

Venturing into schools: Locating mental health initiatives in complex environments

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Schools provide viable settings for mental health promotion initiatives, such as programs to develop students' social and emotional capabilities (SEC). Complexity in the school environments into which initiatives are introduced, such as diverse student capabilities, school structures, and teachers' knowledge and confidence, will play an integral role in the success of those initiatives. This paper investigates the environments of schools about to receive the KidsMatter mental health promotion, prevention and early intervention initiative in Australia, using information sourced from questionnaires about 2598 students and their teachers in 50 Australian primary schools. The focus of the report is on the status of the schools' work in one of the key focus areas for the intervention, namely students' SEC. Analysis showed relatively high levels of students' SEC across the whole sample, but with sub-group differences. Teachers' attitudes towards SEC learning were highly positive. Teachers' self-rated knowledge and approaches in dealing with SEC were moderate, and point to requirements for additional pre-service and professional development. The extent of regular and sustained delivery of SEC programs and mental health initiatives in general showed variability, suggesting the need to attend to school systems and structural supports. Implications of these areas of diversity in school environments on the selection and methods of delivery of mental health promotion programs in schools are discussed.

Keywords: Social and emotional capabilities; mental health promotion, prevention and early intervention; school environments

Introduction

The increased attention being paid to the mental health needs of students in Australian schools (e.g., KidsMatter 2009a; MindMatters n.d.) is, in part, a response to the evidence that a sizeable group of students experience mental health difficulties. For example, reports from Sawyer and colleagues (e.g.,

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Sawyer, Miller-Lewis, and Clark 2007) record the prevalence of mental health disorders for Australian children and adolescents at 13 to 21 per cent, according to self-report or parent/caregiver information. In considering responses to this situation, Greenberg, Domitrovich, and Bumbarger (2001) pointed out that, although the research evidence must be treated cautiously, there does appear to be reasonable support for the view that childhood mental health disorders are amenable to treatment. Further, Greenberg et al. argued that interventions for positive mental health need to begin early, before symptoms appear. One systems-based, developmental approach to such interventions is to institute school-based programs for improving students' social and emotional capabilities (Peth-Pierce 2000; Greenberg et al. 2001; Greenberg et al. 2005; WHO 2007a).

Schools provide ready-made systems suitable for supporting learning programs designed to foster health and wellbeing. The relative stability of students within schools enables long-term interventions that can include teachers and other students who can supplement parents/caregivers as effective health promotion role models (Spieldenner, in WHO Europe 2006). Stanley (2009) argued that prevention responses to population health issues are cost effective and humane. In terms of content, the WHO (2007b) framework for health promotion in schools involves attending to the place of social and emotional issues in the curriculum, addressing the organisation of teaching and learning, development of a supportive school ethos and environment, and partnerships with the wider school community.

A number of school-based programs have been designed broadly along the lines of the WHO framework. These include KidsMatter (2009c) in Australia, SEAL (Social and Emotional Aspects of Learning) (DCSF 2009) in the United Kingdom, the Collaborative for Academic, Social and Emotional Learning initiatives in the United States of America (CASEL 2009) and the European Network for Socio-Emotional Competence in Children (ENSEC 2009). Each of these seeks to develop students' social, emotional and behavioural capabilities, as well as the capabilities of schools and families to support children's wellbeing. CASEL (2009), for example, has identified five core groups of social and emotional capabilities, including self-awareness, self-management, social awareness, relationship skills and responsible decision making.

Collings and Beautaris (2005) pointed out that the identification of appropriate contexts for, and methods of delivery of, mental health promotion initiatives will depend on the target of the interventions. Following a model described by Mrazek and Haggerty (1994), interventions may be targeted at whole populations, or selectively at sub-groups at risk, or more narrowly at indicated 'high-risk' individuals. Universal and selective interventions are usually identified in terms of 'prevention',

whereas indicative interventions encompass ‘early intervention’, although Hazell (n.d.) argued that it may be more profitable, in terms of resource allocation over a person’s life-span, to consider these three areas as a reciprocal continuum of phases, rather than discrete stages. By way of example, in Australia, the MindMatters (n.d.) national mental health initiative promotes a whole school approach, providing staff professional development and teaching resources for use across all secondary school year levels, and also provides resources for targeted interventions for students with high support needs.

