their classroom teaching. Fifteen possible stress factors were listed and teachers were asked to rate the level of stress as *none*, *mild*, *moderate*, *much* or *extreme* for each factor. Items focussed on aspects of students' classroom behaviour, such as the stress caused by "individual pupils who continually misbehave" and teacher responses to this behaviour, such as "constant monitoring of pupils' behaviour". The method of scoring involved attributing a value of one for *none* through to five for *extreme*, the total score obtained by adding the scores for each factor to obtain a total stress score. The lowest possible score was, therefore, 15 and the highest possible score was 75 for an individual teacher. The items included in the questionnaire are presented below in Table 3.2. Teachers were asked, "As a teacher, how great a source of stress are these factors to you?".

Table 3.2

Teacher Stress Factors in the Teacher Stress and Classroom Teaching Questionnaire

1. poorly motivated pupils
2. maintaining class discipline
3. inadequate disciplinary sanctions available
4. individual pupils who continually misbehave
5. generally high noise level
6. pupils' non-acceptance of teacher authority
7. pupils who show a lack of interest
8. punishing pupils
9. constant monitoring of pupils' behaviour
10. noisy pupils
11. trying to uphold /maintain values and standards
12. pupils' general misbehaviour
13. pupils' poor attitudes to work
14. inadequate disciplinary policy of school
15. pupils' impolite behaviour or cheek

In order to determine the reliability of the shortened, modified form of Kyriacou and Sutcliffe's original (larger and more encompassing) measure of teacher stress, individual item scores were correlated with total score, yielding correlation coefficients ranging between 0.5 and 0.7 ($p < .01$). Cronbach's alpha (α) was also calculated which is an overall reliability coefficient based on the 15 individual items.

According to Aron and Aron (1999):

> Cronbach's alpha is the most widely used measure of reliability. It can be thought of as describing how much each item is associated with

each other item. It describes the internal consistency of the test, the extent to which high responses go with highs and lows with lows over all the test items. In general, in psychology, a test should have a reliability (as measured by Cronbach's alpha) of at least .7 and preferably closer to .9 to be considered useful. (p. 527)

The resulting value of Cronbach's α 0.88 ($p < .01$) for this test suggests that the modified scale used in this study is a highly reliable measure with excellent internal consistency.

3.3.4 *Procedure*

Secondary school principals across New South Wales were approached initially by mail, in the context of the broader evaluation study described in Chapter 1, with subsequent telephone follow-up, or directly in the case of the supplementary data also included in the sample. Samples of the questionnaires were sent to all schools. Principals agreeing to participate in the study were sent sufficient questionnaires for their staff to complete with information regarding the study. The choice to be involved was left to individual teachers. Teachers involved in the questionnaire phase only completed the questionnaires anonymously. Where principals and their staff had agreed to be involved in both the questionnaire and observational phase, the questionnaire data was coded to be linked to the observational data making possible analyses relating the teacher report data to the observational data (see Chapter 11). No teacher names were recorded.

3.3.5 *Data Analysis*

Descriptive statistics providing means and standard deviations for the number (and percentage) of troublesome students in the class were computed, detailing the prevalence of troublesome behaviour in New South Wales secondary schools. The most troublesome and most frequent types of classroom misbehaviours, as well as the sex

(and behaviour) of the most troublesome students in the class are detailed using percentages. Descriptive statistics provided the group mean and standard deviation of the teacher stress score. As already noted, teacher gender functions as a key variable throughout this study. The results were also analysed according to academic faculty (subject taught) and the age of the students (year taught). Comparisons are drawn with the results from the parallel study completed in the United Kingdom by Houghton et al. (1988). In addition, the demographic variables of teacher age and teacher experience were also utilised to explore possible differences in the way teachers responded as a result of these factors.

In relation to the statistical analysis, and given that multiple tests were planned and conducted, the more conservative significance level of 1% ($p < .01$) has been adopted throughout. The aim of this is to reduce the risk of Type I error (Borg & Gall, 1989, p. 549) or "family-wise error rate" (Howell, 1997, p. 362). Analyses using chi-square (for categorical data), *t*-tests, analysis of variance, and Pearson product-moment correlations (for continuous data) were conducted where appropriate. Where dichotomous variables (both true and artificial) have been correlated with continuous variables, special product-moment correlations (Ferguson, 1981) were used – see below under *Key Variables.*

Where *t*-tests were utilised, some one-tailed tests were used where there was a theoretical or clear empirical reason for doing so (e.g., the relevant research literature strongly suggested that differences or effects would be in one direction only). Where one-tailed tests have been performed, this is specified immediately prior to the reporting of the test in Chapter 4. In all other instances two-tailed tests were carried out in order to be more conservative (Borg & Gall, 1989, p. 550).

Where chi-square was employed and cell numbers were critically low, some categories were combined. This was the case in respect of year taught where Years 11

and 12 were combined and for teacher experience where teachers in their first year of teaching and teachers with less than five years' experience were combined for the purposes of chi-square analysis.

Effect sizes using Cohen's *d* were calculated where means were compared in order to provide information about the practical importance of the findings (Howell, 1997; Thompson, 1999). The effect size is the difference between two population means, divided by the population standard deviation; in essence, being the extent to which the two populations do not overlap (Aron & Aron, 1994). Carnine (1997) has urged researchers to provide research results that are "trustworthy, useable and accessible" (p. 519). Thompson (1999) has argued that the reporting of effect sizes (as a supplement to tests of statistical significance) is one way of achieving this. Following Cohen's convention, effect sizes were regarded as small (.20), medium (.50) or large (.80) (Aron & Aron, 1999; Howell, 1997). An effect size of 1.0 indicates an increase (or in this current case, a difference) of one standard deviation (Hattie, 1992). Another way of looking at the relative magnitude of effect sizes is that a small effect represents 85% overlap between two means, a medium effect represents 67% overlap, and a large effect represents only 53% overlap (Aron & Aron, 1999, pp. 229-230). Clearly, the greater the magnitude of difference between two groups, the less overlap exists in the distribution of scores of each group, and hence, the greater the effect size.

Aron and Aron (1999), in explaining the usefulness of effect size conventions, stated that they "provide a standard for deciding on the importance of the effect of a study in relation to what is typical in psychology" (p. 230). They also note, however, that psychologists disagree about the relative importance of statistical significance versus effect size when interpreting experimental results, given that "theoretically orientated psychologists seem to emphasise significance, whereas applied researchers emphasize effect size" (Aron & Aron, 1999, p. 249). The reporting of effect sizes

provides an opportunity for researchers to demonstrate the "practical importance" (Thompson, 1999, p. 335) of research findings and to eliminate the risk of placing undue importance on findings that may possibly be a function of nothing more than sample size (Thompson, 1999). Both approaches have been utilised in this study, and throughout the thesis.

3.3.6 *Key Variables*

Three key variables were utilised for the purposes of subsequent analysis.

3.3.6.1 *Teacher Gender*

As noted above, teacher gender was used as a key variable to determine whether any differences existed in the data between male and female teachers. The comparability of the groups of male and female teachers in terms of the major demographics was demonstrated above (under *Participants*).

3.3.6.2 *Response to Question 1*

The second key variable utilised was the dichotomous variable of the response to Question 1 of the *Classroom Behaviour Problems Checklist and Questionnaire* ("In general terms, do you think that you spend more time on problems of order and control than you ought?"). The data were analysed according to whether there were differences in the responses of teachers who answered "yes" to this question as distinct from those teachers who answered "no".

3.3.6.3 *Low Incidence Versus Moderate-High Incidence Troublesome Behaviour*

The third key variable relates to an artificial dichotomous variable constructed for the purpose of determining whether there were any measurable variations in the reporting of teachers who indicated a higher percentage of troublesome students in their classes. A dichotomous variable was created from the continuous variable of number of students in the class considered troublesome based on the percentage of the class

considered troublesome. The percentage of the class the teacher found troublesome was calculated by expressing the number of students considered troublesome as a percentage of the total number of students in the class. The average percentage of the class considered troublesome was then expressed as a categorical variable, being either below 10% of the class considered troublesome (classified as low incidence) or 10% or more of the class considered troublesome (classified as moderate-high incidence). This variable was utilised to distinguish those teachers who considered they experienced a low incidence of classroom behaviour problems from those who considered they had more difficulties in this area. In reality, the low incidence criterion would indicate that, in a class of 21 students, two or fewer students would be considered by the teacher as being troublesome.

3.3.6.4 *Further Detail on Data Analysis Using Key Variables*

Where dichotomous variables (such as teacher sex or the response – yes/no – to Question 1 of the questionnaire) were correlated with continuous data, such as the number of students in the class who were considered to be behaviourally troublesome, a point-biserial correlation (r_{pbi}) was utilised. This is where one of the variables is "a true dichotomy, e.g. male-female, alive-dead, etc." (Burroughs, 1975, p. 265). Where the artificial dichotomous variable of low incidence/moderate-high incidence troublesome classroom behaviour was correlated with continuous data, a biserial correlation (r_b) was used in the analysis. Biserial correlation is used "when one of the variables is continuous and the second is basically continuous but has been split into two categories (dichotomized)" (Burroughs, 1975, p. 265).

3.3.7 *Methodological Considerations*

Certain methodological problems were considered, and data analysis completed to resolve these issues, where possible. Specifically, it is important to demonstrate the extent to which key variables may be confounded with other variables. This is a

problem with all research of this nature where it is not possible to manipulate experimentally and systematically the key variables.

As teacher gender, the response to Question 1, and whether or not teachers report a low or moderate-high incidence of troublesome students in the class are important variables, analyses of any confounding effects across these three key variables and with other teacher demographic variables such as teacher age, teacher experience, subject taught and year taught have also been undertaken. In this way, the issue of whether the groups established by the manipulation of key variables may be regarded as comparable for the purposes of subsequent analysis can be determined. These analyses immediately precede the relevant results in Chapter 4.

3.3.8 *A Note Regarding the Reporting of Data*

Houghton et al. (1988) cite rounded percentages that exclude missing data in relation to Questions 2, 3, and 4 of the *Classroom Behaviour Problems Checklist and Questionnaire*. The same convention has been adopted in the present study. In addition, and as per the approach adopted by Houghton et al. (1988), not all parts of every question were included in the reporting of the results and discussion. In relation to Question 2, 3 and 4 of the *Classroom Behaviour Problems Checklist and Questionnaire*, Houghton et al. only reported data based on respondents' first choices, "in order to reduce confusion and to reduce the length of this report" (Houghton et al., p. 301). In the present study, while some of the respondents' second choices have been included in the analysis, specifically Question 2b (next most troublesome behaviour), Question 3b (next most frequent troublesome behaviour), and Question 4d (the sex of the second most troublesome student), the level of reporting and analysis is much reduced, and some details are relegated to the Appendices.

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TROUBLESOME CLASSROOM BEHAVIOUR IN NEW SOUTH WALES SECONDARY CLASSROOMS: PART II – RESULTS

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CHAPTER 4

TROUBLESOME CLASSROOM BEHAVIOUR

IN

NEW SOUTH WALES SECONDARY CLASSROOMS:

PART II – RESULTS

4.1 Overview

In the following chapter the results of the study into troublesome classroom behaviour in secondary classrooms in New South Wales described in Chapter 3 are presented. This includes the data from the *Classroom Behaviour Problems Checklist and Questionnaire* and *Teacher Stress and Classroom Teaching Questionnaire.* This study has extended the work of Houghton et al. (1988) in the United Kingdom in an Australian context. Teachers were asked to nominate the number of troublesome students they had in their classes, and whether they considered that they spent more time than they thought they should on problems of order and control in the classroom. They were also asked to nominate the most troublesome classroom behaviours of the class as a whole from a list of ten behaviour categories (indicating severity). In order to distinguish the behaviours teachers considered to be the most problematic from those that may occur at a high rate, teachers were asked to nominate the most frequent troublesome behaviours of the class as a whole from the same list of ten behaviours. Teachers were also asked to nominate the sex of the most (and next most) troublesome student. The most troublesome behaviour of the most troublesome students was elicited

to ascertain how the behaviour of these most difficult students varied (if at all) from the behaviour of the class as a whole.

Aspects of the work of Houghton et al. (1988) have been extended in this study. For example, an exploration of whether there are any measurable variations in the perceptions of teachers who consider they spend more time than they think they ought on problems of order and control (for instance, in terms of larger numbers of students reported as troublesome) compared to teachers who do not, has been undertaken. In addition, the emotional impact of having to deal with troublesome classroom behaviour has been explored by assessing the stress that teachers associate with managing student behaviour.

4.2 Results for *Classroom Behaviour Problems Checklist and Questionnaire*

The presentation of the results of this study will not necessarily follow the order in which the questions were presented on the questionnaire (see Appendix B). Rather the reporting of results will follow the broad thematic issues raised in Chapter 2 as follows:

i. prevalence of behaviourally troublesome students — see section 4.2.1 and 4.2.2 which relate to Question 1 of the Questionnaire (which also operates as a key variable in this study), and the number of troublesome students in the class. Gender differences in terms of troublesome students are reported in 4.2.2 and 4.2.3 (see below).

ii. gender differences — see section 4.2.2 (see above) and 4.2.3, which relates to Question 4a and Question 4d and details the sex of the most, and the next most troublesome student;

iii. types of classroom behaviours, their severity, and their frequency — see sections 4.2.4 relating to Question 2a, 4.2.5 relating to Question 2b, 4.2.6

relating to Question 3a, 4.2.7 relating to Question 3b, and 4.2.8 relating to Question 4b.

