Classroom Behaviour Problems: The Relationship between Preparedness, Classroom Experiences, and Self-efficacy in Graduate and Student Teachers

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ABSTRACT

Past research suggests that teachers who are the most effective classroom managers, are teachers who are the most confident in their abilities. Therefore, the importance of preparedness and classroom experiences as factors that are involved in the development and maintenance of teacher self-efficacy in behaviour management were assessed. Differences in self-efficacy in behaviour management between graduate and student teachers were also assessed. The participants in this study were 54 primary education teachers with less than three years experience, and 25 student teachers in their final year of primary education training. The results revealed a significant positive association between self-efficacy in behaviour management, preparedness and classroom experiences. Furthermore, preparedness and classroom experiences significantly predicted teachers' ratings of self-efficacy in behaviour management. However, both graduate and student teachers reported feeling only moderately prepared and self-efficacious, with 83.5% of the total sample indicating they would like additional training in the area of behaviour management. The present findings provide important information for teacher training programs and school support structures.

INTRODUCTION

Classroom behaviour problems are a principle source of stress and burnout for both new and experienced teachers (Blankenship, 1988; Griffith, Steptoe, & Cropley, 1999; Martin, Linfoot, & Stephenson, 1999; Ministry of Education, 1989; Parkay, Greenwood, Olejnik, & Proller, 1988). Whilst inattention, calling out, disturbing others and non-compliance are the most commonly reported classroom behaviour problems (Merrett & Wheldall, 1984), misbehaviour can be "…any behaviour that significantly interferes with the child's own learning, other children's learning or responses, or the teacher's ability to operate effectively" (Merrett & Wheldall, 1984, p.87). Teachers believe they spend a disproportionate amount of time dealing with behaviour problems compared with time spent on instruction and academic activities (Cains & Brown, 1996). Failure to address misbehaviour compromises the learning environment whereby academic activities are interrupted, curriculum content is not covered, teacher authority is undermined, and most importantly, there are decreased opportunities to learn (Blankenship, 1988; Cains & Brown, 1996; Cartledge & Johnson, 1996; Fields, 1999; Little & Hudson, 1998; Martin et al., 1999).

In light of the pressure misbehaviour places on teachers, it is not surprising that studies examining teacher attitudes have found that they are apprehensive, reluctant and least tolerant of children with behaviour difficulties in their classroom (Brochner & Peiterse, 1989; Cartledge & Johnson, 1996; Forlin, Douglas, & Hattie, 1996; Harvey, 1992; Idol, 1997; Lewin, Nelson, & Tollefson, 1983; Moeller & Ishii-Jordan, 1996). Teachers report feeling poorly equipped to deal with misbehaviour, often pointing to their lack of experience and preparation (Martin et al., 1999). Although it is likely that confidence is one of many variables that influence teachers' effectiveness in classroom management, there is a growing

body of research indicating that teacher confidence is an important mediator in determining how teachers interact with difficult students and how they manage misbehaviour (Pajares, 1992; Housego, 1990; Martin et al., 1999; Safran, 1989).

Confidence and Self-efficacy
Confidence, or self-efficacy is conceptualised as an individual's judgement of his/her ability to execute successfully a behaviour required to produce certain outcomes (Bandura, 1986; Gibson & Dembo, 1984). Such beliefs are thought to be an important moderator between an individual's knowledge and skills, and his/her behaviours (Emmer & Hickman, 1999). Viewed as a multi-dimensional construct, self-efficacy has two components: efficacy expectations and outcome expectancy (Gibson & Dembo, 1984). Efficacy expectations are the beliefs pertaining to one's personal capacity to perform a behaviour, task or skill, while outcome expectancy is the general belief that a behaviour will result in a particular outcome (Bandura, 1986; Gibson & Dembo, 1984; Guskey & Passaro, 1994). Therefore, behaviour is thought to be influenced not only by the belief that a particular action will lead to desirable outcomes, but also by the belief that one has the ability to perform that action. For instance, if an individual does not believe he/she has the necessary ability to perform a task, he/she will not initiate or engage in the relevant behaviours, or as Bandura (1986) asserts, persist in difficult situations.

The importance of self-efficacy in understanding teacher behaviours, decision-making processes and effectiveness has been highlighted through research (Gibson & Dembo, 1984; Gorrell & Hwang, 1995; Guskey & Passaro, 1994; Housego, 1990; Welch, 1995). Self-efficacy has been identified as an important predictor of teacher effort and persistence (Bandura, 1986; Emmer & Hickman, 1991); instructional effectiveness (Ashton & Webb, 1986; Gibson & Dembo, 1984); and efficient classroom organisation, planning and practices (Gibson & Dembo, 1984; Pajares, 1992). Confident teachers tend to maintain student attention on academic activities more effectively than teachers who lack confidence in their teaching abilities (Gibson & Dembo, 1984). In addition, less confident teachers appear more vulnerable to stressful classrooms, employing less effective strategies to deal with stress compared with confident teachers (Evans & Tribble, 1986; Parkay et al.,1988).