A recent set of meta-analyses by Payton et al. (2008) included reviews of 317 studies of social and emotional learning interventions directed at different populations (universal, indicated and after-school) across the Kindergarten to Year 8 grade range. Payton et al. found that, in the reviews for each of the three populations, social and emotional learning programs were found to be effective in improving students’ social and emotional capabilities, attitudes about others, positive social behaviours and academic performance. The authors also reported that social and emotional learning programs influenced reductions in students’ conduct problems and emotional distress.

However, externally driven school-based interventions can have problematic features (Greenberg et al. 2001; Greenberg et al. 2005; Kimber, Sandell, and Bremberg 2008). In their review, for example, Greenberg et al. (2001) noted that many such programs focus more on students who display externalising problems, thus giving less attention to internalising problems that students may also be experiencing. In addition, there may be limited attention to the quality of program implementation, with relatively little information available about issues such as fidelity and dosage (Domitrovich, 2008). For example, in a report of a six-lesson mental health promotion intervention in an English school, Naylor and colleagues (2009) reported that, following intervention, students expressed more knowledge about mental health difficulties, and greater awareness of why people feel depressed and why people are bullied, than students in a control school. The authors also reported that the experimental group students’ self-reported conduct problems and pro-social behaviour showed statistically significant improvements. However, the practical significance of these results was low, and limitations of the study included the nested nature of the data and the limited duration of the intervention. Other aspects of the study, such as the nature of the distribution of the data (such as skewness), details of treatment fidelity, and information about pre-existing or concurrent mental health initiatives within the schools, are not addressed in the report.

Greenberg et al. (2005) suggested that attention does need to be given to the nature of the school environments in which intervention programs are enacted. It would be a mistake to assume that schools

are not already paying some attention to, say, the social and emotional education of their students. Meanwhile, it is likely that teachers and parents/caregivers already have opinions about some issues related to mental health, and that teachers might vary in their levels of confidence about their capacities to help students with social and emotional problems. This latter issue emerged in our research into the MindMatters (n.d.) program in Australia, where school staff raised concerns about variations in teacher knowledge and confidence for delivering instruction about mental health, and about the selection, structuring, scope and sequence of classroom delivery of the provided resources (Askell-Williams et al. 2005).

The above issues illustrate the broad focus of the current paper, whereby, mindful of the concerns raised by authors such as Greenberg et al. (2001), Kimber et al. (2008) and Domitrovich et al. (2008), we examine the complex school environments in which a whole school-based mental health initiative, namely KidsMatter, would be enacted. Our expectation is that this analysis will be useful for the future planning and delivery of school-based interventions for students' mental health.

KidsMatter (2006) is mental health promotion, prevention and early intervention initiative for Australian primary schools, piloted in self-nominating and short-listed primary schools in 2007-2008. It included initiatives at the population (primary school populations) and indicative (students identified as experiencing mental health difficulties) levels. The second component (of four) of KidsMatter required that schools teach social and emotional capabilities (SEC) to all students on a regular basis (at least weekly). The designers of KidsMatter adopted the CASEL (2009) model to define SEC. Schools were provided with professional development for staff, and support with developing SEC curricula and selecting SEC resources. Information gathered in the early part of KidsMatter allowed us to consider several features of the school environments in which the initiative would be implemented, including,

- Students' social and emotional capabilities
- School support for social and emotional learning
- Provisions for students at risk of, or experiencing, mental health difficulties
- Staff attitudes, approaches, knowledge and actions for teaching about social and emotional capabilities
- Schools' engagement with mental health initiatives in general

These five issues are the focus of the current report.