The questions referred to in this chapter are not to be confused with the research questions as presented in Chapter 3. The specific research questions will be revisited in the Discussion in the following chapter (Chapter 5).

4.2.1 *Do Teachers Spend More Time Than They Think They Ought On Problems of Order and Control in the Classroom (Question 1)?*

In response to Question 1 of the *Classroom Behaviour Problems Checklist and Questionnaire*, "In general terms, do you think that you spend more time on problems of order and control than you ought?", 76 out of 143 (53%) teachers responding to this question answered "yes". Of those indicating their gender (N = 142), 57% of male teachers responded affirmatively to Question 1 compared with 48% of female teachers. A Chi-square analysis demonstrated that the difference in rate of responding affirmatively was not statistically significant, $\chi^2(1, N = 142) = 1.301, p > .01$.

Given that this question is a key variable in the present study it is important to establish whether there were any demographic differences between those teachers who answered "yes" to Question 1, as opposed to those who answered "no" in terms of teacher age, teacher experience, year taught and subject taught. (Full details of all the demographic variables are presented in Appendix D.) Chi-square analyses indicated that there were no statistically significant differences between teachers who responded "yes" or "no" to Question 1 on the basis of their age, χ^2 (3, N = 143) = 6.619, p > .01, their years of teaching experience, χ^2 (3, N = 127) = 4.141, $p > .01$, the year (or grade) they taught, χ^2 (5, N =1 39) = 6.788, $p > .01$, or the subject they taught, χ^2 (5, N = 139) = 1.899, $p > .01$. Consequently, and given the relatively large sample size, it may reasonably be concluded that there were no appreciable differences between the two groups (i.e., those teachers responding "yes" to Question 1 and those responding "no")

on these major demographic variables and, hence, they may be regarded as comparable for the purposes of subsequent analysis. Although not statistically significant, there are some differences in the patterns of responses to Question 1 in terms of the demographic variables that are worthy of mention here.

4.2.1.1 *Teacher Age and Response to Question 1*

As can be seen in Table 4.1, higher affirmative responding to Question 1 was evident for teachers aged 30-39 and (even more so) 40-49 years. The different response rates evident were not, however, sufficiently different from each other to produce a significant statistical difference between groups based on the age of the teacher.

Table 4.1

Percentages of Teachers Responding Affirmatively to Question 1, Analysed by Teacher Age

Age range (years)	*n*	%
<30	30	37
30-39	69	58
40-49	33	64
50-59	11	36

Note. $N = 143$; 2 missing values.

4.2.1.2 *Teacher Experience and Response to Question 1*

One apparent variation in the pattern of responding was evident when the amount of teacher experience was taken into account as shown in Table 4.2. A higher affirmative response rate to Question 1 of 61% for teachers with over 10 years' experience was evident. Given the findings relating to higher affirmative responses in the middle age ranges outlined above, it is likely that there is a relationship between the two variables of teacher experience and teacher age, as we would expect.

Table 4.2

Percentages of Teachers Responding Affirmatively to Question 1, Analysed by Teacher Experience

Teaching experience (years)	*n*	%
<5	21	43
5-10	24	42
>10	82	61

Note. $N = 127$; 18 missing values; the category 'First year out' and 1-4 years were combined in this table as one category (under 5 years) for the purposes of the chi-square analysis.

4.2.1.3 *Subject Taught and Response to Question 1*

In terms of subject taught (or academic faculty) (see Table 4.3), the pattern of responses was broadly similar across the six faculty or subject categories, the only atypical rate of responding being for teachers of Art/Design, 62% of whom indicated that they spent more time then they thought they ought on problems of order and control. The lowest rate of affirmative responding to Question 1 was from Mathematics teachers.

Table 4.3

Percentages of Teachers Responding Affirmatively to Question 1, Analysed by Subject Taught

Subject taught	*n*	%
English	23	52
Mathematics	20	45
Science	17	53
Social Science	19	47
Art/Design	29	62
Other	31	48

Note. $N = 139$; 6 missing values.

4.2.1.4 *Year Taught and Response to Question 1*

Likewise, and as shown in Table 4.4, while there were no statistically significant differences for teacher responding by year taught, teachers of Years 8 and 10 had higher percentages for affirmative responses to Question 1 (64% and 65% respectively) than the rest of the group. (For the purposes of the statistical analysis using chi-square described earlier, Years 11 and 12 were combined.)

Table 4.4

Percentages of Teachers Responding Affirmatively to Question 1, Analysed by Year Taught

Year taught	*n*	%
Year 7	23	43
Year 8	33	64
Year 9	30	50
Year 10	26	65
Year 11	19	37
Year 12	8	38

Note. $N = 139$; 6 missing values.

4.2.2 *Number (and Percentage) of Students in the Class Considered Troublesome*

Of an average class of 21.1 (*SD* = 5.85) students, a mean of 4.04 (*SD* = 3.40) students were considered by their teachers to be troublesome. Of these troublesome students, 2.8 (*SD* = 2.50) were male and 1.2 (*SD* = 1.49) were female. Given the variability in class size, the proportion of troublesome students was expressed as a percentage of the class total to allow for more direct comparability with other studies. The average percentage of the class that teachers considered troublesome was 20.2% (*SD* = 18.35) in the present study. Troublesome boys comprised 14.2% (*SD* = 13.47) of the class, on average while troublesome girls comprised 6% (*SD* = 8.17).

4.2.2.1 *Number of Troublesome Students and Teacher Gender*

When analysed according to the gender of the teacher, male teachers (*n* = 73) indicated that 3.7 students (*SD* = 3.84) were troublesome, on average, whereas female teachers (*n* = 63) indicated the slightly higher average of 4.3 students (*SD* = 2.79). In terms of the percentage of the class considered troublesome when analysed according to

teacher gender, male teachers indicated that 18.8% (SD = 20.40) of the class was troublesome, whereas female teachers reported the slightly higher proportion of 21.7% (SD = 15.71). A two-sample t-test analysis confirmed, however, that there was no statistically significant difference in the percentage of the class considered troublesome when analysed according to the gender of the teacher, t (129) = 0.94, $p > .01$.

4.2.2.2 *Number of Troublesome Students and Teacher Response to Question 1*

In terms of responses to Question 1, teachers responding "yes" considered that, on average, 29.8% (SD = 18.4) of the class were troublesome, whereas for teachers responding "no", the average was much lower at 9.5% (SD = 11.0). A two-sample t-test revealed highly statistically significant differences between teachers who responded "yes" to Question 1 and those who responded "no" in terms of the percentage of the class they considered troublesome, t (116) = 7.87, $p < .0001$. The effect size for this difference was large (d = 1.11).

4.2.2.3 *Number of Troublesome Students and the Subject Taught*

As can be seen from Table 4.5, the mean number of troublesome students in the class, when the data were analysed by subject taught (academic faculty), ranged from 3 students reported by Mathematics teachers to 5.1 students reported by English teachers. More accurately, as class sizes varied, the percentage of the class considered troublesome across subject taught was calculated. Table 4.6 shows the percentage of the class considered troublesome across the six broad subject areas. The lowest percentages were reported by Mathematics and Science teachers, and percentage of the class considered troublesome ranged from 13% (Mathematics) to 24% (Art/Design). One-way analyses of variance indicated there were no statistically significant differences evident in the number of troublesome students in the class, F (5,127) = 1.25, $p > .01$, or in the percentage of the class considered troublesome, F (5,124) = 1.64, $p > .01$, across subjects taught.

Table 4.5

Mean Number of Troublesome Students per Class Across Subject Taught

Subject Taught	*n*	Number of students	*SD*
English	20	5.1	3.8
Mathematics	20	3.0	3.5
Science	17	3.2	2.4
Social Science	18	3.4	4.2
Art/Design	28	4.7	3.3
Other	30	3.9	3.0

Note. $N = 133$

Table 4.6

Mean Percentage of Troublesome Students per Class Across Subject Taught

Subject Taught	*n*	Mean %	*SD*
English	20	22.66	22.17
Mathematics	20	13.22	16.63
Science	17	13.84	13.08
Social Science	17	16.87	18.71
Art/Design	26	24.26	17.52
Other	30	23.16	17.79

Note. $N = 130$; 3 teachers did not provide details for total number of students in the class so percentages data are based on a reduced number of teachers.

When the sex of the students was taken into account, similar trends were evident in terms of the teachers of the sciences/maths cluster reporting lower numbers of both male and female students who were considered troublesome, but all teachers

consistently nominated more boys than girls as troublesome across all subject areas (see Table 4.7). The mean number of troublesome boys ranged from 2.4 to 3.6 students, whereas the mean number of troublesome girls ranged from a low of 0.5 to 1.6 students. Again, as class sizes were variable, percentages may be more meaningful here. Troublesome boys accounted for between 10% and 16% of all students in the class, whereas troublesome girls accounted for between only 2% to 8% of all students in the class when subject taught was taken into account.

Table 4.7

Mean Number (and Percentage) of Troublesome Students per Class Across Subject Taught (Faculties) Analysed by Sex of Student

Subject Taught	*n*	Troublesome Girls	% of class	Troublesome Boys	% of class
English	20	1.5	6	3.6	16
Maths	20	0.6	3	2.4	10
Science	17	0.5	2	2.6	12
Social Sc.	18	1.1	5	2.4	12
Art/Design	28	1.6	8	3.0	16
Other	30	1.3	8	2.6	15

Note. $N = 133$; percentages data based on $n = 17$ for Social Science teachers and $n = 26$ for Art/Design as some teachers did not provide data for total number of students in the class.

4.2.2.4 *Number of Troublesome Students and Year Taught*

As can be seen from Table 4.8, the mean number of troublesome students in the class when the data were analysed by year taught ranged from 1.9 (Year 12) students to 5.1 students (Year 8). Table 4.9 shows the percentage of troublesome students across year taught, while Table 4.10 shows the number (and percentage) of troublesome students analysed by sex of students across school year.

Table 4.8

Mean Number of Troublesome Students per Class Across Year Taught

Year Taught	*n*	Number of students	*SD*
7	23	3.6	3.4
8	32	5.1	3.7
9	29	4.7	3.5
10	23	4.1	2.9
11	18	2.7	3.3
12	8	1.9	2.4

Note. $N = 133$

Table 4.9

Mean Percentage of Troublesome Students per Class Across Year Taught

Year Taught	*n*	%	*SD*
7	23	16.63	20.47
8	30	25.67	18.49
9	28	23.52	19.77
10	23	18.94	14.14
11	18	13.77	17.15
12	8	11.68	15.36

Note. $N = 130$; 3 teachers did not provide details for total number of students in the class so percentages data are based on a reduced number of teachers.

Table 4.10

Mean Number (and Percentage) of Troublesome Students per Class Across Year Taught by Sex of Student

Year Taught	*n*	No. of T'some Girls	% of class	No. of T'some Boys	% of class
7	23	0.8	4	2.8	13
8	32	1.7	8	3.4	17
9	29	1.3	6	3.4	17
10	23	1.1	5	3.0	14
11	18	0.7	4	1.9	10
12	8	1.0	7	0.9	4

Note. $N = 133$; percentages data based on $n = 30$ for Year 8 teachers and $n = 28$ for Year 9 as some teachers did not provide data for total number of students in the class.

These trends notwithstanding, one-way analyses of variance indicated no statistically significant differences in the number of troublesome students across year taught, $F\ (5,127) = 2.14$, $p > .01$, or the percentage of the class considered troublesome across year taught, $F\ (5,124) = 1.74$, $p > .01$.

4.2.2.5 *Percentage of the Class Considered Troublesome and Teacher Age and Experience*

Turning to the percentage of troublesome students in the class according to the remaining demographic variables of teacher age and teacher experience, one-way analyses of variance indicated there were no differences in terms of teacher age, $F\ (3,130) = 0.78$, $p > .01$, or teacher experience, $F\ (3,115) = 1.87$, $p > .01$, and the percentage of the class considered troublesome. Tables 4.11 and 4.12 indicate the means and standard deviations of the percentage of troublesome students per class across these two remaining teacher demographic variables.

Table 4.11

Mean Percentage of Troublesome Students per Class Across Teacher Age

Teacher age (years)	*n*	Mean	*SD*
<30	29	19.50	20.47
30-39	66	18.87	18.43
40-49	29	24.77	16.46
50-59	10	17.92	17.02

Note. $N = 134$; 11 missing values.

Table 4.12

Mean Percentage of Troublesome Students per Class Across Teacher Experience

Teacher experience (years)	*n*	Mean	*SD*
First year out	8	15.32	14.37
1-4	12	19.16	25.43
5-10	22	14.15	14.13
>10	77	23.63	18.51

Note. $N = 119$; 26 missing values.

In terms of specific findings, teachers in the 40-49 years age range reported the highest percentage of troublesome students in the class (25%). Teachers in the other age categories reported similar percentages of troublesome students in the class.