Much of the past research assessing teacher self-efficacy has focused on teaching skills and abilities generally. However, Bandura (1986) asserts that self-efficacy is a situational and domain specific construct whereby confidence varies depending upon the skill required, or the situation faced. In support for this view, Welch (1995) found no relationship between general teaching self-efficacy and self-efficacy specific to teaching art eduction, and concluded that "...self-efficacy cannot be considered a comprehensive quality which is generalised to every context, and that the level of confidence is likely to vary between subjects" (p.78).

Whilst the vast majority of research has assessed teacher self-efficacy in general, the nature of context specific self-efficacy remains largely unexplored. Given that self-efficacy may vary for different skills or situations, it is likely that teachers may feel confident about a smaller subset of skills in one setting, but feel lacking in another. Emmer and Hickman (1991) argued that teacher attention is often focused on matters other than teaching and learning outcomes, and that it would be useful to examine self-efficacy in sub-areas of teaching. Therefore, research needs to assess teacher self-efficacy for specific skills required in teaching, such as behaviour management, and for teaching specific student populations, such as students with persistent behaviour difficulties. The literature examining self-efficacy specific to classroom behaviour management will be discussed.

Self-efficacy in Classroom Behaviour Management
The importance of self-efficacy in behaviour management has been highlighted by Martin and colleagues (Martin et al., 1999) who proposed that teachers' responses to misbehaviour may be mediated by their beliefs about their ability to deal with behaviour, as well as their beliefs

about the causes of student misbehaviour. Studies have found a negative correlation between teachers' confidence and their use of effective behaviour management techniques (Safran, 1989; Woolfolk, Rossoff, & Hoy, 1990).   For instance, less confident teachers are more likely to become angered and threatened by misbehaviour (Ashton, Webb, & Doda, 1983, as cited in Dembo & Gibson, 1985); use inappropriate management techniques (Martin et al., 1999; Pettit, Bates, & Dodge, 1992); and frequently refer students to other school personnel (Martin et al., 1999). In comparison, confident teachers believe that difficult students are teachable (Buell, Hallam, Gamel-McCormick, & Sheer, 1999); they offer more support (Ashton & Webb, 1986); and use proactive approaches to behaviour management (Blankenship, 1988; Cartledge & Johnson, 1996). It has been posited that teachers who fail to handle disruptive behaviours with confidence may precipitate or exacerbate behaviour problems (Martin et al., 1999; Pettit et al., 1992). Given these findings, it appears that teachers most effective in dealing with misbehaviour are those teachers most confident in their ability to teach difficult students.

Although the vast majority of research indicated self-efficacy was an important predictor of effective behaviour management, Agne, Greenwood and Miller (1994) found conflicting results, whereby locus of control and pupil control ideology, rather than self-efficacy, were more predictive of teacher effectiveness. The disparity between studies may be due to a lack of research that considers multiple variables in determining teacher effectiveness in classroom management.   However, it appears that past studies typically have relied upon a small number of questions to measure teacher confidence in behaviour management (e.g., Greenwood, Olejnik, & Parkay, 1990; Martin et al., 1999; Thomas, 1985), or have used general measures of self-efficacy to assess confidence in specific skills in teaching (Buell et al., 1999), thus, compromising reliability and validity.

In recognising that self-efficacy in behaviour management is conceptually and behaviourally distinct from general teaching efficacy, Emmer and Hickman (1991) devised the Teacher Efficacy in Classroom Management and Discipline Scale. This multidimensional scale measures three types of beliefs thought to comprise self-efficacy in classroom management: beliefs about their classroom management abilities; beliefs pertaining to the degree to which teachers believe external influences have an impact on student behaviour; and beliefs about their personal ability to teach. To illustrate how these beliefs are related: teachers who sense that there is little they can do to change students' behaviour, due to external factors, such as home environment and parenting (i.e. factors beyond their control), tend to have a lower sense of self-efficacy in behaviour management and personal teaching abilities.

