



Teachers' coping styles and factors inhibiting teachers' preferred classroom management practice



Merav Salkovsky^a, Shlomo Romi^{a,*}, Ramon (Rom) Lewis^{b,1}

^a School of Education, Bar-Ilan University, Ramat-Gan, Israel

^b Faculty of Education, La Trobe University, Melbourne, Victoria, Australia

HIGHLIGHTS

- Five factors inhibit teachers from applying their preferred classroom management.
- Non-productive coping relates to more awareness of two types of inhibitors.
- Productive coping relates to less awareness of personal inhibitors (e.g. no time).
- Problem solving does not relate to awareness of any of the inhibitors.

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ABSTRACT

The relationship between 294 teachers' coping styles and factors they perceive as inhibiting them from using their ideal classroom management is investigated. The results show that a coping style that includes strategies such as self-blame and wishful thinking relates to greater identification of both personal inhibitory factors (e.g., time and work demands), and broader factors (e.g., accountability to parents). Conversely, a coping style incorporating physical activity and a focus on the positive, relates negatively to personal inhibitory factors. Somewhat surprisingly, teachers' use of socially embedded problem solving failed to relate to the perceived prominence of inhibitors to preferred management practice.

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1. Introduction

When teaching in the classroom, teachers often find themselves in a gap between their ideals of teaching and classroom management and the harsh, often rude reality of everyday classroom life.

The present study was designed to examine teachers' perceptions of factors which inhibit them from implementing their preferred classroom management practice, and to investigate the ways teachers cope with the gap between their preferred and current management practice, the gap between the ideal and the real.

1.1. Effective classroom management

Teachers must “establish order, engage students, or elicit their cooperation” (Emmer & Stough, 2001, p. 103) in order to create a classroom environment in which students learn, and which the teacher can manage (Burden, 2003). The importance of classroom management is widely documented (Evertson & Weinstein, 2006), indicating that teachers' effective managing of students' behavior and learning is critical to achieving positive educational outcomes. Teachers' classroom management practices can have a significant effect on students' concentration and self-regulated learning (McCaslin et al., 2006), autonomy and responsibility (Lewis, Romi, & Roache, 2012; Elias & Schwab, 2006; Psunder, 2005), moral and social development (Nucci, 2006), students' achievements (Freiberg, Huzinec, & Borders, 2008), attitudes toward schoolwork and their teachers, and the development of pro-social values (Lewis, Romi, Katz, & Qui, 2008). In addition, a significant body of research attests to the importance of effective classroom management to teachers' occupational well-being, and its effect on stress, strain, burnout, attrition, and self-efficacy (Kokkinos, 2007;

* Corresponding author. School of Education, Bar-Ilan University, Ramat-Gan 5290002, Israel. Tel.: +972 3 5318710.

E-mail address: Shlomo.Romi@biu.ac.il (S. Romi).

¹ Tel.: +61 3 95258482.

Richards, 2012; Van Dick & Wagner, 2001; Woolfolk, Rosoff, & Hoy, 1990).

Effective classroom management requires more than actions taken to create and maintain a learning environment conducive to successful instruction. Because it is a complex social, psychological, and emotional process, involving interactions and relationships between teachers and students (Pianta, 2006), classroom management also includes establishing personal relationships with students and working within them (Brophy, 2006). A major theme of classroom management research is that teachers who are effective classroom managers demonstrate an ethos of “warm demander,” that is teachers signify to all that they care for their students and simultaneously hold high expectations for their academic, social, and overall continued success (Pool & Everston, 2013).

Data from Australia indicate that teachers' classroom management is usually described in terms of punishments for inappropriate behavior and, less frequently, in terms of recognition and rewards for good behavior. There is also some individual discussion with teachers and some opportunity, albeit limited, for hearing students' voice through group decision making (Lewis, 2006).

A number of studies conducted in Israel, China, and Australia, have addressed the effectiveness of a range of classroom management techniques and their impact on levels of misbehavior. The results indicate the productive effect of recognizing responsible behavior, and discussing the impact of misbehavior on other students with the student who misbehaved. Students who had experienced recognition and discussion became more responsible, less distracted, and more positive toward teachers and schoolwork. Conversely, teacher aggression, manifested in group punishment, humiliating students, and yelling in anger, appears to be associated with more student misbehavior and higher levels of negative student attitudes toward learning (Lewis, Romi, Qui, & Katz, 2005; Lewis et al., 2008; Romi, Lewis, & Katz, 2009).

Classroom management refers to teachers' strategies for regulating student behavior, interaction, and learning (Martin & Sass, 2010). The various classroom-management models can be classified into three approaches, based on the degree of a teacher's control over students' behavior and the degree of autonomy that should be given to students (Psunder, 2005). The first approach involves minimal teacher control and assumes students' responsibility for their behavior; management techniques are nonverbal cueing and nondirective statements (Wolfgang, 1999; Wolfgang, Bennett, & Irvin, 1999; Wolfgang & Wolfgang, 1995). The second approach views student behavior as the combined and cooperative responsibility of students and teachers, who together determine appropriate student behavior and set up unpleasant consequences for inappropriate behavior (Dreikurs, Grunwald, & Pepper, 1971; Glasser, 1969). Teachers who choose this democratic approach usually use questioning techniques (Wolfgang, 1999; Wolfgang et al., 1999; Wolfgang & Wolfgang, 1995), allow students to participate in decisions on managing their classmates' behavior, and encourage them to develop a mutually agreed contract for behavioral change (Psunder, 2005).