Looking at the possible impact of teacher experience, teachers with over 10 years' experience reported the highest percentage of the class as troublesome (24%), but no apparent pattern of responses was evident for the other groups.

4.2.3 *Sex of the Most (and Next Most) Troublesome Student (Questions 4a and 4d)*

As all classes clearly have students who are more troublesome than the rest, teachers were asked to indicate the sex of the two most troublesome students in their class (and their most troublesome behaviours, to be returned to later). Question 4a of the questionnaire asked the sex of the most troublesome student. Of the 129 teachers responding to this item, 88% indicated that a boy was the most troublesome student in the class. When asked the sex of the second most troublesome student (Question 4d), once again a boy was consistently nominated, although the percentage of teachers making this choice dropped from 88% to 70%.

4.2.3.1 *Sex of the Most Troublesome Student/s and Teacher Gender*

Further, when analysed according to the gender of the teacher ($N = 128$), there were no differences at all between male and female teachers in respect of the sex of the most troublesome student. Whether analysing the responses by gender of the teacher or for the total sample overall, 88% of teachers considered that a boy was the most troublesome student in the class. When considering the sex of the second most troublesome student in the class, a slightly higher proportion of female teachers (76%) than male teachers (64%) indicated a boy.

4.2.3.2 *Sex of the Most Troublesome Student/s and Teacher Response to Question 1*

Irrespective of their response to Question 1, teachers were agreed as to the sex of the most (and next most) troublesome student. Of the teachers responding "yes" to Question 1 ($n = 74$), 88% indicated that a boy was the most troublesome student in the class, while 87% of teachers who answered "no" to Question 1 also indicated that a boy was the most troublesome student in the class. In terms of the second most troublesome student in the class analysed by Question 1, 66% of teachers answering "yes" to

Question 1 indicated that this student was a boy, while those who answered "no" selected a male student 76% of the time.

4.2.3.3 *Sex of the Most Troublesome Student/s and Teacher Age*

Analysis by the demographic variable of teacher age indicated that 80% or more of teachers from each age range selected a boy as the most troublesome student in the class with the youngest teachers (< 30 years) having the highest rate of 93%. For the second most troublesome student in the class, 82% of teachers aged under 30 years selected another boy. The percentage of teachers in the remaining ages groups selecting a boy as the second most troublesome student in the class ranged from 63% to 78%. Full details are included in Appendix E.

4.2.3.4 *Sex of the Most Troublesome Student/s and Teacher Experience*

Ninety five per cent (95%) of teachers with fewer than five years' experience, as well as those with five to ten years' experience, indicated a boy as the most troublesome student in the class. This figure reduced a little for teachers with over ten years' experience, 83% of whom nominated a boy as the most troublesome student in the class. For the second most troublesome student in the class, once again the two groups with 10 years' experience and under had similar figures of 82% and 81% nominating a boy. For teachers with over ten years' experience, 63% nominated a boy as the second most troublesome student in the class. Full details are included in Appendix F.

4.2.3.5 *Sex of the Most Troublesome Student/s and Year Taught*

Table 4.13 shows the high percentages of teachers from Years 7 to Year 11 who selected a boy as the most troublesome student in the class. A slightly lower figure of 57% is evident for Year 12 teachers but caution should be exercised as the sample size for Year 12 was only small. Lower percentages of teachers indicating that a boy was the

second most troublesome student in the class were evident, the highest being teachers of Year 9 and Year 10 students (79%). Full details are available in Appendix G.

Table 4.13

Percentages of Teachers Citing a Boy as the Most Troublesome Individual Student, Analysed by Year Taught (Age of Students)

Year Taught	*n*	%
Year 7	19	95
Year 8	30	83
Year 9	27	89
Year 10	25	96
Year 11	17	88
Year 12	7	57

Note. $N = 125$; 20 missing values.

4.2.3.6 *Sex of the Most Troublesome Student/s and Subject Taught*

Turning to the subject area taught, it is clear from Table 4.14 that boys were the consistent choice of teachers of all subject areas ranging from 75% of Social Science teachers to 100% of Science teachers. When asked about the sex of the next most troublesome student, a similar pattern was evident but to a lesser extent. The lowest percentage of teachers indicating a boy as the next most troublesome student was evident for teachers of the subjects included in the "Other" category and the highest was reported by Mathematics teachers (80%). Full details are available in Appendix H.

Table 4.14

Percentages of Teachers Citing a Boy as the Most Troublesome Individual Student, Analysed by Subject Taught (Faculty)

Subject Taught	*n*	%
English	22	92
Mathematics	18	94
Science	13	100
Social Science	16	75
Art/Design	28	86
Other	28	82

Note. $N = 125$; 20 missing values.

4.2.4 *Most Troublesome Behaviour of the Class as a Whole (Question 2a)*

Teachers were asked to indicate the *two* categories of behaviour they found to be the most troublesome with this class as a whole. While detailed analysis of teachers' first choice of the most troublesome behaviour is presented here detailing responses to Question 2a, a brief summary only will be presented of responses to Question 2b. Question 2b elicited teacher responses to the next most troublesome behaviour of the class as a whole and follows this section.

As is evident from Table 4.15 and Figure 4.1, the most troublesome behaviour overall was Category D *talking out of turn* (TOOT), with 40% of teachers selecting this behaviour as the most troublesome. *Idleness/slowness* (Category E) was considered the most troublesome by 22% of teachers, followed by Category C *disobedience* (11%). No other behaviour category was cited by more than 10% of teachers when analysed overall.

4.2.4.1 *Most Troublesome Behaviour of the Class as a Whole and Teacher Gender*

A very similar pattern emerged when the responses of male and female teachers were analysed separately (Table 4.15 and Figure 4.2). *Talking out of turn, idleness/slowness* and *disobedience* were the behaviours that female teachers found the most troublesome, with the only difference that male teachers reported being *hindering other children*, which they cited as the third most troublesome behaviour (at 12%) rather than *disobedience.*

Table 4.15

Most Troublesome Behaviour of the Class as a Whole-First Choice (Question 2a) - Overall and as Identified by Male and Female Teachers

Behaviour	Overall		Male		Female	
	N = 129*		*n* = 65^		*n* = 63^^	
	n	%	*n*	%	*n*	%
A. Verbal abuse	6	5	5	8	1	2
B. Non-verbal noise	9	7	3	5	6	10
C. Disobedience	14	11	7	11	7	11
D. Talking out of turn	52	40	25	38	26	41
E. Idleness/slowness	28	22	14	22	14	22
F. Unpunctuality	5	4	3	5	2	3
G. Hindering other children	13	10	8	12	5	8
H. Physical aggression	2	2	0	0	2	3
I. Untidiness	0	0	0	0	0	0
J. Out of Seat	0	0	0	0	0	0

Note. *16 missing values; 128 cases available with gender of teacher answering Q2a; ^12 missing values; ^^8 missing values.

Figure 4.1

Most Troublesome Behaviour of the Class as a Whole

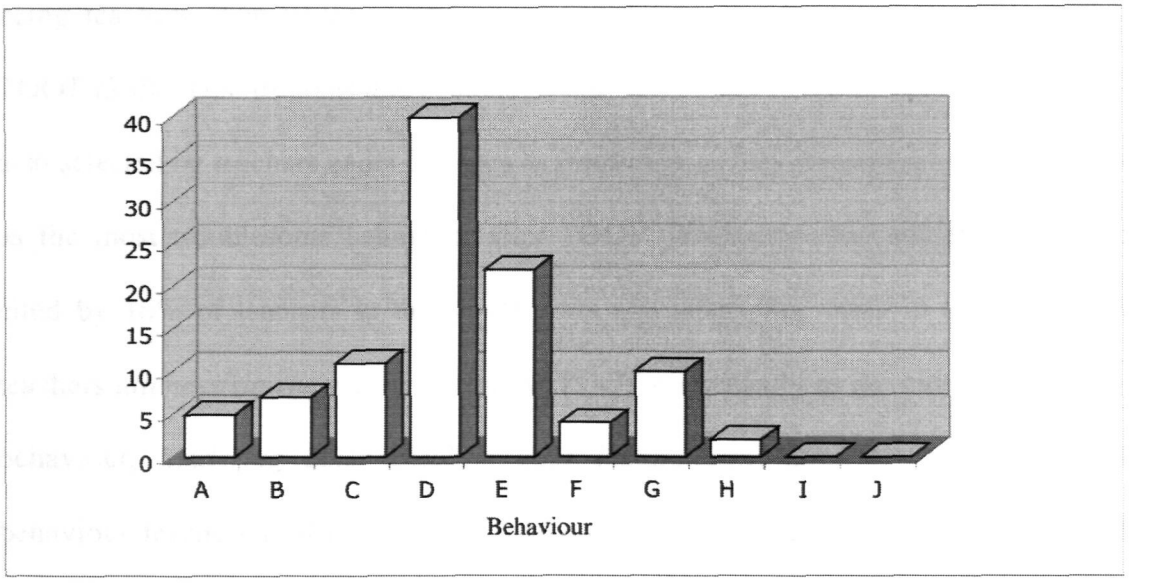
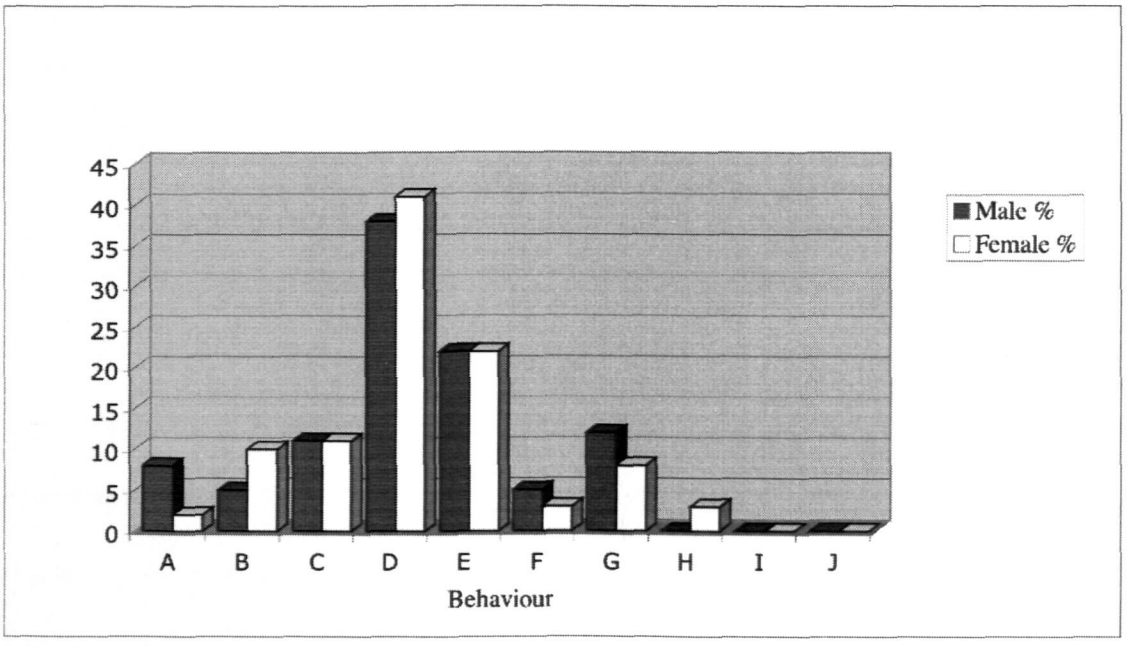


Figure 4.2

Most Troublesome Behaviour for the Class as a Whole Identified by Male and Female Teachers



4.2.4.2 *Most Troublesome Behaviour and Teacher Age*

When analysed according to the teacher demographic variables, similar patterns of reporting were evident. As Table 4.16 indicates, teachers across all of the age ranges represented consistently selected Category D *talking out of turn* as the most

troublesome behaviour of the class as a whole. Further, for most age ranges, Category E *idleness/slowness* followed TOOT as the most troublesome behaviour, the exception being teachers over 50 years who chose Category G *hindering other children* after TOOT as the most troublesome behaviour with the class as a whole. This category was also selected by teachers under 30 years as frequently as they selected *idleness/slowness* as the most troublesome behaviour after TOOT. *Hindering other children* was also cited by 16% of teachers in the 40-49 years age range. So, while in this sample of teachers *idleness/slowness* tends to follow TOOT consistently as the most troublesome behaviour, *hindering other children* does feature quite strongly in the types of behaviour teachers find troublesome (and see Question 2b). The only other types of behaviour cited more frequently than 10% were *disobedience* and *non-verbal noise.*

Table 4.16

Most Troublesome Behaviour of the Class as a Whole (Question 2a) Analysed by Teacher Age

Behaviour	<30 years		30-39 years		40-49 years		>50 years	
	N = 29		*N* = 59		*N* = 32		*N* = 9	
	n	%	*n*	%	*n*	%	*n*	%
A. Verbal abuse	1	3	4	7	1	3	0	0
B. Non-verbal noise	2	7	5	8	1	3	1	11
C. Disobedience	2	7	8	14	3	9	1	11
D. Talking out of turn	16	55	21	36	12	38	3	33
E. Idleness/slowness	3	10	14	24	9	28	2	2
F. Unpunctuality	2	7	2	3	1	3	0	0
G. Hindering other child'n	3	10	3	5	5	16	2	22
H. Physical aggression	0	0	2	3	0	0	0	0
I. Untidiness	0	0	0	0	0	0	0	0
J. Out of Seat	0	0	0	0	0	0	0	0

4.2.4.3 *Most Troublesome Behaviour and Teacher Experience*

While there were similarities in the choices made about what constituted the most troublesome behaviour when the data were analysed according to the amount of experience teachers had had, some minor variations were evident (see Table 4.17). For teachers with between 5 and 10 years' experience, Category D *talking out of turn*, Category E *idleness/slowness*, and Category G *hindering other children* were the three most frequently selected behaviour categories (and the only ones over 10%), representing a familiar pattern of responses. For teachers with over 10 years' experience, *idleness/slowness* was cited most frequently followed closely by TOOT and to a lesser extent by *disobedience*. For teachers with less than five years' experience,

the majority (65%) selected TOOT as the most troublesome behaviour of the class as a whole, an unusually high percentage even for this most popular choice. The next two behaviours selected were Category C *disobedience* and Category B *non-verbal noise*, both at 10%, all other behaviours being cited less frequently or not at all.