Research using Emmer and Hickman's (1991) scale revealed self-efficacy in behaviour management was a significant predictor for the preference of behaviour management strategies employed. Teachers high in self-efficacy were more likely to use positive teaching strategies, such as praise, modifying teaching approaches, and encouragement for effort. While teachers low in self-efficacy tended to employ reductive strategies, such as time out, warnings, and loss of privileges (Emmer & Hickman, 1991). There is limited research using appropriate measures to assess self-efficacy in specific teaching skills, and further research using such scales is needed. What is known, however, is that the development of teacher self-efficacy in specific domains is influenced by a number of variables.

The Development of Teacher Self-Efficacy

Research tracking changes in self-efficacy as pre-service teachers move from education and training into their early years of teaching has produced mixed findings. There is some evidence indicating that self-efficacy beliefs change over the course of teacher development, with teaching confidence highest during pre-service years, and decreasing within two years of graduating (Buell et al., 1999; Soodak & Podell, 1997; Welch, 1995). Soodak and Podell (1997) found that self-efficacy levels of practicing teachers with greater than six years

experience improved, but appeared never to reach their pre-service levels. Finally, Lin and Gorrell (1998) tracked self-efficacy in a number of teaching competencies during pre-service years, but did not examine in-service teachers. They found that student teachers in their final year were more confident about teaching children with behaviour problems than student teachers in their first year.

Conversely, some studies have found no differences between the self-efficacy ratings of pre-service and experienced teachers (Herbert et al., 1998; Lin & Gorrell, 1998).   It is apparent that there remain some equivocal issues surrounding the changes in teacher confidence during the first two years of full-time teaching. Little research has investigated changes in self-efficacy for differing teaching competencies. Further research into the changes in teacher self-efficacy in classroom behaviour management is needed.

Furthermore, research has yet to identify clearly the factors instrumental in changing self-efficacy as teachers enter into full time teaching. Factors considered in the past have focused on school organisation variables, such as the school climate or ethos (Dembo & Gibson, 1985; Welch, 1995); social support from colleagues and other professionals (Kruger, 1997); and the socialisation of teachers, such as work relationships (Dembo & Gibson, 1985).   Personal variables such as professional preparation and classroom experiences have received less attention. It is clear that research needs to identify and establish the role of the mediating factors that are instrumental in the development and maintenance of teacher self-efficacy. The findings of such research may provide important information to develop a comprehensive model of self-efficacy development. One of the mediating factors that has been suggested to be related to self-efficacy is preparedness to teach.

Preparedness and Self-Efficacy
Although a causal relationship is yet to be established, perceived preparedness has been theoretically linked to development of self-efficacy. Housego (1990) argued that for a teacher who felt ill-prepared to teach, their success in maintaining an effective learning environment was compromised. This assertion does not imply that a teacher's perceived preparedness denotes that they are prepared in reality, however, the *feeling* of being prepared is essential in the development of confidence in one's ability to execute a behaviour. Lewin and colleagues (1983) demonstrated that teachers who had formal instruction in the basic behaviour principles during their preparation as student teachers had improved their ability to manage classroom misbehaviour. Despite findings such as these, Little (1999) revealed that 44% of students completing teacher training in Victoria reported that they did not receive formal training on classroom management. Therefore, it is not surprising that many studies revealed that teachers perceived themselves to be trained poorly to deal with behaviour management issues (Buell et al., 1999; Cains & Brown, 1996; Cains & Brown, 1998a; Cains & Brown, 1998b; Villa, Thousand & Chapple, 1996).

Although professional preparation is crucial in developing competent teachers, there also appears to be workplace factors that are operating, serving to reduce new graduate teachers' self-efficacy once they enter into full time work. For instance, further research needs to assess the relationship between teacher self-efficacy and preparedness to manage classroom behaviour, whilst considering the complex relationship between other factors such as workplace experiences that may also shape self-efficacy.

Classroom Experience and Self-Efficacy
Self-efficacy theory posits that an individual's confidence is strongly influenced by experiences (Welch, 1995), whereby self-efficacy will increase or decrease depending upon the nature of the experience. A series of successful, positive experiences tend to build self-efficacy, while unsuccessful, negative experiences will lower self-efficacy. Therefore, it would be expected that over time with multiple negative experiences teachers may be at risk of developing negative beliefs about their abilities to teach and manage a classroom.

Principally, research has examined the relationship between self-efficacy and teaching experience in years. However, Cains and Brown (1998a) contend that the topography or qualities of behaviours are of greater concern to teachers. Qualities of behaviours that have been researched are severity, tolerance, manageability, and contagion or ripple effects to other students (Safran & Safran, 1985). To date there appears to be no research investigating how varying experiences on these dimensions may influence teacher self-efficacy in dealing with misbehaviour. It seems likely that a sense of self-efficacy will change depending upon the nature of these experiences.