The third approach gives the teacher most power, as it is based on the assumption that students are not capable of realizing what is best for them, leaving decisions to the teacher. The teacher is entrusted with selecting the most appropriate behavior, reinforcing it, and eliminating inappropriate or disruptive behavior (Canter, 1976). Teachers who espouse this approach usually use power techniques, among them directive statements, threats, modeling, reinforcement, and physical intervention (Wolfgang, 1999; Wolfgang et al., 1999; Wolfgang & Wolfgang, 1995).

Reupert and Woodcock (2010) suggested another classification of classroom management strategies – by timing of strategy implementation: (1) *Reward strategies* (e.g. stickers) after student's

desirable behavior; (2) *Preventive strategies* to avoid the occurrence of behavioral issues (e.g., establishing routines, seating arrangements, and class rules); (3) *Initial correction strategies* that include actions involving mild or low intrusive correction responses (e.g., proximity control, signaling, and directive statements); (4) *Later correction strategies* that are more assertive and forceful steps (e.g., time out and behavioral contracts). The third and fourth correction strategies are used after the undesirable behavior.

When considering the gap between preference and practice, we might ask whether teachers' preferred practices differ from effective classroom management practices. It would seem that if a technique is tried and true, it would be universally embraced and implemented.

However, there are many management styles, and in this sense, a classroom is a small organization whose management is dictated not only by the teacher – the direct manager – but also by school policies, cultural codes, and requirements set forth by the educational system. And while there are methods that have been proven effective – frontal instruction and various behavioral techniques – they may not be consistent with a teacher's personality and educational view. Overall, teachers' ideas of best management practice involve significantly more empowerment of students than is currently the case in classrooms. They prefer to utilize fewer control methods such as rules, rewards, and consequences, and seek to manage classrooms by organizing students to make their own decisions or by influencing each student to decide to behave well (Lewis & Burman, 2008). However, when asked about their everyday classroom experience, teachers mentioned factors that inhibit them from implementing their ideas of best disciplinary practice.

1.2. Classroom management inhibitors

Jackson (1968) noted that the complexity of classroom management results from several properties of classroom teaching, including multidimensionality (varied events and persons), simultaneity (many things happen at once), immediacy (the rapid pace of events limits reflection), unpredictability (of events and outcomes), publicness (events are often witnessed by many or all students), and history (actions and events have pasts and futures).

Lewis and Burman (2008) asked some 300 Australian secondary-school teachers to identify the main factors that prevented them from implementing their ideas of best classroom management. The teachers were asked to rate a list of potential constraints on various levels – personal, student, classroom, the school, and beyond (e.g. parents' preferences, government policies). The factors that were listed as most inhibiting best classroom management were excessive workload, classroom size and layout, and lack of support from the school administration. The result of the effect of these factors was that teachers found themselves to be more controlling of students than they thought was ideal. As might be expected, this gap between preferred and current practice was of concern to teachers, and the greater the gap, the greater the concern.

1.3. Present versus preferred classroom management – the gap

Teachers' dissatisfaction with their classroom management performance has been associated with a lower sense of efficacy (Woolfolk et al., 1990). Dissatisfaction plays a role in determining stress level (Greenwood, Olejnik, & Parkay, 1990), and consequently, could contribute to generating teacher burnout (Betoret, 2009; Betoret & Artiga, 2010; Kokkinos, 2007). In addition, differences between teachers' expectations and classroom reality are major causes for a novice teachers' sense of depression and turmoil (Conway, 2001).

Voydanoff (2005) suggested that the incongruity, produced by environmental constraints, between the way a person actually behaves and his or her desired behavior, produces stress. In the case of teachers, lack of congruence between the preferred and the real classroom management practices might lead to job dissatisfaction and stress.

In the present study we refer to *inhibitors* – the factors that are potentially responsible for the incongruity. Some of these, such as too many things to do, are immediate; others, such as parent's expectations or requirements handed down by the educational system, more remote. However, close or distant, these factors all combine to produce the gap between teachers' expectation of themselves and the reality of their practice. Kokkinos (2007) examined the relationship between teacher stress and both individual and environmental factors associated with such stress and found that

While the early theories of burnout focused exclusively on work-related stressors, recent research adopts a more integrative approach where both environmental and individual factors are studied. Nevertheless, such studies are scarce with teacher samples (p. 229).

In his study, the individual factors included personality measures such as neuroticism and accomplishment, and the environmental included variables such as classroom discipline among the factors affecting teachers' stress. As part of his analysis, Kokkinos reported that classroom management and student misbehavior are significantly related to stress. In the present paper we continue the examination of teacher stress, considering the role of individual and environmental factors. However, in this study teachers' dissatisfaction with their current approach to classroom management is viewed as a dependent variable rather than an independent variable.

Much current research is based upon Lazarus and Folkman's (1984) model of stress and coping, which is used to help understand the process by which threatening demands – inhibitors – give rise to coping behavior. According to this model, stress is a two-way process which involves the production of stressors by the environment, and the response of an individual subjected to these stressors.

Fig. 1 shows some hypothesized relationships between inhibitors of preferred classroom management practices, the stressing gap between current versus preferred classroom management practices and coping styles. The figure reveals a number of inhibitors that affect the gap between teachers' perception of preferred classroom management and present practices. If teachers attach importance to this gap, they may feel stressed and thereby search for ways of coping with inhibitors. Productive coping styles are expected to lead to a decrease in the number of factors identified as inhibitors, or the extent to which inhibitors cause a concern about an inability to implement their own ideas of best classroom management. Thus, in general, coping styles are characterized in this paper as independent variables whereas the perceived inhibitors are dependent variables. Nevertheless, the model reflects the possibility that identification of a particular inhibitor may result in greater use of a particular coping style, hence the two-way arrow between inhibitors and coping styles.