Table 4.17

Most Troublesome Behaviour of the Class as a Whole (Question 2a) Analysed by Teacher Experience

Behaviour	<5 years		5-10 years		>10 years	
	N = 20		*N* = 22		*N* = 73	
	n	%	*n*	%	*n*	%
A. Verbal abuse	1	5	2	9	3	4
B. Non-verbal noise	2	10	1	5	5	7
C. Disobedience	2	10	1	5	11	15
D. Talking out of turn	13	65	10	45	20	27
E. Idleness/slowness	1	5	4	18	22	30
F. Unpunctuality	0	0	1	5	3	4
G. Hindering other child'n	1	5	3	14	7	10
H. Physical aggression	0	0	0	0	2	3
I. Untidiness	0	0	0	0	0	0
J. Out of Seat	0	0	0	0	0	0

4.2.4.4 *Most Troublesome Behaviour and Year Taught*

Table 4.18 shows the choice teachers made across the different years taught in terms of the most troublesome classroom behaviour for the class as a whole. For all years taught, with the exception of teachers of Year 11 and 12 (analysed together in order to provide an adequate sub-sample size), Category D *talking out of turn* was once again the most popular choice made by teachers, followed by Category E

idleness/slowness in the cases of teachers of Year 7 (equal with Category G *hindering other children*), Year 8 and Year 10 (equal with Category C *disobedience*). Year 9 teachers cited *disobedience* as the most troublesome behaviour after TOOT, followed by *idleness/slowness.* Teachers of Year 11 and 12 departed from the pattern by selecting Category E *idleness/slowness* as the most troublesome behaviour, followed by Category D *talking out of turn.* No other categories of behaviour exceeded 10% for all of the years taught.

Table 4.18

Most Troublesome Behaviour of the Class as a Whole (Question 2a) Analysed by Year Taught

Behaviour	Year 7		Year 8		Year 9		Year 10		Year 11/12	
	N = 22		*N* = 29		*N* = 28		*N* = 25		*N* = 22	
	n	%	*n*	%	*n*	%	*n*	%	*n*	%
A. Verbal abuse	2	9	3	10	0	0	0	0	0	0
B. Non-verbal noise	2	9	2	7	1	4	2	8	2	9
C. Disobedience	0	0	3	10	5	18	4	16	1	5
D. TOOT	9	41	11	38	15	54	12	48	5	23
E. Idleness/slowness	4	18	5	17	4	14	4	16	11	50
F. Unpunctuality	1	5	0	0	1	4	1	4	2	9
G. HOC	4	18	4	14	1	4	2	4	1	5
H. Phys Agg	0	0	1	3	1	4	0	8	0	0
I. Untidiness	0	0	0	0	0	0	0	0	0	0
J. Out of Seat	0	0	0	0	0	0	0	0	0	0

Note. TOOT = Talking out of turn; HOC = Hindering other children; Phys Agg = Physical Aggression.

4.2.4.5 *Most Troublesome Behaviour and Subject Taught*

Teachers of all subjects, with the exception of Mathematics who chose Category E *idleness/slowness* at the rate of 42%, chose Category D *talking out of turn* as the most troublesome behaviour of the class as a whole (see Table 4.19). Teachers of English, Social Science, Art/Design and Other followed the general trend by citing *idleness/slowness* after TOOT as the most troublesome behaviour of the class as a whole, followed by either Category G *hindering other children* or Category C *disobedience.* Mathematics teachers selected the same behaviours but the prevalence varied with Category E *idleness/slowness* being the most popular choice (42%), followed by *talking out of turn* (32%) and *disobedience* (11%). Science teachers, although selecting the same most troublesome behaviour as most of their peers (*talking out of turn* at a rate of 43%), selected Category B *non-verbal noise* (29%) after TOOT, with no other categories exceeding 10%. Caution should be exercised, however, as the sub-sample of Science teachers was small.

Table 4.19

Most Troublesome Behaviour of the Class as a Whole (Question 2a) Analysed by Subject Taught

Behaviour	English		Maths		Science		Social Science		Art/ Design		Other	
	N = 22		*N* = 19		*N* = 14		*N* = 15		*N* = 26		*N* = 29	
	n	%	*n*	%	*n*	%	*n*	%	*n*	%	*n*	%
A. Verbal abuse	2	9	1	5	0	0	0	0	1	4	1	3
B. Non-verbal noise	0	0	1	5	4	29	1	7	1	4	1	3
C. Disobedience	3	14	2	11	1	7	1	7	4	15	2	7
D. TOOT	9	41	6	32	6	43	7	47	10	38	14	48
E. Idleness/slowness	5	23	8	42	1	7	3	20	5	19	6	21
F. Unpunctuality	1	5	0	0	1	7	1	7	1	4	1	3
G. HOC	2	9	1	5	1	7	2	13	4	15	3	10
H. Phys Agg	0	0	0	0	0	0	0	0	0	0	1	3
I. Untidiness	0	0	0	0	0	0	0	0	0	0	0	0
J. Out of Seat	0	0	0	0	0	0	0	0	0	0	0	0

Note. TOOT = Talking out of turn; HOC = Hindering other children; Phys Agg = Physical Aggression.

4.2.5 *Next Most Troublesome Behaviour of the Class as a Whole (Question 2b)*

As stated in Chapter 3 (see 3.3.8), a brief summary only of selected aspects of the data relating to Question 2b (and Question 3b) are presented. As can be seen in Table 4.20 *hindering other children* (Category G - HOC) was cited as the next most troublesome behaviour by 23% of teachers. Twenty one percent (21%) of teachers chose Category D *talking out of turn*, with another 21% selecting Category E *idleness/slowness* as the second most troublesome behaviour with the class as a whole. Category J *out of seat* was cited by 10% of teachers as a second choice of most troublesome behaviour.

4.2.5.1 *Next Most Troublesome Behaviour of the Class as a Whole and Teacher Gender*

When analysed according to the key variable of teacher gender, some differences in the responses of male and female teachers were evident. Male teachers, as was the case in the overall sample response to this question, indicated that *hindering other children* was their second choice of most troublesome behaviour (32%), followed by *idleness/slowness* (17%) and *out of seat* behaviour (16%). For female teachers, however, *talking out of turn* was again selected as the next most troublesome behaviour (30%), followed by *idleness/slowness* (25%), with *hindering other children* being nominated only 15% of the time. So, while male and female teachers were in almost total agreement as to the most troublesome behaviours with the class as a whole (Question 2a), there were some gender differences in the second choice of most troublesome behaviour.

Table 4.20

Next Most Troublesome Behaviour of the Class as a Whole (Question 2b)

Behaviour	Overall		Male		Female	
	N = 125		*n* = 63^		*n* = 61^^	
	n	%	*n*	%	*n*	%
A. Verbal abuse	7	6	2	3	5	8
B. Non-verbal noise	11	9	5	8	6	9
C. Disobedience	7	6	3	5	4	7
D. Talking out of turn	26	21	8	13	18	30
E. Idleness/slowness	26	21	11	17	15	25
F. Unpunctuality	3	2	1	2	2	3
G. Hindering other children	29	23	20	32	9	15
H. Physical aggression	2	2	2	3	0	0
I. Untidiness	1	1	1	2	2	0
J. Out of Seat	12	10	10	16	2	3

Note. * 20 missing values; 124 cases available with gender of teacher answering Q2b; ^ 14 missing values; ^^ 6 missing values.

4.2.6 *Most Frequent Troublesome Behaviour of the Class as a Whole (Question 3a)*

When asked what they considered the most frequent troublesome behaviour (as opposed to the most troublesome) with the class as a whole, 47% of teachers again nominated Category D *talking out of turn*, followed by Category E *idleness/slowness* (Table 4.21; Figure 4.3). No other behaviours were cited above 10%.

4.2.6.1 *Most Frequent Troublesome Behaviour of the Class as a Whole and Teacher Gender*

Analysed according to gender of the teacher, female and male teachers had a very similar pattern of responding (Table 4.21, Figure 4.4). Forty seven percent (47%) of female teachers selected *talking out of turn* as the most frequent troublesome behaviour followed by *idleness/slowness* (20%). No other category was cited at 10% or above. For males, 46% selected *talking out of turn*, followed by *idleness/slowness* at 22%. *Hindering other children* was cited by 10% of male teachers but no other category was cited at the 10% or above level.

Table 4.21

Most Frequent Troublesome Behaviour of the Class as a Whole (Question 3a) Overall and Analysed by the Gender of the Teacher

Behaviour	Overall		Male		Female	
	N = 128*		*n* = 63^		*n* = 64^^	
	n	%	*n*	%	*n*	%
A. Verbal abuse	5	4	4	6	1	2
B. Non-verbal noise	8	6	3	5	5	8
C. Disobedience	10	8	4	6	6	9
D. Talking out of turn	59	47	29	46	30	47
E. Idleness/slowness	27	21	14	22	13	20
F. Unpunctuality	5	4	2	3	3	5
G. Hindering other children	10	8	6	10	4	6
H. Physical aggression	1	1	0	0	1	2
I. Untidiness	2	2	1	2	1	2
J. Out of Seat	0	0	0	0	0	0

Note. * 17 missing values; 127 cases available with gender of teacher answering Q3a; ^ 14 missing values; ^^ 3 missing values.

Figure 4.3

Most Frequent Troublesome Behaviour for the Class as a Whole (Question 3a)

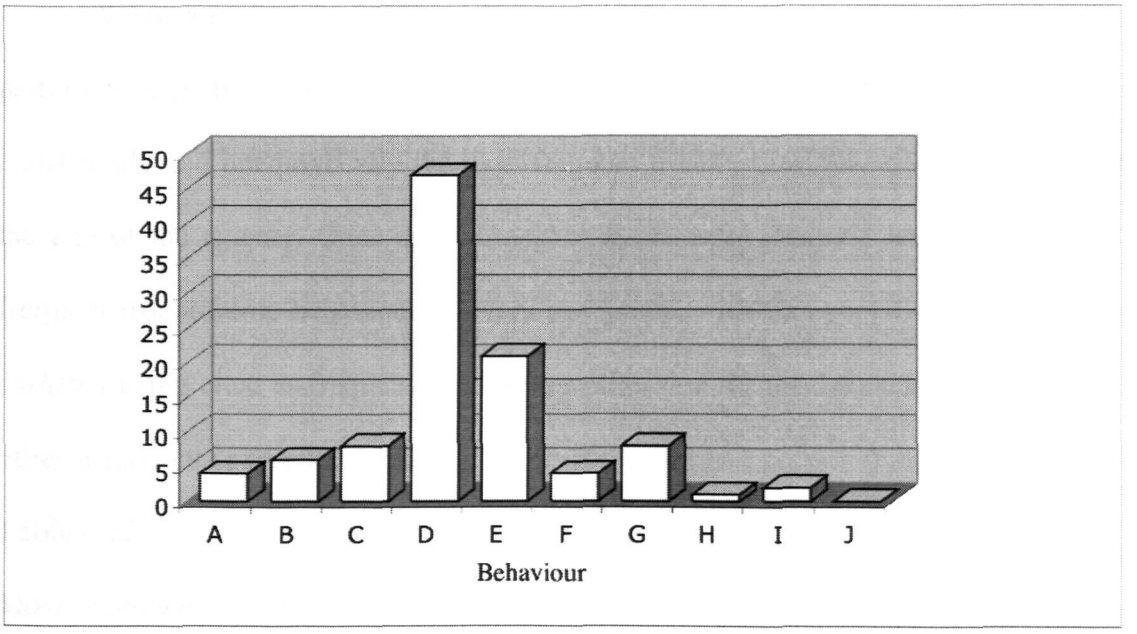
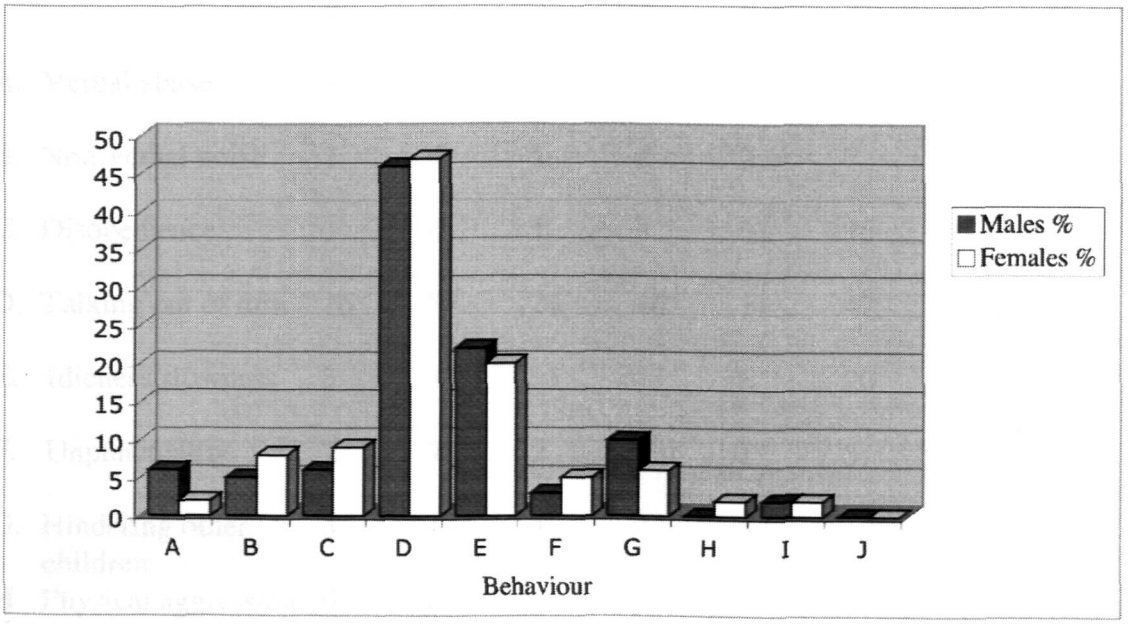