Finally, the potential effect of classroom diversity on teachers' self-efficacy has not been assessed thoroughly in research. Some evidence suggests that teacher concerns about misbehaviour magnify when there is greater diversity of abilities and behaviours in the classroom (Blankenship, 1988; Safran & Safran, 1985). Therefore, future research needs to take into account heterogeneity in the classroom when assessing teacher self-efficacy in managing classroom behaviour problems.

Research Aims & Hypotheses
The importance of self-efficacy beliefs in mediating teacher responses to misbehaviour has driven the present study to investigate perceived preparedness and classroom experiences as factors that may contribute to the development of confident teachers. Given the evidence that teacher self-efficacy, in particular context specific self-efficacy, is related to effective teaching, examining how these beliefs develop will provide important information for teacher training institutions and for support structures in schools for new graduate teachers.
The present study aimed to assess the relationship between self-efficacy in behaviour management, preparedness and classroom experience. It was hypothesized that a positive relationship between self-efficacy and preparedness would exist whereby self-efficacy would be higher for teachers with a greater sense of preparedness, and lower for teachers who felt less prepared. In reference to classroom experiences, it was hypothesized that a positive relationship would exist between self-efficacy and classroom experience with behaviour difficulties, assessed on four dimensions of severity, tolerability, manageability and contagion. Thus, teachers who experienced behaviours that were less tolerable and manageable, more severe and influenced other students would have a lower sense of self-efficacy in classroom management and discipline. In comparison, teachers who had classroom experiences with behaviours that were tolerable and manageable, less severe, and less likely to influence other students, would have a higher sense of self-efficacy in classroom management. Finally, the present study aimed to assess differences in self-efficacy in behaviour management between recent graduate and student teachers. Given the findings in past literature, it was hypothesised that student teachers would have a greater sense of self-efficacy than new graduate teachers.

METHOD

Participants
The participants in this study were 54 primary education teachers with less than three years experience recruited from state schools in the Melbourne metropolitan area, and 25 final year primary education student teachers from four Victorian universities. This was a response rate of 54% and 25%, respectively. The teacher sample was comprised of 12 (22%) males and 42 (78%) females, with the mean age ranging between 18 and 24 years ($\underline{SD}$=.69) and a mean length of teaching experience of 1.6 years ($\underline{SD}$=.71). Fifty percent of teachers taught lower primary grades (Grades Prepatory,1 and 2), 19% taught middle primary grades (Grades 3 and 4), 22% taught the upper primary grades (Grades 5 and 6), and 9% taught specialist classes to a range of grades in the school. The student teacher sample was comprised of 2 (8%) males and 23 (92%) females, with a mean age ranging between 18 and 24 years ($\underline{SD}$=.33).

Materials

Self-report measures were completed to assess teachers' self-efficacy, perceived preparedness and classroom experience. Information pertaining to teaching experience, grade level taught, and classroom composition, including number of children with persistent behavioural difficulties was also obtained. Teachers were asked about various forms of misbehaviour in the classroom and the frequency in which they needed to be addressed. They were also asked about the sufficiency of their training, and were invited to comment on areas of classroom management in which they would like additional training. Student teachers were asked to respond in reference to their last teaching placement.

Teacher Self-efficacy in Behaviour Management and Discipline Scale [SEBM] (Emmer & Hickman, 1991) was used to assess teachers' confidence in classroom management and discipline. An overall score for self-efficacy in behaviour management was calculated, and as well as subscale scores for Classroom Management/Discipline, External Influences and Personal Teaching Efficacy. The 36 items were rated on a 6-point Likert scale, whereby teachers indicated the degree to which they agreed or disagreed with the statements (1=Disagree Strongly and 6=Agree Strongly), with higher scores indicating stronger self-efficacy beliefs. Emmer and Hickman (1991) reported that the subscales have moderate internal consistency and test-retest reliabilities.

The PrepCon Questionnaire (Cains & Brown, 1996) was used to obtain a sense of teachers' perceived preparedness in various competencies involved in teaching. The seven categories include; General Teaching, Teaching Theory, Special Needs, Behaviour Management, Personal Development, Race and Gender Issues and Administration (Refer to Table 3 for descriptions). On a 7-point Likert scale, teachers indicated the degree to which they felt prepared or unprepared on 41 items (1=Not at all prepared and 7=Excellently prepared). Adequate reliability and internal consistency have been reported (Cains & Brown, 1996). The wording of some items in the questionnaire had been changed slightly to make it relevant to Victorian teachers.