1.4. Teachers' coping styles

Coping is commonly thought of the cognitive, affective, and behavioral responses used by an individual to deal with problems encountered in everyday life. Lazarus and Folkman (1984) define coping as “the ongoing cognitive and behavioral efforts to manage

specific external and/or internal demands that are appraised as taxing or exceeding the resources of the person” (p. 141), and point out that managing stress includes accepting, tolerating, avoiding, or minimizing the stressors. They also include the more traditional view of coping as mastery over the environment. Moreover, coping is not limited to successful efforts but includes all purposeful attempts to manage stress regardless of their effectiveness. That is, the coping response is initiated as a response to a stressful event that is personally significant and taxes or exceeds an individual's resources.

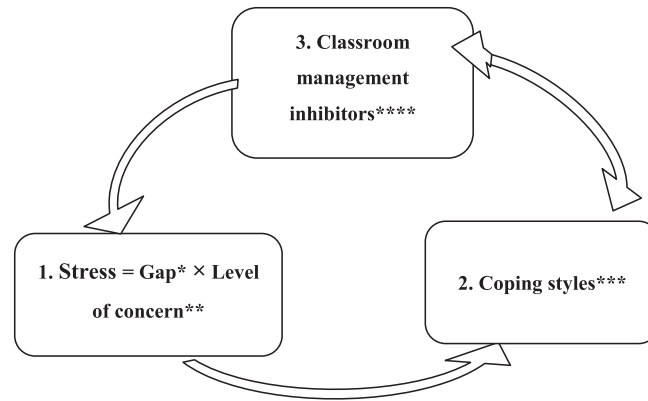
There are multiple ways to cope with stressors. In their review, Skinner, Edge, Altman, and Sherwood (2003) commented that the hundreds of coping styles can be grouped into five: problem solving, support seeking, avoidance, distraction, and positive cognitive restructuring. Alternatively, it has been argued that there are three negative styles (rumination, helplessness, and social withdrawal) and one positive one – emotion regulation (Newton, 1989; O'Driscoll & Cooper, 1994; Skinner et al., 2003). Recently, Lewis, Roache, and Romi (2011) conceptualized teachers' coping in terms of three styles: social problem solving, passive avoidant coping, and relaxation.

Inherently and universally, specific coping strategies are neither good nor bad, as different situations may call for different responses. However, it is possible to differentiate coping in terms of general effectiveness, and divide group coping strategies into productive or non-productive styles (Frydenberg & Lewis, 2002). In general, individual generic coping responses may include problem-solving skills (e.g., time management, direct action), thought regulation (e.g., positive thinking), passive acceptance, and selective ignoring (Austin, Saklofske, & Egan, 2005; Fleishman, 1984). Similarly, according to Kyriacou (2001), teachers cope with stress by palliative techniques and direct actions. Palliative techniques do not deal with the source of the stress, but aim to reduce the impact of the stressors. Such techniques include drinking, smoking, engaging in leisure activities, and avoidance behavior, all of which are argued dysfunctional in the long run (Sinclair, 1992). In contrast to palliative techniques, direct-action techniques for coping involve attempts to eliminate the sources of stress, such as taking actions to deal with problem.

Teachers with more adaptive coping strategies show a lower degree of burnout than teachers with coping strategies based on ignoring or avoiding problematic situations (Van Dick & Wagner, 2001). Productive coping strategies, such as solving the problem, and working hard have been consistently associated with better health outcomes. Austin et al. (2005) concluded that teachers with high levels of stress are more likely to use negative coping strategies such as escape and avoidance. Avoidance and distancing strategies are associated with withdrawal from stress sources, emotional exhaustion, depersonalization, and lack of accomplishment (Chan & Hui, 1995).

However, evidence of the efficacy of coping strategies for mitigating distress has been inconsistent. Not all coping strategies are likely to reduce distress, and certain ones, such as avoidance (Cronkite & Moos, 1984) or restricting one's expectations (Menaghan & Merves, 1984), may even exacerbate distress. Chan (1998) investigated the role of teachers' coping strategies in mediating the effects of stressors on psychological distress, and found that the direct effect of stressors on distress is sizably reduced when coping strategies such as problem solving and seeking support are involved. Coping can thus mitigate or exacerbate psychological distress regardless of the stressors confronted.

Many coping measures have been developed over the years. In her comprehensive review of the measurement of coping, Aldwin (2007) identified 200 references to different coping instruments. In research, descriptions of the ways people cope are grouped



* The gap between preferred and current classroom management

** Level of concern about the gap

*** Response to a stressful event, such as social problem solving, passive avoidant coping, and relaxation

**** Potential constraints on various levels – personal (too many things to do), student (age, personality), classroom (classroom size and layout), the school (lack of support from the school administration), and beyond (e.g. parents' preferences, government policies) – inhibiting teachers from implementing their preferred classroom management.

Fig. 1. Hypothesized relationships between research variables.

according to similarity of concept or ideation, with the most common categorization or grouping being the dichotomous one proposed by Lazarus and Folkman (1984; Lazarus, 1993), which identifies problem- and emotion-focused coping. Alternative categorizations range from groupings of 8–10 strategies (e.g. Stark, Spirito, Williams, & Guevremont, 1989), to the specificity of 18 strategies that make up the Adolescent Coping Scale ACS (Frydenberg & Lewis, 1993) and 20 in the later ACS-2 (Frydenberg & Lewis, 2011). Strategies have often been grouped to characterize coping styles that represent functional and dysfunctional aspects of coping (Cox, Gotts, Boot, & Kerr, 1985; Frydenberg & Lewis, 1997, 2011; Seiffge-Krenke & Shulman, 1990). The functional styles represent direct attempts to deal with the problem, with or without reference to others, whereas the dysfunctional styles relate to the use of non-productive strategies.