Method

KidsMatter schools ranged in size from 11 students with one staff member, to 1085 students with 100 staff. Some schools had no students with English as a Second Language (ESL), going up to a school with 94 per cent ESL students. Some schools had no Aboriginal or Torres Strait Islander (ATSI) students, and some had more than 75 per cent ATSI students. Schools were drawn from State, Catholic and Independent school systems, and were located in metropolitan, rural and remote areas.

KidsMatter was rolled out in two Rounds, with 51 Round 1 schools commencing in 2007, and 50 Round 2 schools commencing in 2008. This provided the opportunity to collect baseline data from Round 2 schools in 2007, prior to any KidsMatter related interventions occurring.

Using de-identified student enrolment lists, 50 male and female students aged 10 in 2007 were initially randomly identified from each of the 50 Round 2 schools. In addition, in order to ensure that students likely to be of interest were included in the sample, an additional 26 students in each school, who had been identified by school staff as being 'at risk' of social emotional or behavioural difficulties, were also included in the sample. We have reported elsewhere (Dix, Askell-Williams, and Lawson 2008) that these staff professional judgements of students' 'at risk' status show concurrence with an alternative, more clinically focused measure, namely the Strengths and Difficulties Questionnaire (Goodman 2005), and argue that the staff judgements have authenticity when considering the decisions and actions of school staff in school settings.

Purpose-designed questionnaires were delivered to the teachers and parents/caregivers of the selected students. The teacher questionnaire contained items that addressed teachers' knowledge and competence for teaching about SEC. Both the teacher and parent/caregiver questionnaires sought information about the sampled students' SEC. In addition, both teacher and parent/caregiver questionnaires sought information about the provision of SEC learning opportunities, and also about extant general mental health initiatives at their schools.

Questionnaires reporting on 2598 primary school students were returned from parents/caregivers, with a parallel set of questionnaires returned by the 421 teachers of those same students. All questionnaire items were subjected to confirmatory factor analysis using asymptotically distribution-free data methods available in AMOS (in SPSS), in order to determine the factor structure of each group of items (Tabachnick and Fidell 2001; Garson 2009). The analysis confirmed the scale reliability, and that the questions comprising each scale did reflect the theoretical constructs initially conceptualised in the questionnaire construction (see Slee et al. 2009). In this paper we report averaged parent/caregiver and

teacher responses to selected scales in the questionnaires. In addition, in order to highlight particular constructs, we investigate parent/caregiver and teacher responses to some individual questionnaire items. We note here that the distributions of parent/caregiver and teacher responses on many scales were noticeably skewed and so, where appropriate, in the following analyses we report median responses as an appropriate measure for non-parametric data.

Results and Discussion

Students' social and emotional capabilities

Our first area of investigation examined teachers' and parents/caregivers' views of the social and emotional capabilities (SEC) of the sampled KidsMatter primary school students. Parents/caregivers and teachers were asked to indicate their agreement on seven items about students' SEC sourced from the five areas suggested by CASEL (2009) and including items such as,

On average over the last month, this student has shown that he/she can:

- solve personal and social problems.
- manage his/her feelings

Taking scores of 6 and 7 to indicate responses of "Strongly Agree," 57 per cent of parents/caregivers, and 52 per cent of teachers, strongly agreed to the group of items about students' SEC, providing, on average, a relatively positive picture of the status of students' SEC.

Although the overall rating of students on the SEC scale was relatively high, it is interesting to consider the individual items in the SEC scale, and to compare the item profiles of students in the 'not at risk' and 'at risk' classifications. Figure 1 shows four profiles of median scores from teachers' and parents/caregivers' reports of students' SEC plus three additional optimism and coping items. It can be seen, as expected, that the profiles of the 'not at risk' students show consistently higher scores than the profiles of the 'at risk' students. Of note are items where there is a dip in median scores. Three of the four profiles fall at 'can solve personal and social problems', and these three profiles are also relatively lower at 'can manage his/her feelings'.

From the above results, we can see that teachers and parents/caregivers are attuned to students' social and emotional status and, on average, rate students' SEC generally positively. This finding has implications for different stakeholders involved in the introduction of SEC programs to schools.