The Rating Scale for Measuring Teachers' Perception of Problem Behaviours (Safran & Safran, 1985) was used to obtain information about the types of experiences with behaviour problems teachers have in their classrooms and on teaching placements. On a 5-point scale, four dimensions of problem behaviours were assessed; severity (e.g., Please indicate the level of severity of behaviour problems in your classroom), tolerance (e.g., Please rate the level of tolerance you have for the behavioural difficulties in your classroom), manageability (e.g., Please rate the level of manageability of your classroom.), and contagion or ripple effect the problem behaviours have on the rest of the class (e.g., Please rate the level in which others students are effected by the problem behaviours in your classroom). Moderate internal consistency and reliability have been reported (Safran & Safran, 1985).

Procedure

Upon approval from the RMIT University Human Ethics Committee and the Department of Education, Employment and Training, principals of 58 randomly selected schools in the Melbourne Metropolitan area were contacted and informed of the study, and the voluntary participation of staff with 3 years or less experience was requested. Student teachers were recruited from four Victorian universities. Upon arrangements made with the schools and universities, the questionnaires were distributed to the teachers and student teachers. All participants were informed that the purpose of the study was to investigate teacher confidence and preparedness in classroom behaviour management, and their participation was voluntary and anonymous. The participants were required to return the questionnaires in a reply paid envelope to ensure confidentiality and anonymity.

Data Analysis

Data were collated and analysed on a group basis using descriptive and multivariate data analyses. Correlational analyses were conducted to assess the significance of the relationships between variables. Standard regression analyses were used to assess the predictability of self-efficacy scores, from the dependent measures, preparedness and classroom experience. Finally, single-factor between-subjects multivariate analysis of variance was conducted to assess for differences between teachers and student teachers on each of the dependent measures.

RESULTS

The mean number of children presenting with persistent behaviour difficulties in the classroom was reported to be 2.45 ($\underline{SD}$=1.67). The most commonly occurring behaviour problems (presented as percentages), addressed at least once a day, were calling out (41%), disobedience (30%), not listening (33%) and poor concentration (25%). The total sample of recent graduate and student teachers were moderately confident in their behaviour management and discipline abilities ($\underline{M}$=4.06, $\underline{SD}$=.42) and were moderately prepared to teach ($\underline{M}$=4.65, $\underline{SD}$=.91). Graduate and student teachers did not differ significantly in their perceived level of experience with children who showed persistent behaviour problems, rating themselves on a 5-point Likert scale, as having little experience, with a mean of 2.35 ($\underline{SD}$=1.05) and 2.60 ($\underline{SD}$=.71), respectively.

Pearson's Correlation coefficients were computed to assess the relationships among SEBM, preparedness and the classroom experience variables. The results of the analysis are presented in Table 1. In support for the first hypothesis, there was a significant positive correlation between SEBM and Preparedness, $\underline{r}$(79)=.35, $\underline{p}$=.002, indicating that teachers who have a greater sense of perceived preparedness to teach also tend to have a greater sense of self-efficacy in behaviour management. SEBM was negatively correlated with Severity, $\underline{r}$(79)=-.30, $\underline{p}$=.008, and positively correlated with Manageability $\underline{r}$(77)=-.37, $\underline{p}$=.001, indicating that teachers who perceive that their classroom environment requires them to deal with severe and unmanageable behaviours are more likely to have a lower sense of self-efficacy in behaviour management. There were no significant correlations between SEBM and Tolerance.

Table 1: Correlations among Self-efficacy in Behaviour Management and Discipline, Preparedness and Classroom Experience Variables.

Measures	1	2	3	4	5	6
1.Self-efficacy in Behaviour Management and Discipline Scale (SEBM)	--	.35** (79)	-30** (79)	.37** (77)	.14 (77)	-.19 (79)
2. PrepCon Questionnaire (Overall Score)		--	-.19 (79)	.23* (77)	.03 (78)	-.19 (79)
3. Severity			--	-53** (77)	-.07 (78)	.34** (79)
4. Manageability				--	.11 (76)	-34** (77)
5. Tolerability					--	-.22* (78)
6. Contagion						--

*$\underline{p}$<.05. **$\underline{p}$<.01. (Figure in brackets = $\underline{N}$).

A standard multiple regression analysis was conducted to evaluate the predictability of SEBM scores from the variables of preparedness and classroom experience. The regression model obtained an R^2 of .24 (Adjusted R^2= .18), indicating that 24% of the variance in teachers' SEBM scores could be accounted for by the linear combination of the dependent measures. This model was found to be significant, $F(5,70)$=4.34, p=.002, supporting the hypotheses that perceived preparedness and classroom experience together would predict teachers' SEBM scores. Preparedness was the only variable to provide a significant amount of unique predictive variability in the model, $t(75)$= 2.82, p=.006.