In the present study we used a slightly modified forerunner of Frydenberg and Lewis's Coping Scale for Adults (CSA-2) (2014). The first version of this instrument (Frydenberg & Lewis, 1997) was used in numerous studies and has been shown to be valid and reliable in different population and professions, among them teachers (Lewis et al., 2011; Richards, 2012; Wilson, 2012), parents of preschoolers (Gulliford, 2013), managers (Frydenberg & Lewis, 2002), patients with traumatic brain injuries (Anson, 2006; Hsieh et al., 2012), and anorexic girls and their mothers (Lynham, 1996). The CSA identifies consistency and variation in coping, and these are reflected in general forms of coping and in situation-specific ones.

The present paper aims to examine the relationship between the coping styles of teachers who express concern over a gap between their preferred and practiced approach to classroom management, and the factors inhibiting them from implementing their own ideas of best classroom management. Accordingly, the main research assumption is that when teachers attach importance to the gap between their perception of real and preferred classroom management practices, they search for ways of coping with the factors which they perceive as inhibiting them from realizing their ideals of best practice. Therefore our hypotheses were (1) Greater use of the Productive coping style is expected to lead to a decrease

in the number of inhibitors identified by teachers, (2) Greater use of the Problem-solving coping style is expected to lead to a decrease in the number of inhibitors identified by teachers, and (3) Greater use of the Non-productive coping style is expected to lead to an increase in the number of inhibitors identified by teachers.

2. Method

2.1. Sample

A total of 294 secondary-school teachers participated in this study. The teachers came from 15 metropolitan schools in Melbourne, Australia. Over half (60%) were women; the mean age of respondents was 39.5 years ($SD = 9.4$). The schools were randomly sampled, and although they do not constitute a representative sample of Melbourne metropolitan schools, neither do they appear a systematically distinct set. Schools within the sample are situated across the Melbourne metropolitan area and range in size from approximately 400 to 1000 students. All are state coeducational schools.

2.2. Instruments

2.2.1. Teachers' coping styles

To assess how staff attempted to cope with the difference between present and preferred management style, an earlier version of the 20-item short form of the newly published The CSA-2 was developed in Australia for clinicians, counselors, and human-resources personnel who work with adults on issues of coping and to help these clients develop productive coping strategies (Frydenberg & Lewis, 2014). Each item of the CSA describes a specific coping strategy which represents a response to a concern, and respondents are asked to indicate the frequency with which they use the strategy on 5-point scale (5 – *very often*, 1 – *never*). Each of the 20 items reflects a conceptually and empirically distinct coping strategy (for example self-blame, problem solve, worry, try to be funny). One optional item, get sick, assessed a respondent's professed inability to cope. The only difference between the scale used

in this study and the CSA-2 Short Form is that an item assessing Focusing on the negative did not appear in this study. On average, the correlation between the Short Form, single-item measures of coping strategies and the respective Long Form scale of the ASC is .89 (Frydenberg, 2004, Table 10).

To determine whether the recommended scaling of coping styles, based on the Short Form items (Frydenberg & Lewis, 2014), applied to the current sample, Cronbach alpha coefficients were computed. The alphas for the scales assessing the Productive coping style, the Non-productive style and the Problem solving style respectively reported by Frydenberg and Lewis (2014) were .68, .74, and .68. Nevertheless, they were argued as acceptable because although the coping strategies comprising respective styles are similar and share substantial variance, these styles are not uni-dimensional constructs.

Table 1 records the mean scores, standard deviations and, where applicable, internal consistency (Cronbach's alpha) coefficients for each of the CSA-2 styles (with the slight variation of the omission of the item Dwell on the negative from the Non-productive style). To investigate the relationships between styles, correlations between scales were performed. The results indicate significant ($p < .05$) correlations between Productive coping and both Non-productive (.43) and Problem-solving coping (.31), although the correlation between Non-productive coping and Problem-solving coping was not significant (.12). Consequently the styles were considered sufficiently independent to warrant separate measures.

The data indicate that the three scales display moderate reliability, as one would expect from an assessment of a coping style comprising a number of conceptually distinguishable strategies. Consideration of the scale average item means shows that, overall, Problem solving (develop a plan of action, ask a professional person for help, meetings addressing the problem, talk to others, and give each other support) is the most commonly used style of coping dealing with the gap between the current and preferred approaches to classroom management (used on average 'sometimes'), followed by Productive coping (Focus on the positive, wishful thinking, ignore the issue, relax, employ a sense of humor, improve relationships, pray and pay attention to one's self-image), and the least commonly used is Non-productive coping, comprising self-blaming, worrying about how things will turn out well, finding ways to let off steam and getting sick, used only 'occasionally'.

2.2.2. Inhibitors

Identification of potential inhibitors to self-defined best classroom management practice was achieved via a series of professional-development sessions with more than 500 primary and secondary-school teachers. These sessions were begun in 2008 and have been conducted for the last six years in consultation with schools in the Northern and Western Educational Regions in the State of Victoria (e.g., the AiZ project – <http://www.aiz.vic.edu.au/Content/NMR-Powerful-Learning>). As part of these professional development-sessions, groups of six teachers were asked to identify what factors prevented them from implementing their own ideas of

best practice of classroom management. The list of potential factors grew to 27 potential constraints: at the personal level (e.g., too many other things to do), the student level (e.g., age), the classroom level (e.g., class size), the school level (e.g., support from administration) and beyond (e.g. parents' preferences, government policy). Teachers' acknowledgment of these potential inhibitors has been reported in a previous paper by one of the current authors (Lewis & Burman, 2008). However in that paper, the possible existence of underlying latent variables inherent in the list of inhibitors had not been investigated. To further investigate this issue, factor structure and reliability of the inhibitors' scales were part of data analysis of this study and are reported in the results section.