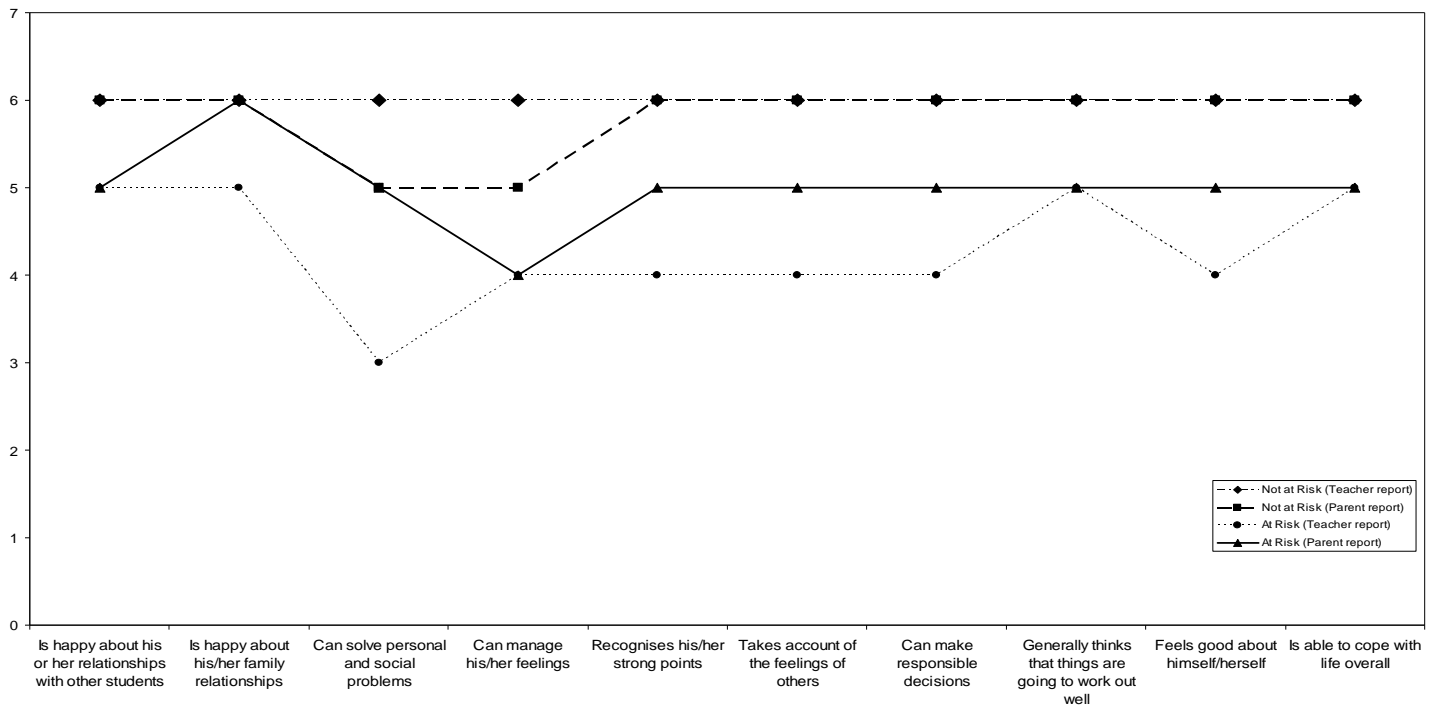


Figure 1: Profiles of median scores on 7-point Likert scales on SEC items for students nominated as ‘not at risk’ or ‘at risk’ of social, emotional or behavioural difficulties.