Figure 4.4

Most Frequent Troublesome Behaviour Identified by Male and Female Teachers (Question 3a)



4.2.6.2 *Most Frequent Troublesome Classroom Behaviour for the Class as a Whole and Teacher Age*

When analysed according to the teacher demographic variables, a very similar pattern of responses emerged. As Table 4.22 shows, Category D *talking out of turn* was consistently and unequivocally the most frequent troublesome behaviour, regardless of the age of the teacher. Once again Category E *idleness/ slowness* was the next most frequent troublesome behaviour in every age group, with Category G *hindering other children* being cited as frequently as *idleness/slowness* for teachers under 30 years. No other behaviours exceeded 10%.

Table 4.22

Most Frequent Troublesome Behaviour of the Class as a Whole (Question 3a) According to Teacher Age

Behaviour	<30 years		30-39 years		40-49 years		>50 years	
	N = 28		*N* = 60		*N* = 30		*N* = 10	
	n	%	*n*	%	*n*	%	*n*	%
A. Verbal abuse	2	7	2	3	1	3	0	0
B. Non-verbal noise	1	4	5	8	2	7	0	0
C. Disobedience	1	4	5	8	3	10	1	10
D. Talking out of turn	16	57	24	40	14	47	6	60
E. Idleness/slowness	3	11	15	25	6	20	3	30
F. Unpunctuality	2	7	2	3	1	3	0	0
G. Hindering other children	3	11	4	7	3	10	0	0
H. Physical aggression	0	0	1	2	0	0	0	0
I. Untidiness	0	0	2	3	0	3	0	0
J. Out of Seat	0	0	0	0	0	0	0	0

4.2.6.3 *Most Frequent Troublesome Classroom Behaviour for the Class as a Whole and Teacher Experience*

As can be seen in Table 4.23, the same pattern of responses applied when teacher experience was taken into account, with *talking out of turn* being the most frequent troublesome behaviour (responses ranging from 40% to 60%). Similarly, *idleness/slowness* was the next most frequently cited misbehaviour across all age ranges (ranging from 10% to 26%), with teachers with less than five years' experience also finding Category B *non-verbal noise* and Category A *verbal abuse* as being equally problematic as *idleness/slowness.* (In reality, this finding reflects only six teachers nominating the three different behaviour categories equally often.) The only other behaviour categories that exceeded 10% were *hindering other children* (cited by 14% of teachers with 5 to 10 years experience and Category C *disobedience* cited by 11% of teachers with more than 10 years' experience.

Table 4.23

Most Frequent Troublesome Behaviour of the Class as a Whole (Question 3a) According to Teacher Experience

Behaviour	<5 years		5-10 years		>10 years	
	N = 20		*N* = 22		*N* = 73	
	n	%	*n*	%	*n*	%
A. Verbal abuse	2	10	0	0	3	4
B. Non-verbal noise	2	10	0	0	5	7
C. Disobedience	1	5	1	5	8	11
D. Talking out of turn	12	60	11	50	29	40
E. Idleness/slowness	2	10	5	23	19	26
F. Unpunctuality	0	0	2	9	3	4
G. Hindering other children	1	5	3	14	3	4
H. Physical aggression	0	0	0	0	1	1
I. Untidiness	0	0	0	0	2	3
J. Out of Seat	0	0	0	0	0	0

4.2.6.4 *Most Frequent Troublesome Classroom Behaviour for the Class as a Whole and Year Taught*

When analysed according to year taught (Table 4.24), the most frequent troublesome behaviour was, again, Category D *talking out of turn* for all years, with teachers of Years 11 and 12 also selecting Category E *idleness/slowness* as often as TOOT as the most frequent troublesome behaviour. As has consistently been the case, *idleness/slowness* was the next choice of most frequent troublesome behaviour for teachers from Year 7 to 9, while teachers in Year 10 selected Category C *disobedience* (20%) as the next most frequent troublesome behaviour after TOOT (Year 10 teachers selected *idleness/slowness* 12% of the time). The only other behaviours that exceeded

10% were Category G *hindering other children* (15%) cited by four Year 10 teachers, and Category F *unpunctuality* (15%) cited by three teachers of Year 11 and 12 students.

Table 4.24

Most Frequent Troublesome Behaviour of the Class as a Whole (Question 3a) According to Year Taught

Behaviour	Year 7		Year 8		Year 9		Year 10		Year11/12	
	N = 21		*N* = 31		*N* = 26		*N* = 26		*N* = 20	
	n	%	*n*	%	*n*	%	*n*	%	*n*	%
A. Verbal abuse	1	5	2	6	1	4	0	0	0	0
B. Non-verbal noise	2	10	2	6	2	8	1	4	1	5
C. Disobedience	0	0	2	6	1	4	5	20	1	5
D. Talking out of turn	9	43	18	58	14	54	11	42	7	35
E. Idleness/slowness	7	33	5	16	5	19	3	12	7	35
F. Unpunctuality	0	0	0	0	0	0	2	8	3	15
G. HOC	2	10	1	3	1	4	4	15	1	5
H. Phys agg	0	0	1	3	0	0	0	0	0	0
I. Untidiness	0	0	0	0	2	8	0	0	0	0
J. Out of Seat	0	0	0	0	0	0	0	0	0	0

Note. HOC = Hindering other children; Phys agg = Physical aggression.

4.2.6.5 *Most Frequent Troublesome Classroom Behaviour for the Class as a Whole and Subject Taught*

Table 4.25 shows that regardless of subject taught, teachers consistently nominated Category D *talking out of turn* as the most frequent troublesome behaviour for the class as a whole, with percentages ranging from 43% to 57%. Further, as has also consistently been the case, Category E *idleness/slowness* was the next most frequent troublesome behaviour across all subjects taught (ranging from 18% to 32%).

Table 4.25

Most Frequent Troublesome Behaviour of the Class as a Whole (Question 3a) According to Subject Taught

Behaviour	Eng		Maths		Science		Social Science		Art/ Design		Other	
	N = 21		*N* = 19		*N* = 15		*N* = 14		*N* = 27		*N* = 28	
	n	%	*n*	%	*n*	%	*n*	%	*n*	%	*n*	%
A. Verbal abuse	1	5	0	0	0	0	1	7	0	0	2	7
B. Non-verbal noise	1	5	1	5	3	20	0	0	1	4	1	4
C. Disobedience	1	5	1	5	0	0	1	7	4	15	3	11
D. Talking out of turn	9	43	9	47	7	47	8	57	14	52	12	43
E. Idleness/slowness	6	29	6	32	3	20	2	14	5	19	5	18
F. Unpunctuality	1	5	1	5	0	0	2	14	1	4	0	0
G. HOC	1	5	1	5	2	13	0	0	2	8	4	14
H. Phys agg	0	0	0	0	0	0	0	0	0	0	0	0
I. Untidiness	1	5	0	0	0	0	0	0	0	0	1	4
J. Out of Seat	0	0	0	0	0	0	0	0	0	0	0	0

Note. HOC = Hindering other children; Phys agg = Physical aggression.

4.2.7 *The Next Most Frequent Troublesome Behaviour of the Class as a Whole (Question 3b)*

A brief summary only for teacher responses to Question 3b is presented here. As may be seen in Table 4.26, the next most frequent troublesome behaviour of the class as a whole was Category E *idleness/slowness* (24%), followed by Category D *talking out of turn* (19%), and Category G *hindering other children* (17%).

4.2.7.1 *The Next Most Frequent Troublesome Behaviour and Teacher Gender*

When analysed according to the gender of the teacher (see Table 4.26), male teachers, once again reported that *hindering other children* was the next most frequent

troublesome behaviour (25%), followed by *idleness/slowness* (22%) and *talking out of turn* (17%). (Male teachers had selected *hindering other children* and *idleness/slowness* as the next most *troublesome* behaviours as well, see 4.2.5.1.) Female teachers reported that *idleness/slowness* (25%) was the next most frequent troublesome behaviour, followed by *talking out of turn* (22%) and Category B *non-verbal noise* (12%).

Table 4.26

Next Most Frequent Troublesome Behaviour (Question 3b) Overall and as Identified by Male and Female Teachers

Behaviour	Overall		Male		Female	
	$N = 121$*		$n = 60$^		$n = 60$^^	
	n	%	*n*	%	*n*	%
A. Verbal abuse	6	5	1	2	5	8
B. Non-verbal noise	11	9	4	7	7	12
C. Disobedience	6	5	3	5	3	5
D. Talking out of turn	23	19	10	17	13	22
E. Idleness/slowness	29	24	13	22	15	25
F. Unpunctuality	6	5	1	2	5	8
G. Hindering other children	20	17	15	25	5	8
H. Physical aggression	4	3	3	5	1	2
I. Untidiness	5	4	3	5	2	3
J. Out of Seat	11	9	7	12	4	7

Note. *24 missing values; 120 cases for Q3b for which gender responses are available; ^17 missing values; ^^7 missing values.

4.2.8 *The Most Troublesome Behaviour of the Most Troublesome Student (Question 4a)*

As detailed earlier, teachers consistently selected a boy as the most troublesome (and to a lesser extent, the next most troublesome) student in the class. The question of what teachers find to be the most troublesome behaviour of this most troublesome

individual student is now detailed. As noted in the previous chapter in 3.3.8 detail relating to the behaviours of the next most troublesome student is presented in Appendix I.

4.2.8.1 *Most Troublesome Behaviour of the Most Troublesome Student (Question 4b)*

The most troublesome behaviour of the most troublesome student is clearly indicated in Table 4.27 (and in Figure 4.5) as (again) being Category D *talking out of turn* (41%), followed by Category G *hindering other children* (18%), and Category E *idleness/slowness* (13%).

4.2.8.2 *Most Troublesome Behaviour of the Troublesome Student and Teacher Gender*

This pattern was fairly well replicated when the data were analysed according to the gender of the teacher, as can also be seen in Table 4.27 and Figure 4.6. Forty percent (40%) of male teachers and forty-two percent (42%) of female teachers cited *talking out of turn* as the most troublesome behaviour of the most troublesome student. Category G, *hindering other children* (24%), was the behaviour male teachers cited after TOOT as the most troublesome behaviour of the most troublesome student, followed by *idleness/slowness* (12%). For female teachers, *idleness/slowness* (13%) and *hindering other children* (12%) appeared to be the most problematic behaviours of the most troublesome student after TOOT. Importantly, regardless of whether the analysis was conducted overall, or by gender of the teacher, TOOT was clearly the most troublesome behaviour of the most troublesome student.