Table 2 presents the means and standard deviations for graduate and student teachers on the SEBM overall score and each of the constructs. To evaluate differences between graduate and student teachers on the multiple outcome measures pertaining to Self-efficacy in Behaviour Management and Discipline, a single-factor between-subjects multivariate analysis of variance (MANOVA) was conducted. The dependent variables included; Classroom Management/Discipline, External Influences and Personal Teaching Efficacy. It was intended that a measure of the number of children with behaviour problems in the class, as well as a measure of teachers' perceived experience with children with behaviour problems would be included in the analysis to serve as covariates. However, these variables did not covary significantly with SEBM scores, and therefore their influence on SEBM scores did not need to be controlled for. A significant multivariate effect was found, Wilk's Λ = .877, $F(3,75)$ = 3.50, p=.020. An examination of the overall means for SEBM, in Table 2 revealed that teachers scored significantly higher than student teachers. Follow up univariate analyses for each of the self-efficacy constructs revealed that teachers were significantly more positive about their Classroom Management/Discipline abilities than student teachers, $F(1, 77)$ = 10.55, p=.002. There were no significant differences between teachers and student teachers on External Influences and Personal Teaching Efficacy.

Table 2: Means and Standard Deviations for Self-efficacy in Behaviour Management and Discipline Constructs in Graduate and Student Teachers.

Measures	Graduates (n=54)		Student Teachers (n=25)		Total (N=79)	
	M	SD	M	SD	M	SD
Self-efficacy in Behaviour Management Scale	4.14	.42	3.90	.37	4.06	.42
Classroom Management/ Discipline	4.70	.72	4.14	.69	4.52	.75
External Influences	3.68	.54	3.57	.35	3.65	.49
Personal Teaching Efficacy	4.04	.74	3.98	.56	4.02	.69

A single-factor between-subjects multivariate analysis of variance (MANOVA) was also conducted to evaluate differences between graduate and student teachers on Preparedness in seven teaching competencies (See Table 3 for competencies). A significant multivariate effect was found, Wilk's Λ = .785, $F(7, 71)$ = 2.78, p=.013. An examination of the overall means for Preparedness in Table 3 revealed that teachers perceived themselves to be more prepared than student teachers. Although, statistically significant, the mean difference is very small, with very little practical significance. Nevertheless, follow up univariate analyses indicated that teachers perceived themselves to be more prepared in the area of General Teaching than student teachers, $F(1, 77)$ = 12.68, p=.001. There were no significant differences between teachers and student teachers in remaining teaching competencies.

Table 3: Means and Standard Deviations for Preparedness in Graduate and Student Teachers.

Measures	Description	Graduates (n=54)		Student teachers (n=25)		Total (N=79)	
		M	SD	M	SD	M	SD
PrepCon Questionnaire	Overall score	4.66	1.00	4.64	.69	4.65	.91
Genteach	Practical classroom teaching	4.30	.66	3.76	.54	4.13	.67
Theory	Theoretical educational issues	4.87	1.16	4.79	1.01	4.84	1.11
Special	Special education needs	4.20	1.13	4.35	.78	4.24	1.03
Behave	Behaviour management issues	4.84	1.35	4.90	1.27	4.86	1.32
Person	Personal performance & development issues	4.55	1.16	4.41	1.04	4.51	1.12
Racegen	Race and gender issues	4.68	1.63	4.76	1.23	4.70	1.51
Admin	Management and administration issues	4.31	1.29	4.24	.97	4.29	.91

Despite the differences in self-efficacy and preparedness between graduate and student teachers, on a 5-point Likert scale, the total sample rated their education and training as being minimally sufficient (M=2.00, SD=1.03), with 83.5% indicating they would like additional training in classroom behaviour management. Responses to the open-ended question were categorised and frequencies were computed. Seventy-three percent of the total sample indicated that they would like additional training in specific behaviour management strategies, followed by 29% requesting information and strategies for specific types of disabilities. Eleven percent of the sample reported they would have liked to undertake a formal subject on classroom behaviour management and have 'hands on' experience with children with behaviour problems during their preparation and training.

DISCUSSION

The primary aim of this study was to assess the importance of preparedness and classroom experiences as factors that may contribute to the development and maintenance of teacher self-efficacy in classroom behaviour management. As hypothesized, the results revealed a significant association between these factors and self-efficacy in behaviour management. Furthermore, the hypothesis stating that preparedness and classroom experiences would significantly predict teachers' ratings of self-efficacy was supported. A further aim was to assess for differences in self-efficacy and perceived preparedness between graduate and student teachers. This hypothesis was not supported, with the results indicating that teachers have a greater sense of self-efficacy and perceived preparedness than student teachers.