2.2.3. Level of concern about the gap

Within the investigation, after indicating their views about their present and preferred styles of management, teachers were asked to identify how concerned they were about the gap between preferred practice and current practice (3 – major concern, 1 – no concern). Finally, teachers were asked to rate each of the factors potentially preventing them from implementing their ideas of best practice.

2.3. Procedure

In each sampled school, teachers received survey questionnaires from a research assistant who briefly explained the study to all staff prior to placing anonymous questionnaires in every second teacher's post box (50%). When teachers received a questionnaire for a grade they did not teach, they were asked to choose a grade they were teaching and alter the questionnaire accordingly. Completed questionnaires were collected in person, from a box at the office; one week after the questionnaires had been distributed. Teachers who has lost or misplaced their questionnaires were issued new ones on request and asked to fill them in. Teachers were informed that their responses were anonymous and that the collated data would be reported to the staff and used for research publications, and that completion signified consent. To ensure anonymity, no demographic variable other than gender and years of teaching experience were requested. The response rate was 78%, indicating the significance of the focus, however anonymity prevented any determination of bias in sampling.

3. Results

3.1. Inhibitors to preferred classroom management

Lewis and Burman (2008) examined and listed the factors that teachers reported as inhibitors in the present paper, and addressed these inhibitors independently. In the current study however we subjected teachers' responses to this section of the questionnaire to an Oblique factor analysis, before attempting to relate teachers' perceptions of the significance of inhibitors to preferred classroom management practice and their coping styles. For this analysis as well as all other reported below, SPSS statistics 20 was utilized. This allowed us to consider the possibility that their responses supported the presence of underlying latent variables, and the use of scales rather than individual inhibitors increased the reliability of measurement. The Scree test suggested a 5-factor solution, which explained 62% of variance. The factor loadings are reported in Table 2, with factor loadings greater than .3 reported in bold type. Where an item loaded significantly ($>.3$) on more than one factor the largest loading was used as a guide to which factor the item contributed.

Table 1
Levels of concern with the gap between practiced and preferred classroom management, and coping.

Variable	Ave. item mean	Scale SD	Alpha	Number of items
Level of concern	2.19	.66	n/a	1
Coping styles				
Non-productive	2.08	3.28	.69	4
Problem solving	3.09	2.87	.67	4 ^a
Productive	2.53	4.89	.68	8

^a Focus on the Negative was not included.

Table 2
Factor structure of inhibitors.

Pattern matrix ^a	Factors				
	1	2	3	4	5
1. Accountability to Department of Education	.891	-.046	-.024	-.077	.112
2. Accountability to parents	.859	.106	-.009	.021	.049
3. Accountability to school administration	.847	.083	-.029	-.072	.070
4. Government policy	.818	-.080	-.023	-.054	-.101
5. Parents' preferences	.794	-.045	.020	.142	-.210
6. Council's preferences	.793	-.037	.045	.094	-.192
7. Legal responsibility	.776	.023	.032	-.084	.044
8. School policy	.545	.134	-.015	.125	-.481
9. Personality	.020	.774	.112	.037	-.021
10. Experience with approach	.055	.772	-.123	-.202	-.024
11. Knowledge of approach	.006	.743	-.130	-.314	-.052
12. Teaching experience	.042	.682	.133	.097	-.101
13. Teaching philosophy	-.024	.669	.224	.230	-.052
14. Students' age	-.043	.045	.791	.173	.073
15. Students' personalities	-.103	.132	.730	.148	-.075
16. Subjects taught	-.039	.033	.713	-.045	-.037
17. Class time available	.082	-.059	.691	-.114	.044
18. Class size	.063	.033	.572	-.244	-.131
19. Students' gender (no. of males)	.137	.048	.507	-.116	.035
20. School size	.178	-.282	.468	-.344	-.068
21. Classroom size/layout	.110	-.051	.421	-.279	-.244
22. Energy available	.033	.326	.070	-.705	-.033
23. Too many things to do	.124	.032	.184	-.683	.041
24. Stress	.178	.324	.174	-.372	.080
25. Lack of support from peers	.116	.208	.103	.043	-.759
26. Lack of support from school administration	.213	.113	.106	.055	-.736
27. Satisfaction with current approach	.231	.195	.198	.354	.367
Percent of variance explained	36.52	10.48	7.88	5.71	1.46

^a The factor loadings are reported in Table 2, with factor loadings greater than 0.3 reported in bold type. Where an item loaded significantly (>0.3) on more than one factor the largest loading was used as a guide to which factor the item contributed.

Inspection of the items loading significantly (>.3) on their respective factors in Table 2 shows that 22 of the 27 items loaded significantly on only one factor and five loaded significantly on two factors (Items 8, 11, 20, 24, and 27). In these five cases, the items were associated with the factor upon which their respective loading was greatest. Items loading on factors 1–5 were examined for the internal consistency of teachers' responses by computing Cronbach's alpha coefficients, removing items from a respective scale if its exclusion increased the magnitude of the alpha, and one item was excluded (Satisfaction with current approach, in Factor 5). Consequently five scales were constructed and named. Table 3 records the scales' means, standard deviations, and alpha coefficients. In addition, to permit comparison of support for different types of inhibitors, average item means were computed by dividing the scale means by the number of

Table 3
Scales of inhibitors.