Table 4.27

Most Troublesome Behaviour of the Most Troublesome Student (Question 4b)

Behaviour	Overall		Male Teachers		Female Teachers	
	$N = 119$*		$n = 59$		$n = 60$	
	n	%	*n*	%	*n*	%
A. Verbal abuse	9	8	4	7	5	8
B. Non-verbal noise	7	6	2	3	5	8
C. Disobedience	9	8	3	5	6	10
D. Talking out of turn	49	41	25	42	24	40
E. Idleness/slowness	15	13	7	12	8	13
F. Unpunctuality	3	3	2	3	1	2
G. Hindering other children	21	18	14	24	7	12
H. Physical aggression	4	3	2	3	2	3
I. Untidiness	0	0	0	0	0	0
J. Out of Seat	2	2	0	0	2	3

Note. * 26 missing values

Figure 4.5

Most Troublesome Behaviour of the Most Troublesome Student (Question 4b)

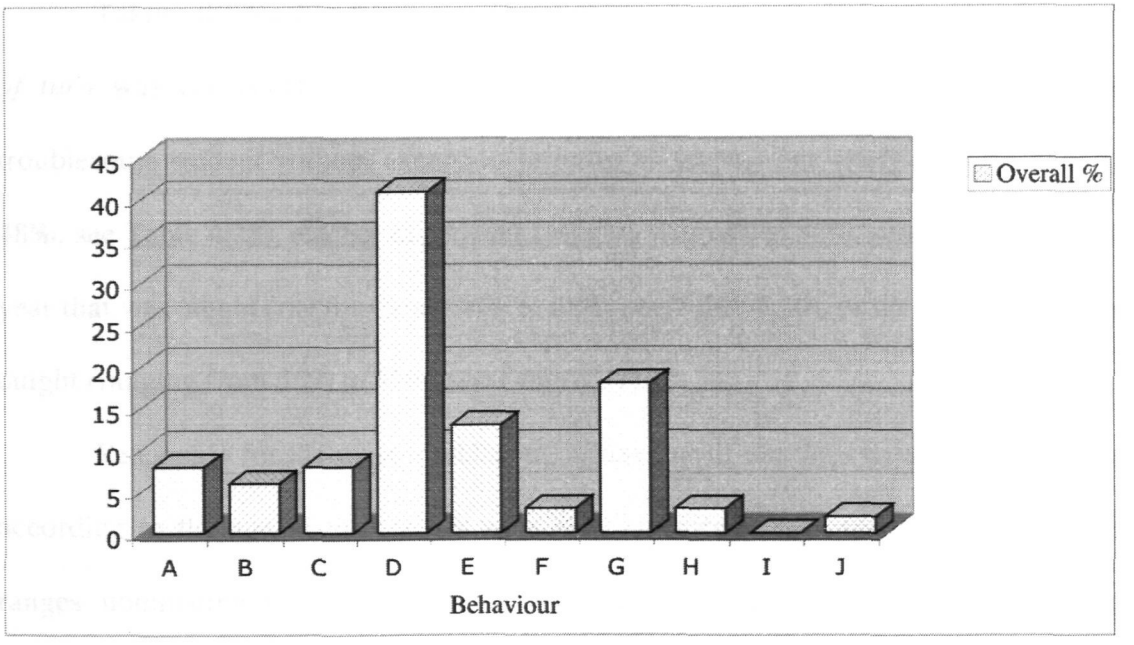
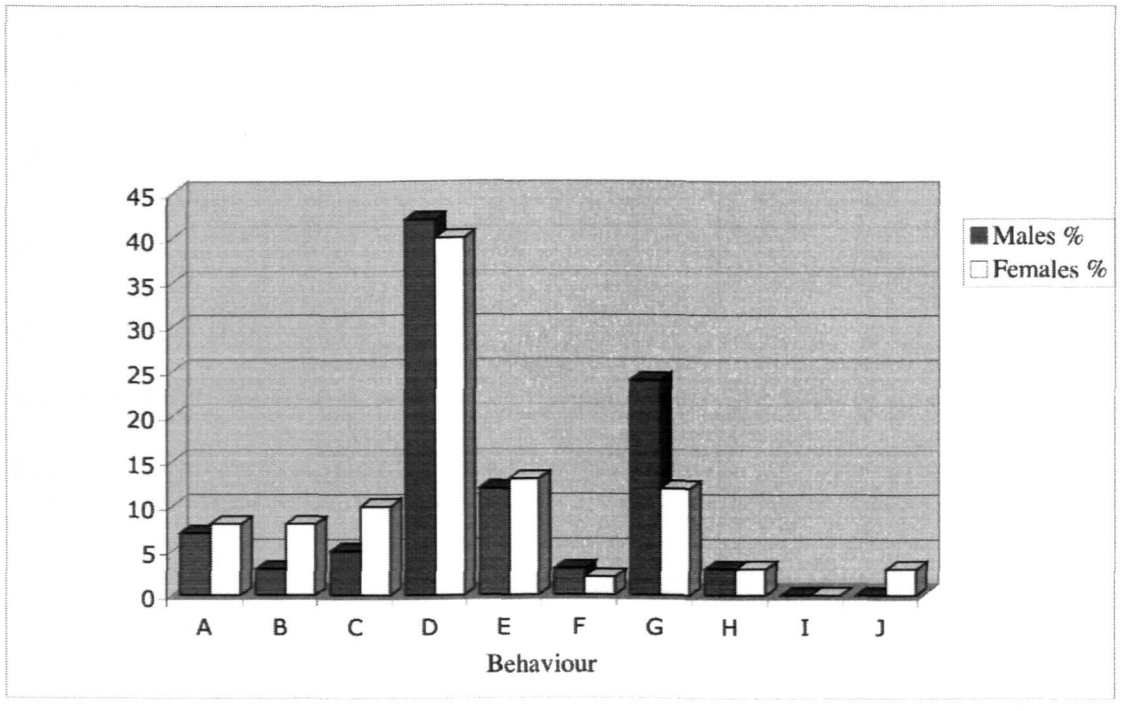


Figure 4.6

Most Troublesome Behaviour of the Most Troublesome Student Identified by Male and Female Teachers



4.2.8.3 *Most Troublesome Behaviour of the Most Troublesome Student and Other Teacher Variables*

Taking the teacher demographic variables into account, Category D *talking out of turn* was consistently selected as the most troublesome behaviour of the most troublesome student without exception in terms of teacher age (ranging from 38% to 48%, see Table 4.28), teacher experience (ranging from 38 to 53%, see Table 4.29), the year that was taught (ranging from 36% to 48%, see Table 4.30), or the subject that was taught (ranging from 36% to 57%, see Table 4.31).

Responses for the most troublesome behaviour of the most troublesome student according to the age of the teacher were very consistent, with teachers from all age ranges nominating Category G *hindering other children* as the most problematic behaviour after TOOT followed by Category E *idleness/slowness*. While some other behaviours were cited by more than 10% of teachers, their significance should not be emphasised as sample sizes were small.

Table 4.28

Most Troublesome Behaviour of the Most Troublesome Student According to Teacher Age

Behaviour	<30 years		30-39 years		40-49 years		>50 years	
	N = 23		*N* = 56		*N* = 32		*N* = 8	
	n	%	*n*	%	*n*	%	*n*	%
A. Verbal abuse	0	0	5	9	3	9	1	13
B. Non-verbal noise	2	9	4	7	1	3	0	0
C. Disobedience	2	9	5	9	2	6	0	0
D. Talking out of turn	11	48	23	41	12	38	3	38
E. Idleness/slowness	2	9	6	11	6	19	1	13
F. Unpunctuality	2	9	1	2	0	0	0	0
G. HOC	3	13	9	16	7	22	2	25
H. Physical aggression	0	0	2	4	1	3	1	13
I. Untidiness	0	0	0	0	0	0	0	0
J. Out of Seat	1	4	1	2	0	0	0	0

The same pattern of responses was evident when teacher experience was taken into account (see Table 4.29). As stated above, Category D *talking out of turn* was again the most troublesome behaviour of the most troublesome student (ranging from 38% to 53%) followed by Category G *hindering other children* (ranging from 13% to 18%). Again, although some behaviour categories were reported at 10% or more, the small numbers involved diminishes their importance.

Table 4.29

Most Troublesome Behaviour of the Most Troublesome Student (Question 4b) According to Teacher Experience

Behaviour	<5 years		5-10 years		>10 years	
	N = 15		*N* = 19		*N* = 73	
	n	%	*n*	%	*n*	%
A. Verbal abuse	1	7	1	5	7	10
B. Non-verbal noise	1	7	2	11	3	4
C. Disobedience	2	13	1	5	5	7
D. Talking out of turn	8	53	8	42	28	38
E. Idleness/slowness	1	7	2	11	11	15
F. Unpunctuality	0	0	1	5	1	1
G. Hindering other children	2	13	3	16	13	18
H. Physical aggression	0	0	0	0	4	5
I. Untidiness	0	0	0	0	0	0
J. Out of Seat	0	0	1	5	1	1

Tables 4.30 and 4.31 indicate that Category D *talking out of turn* was consistently the behaviour cited by teachers as being the most troublesome behaviour of the most troublesome student in the class, as mentioned above, irrespective of year taught. Further, again there was consensus about the next most frequently cited category, Category G *hindering other children*, amongst all but teachers of Years 11 and 12 (who chose Category E *idleness/slowness* after TOOT, then, hindering other children). Year 10 teachers also selected Category C *disobedience* and Category E *idleness/slowness* at the same rate as Category G *hindering other children* (13%), however. The selection of Category A *verbal abuse* by Year 7 (11%) and 8 (14%)

teachers should be noted, as should Category C *disobedience* (14% of Year 8 teachers and 13% of Year 10 teachers), notwithstanding the small numbers.

Table 4.30

Most Troublesome Behaviour of the Most Troublesome Student (Question 4b) According to Year Taught

Behaviour	Year 7		Year 8		Year 9		Year 10		Years11/12	
	N = 18		*N* = 28		*N* = 24		*N* = 23		*N* = 22	
	n	%	*n*	%	*n*	%	*n*	%	*n*	%
A. Verbal abuse	2	11	4	14	1	4	1	4	0	0
B. Non-verbal noise	1	6	1	4	2	8	1	4	1	5
C. Disobedience	0	0	4	14	2	8	3	13	0	0
D. Talking out of turn	7	39	10	36	11	46	11	48	10	45
E. Idleness/slowness	3	17	1	4	2	8	3	13	6	27
F. Unpunctuality	1	6	0	0	0	0	1	4	1	5
G. HOC	4	22	5	18	4	17	3	13	4	18
H. Phys agg	0	0	2	7	1	4	0	0	0	0
I. Untidiness	0	0	0	0	0	0	0	0	0	0
J. Out of Seat	0	0	1	4	1	4	0	0	0	0

Similarly, when analysed according to subject taught (see Table 4.31), in terms of the behaviour selected most frequently after TOOT, *hindering other children* was selected by all but Mathematics teachers (who selected *idleness/slowness*). Having said this, there was also evidence of other behaviours being present at a similar rate for some subjects.

Table 4.31

Most Troublesome Behaviour of the Most Troublesome Student According to Subject Taught

Behaviour	English		Maths		Science		Soc Sc		Art/D		Other	
	N = 21		*N* = 17		*N* = 13		*N* = 14		*N* = 26		*N* = 25	
	n	%	*n*	%	*n*	%	*n*	%	*n*	%	*n*	%
A. Verbal abuse	1	5	1	6	1	8	0	0	1	4	4	16
B. Non-verbal noise	1	5	1	6	1	8	0	0	2	8	2	8
C. Disobedience	3	14	0	0	2	15	2	14	1	4	1	4
D. Talking out of turn	10	48	7	41	6	46	8	57	9	35	9	36
E. Idleness/slowness	3	14	4	24	0	0	1	7	4	15	3	12
F. Unpunctuality	0	0	0	0	1	8	1	7	1	4	0	0
G. HOC	3	14	3	18	2	15	2	14	6	23	4	16
H. Physical aggression	0	0	0	0	0	0	0	0	1	4	2	8
I. Untidiness	0	0	0	0	0	0	0	0	0	0	0	0
J. Out of Seat	0	0	0	6	0	0	0	0	1	4	0	0

Note. $N = 116$; 39 missing values.

4.2.9 *Next Most Troublesome Behaviour of the Most Troublesome Student (Question 4c)*

Teachers were asked to indicate the next most troublesome behaviour of the most troublesome student (Question 4c), their responses being presented in Table 4.32. By way of a brief summary, Category G *hindering other children* 21% and Category E *idleness/slowness* (20%) were clearly the next most troublesome behaviours of the most troublesome student irrespective of the analysis being an overall analysis or an analysis by teacher gender. (See summary Table 4.33 for detail of the analysis of the most troublesome and next most troublesome behaviours of the second most troublesome student.)

Table 4.32

Next Most Troublesome Behaviour of the Most Troublesome Student (Question 4c) Overall and as Identified by Male and Female Teachers

Behaviour	Overall		Male Teacher		Female Teacher	
	N = 107*		*n* = 52		*n* = 54	
	n	%	*n*	%	*n*	%
A. Verbal abuse	9	8	3	6	6	11
B. Non-verbal noise	8	7	4	8	4	7
C. Disobedience	10	9	3	6	7	13
D. Talking out of turn	17	16	7	13	9	17
E. Idleness/slowness	21	20	11	21	10	19
F. Unpunctuality	9	8	4	8	5	9
G. Hindering other children	22	21	11	21	11	20
H. Physical aggression	2	2	2	4	0	0
I. Untidiness	2	2	1	2	1	2
J. Out of Seat	7	7	6	12	1	2

Note. * 38 missing values

4.2.10 *Summary of Troublesome Classroom Behaviour*

Table 4.33 presents a summary of the main findings in terms of the most troublesome and most frequent classroom behaviours. The sex of the most, and the next most, troublesome students and their behaviours are detailed. The responses of teachers according to the key variable of teacher gender are also presented.