Self-efficacy and preparedness
As hypothesized, teachers who had a greater sense of perceived preparedness were also likely to have a greater sense of self-efficacy. These findings provide support for Housego's (1990) view that the perception of being prepared is important in the development of confidence in one's ability to execute a behaviour. It appears as though teachers who feel that they lack the necessary knowledge and skills, are likely to develop feelings of inadequacy about their abilities. Given that most graduate and student teachers in the study rated their preparation and training in behaviour management as not sufficient, it is not surprising they feel moderately prepared to teach and would like additional training. A student teacher responded,

"I feel like we have done virtually nothing on this [behaviour management] at all during our four year course". Melnick and Zeichner (1998) argue that feelings of ill preparedness can be traced back to the institution responsible for the preparation of teachers.

These research findings have important implications for teacher training institutions to provide areas of training requested by teachers, such as specific behaviour management strategies, and information and strategies for specific disabilities. Worth mentioning is the comment made by a student teacher who requested that a formal subject on classroom behaviour management and 'hands on' experience be provided in the training courses. "It is not explicitly taught at all at uni-only if you happen to get good modelling from a supervising teacher on rounds. Therefore, classroom management in general needs to be taught more comprehensively in the curriculum". Therefore, the findings of this study are consistent with previous research that has demonstrated a need for specific instruction in classroom management strategies in pre-service teaching courses (Cains & Brown, 1998a; Cains & Brown, 1998b; Lewin et al, 1983; Melnick & Zeichner, 1998; Villa et al, 1996). It would then be of interest to examine the effect of such training on the development of self-efficacy.

Self Efficacy & Experience
The hypothesis that perceived preparedness and classroom experiences together would predict teachers' self-efficacy levels was supported. In particular, preparedness and perceived manageability of the classroom significantly contributed to the prediction of teacher self-efficacy. These findings lend some support for the idea that both factors play an important role in the development and maintenance of teacher self-efficacy in behaviour management. Although significant, these factors accounted for a small portion of the variance in self-efficacy scores, highlighting that other factors involved in the development of self-efficacy were not accounted for in this study. However, Pajares (1992) cautions the inclusion of a model with too many variables, because evaluating the cognitive processes of an entire belief system can be too complex to measure and interpret. Nevertheless, future research should assess the significance of other belief constructs such as attribution and pupil ideology control beliefs, to develop a comprehensive model of teacher self-efficacy in classroom behaviour management development.

The findings pertaining to classroom experience provide support for self-efficacy theory, which states that multiple negative experiences serve to reduce one's self-efficacy (Welch, 1995). Of the four qualitative characteristics used to describe behaviour in the classroom, (severity, manageability, tolerability, and contagion), two were significantly related to self-efficacy in behaviour management. Teachers who perceived themselves as dealing with dealt with behaviours that were severe and unmanageable tended to have a lower sense of self-efficacy. Teachers who perceived themselves as dealing with dealt with manageable and less severe behaviours were more confident in their classroom management abilities. Qualities of behaviours pertaining to contagion or tolerance were not related to self-efficacy levels. Welch (1995) suggests that experiences that require greater skill or have greater consequences are likely to have a greater influence on self-efficacy. This may help to explain the significant relationship between self-efficacy, manageability and severity, but not for tolerability or contagion. For instance, behaviours can be personally intolerable for teachers, but they may be manageable. Whereas, behaviours that are unmanageable and severe, require teachers to employ effective behaviour management strategies, because failure to do so disrupts the activities and learning of all students in the class. The results of this study need to be interpreted with some caution, due to the directionality and causality problem associated with correlational studies. It is not clear whether negative experiences serve to reduce self-efficacy, or whether teachers low in self-efficacy appraise classroom behaviours as being severe and unmanageable. These are questions for future research to address.

In addition to the findings pertaining to classroom experience, it is worth noting that teachers' perceived level of experience with children with behaviour problems was not related to self-

efficacy in behaviour management. Although not hypothesized, it may have been expected that teachers who feel they have had experience with children with behaviour difficulties, would be more confident in their behaviour management abilities. However, the findings indicated that level of experience may not be involved in the development of self-efficacy, but rather the *nature* of these experiences are of greater importance.