Scale name	Mean (average item mean)	SD	Items	Cronbach's alpha
Accountability	20.80 (2.60)	6.79	1, 2, 3, 4, 5, 6, 7, 8	.94
Personal– pedagogic Context	13.65 (2.73)	3.95	9, 10, 11, 12, 13	.83
	20.40 (2.55)	5.60	14, 15, 16, 17, 18, 19, 20, 21	.85
Personal pressure	7.20 (2.40)	2.32	22, 23, 24	.74
School-level support	4.94 (2.47)	1.99	25, 26	.87

items in the scale. These average item means are included in parentheses in Table 3.

Table 3 presents five reliable scales of inhibitors. The first, Accountability inhibitors, included accountability to the Department of Education, parents, school administration, government policy, parents' preferences, council's preferences, legal responsibility, and school policy. The second scale, Personal – Pedagogic inhibitors, included personality, teaching philosophy, knowledge of approach, teaching experience, and experience with approach. Context inhibitors comprised a third scale which included students' age, students' personalities, subjects taught, class time available, class size, students' gender, school size, and classroom size/layout. The fourth, Personal pressure inhibitors included stress, too many things to do, and energy available. The last one, School level support inhibitors, comprised lack of support from peers and from school administration.

Inspection of the data in Table 3 shows that, on average, the inhibitors most obvious to teachers are personal pressures like stress and time demands, followed by a perceived lack of school-level support. These personal pressures and perceived lack of school-level support are seen as moderate to strong factors preventing teachers from implementing their ideas of best management practice in their classrooms. The school and class context is the next most significant, followed by teachers' lack of relevant pedagogical preparedness and the need to meet parental, and administrative requirements. To investigate the relationships between levels of support for the five factors, correlations between scales were performed. The results indicate all correlations were significant. Of the 10 inter-correlations, 5 were between .34 and .36, one was .41 and the remaining four were between .51 and .57. Consequently, although the factors were clearly related, the scales assessing different types of inhibitors were considered sufficiently independent to warrant the separate measures.

To compare teachers' rating of importance for the various kinds of preferred classroom management inhibitors, a MANOVA was computed, using the five scales of inhibitors as the dependent variable, and the results revealed that the means differed ($F_{(4,132)} = 6.020, p = .000, \eta^2 = .153$). To compare the significance of difference between means, post hoc analyses were computed. At the $p = .05$ level of significance, School level support (mean = 2.53) and Personal pressure (mean = 2.60) are significantly more inhibiting than are the other factors.

3.2. Teachers' coping styles and the concern about the gap

Having established the existence of three reliable measures of coping styles, the next step was to see whether any were associated with the level of concern teachers expressed about not being able to manage classes in their preferred manner. Level of concern in this analysis acted as a surrogate for the size of the gap between present and preferred classroom management practice, as these variables had been shown to have a significant relationship (Lewis & Burman, 2008). To examine these relationships, levels of concern was entered as an independent variable (together with gender) into a multivariate analysis where the three coping scales comprised the dependent variables; the number of years of teaching experience was used as a covariate.

The results of the multivariate ANOVA indicated that although teaching experience failed to associate significantly with the coping styles, both teacher gender ($F_{(3,143)} = 3.86, p = .011, \eta^2 = .074$) and level of concern ($F_{(6,290)} = 4.42, p = .079, \eta^2 = .05$) were significant predictors of coping. Inspection of the Univariate F values indicated that female teachers used Problem solving ($M = 2.85$) more frequently ($F = 5.58, p = .020, \eta^2 = .037$) than male teachers ($M = 3.21$). Furthermore, teachers who expressed greater concern

about the gap between their present and preferred style of classroom management used significantly more Non-productive coping ($F = 11.58, p = .000, \eta^2 = .137$). Teachers who rated the gap between present and preferred classroom management to be of major concern used the most Non-productive coping ($M = 2.61$), those who rated it of minor concern used less Non-productive coping ($M = 2.21$), and those who rated the gap as being of No concern used even less ($M = 1.66$). This created a significant linear relationship between usage of Non-productive coping and level of concern about the gap between present and preferred classroom management. However, no relationship was evident for the other two coping styles.

3.3. Concern and inhibitors

Correlations between level of concern and the significance of respective inhibitors were not statistically significant. That is, there is no relationship between the kinds of factors teacher identify as responsible for inhibiting their attempts at best practice and the level of concern associated with the gap between current and preferred classroom management.

3.4. Coping styles and inhibitors

Although, as stated earlier, coping styles are generally treated as independent variables and inhibitors as dependent variables, we were aware that identification of a particular inhibitor may result in greater use of a particular coping style. Therefore, to examine the relationship between coping styles and inhibitors to preferred management practice, the three coping scales were correlated with the five inhibitor scales. Because previous research has shown a tendency for coping styles to be correlated, partial correlations between styles were computed to determine whether the relationship between one style and the inhibitors should be considered while controlling for the other styles. As shown above, there were significant correlations between some of the coping styles. Consequently, when investigating the relationships between coping styles and inhibitors, partial correlations were computed. The resulting correlations and their statistical significance are reported in Table 4.

As can be seen, one of the significant correlations ($p = .05$) in Table 4 ($r = .32, p = .001$) is between Non-productive coping and the inhibitors comprising the Personal pressure scale. This finding means that teachers are more likely to attribute greater significance to personal inhibiting factors (e.g., lack of energy and time) and stress, are those who tend to use more of the Non-productive style of coping. This style includes self-blame, worrying about how things will turn out well, finding ways to let off steam and getting sick. Reliance on these coping strategies is also associated with perceiving accountability factors related to the expectations of teachers, parents, school administration and government as more inhibiting ($r = .21, p = .032$).