Table 4.33

Summary Table of the Most Troublesome and Most Frequent Classroom Behaviours and the Sex of the Most Troublesome Students and Their Behaviours

Troublesome Behaviour	Overall	Male Teachers	Female Teachers
Most troublesome behaviour- class as a whole (Q2a)	TOOT	TOOT	TOOT
Next most troublesome- class as a whole (Q2b)	HOC	HOC	TOOT
Most frequent troublesome- class as a whole (Q3a)	TOOT	TOOT	TOOT
Next most frequent troublesome- class as a whole (Q3b)	Idleness/ slowness	HOC	Idleness/ slowness
Sex of most troublesome student (Q4a)	Male	Male	Male
Most troublesome behaviour- most troublesome student (Q4b)	TOOT	TOOT	TOOT
Next most troublesome behaviour – most troublesome student (Q4c)	HOC	HOC/ Idleness/ slowness	HOC
Sex of the second most troublesome student (Q4d)	Male	Male	Male
Most troublesome behaviour - second most troublesome student (Q4e)	TOOT	TOOT	TOOT
Next most troublesome behaviour - second most troublesome (Q4f)	Idleness/ slowness	Idleness/ slowness	Idleness/ Slowness

Note. TOOT Talking out of turn – Category D
HOC Hindering other children – Category G
Idleness/slowness – Category E

4.2.11 *Differential Reporting of Troublesome Students - An Exploration of (Possible) Variations in the Perceptions of Teachers*

In this section, a further and closer look is taken at whether there were any measurable variations in the perceptions of teachers who reported a *low incidence* of troublesome classroom behaviour compared to those who reported a *moderate-high incidence.* Similarly, an exploration of any variations in the responses of teachers who considered they spent more time than they ought on problems of order and control in the classroom (the response to Question 1 of the questionnaire) compared to those who do not, is reported.

As described in Chapter 3 (see *Data Analysis* — 3.3.6.3 and 3.3.6.4), the percentage of troublesome students in the class was used to construct a dichotomous variable for the purposes of subsequent analyses using biserial correlation (r_b). The 49 teachers (37%) citing less than 10% of students in the class as troublesome (classified as low incidence) were differentiated from the 85 teachers (63%) citing 10% or more students in the class as troublesome (classified as moderate-high incidence). Given that this percentage (10%) was considerably lower than the mean of troublesome students for this sample (20.2%), we would expect that this criterion would identify the less difficult classes as perceived by their teachers. Moreover, a relatively high correlation (0.708) was found between the continuous variable (percentage of the class considered troublesome), and the categorical variable of 10% or more of the class considered troublesome (moderate-high incidence of troublesome behaviour). As reported earlier, the average class size in the present study was 21.1 students. Applying the low incidence troublesome classroom behaviour criterion (less than 10%) to the present sample, we would expect just over two students in the class to be considered troublesome for this group of teachers.

4.2.11.1 *Number (and Percentage) of Students in the Class Considered Troublesome Analysed by Low Incidence/Moderate-High Incidence Troublesome Behaviour*

When considering if there were substantially varying numbers (and percentages) of troublesome students in the classes of teachers who reported a low incidence of troublesome classroom behaviour rather than moderate-high incidence, it was shown that there were statistically significant differences at the 1% level (as might be expected). Given that the dichotomous variable was constructed from the percentage of the class considered troublesome, this result is, of course, an artefact of the variable. Having said this, it is interesting to note the difference this represents in terms of percentage of the class considered troublesome and the number of students considered troublesome. For teachers in the low incidence category (n = 49), teachers indicated that only 3.16% (SD = 3.85) of the class or 0.71 students, on average, were troublesome compared to 30% (SD = 16.1) or 6.02 students in the moderate-high incidence group (n = 85). A t-test indicated these differences to be highly statistically significant t (99) = 14.72, $p < .0001$. The effect size for this difference was very large (d = 1.46). This demonstrates that the two created sub-groups differ markedly in respect of this variable.

4.2.11.2 *Demographic Detail for the Constructed Variable Sub-groups*

Given the role of this constructed dichotomous variable in subsequent analyses, it is important to know whether the two constructed groups differed demographically before conclusions may be drawn about any differences found between the two groups on other dependent variables (e.g., teacher stress). Teacher demographics for this constructed variable are presented in the Appendix J. The tables show (using an alpha level of 1% to determine statistically significant difference between groups) that the incidence of troublesome classroom behaviour expressed according to the dichotomous variable is not confounded by any of the teacher variables.

Specifically, (the artificially constructed) dichotomous variable is not confounded by teacher gender, $\chi^2(1, N = 133) = 5.454, p > .01$, year taught, $\chi^2(4, N = 130) = 11.388, p > .01$, teacher age, $\chi^2(3, N = 134) = 4.447, p > .01$, teacher experience, $\chi^2(2, N = 119) = 3.932, p > .01$, or by subject taught, $\chi^2(5, N = 130) = 9.133, p > .01$. The two groups created by the dichotomous variable of low incidence/moderate-high incidence troublesome classroom behaviour are therefore broadly demographically similar.

In the following sections (4.2.11.3—4.2.11.8) teacher demographic variables will be explored with reference to the constructed dichotomous variable of low incidence/moderate-high incidence troublesome classroom behaviour. It should be noted that these data have already been explored using the continuous variables of number of students or the percentage of the class considered troublesome, the results of which have been reported in sections 4.2.2.1—4.2.2.5. The dichotomised variable has been used to elicit any further information regarding any variations in the characteristics of teachers who report more troublesome students in their classes.

4.2.11.3 *Differential Reporting of Troublesome Students and Teacher Gender*

When analysed by the gender of the teacher, of the 49 teachers who indicated low incidence troublesome classroom behaviour, there were just over twice as many male teachers ($n = 33$) as female teachers ($n = 16$). Of the 84 teachers who reported moderate-high incidence troublesome classroom behaviour, a balance between male and female teachers was more evident, with more female teachers ($n = 45$) than male ($n = 39$) indicating a moderate-high incidence troublesome behaviour. These apparent variations, notwithstanding, Chi-square analysis indicated that there was no statistically significant gender effect evident, $\chi^2(1, N = 133) = 5.454, p > .01$, when the data were analysed according to the low/moderate-high incidence variable.

Table 4.34 shows a tally of the way teachers report the number of troublesome students in their classes, ranging from zero to fourteen students. The reporting of male

and female teachers is shown separately. Interestingly, a large number of teachers (n = 29) indicated that they had *no* troublesome students in the class, the vast majority (n = 23) of whom were male teachers. There were similar numbers of male and female teachers indicating that there were one or two students in the class who were troublesome. The main variation occurred in the numbers of male and female teachers indicating that there were *no* troublesome students at all in their classes. There was a large number of male teachers who indicated that they had no troublesome students in the class at all (23 out of 74 males who responded to this item or 31%). In sharp contradistinction to this finding, only 6 out of 63 female teachers in the sample (10%) made the same observation. Given that there were roughly equal numbers of male and female teachers in the sample and, with the exception of subject taught, for most of the demographic variables no differences were apparent (see Chapter 3 – Method – Teacher Characteristics), this pattern of responding may be worth further investigation with a larger sample in future research. Further consideration of the effect of subject taught may also provide additional information regarding this variation in the data.

Table 4.34

Teacher Reports of the Number of Troublesome Students in the Class

Number of Troublesome Students in the Class	Total Teachers $N = 136$	Male Teachers $n = 73$	Female Teachers $n = 63$
0	29	23	6
1	9	5	4
2	16	9	7
3	16	5	11
4	9	2	7
5	12	5	7
6	11	7	4
7	13	6	7
8	11	4	7
9	0	0	0
10	4	2	2
11	1	0	1
12	2	2	0
13	2	2	0
14	1	1	0

4.2.11.4 *Differential Reporting of Troublesome Classroom Behaviour and Teacher Response to Question 1*

When the sub-groups of low/moderate-high incidence of troublesome classroom behaviour were analysed according to response to Question 1, a strong and statistically significant relationship was evident, $\chi^2(1, N = 134) = 37.161$, $p < .01$. Sixty-two of the 71 teachers (87%) who responded "yes" to Question 1 also indicated that more than 10% of the class was troublesome. Only 9 teachers (13%) who responded "yes" to Question 1 reported low incidence troublesome classroom behaviour. In terms of the 63 teachers who responded "no" to Question 1, 40 teachers (63%) indicated low incidence troublesome behaviour.

4.2.11.5 *Teacher Age and Differential Reporting of Troublesome Classroom Behaviour*

As reported earlier, there were no statistically significant differences in the pattern of responses in terms of teachers' age regardless of whether they had low incidence or moderate-high incidence troublesome behaviour, $\chi^2(3, N = 134) = 4.447$, $p > .01$. While there were no statistically significant differences, the percentage of teachers aged 40-49 years who reported a low incidence of troublesome classroom behaviour was particularly low (21%) (see Appendix J).

4.2.11.6 *Teacher Experience and Differential Reporting of Troublesome Classroom Behaviour*

Turning to the effect of teacher experience on the reported incidence of troublesome classroom behaviour, for the purposes of the chi-square analysis the categories were reduced from four to three as the anticipated cell sizes would have been too small for legitimate analysis. The effect of this change was to combine first year out teachers with teachers who had between one and four years' experience, creating a category of teacher experience which was fewer than five years' experience (see Appendix I). As already outlined, there were no statistical differences in the patterns of

responses across teacher experience, $\chi^2(2, N = 119) = 3.932, p > .01$, but for both groups of teachers with under ten years' experience, 45% of each group indicated that they had low incidence troublesome behaviour. In contrast, only 27% of the most experienced group of teachers (over 10 years' experience) indicated low incidence troublesome behaviour. Given the findings for teacher age above, the same teachers are probably responsible for this pattern in the data.

4.2.11.7 *Differential Reporting of Troublesome Classroom Behaviour and Year Taught*

Similarly, for the chi-square analysis of the effect of year taught, Years 11 and 12 were combined (see Appendix I). As already reported, there were no statistically significant differences evident in terms of year taught and whether teachers reported low or moderate-high incidence troublesome behaviour, $\chi^2(4, N = 130) = 11.388, p > .01$. As we might expect, teachers of students in Years 11 and 12 had a higher rate (62%) of reporting low incidence troublesome behaviour than any other year group in the sample, followed by teachers of Year 7 and Year 10 (both at 39%). Teachers of Year 8 (20%) and Year 9 (29%) reported the lowest rates for low incidence troublesome behaviour, but none of these variations were sufficiently large to indicate a statistically significant difference between years.

4.2.11.8 *Differential Reporting of Troublesome Classroom Behaviour and Subject Taught*

For subject taught, there were no statistically significant differences across groups as outlined above, $\chi^2(5, N = 130) = 9.133, p > .01$. No clear pattern of responses was evident across subjects but teachers of English (30%), Other (30%), and Art/Design (23%) reported the lowest rates of low incidence troublesome behaviour. Teachers of Mathematics, on the other hand, reported the highest low incidence rates of troublesome behaviour (60%), followed by Science and Social Science teachers (both 47%). It would appear from these data that Mathematics teachers (60%) and Art/Design

teachers (23%) would be the most dissimilar in this group in terms of patterns of reporting low incidence troublesome behaviour but as already indicated, no statistical differences are evident. While we know from information presented in Chapter 3 (see Method – Teacher Characteristics – The Effect of Teacher Gender) that there were roughly equal numbers of male and female teachers teaching Art/Design, there was a marked difference in the number of male teachers as opposed to females teaching Mathematics. In the group of 20 teachers teaching Mathematics, only three were female.

4.2.11.9 *Sex of the Most Troublesome (and Next Most Troublesome) Student in the Class Analysed by Low/Moderate-High Incidence Troublesome Behaviour*

As reported earlier, regardless of whether teachers were male or female, or answered "yes" or "no" to Question 1, around 88% of teachers nominated a boy as the most troublesome student in the class. Once again the figures were very similar when analysing the responses according to whether teachers reported low incidence or moderate-high incidence troublesome behaviour. Eighty nine per cent (89%) of teachers indicating that less than 10% of the class was troublesome (low incidence) indicated that a boy was the most troublesome student in the class. Likewise, for teachers who thought that 10% or more of the class was troublesome (moderate-high incidence), 88% also indicated that a boy was the most troublesome student in the class. As was the case for the total sample, a boy was the choice for the second most troublesome student with the same lower percentage of 70% for those reporting moderate-high troublesome behaviour. Similarly, for teachers reporting low incidence troublesome behaviour, 71% also indicated that a boy was the second most troublesome student in the class. In those classes where teachers indicated a low incidence of troublesome behaviour, the pattern of responding was virtually identical to that of the sample overall (described earlier). Moreover, regardless of whether teachers believed they spent more time than they

ought on problems of order and control (Question 1), the findings in terms of the sex of the most troublesome student were the same.