Differences in Self-efficacy between Graduate and Student Teachers.
Contrary to research indicating that teacher self-efficacy declines early in their teaching careers (Buell et al., 1999; Soodak & Podell, 1997; Welch, 1995), the findings of this study revealed that teachers were more confident than student teachers in their classroom behaviour management abilities. While it is a positive finding that Victorian teachers' confidence improves as they begin full-time teaching, it is worth noting that the results indicated that teachers feel only moderately prepared to teach and moderately confident in their abilities as classroom managers.

One possible explanation for the improvement in teacher self-efficacy is the notion that confidence develops through experience (Martin et al, 1999). Self-efficacy theory states that enactive, or real experiences are more effective than vicarious experiences in building a realistic sense of self-efficacy (Bandura, 1986). Although student teachers are expected to develop skills and confidence from their teacher training experiences, these experiences are often very limited.

Evans and Tribble (1986) suggest the disparity in self-efficacy levels between graduate and student teachers can be accounted for by relative lack of classroom experience. It is thought that pre-service levels of self-efficacy represent idealised beliefs based on a narrow range of experience, while in-service teachers having been exposed to a range of multiple experiences are thought to have an accurate sense of self-efficacy (Hebert et al, 1998; Little & Robinson, 1997). Principally, student teachers' experiences are often based on vicarious experiences; observing a supervising teacher in the classroom. The self-efficacy of a student teacher who chiefly observes the demonstration of behaviour management skills may be quite different from the self-efficacy of a teacher who has applied the skills daily. Some student teachers may not encounter students with persistent behaviour problems on their placements. In addition, as teachers spend time in the classroom dealing with behaviour issues they are presented with many opportunities to practice and develop a range of behaviour management strategies.

In response to the open-ended question regarding additional training a teacher commented that, "You can't be taught how to deal with behaviour problems very well at university - most comes from experience", and another stated "I deal with it according to the behaviour of the child and in consultation with the educational psychologist. You need to be in the classroom to develop the experience." These comments are in line with Martin and colleagues (1999) who contend that teacher training programs cannot be expected to impart every skill required to deal with children's misbehaviour and that much of it will come with experience. Therefore, one possible explanation for the results of the current study not indicating a decline in self-efficacy as teachers move into full time teaching is that a decrease in self-efficacy may not become apparent until later in their careers. This study assessed self-efficacy in teachers with less than three years teaching experience, however future studies may need to include a more experienced sample of teachers as a comparison group.

Methodological Limitations
There are some limitations of the present study. First, although considered adequate for comparison, the sample size of student teachers was small. A more representative sample of student teachers is required. Secondly, the inclusion of a more experienced sample of teachers may have revealed evident changes in self-efficacy over a longer period of time. Finally, the

present study was a cross-sectional design, however tracking the changes in self-efficacy over the course of teacher development may lend itself to a longitudinal design.

Implications of the Study
Despite the shortcomings of this research, the present findings provide important information for teacher training programs and school support structures. Current teacher training programs could be modified and enhanced to prepare teachers to teach and plan for children with behaviour problems better, by providing additional training in the areas requested by teachers themselves. In addition, a variety of training formats should be considered, in particular more opportunities to learn about, as well as experience a wide range of behaviour problems and management strategies. Given that the vast majority of both graduate and student teachers indicated that they would like additional training in classroom management, both training institutions and schools should be encouraged to provide opportunities for further formal education in this area. Training institutions that do not already do so, should be urged to provide a formal subject on classroom behaviour management, as it seems likely that teachers who receive explicit training in behaviour management will develop the necessary skills and confidence to deal with difficult behaviours in the classroom. It would be of interest for further research to assess the self-efficacy of teachers who had completed a formal subject in classroom behaviour management, and those who had not, to determine whether this would improve their confidence.

Areas for Further Research
The present findings indicate that teacher self-efficacy is vulnerable when children with severe and unmanageable behaviour are present in their classrooms. Therefore, at a work place level, schools need to provide additional support and training for teachers who have students with persistent behaviour problems in their classroom and these additional supports need to be evaluated for their impact on self-efficacy. Further research needs to assess the influence of forms of support, such as a school psychologist or welfare coordinator, on teacher confidence in behaviour management. Finally, the classroom placement of children with persistent behaviour problems could be based upon an assessment of the prospective teachers' self-efficacy in behaviour management.

Summary
As past research suggests teachers who are the most effective classroom managers, are those who are most confident in their abilities (Cartledge & Johnson, 1996). This study has identified preparedness and classroom experiences as factors that are significantly associated with levels of teacher self-efficacy in behaviour management. Therefore, with improved training and support, teachers will be in a position to deal with classroom misbehaviour confidently and effectively, lowering the risk of stress and burnout, as well as provide an optimum learning environment for all students in the classroom.

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