Table 4
Coping styles by type of inhibitors.

Scale name	Productive		Non-productive		Problem solving	
	Corr.	Prob.	Corr.	Prob.	Corr.	Prob.
Accountability	.18	.072	.21	.032	.18	.063
Personal – pedagogic	.06	.517	.06	.057	-.06	.535
Immediate context	.15	.125	.06	.526	-.05	.620
Personal pressure	-.21	.030	.32	.001	.16	.093
School-level support	.06	.067	.08	.396	.17	.089

Significant values are in bold.

The remaining significant correlation in Table 4 shows that teachers who use more Productive coping strategies, including putting time into, friends, relaxing, self-image, prayer and humor, wishfully thinking, focusing on the positive, and increasing their attempts to put the problem out of their mind, are likely to attribute less importance to personal inhibiting factors such as lacking energy, having too many things to do and being stressed, as inhibitors to best practice ($r = .21, p = .030$).

It is interesting to note that use of the Problem solving coping strategies, such as developing a plan of action by seeking both professional and private support, fails to correlate significantly with any of the inhibitors. That is, regardless of the extent of problem solving undertaken to deal with a recognized gap between current and preferred management practice, teachers are no more nor less likely to identify any inhibitor as more significant in preventing them from implementing best practice.

4. Discussion

The present study was designed to identify inhibitors – factors that teachers perceive as standing between their present classroom management practice and their preferred management. It was further designed to examine how teachers cope with any gap between present and preferred management practices.

4.1. The most inhibiting factors

The most inhibiting factors were personal pressure (too little energy available, too many things to do, stress), and lack of support at the school level (from peers and from school administration). These two groups of inhibitors are conceptually interrelated, because support at the school level is likely to decrease a teacher's level of personal pressure, just as lack of support can exacerbate it. Team cooperation and peers support teachers in carrying out tasks. In addition, advance and reasonable planning by school administration might reduce teachers' stress and increase their energy, vitality, and motivation.

Van Dick and Wagner (2001) reached similar conclusions, when they found that excessive workload leads to stress reactions, whereas principal support reduces the perception of high workload. Griffith, Steptoe, and Cropley (1999) assessed the association between teacher stresses, psychological coping responses and social support. Their results similarly indicated that less social support at work, and the coping responses of “behavioral disengagement” and “suppression of competing activities” predicted higher job stress independently of teachers' age, gender, class size, occupational grade, and negative affectivity. It is suggested that behavioral disengagement and suppression of competing activities are maladaptive responses in a teaching environment, and may actually contribute to job stress. Coping and social support not only moderate the impact of stressors on well-being, but can also influence the appraisal of environmental demands.

In the long run, overload and lack of support may lead to burnout and early retirement, or leaving the profession. However, this study reveals that there is also substantial short-term damage. Teachers feel that they are not able to implement their preferred practices of classroom management, and thus their perception of the entire process of learning and classroom management might be distorted, and viewed as insufficient or even ineffective.

4.2. The gap

The level of concern about the gap between present and preferred approaches in classroom management was a significant

predictor of teachers' coping style, with a greater gap between the present and preferred approaches associated with greater usage of Non-productive coping. Thus, teachers who are more concerned about the gap, choose not to deal with it (preferring to engage in self-blaming themselves and worrying about how things will turn out). This leads to a cycle of concern exacerbated by the coping response, further impairing the teacher's quality of classroom management. Greater self-efficacy and social support are two resources capable of breaking this cycle (Van Dick & Wagner, 2001), and these might encourage teachers to actively work on decreasing the gap between present and preferred approaches in classroom management.

4.3. Coping styles

The results indicated that the measures of coping style had moderately low reliability, which were nevertheless quite similar to those reported in the CSA-2 manual. This may be, in part, related to the shortness of these scales (two of which have fewer than six items). The low reliability of these variables could have attenuated any relationships between them and any others, causing the results of this study to be conservative. The CSA-2 manual however, also reports reliability coefficients for coping styles based on responses to the long form (60 items). These Cronbach alpha coefficients are between .71 and .84 as the scales range from 12 to 24 items. The use of the short form in the current investigation was due to the large number of other variables assessed by items in the current questionnaire, thereby necessitating an efficient measure of coping. Future research, focusing only on coping and inhibitors could make use of the 60 item Long form of the CSA-2 to further examine relationships between coping and inhibitors.

As noted above, the most commonly used style of coping was social problem solving. Productive coping is used sometimes and Non-productive coping is used occasionally. Teacher's gender was a significant predictor of coping style, with female teachers using more social problem solving than male teachers. Female teachers talk more to others and support each other; they seek professional help, and go to meetings where different solutions for the problem are proposed. Finally, female teachers work more on improving their relationships with others, and overall, prefer coping strategies that involve personal relationships and cooperation. This may imply that meetings of teachers to address work-related issues may be perceived as less useful by male teachers than by their female colleagues.

A number of researchers have noted gender differences in coping, with women being more pro social than men, but not less active (Hobfoll, Dunahoo, Ben-Porath, & Monnier, 1994), and using more support than man when in similar roles (Rosario, Shinn, Morch, & Hucjabee, 1988). Nevertheless, Matud (2004) suggested that women suffer more stress than men and that their coping style is more emotion-focused than that of men. These findings emphasize the importance of understanding gender-specific needs within the school settings.

4.4. Coping styles and inhibitors

Of the three hypotheses identified earlier, there is partial support for two. Greater use of the Productive coping style appears to lead to a decrease in the number of inhibitors identified by teachers, and greater use of the Non-productive coping style appears to lead to an increase in the number of inhibitors. As discussed later there is no significant relationship between the use of the Problem-solving coping style and inhibitors identified by teachers.