4.2.11.10 *Most Troublesome Behaviour for the Class as a Whole Analysed by Teachers' Response to Question 1 and Low/Moderate-High Incidence Troublesome Behaviour*

Table 4.35 details the most troublesome behaviour of the class as a whole when analysed according to teachers' response to Question 1 and whether the incidence of troublesome classroom behaviour was low (under 10%) or moderate to high. Regardless of their response to Question 1, teachers indicated that Category D *talking out of turn* was the most troublesome classroom behaviour, followed by Category E *idleness/slowness*. For teachers who answered "yes" to Question 1, however, their choice of category E (16%) was made about half as frequently as teachers who answered "no". Category G *hindering other children* and Category C *disobedience* followed categories D and E approximately equally (12% and 11% respectively), whereas for teachers who answered "no" to Question 1, TOOT and *idleness/slowness* were followed by *disobedience* with no other categories being cited over 10%.

For teachers indicating low incidence troublesome behaviour, TOOT (47%) and *idleness/slowness* (24%) were once again selected as the most troublesome behaviours, the same behaviours being selected by teachers who indicated moderate-high troublesome behaviour. The only difference between these two groups was that the low incidence group selected Category B *non-verbal noise* (11%) after Category D and E as the most troublesome behaviour, whereas the moderate-high incidence group selected Category C *disobedience* (14%). No other categories of behaviour, apart from Category G *hindering other children* (11%), were cited by more than 10% of the teachers who indicated that more than 10% of the class was troublesome.

It appears from these data, that the behaviours teachers find the most troublesome do not differ substantially in those classes where the teachers indicate that

a higher proportion of the class is troublesome, or in those classes where teachers feel they spend more time than they ought on problems of order and control. As expected, the more serious misbehaviours such as Category A *verbal abuse* and Category H *physical aggression* were nominated, albeit in a small number of cases only, by teachers who reported a higher incidence of classroom behaviour problems. In the group of teachers who answered "yes" to Question 1, *verbal abuse* and *aggression* were nominated at 7% and 3% respectively, and for the group who indicated moderate-high incidence troublesome behaviour, the same behaviours were nominated at 6% and 2% respectively.

Table 4.35

Most Troublesome Behaviour for the Class as a Whole Analysed by Teachers' Response to Question 1 and the Low/Moderate-High Incidence Troublesome Behaviour

Behaviour	Yes to Q1		No to Q1		Low Incidence Less than 10%		Mod/High Incidence 10% or more	
	N = 73		*N* = 56		*N* = 38		*N* = 84	
	n	%	*n*	%	*n*	%	*n*	%
A. Verbal abuse	5	7	1	2	0	0	5	6
B. Non-verbal noise	6	8	3	5	4	11	5	6
C. Disobedience	8	11	6	11	1	3	12	14
D. Talking out of turn	30	41	22	39	18	47	33	39
E. Idleness/slowness	12	16	16	29	9	24	16	19
F. Unpunctuality	1	1	4	7	3	8	2	2
G. Hindering other children	9	12	4	7	3	8	9	11
H. Physical aggression	2	3	0	0	0	0	2	2
I. Untidiness	0	0	0	0	0	0	0	0
J. Out of Seat	0	0	0	0	0	0	0	0

4.2.11.11 *Most Frequent Troublesome Behaviour for the Class as a Whole (Question 3a) Analysed by Response to Question 1 and Low/Moderate-High Incidence Troublesome Behaviour*

Similarly, Category D *talking out of turn* was the most popular choice of most frequent troublesome behaviour, regardless of whether teachers responded "yes" (52%) or "no" (40%) to Question 1, or whether they indicated low incidence troublesome behaviour (42%), or moderate-high incidence troublesome behaviour (52%) (see Table 4.36). Interestingly, a higher (and identical) percentage of teachers nominated TOOT in those classes where we might expect the more problematic behaviour to occur. Table 4.36 shows that Category E *idleness/slowness* followed TOOT as the most frequent troublesome behaviour for the class as a whole regardless of response to Question 1 or in terms of the incidence of troublesome behaviour. The only other behaviour that exceeded 10% was Category G *hindering other children*, which was cited after TOOT and *idleness/slowness* by teachers who had low incidence troublesome behaviour.

Table 4.36

Most Frequent Troublesome Behaviour for the Class as a Whole (Question 3a) Analysed by Response to Question 1 and Low/Moderate-High Incidence Troublesome Behaviour

Behaviour	Yes to Q1		No to Q1		Low Incidence Less than 10%		Mod/High Incidence 10% or more	
	N = 73		*N* = 55		*N* = 38		*N* = 82	
	n	%	*n*	%	*n*	%	*n*	%
A. Verbal abuse	5	7	0	0	0	0	5	6
B. Non-verbal noise	6	8	2	4	2	5	5	6
C. Disobedience	6	8	4	7	2	5	6	7
D. Talking out of turn	38	52	22	40	16	42	43	52
E. Idleness/slowness	9	12	18	33	9	24	15	18
F. Unpunctuality	2	3	3	5	3	8	2	2
G. Hindering other children	5	7	5	9	5	13	4	5
H. Physical aggression	1	1	0	0	0	0	1	1
I. Untidiness	1	1	1	2	1	3	1	1
J. Out of Seat	0	0	0	0	0	0	0	0

4.2.11.12 *Most Troublesome Behaviour of the Most Troublesome Student According to Response to Question 1 and the Low/Moderate-High Incidence Troublesome Behaviour Criterion*

In terms of response to Question 1, teachers nominated Category D *talking out of turn* as the most troublesome behaviour of the most troublesome student consistently, regardless of whether they answered "yes" to Question 1 or "no" (see Table 4.37). For teachers who answered "yes", however, Category G *hindering other children* (20%) and Category A *verbal abuse* (13%) were the behaviours cited after TOOT, whereas for teachers who answered "no", Category E *idleness/slowness* (21%) and *hindering other*

children (15%) were the behaviours selected after *talking out of turn.* No other behaviour categories exceeded 10%.

When the data were analysed according to low incidence/moderate-high incidence troublesome behaviour, the pattern of responding for both these groups was very similar to each other. Once again Category D *talking out of turn* was the most frequently cited troublesome behaviour of the most troublesome student, followed in both cases by Category G *hindering other children* and Category E *idleness/slowness.* The only difference was that for the moderate-high incidence group, Category A *verbal abuse* was also cited as frequently as *idleness/slowness* (11%). No other behaviour categories exceeded 10%.

Table 4.37

Most Troublesome Behaviour of the Most Troublesome Student Analysed by the Response to Question 1 and Low/Moderate-High Incidence Troublesome Behaviour

Behaviour	Yes to Q1		No to Q1		Low Incidence Less than 10%		Mod/High Incidence 10% or more	
	N = 71		*N* = 48		*N* = 31		*N* = 80	
	n	%	*n*	%	*n*	%	*n*	%
A. Verbal abuse	9	13	0	0	0	0	9	11
B. Non-verbal noise	5	7	2	4	3	10	3	4
C. Disobedience	4	6	5	10	0	0	7	9
D. Talking out of turn	29	41	20	42	16	52	33	41
E. Idleness/slowness	5	7	10	21	4	13	9	11
F. Unpunctuality	0	0	3	6	2	6	1	1
G. Hindering other children	14	20	7	15	5	16	13	16
H. Physical aggression	4	6	0	0	0	0	4	5
I. Untidiness	0	0	0	0	0	0	0	0
J. Out of Seat	1	1	1	2	1	3	1	1

4.3 Results of the *Teacher Stress and Classroom Teaching Questionnaire*

Of the total sample (*N* = 145), 127 teachers provided data on the level of stress they experienced as a result of their classroom teaching. As outlined earlier in Chapter 3, the *Teacher Stress and Classroom Teaching Questionnaire* provides a total stress score based on teacher responses to 15 items, with possible scores ranging from 15 (indicating zero stress level) to 75 (indicating an extreme stress level). Stress levels between these two extremes are described as *mild*, *moderate* and *much*. A score for each item of 1 is attributed to *none* and increases by 1 up to 5 for *extreme*. For example, if a teacher responded to each item on the questionnaire with a response of *mild* stress

associated with the item described, he/she would attain a total score of 30. As can be seen from Table 4.38, the mean teacher stress score for the group as a whole was 41.62 (*SD* 9.18).

4.3.1 *Stress and Teacher Gender*

When analysed according to teacher gender, there was no difference between male and female teachers in reporting of stress related to dealing with classroom behaviour, t (125) = 0.18, $p > .01$. The mean stress level scores for male and female teachers were not significantly different.

Table 4.38

Mean Teacher Stress Scores Overall and Analysed by Teacher Gender

Teacher responses	*N*	Stress score	*SD*
Overall	127	41.62	9.18
Male	68	41.50	10.60
Female	59	41.78	7.28

4.3.2 *Stress and Teacher Age, Experience, Subject and Year Taught*

Similarly, in terms of the other categorical demographic variables of teacher age, experience, subject taught and year taught, one-way analyses of variance detected no differences in the mean stress scores of the teachers between the various groups (see Tables 4.39-4.42), as shown in Table 4.43.

Table 4.39

Means of Teacher Stress Scores Analysed by Subject Taught

Subject Taught	*n**	Mean	*SD*
English	24	41.71	8.06
Mathematics	21	41.80	8.68
Science	20	38.64	8.52
Social Science	14	38.00	10.41
Art/Design	17	44.19	9.92
Other	27	42.29	8.24

Note. * $N = 123$; 4 missing values.

Table 4.40

Means of Teacher Stress Scores Analysed by Year Taught

Year Taught	*n**	Mean	*SD*
Year 7	19	39.58	10.71
Year 8	29	44.66	8.73
Year 9	29	40.41	9.44
Year 10	22	42.23	7.05
Year 11	16	38.31	9.82
Year 12	8	43.00	8.49

Note. * $N = 123$; 4 missing values.

Table 4.41

Means of Teacher Stress Scores Analysed by Teacher Experience

Teacher Experience in Years	*n**	Mean	*SD*
First year	9	40.67	9.54
1-4	12	41.75	9.21
5-10	25	38.24	7.85
>10	81	42.75	9.40

Note. *$N = 127$

Table 4.42

Means of Teacher Stress Scores Analysed by Teacher Age

Teacher age	*n**	Mean	*SD*
<30	26	41.27	8.36
30-39	61	41.18	9.50
40-49	31	42.94	9.51
50-59	9	41.11	9.13

Note. $N = 127$

Table 4.43

Analyses of Variance for Teacher Variables of Experience, Age, Subject Taught and Year Taught

Variable	*F*	*DF*	*p*
Teacher experience	1.60	3,123	.194
Teacher age	0.28	3,123	.843
Subject taught	1.31	5,117	.265
Year taught	1.41	5,117	.224

4.3.3 *Stress and Teacher Response to Question 1*

The mean stress level scores of those teachers saying "yes" to Question 1 were significantly higher than those of their colleagues who did not. A one-tailed *t*-test was performed to compare the mean stress scores. A one-tailed test is acceptable in this instance as one could reasonably predict the direction of the relationship, should one be found to exist (i.e., an affirmative response to Question 1 is likely to be associated with higher stress scores). It is unlikely that teachers responding "yes" to Question 1 would have lower stress scores given what we know from the research literature (see Chapter 2) about the effect of dealing with troublesome behaviour on teacher stress.

Teachers who responded "yes" to Question 1 of the *Classroom Behaviour Problems Checklist and Questionnaire* reported significantly higher stress scores (mean 43.49, *SD* = 8.77) than teachers who responded in the negative (mean 39.49, *SD* = 9.28), $t\ (124) = 2.48$, $p < .01$) (see Table 4.44). The strength of this relationship may be appreciated by its effect size of 0.44, which is approaching medium (0.50) in size. Teachers who answered "yes" to Question 1 clearly experienced statistically significantly higher levels of stress than their colleagues who answered "no".

Table 4.44

Teacher Responses to Question 1 and Teacher Stress

Teacher Responses to Q1	*N*	Stress score	*SD*
Yes	69	43.49	8.77
No	57	39.49	9.28
Total	126*		

Note. * 1 missing value

4.3.4 *Stress and Differential Teacher Reporting of Troublesome Behaviour*

Further, and as detailed in Table 4.45, teachers who indicated moderate-high incidence troublesome behaviour also had significantly higher stress scores than their colleagues who indicated low incidence troublesome behaviour, t (117) = 3.48, $p <$ .001). The effect size was 0.68, which clearly indicates a medium effect. This relationship was confirmed by a statistically significant correlation between the continuous variable of percentage of the class considered troublesome and teacher stress scores. These variables were correlated at 0.35 ($p < .01$) confirming that the observed difference was not merely a function of an arbitrary cut-off point (i.e., below or above 10% of the class as troublesome.)

Table 4.45

Stress Scores According to Percentage of the Class Considered Troublesome

More than 10% of class troublesome	*N*	Stress score	*SD*
Yes (Moderate-high Incidence)	79	43.73	8.08
No (Low incidence)	40	37.85	9.85
Total	119*		

Note. *8 missing values

Taken together, these latter two findings indicate a strong relationship between teacher perceptions of stress related to managing a class, their perceptions of the proportion of students in their classes they regard as troublesome, and their perception of whether they spend "too much" time on problems of order and control. It has already been established that teachers who responded "yes" to Question 1 perceived a significantly higher proportion of their students as troublesome. To the extent that common teacher perceptions are being tapped via various routes, this could be considered a form of confirmatory triangulation.