Although, as mentioned above, it is possible that the nature of the inhibitor may predict the coping styles adopted by teachers, in

this paper we are arguing that the more likely relationship is one whereby coping style predicts the type of inhibitor identified. Hence the significant relationship between Non-productive coping and the personal pressure inhibitory factor, reported above indicates the possibility that teachers' use of the Non-productive coping style relates to increased awareness of personal inhibitors. This relationship is not surprising, as a significant component of the Non-productive style is self-blame. Consequently it could be argued that teachers who more frequently blame themselves as a way of coping with their concerns report their own stress and energy levels, as well as lack of personal time, as more significant inhibitors, preventing them from implementing their own idea of best practice. The relationship between coping and these inhibitors is logical given the definition of both of these variables in this study and engenders confidence in the measures utilized to assess these constructs.

However this relationship is not the only one to involve Non-productive coping. Teachers who more frequently self-blame, engage in wishful thinking, and keep things to themselves, are also likely to attribute a greater inhibitory power to accountability factors. Thus, the expectations of parents', teachers', and the administration of classrooms management are seen by teachers who use Non-productive coping more frequently as stronger constraints on their preferred practice.

In partial summary therefore, it can be argued that teachers who more frequently utilize Non-productive coping are those more likely to attribute greater inhibitory power to some micro level factors, such as their own stress and energy levels, as well as to some macro level factors such as parental preferences and government policy. Accordingly, the significant relationship reported earlier between Non-productive coping and teachers' level of concern about the gap between current and preferred approach to classroom management is noteworthy. It may be argued that any coping response that may increase the perceived power of inhibitors to preferred practice is a less than optimal response to concerns or stress.

This finding may be related to the fact that Non-productive coping does not include any response which directly attempts to remove or remediate the problem. Responses such as self-blame, wishful thinking, letting out stress by varying eating or sleeping patterns, worrying, not letting others know and getting sick tend to be attempts to regulate the self rather than the stressor. Regardless of the reason, the strategies comprising the Negative self-referenced coping style have been reported in a paper summarizing six studies that used the CSA, as having significant associations with feelings of being overwhelmed and stressed (Frydenberg & Lewis, 2002). Consequently, to attenuate the perceived significance of factors inhibiting teachers from implementing best practice there may be value in having them reduce their reliance on coping strategies such as daydreaming about how things will turn out well, self-blaming, varying eating or sleeping patterns, worrying, not letting others know and getting sick.

In light of this consideration, it is relevant to examine the significant relationship between Productive coping and the personal pressure inhibitor. The negative correlation indicates that teachers who more frequently make time to relax, play sports, and retain a sense of humor, focus on the positive, and work on their self-image, are those less likely to perceive their lack of energy, high stress levels and time constraints as inhibitors. However, it should be noted that there is no significant relationship between the Productive coping style and the other four inhibitors. Nevertheless it may be argued that allotting time for leisure activities and sports or exercise, as well as displaying a concern for one's self-image, may act to reduce the significance of personal inhibitory factors and as such is a productive coping style. The positive effect of exercise on

reducing teachers' stress has been recently reported (Austin et al., 2005) and, as Kyriacou (2001) indicated, relaxation training is a common feature of workshops designed to reduce teachers' stress.

The final finding relates to the lack of relationship between Problem solving and any inhibitor. It would seem that the more frequently a teacher engaged in problem solving, the less significance he or she would attribute to a range of inhibitors. Certainly such results have been reported for adolescents (e.g., Frydenberg & Lewis, 2002). This relationship may not be so obvious for macro-level inhibitors (government policy, or parents' preferences), or for middle-level inhibitors such as class size, which are also out of the locus of control of teachers. However, it would seem reasonable to assume that some of the micro-level inhibitors such as too many things to do and personal stress levels would be mediated by socially embedded problem solving. We have no satisfactory explanation for why these relationships did not occur, but note that previously, too, problem-solving oriented coping failed to display expected benefits (Frydenberg & Lewis, 2002). It may be the case that "how often" one undertakes a problem-solving response fails to relate to productive outcomes because it is "how well one does" it not "how often." This distinction between quantity and quality of coping responses has been highlighted in studies of adolescent coping (Lewis & Frydenberg, 2004).

When considering the lack of relationship of the problem-solving style of coping to inhibitors it is important to note our earlier observation that unlike Negative self-referenced coping style, social problem solving coping also failed to relate to the level of concern teachers expressed about their inability to manage classes as they would prefer to manage them (with more student involvement in decision making). One might have assumed that greater concern leads to more frequent use of all coping styles but this was not the case for social problem solving.

It should be noted that this study addressed one point in time and was conducted in a defined geographical region among secondary-school teachers only. We did not strive for generalizability but rather aimed to introduce the concept of inhibitors and the individual perspective of the obstacles to preferred-style classroom management. Despite the temporal and geographical limitation, we contend that teachers and teacher educators will find the concept of inhibitors to be a valuable tool when assessing classroom management styles.

In conclusion, given the findings reported above, teachers could be assisted to implement their preferred classroom management practice in two ways. One would focus on helping teachers deal directly with their individual coping responses, to reduce their reliance on passive, avoidant strategies while making time for leisure and exercise, and improving the quality of their attempts at problem solving. The other would focus on helping them make changes in factors in the environment which are currently seen as inhibiting best practice. For example if too many things to do are seen as an issue, teachers could reduce the number of tasks they undertake or learn to prioritize. Similarly if accountability to the wishes of others is an inhibitor to preferred practice, then teachers may need to attempt to educate colleagues, parents, and employers as to the advantages of their preferred approach.

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