For example, for researchers attempting to measure change following the introduction of SEC interventions, data collection methods may need to account for already relatively high baseline ratings of students’ SEC and the possibility that collected data will be highly skewed and showing a ceiling effect. This has implications for the kinds of data analysis that can be undertaken (Gregory et al. 2008). Related to this issue of distributional pattern is the possibility that, as SEC programs and their associated professional development are introduced to schools, teachers’ sensitivities towards students’ SEC may change, thus changing the basis on which teachers make assessments of students’ SEC. A change in informants’ perspectives has implications for researchers concerned with measuring the efficacy of programs, over and above actual changes to students’ SEC. For example, it may be the case that, with increased teacher knowledge and sensitivity to the nature of mental health strengths and difficulties, teachers’ ratings of students’ SEC may initially decrease following the introduction of SEC programs.

The generally lower profiles of students in the ‘at risk’ group, and the dip at items related to solving problems and self-management, indicates a general need for explicit SEC interventions, and particularly supports targeting ‘at-risk’ groups in KidsMatter and similar programs.

School support for social and emotional learning

Next we turned our attention to schools' provision of SEC programs. Parents/caregivers and teachers were asked to respond 'Yes' or 'No' to whether their child participated in a program that taught SEC during the previous semester. The responses, shown in Table 1, show that more than two thirds of the parents/caregivers thought that their child was not participating in SEC programs, contrasting to the teachers' reports, which indicated that 66 per cent of students were exposed to SEC learning programs.

Table 1: Parent/caregiver and teacher responses to the question “Did this student participate in a program teaching social and emotional skills during this semester?”

	Parents/Caregivers		Teachers	
	Count	%	Count	%
No	1293	71%	792	34%
Yes	522	29%	1567	66%

Three features of the information in Table 1 are of note. First, it might be argued that the difference in these response patterns should be expected, given that teachers were in a better position than parents/caregivers to answer a question about the delivery of SEC programs.

However, a second point concerns the nature of relationships between schools and parents/caregivers. One interpretation of this result is that parents/caregivers and teachers do not, on the whole, communicate with each other about the availability and nature of SEC programs in the school. It might be the case that teachers and parents/caregivers give more attention to the academic parts of the school curriculum, and accord the SEC components less attention, or lesser importance, and so have less detailed knowledge about the SEC components. It also seems likely that, if parents/caregivers perceive that their child has no particular needs for such programs, then the parent/caregiver may not take notice of the provision of such programs.

The above points raise the question of whether or not the parents/caregivers' lower levels of awareness of children's participation in SEC programs should be seen as a matter of concern. It would be unrealistic to expect that parents/caregivers would have comparable levels of knowledge about all curriculum activities. But it seems likely that most parents/caregivers would know that their child was engaging in activities related to key learning areas in the academic curriculum – literacy, numeracy, art and so on. Could this mean that the SEC part of the curriculum is given less prominence in discussions with parents/caregivers? If parents/caregivers are relatively unaware of the delivery of SEC programs to

their children, this would be expected to have implications for a mental health intervention where parent/caregiver engagement with school-based activities was expected (Greenberg et al. 2005; KidsMatter 2009b). If this last situation occurs generally, then it might be anticipated that the building of communications with parents/caregivers should assume importance for a broad-based mental health intervention.

A final point of interest from Table 1 is that, with teachers reporting of 66 per cent of students receiving exposure to SEC programs, this leaves the question of whether the remaining 34 per cent of students are being exposed to SEC programs in regular and sustained ways. This data suggests that this is not the case. Regular and sustained delivery of SEC programs is an important feature of the success of such programs (Payton et al. 2008; Hattie 2009), indicating a need for interventions to attend to structural supports, such as allocating regular space in the timetable, in order to enable SEC interventions to be delivered with sufficient frequency to be effective.

To develop this line of enquiry further, ten questions in the teacher questionnaire were designed to measure in more detail the provision of SEC learning opportunities. Teachers were asked to signal their agreement to questions such as,

- The school teaches social and emotional skills regularly to all students (at least once per week);
- The school supports professional development about teaching social and emotional skills; and
- The school's resources for teaching social and emotional skills meet the needs of our students.

Twenty nine per cent of teachers rated scores 6 and 7 (Strongly Agree) on the scale measuring the extent to which their school delivered SEC learning opportunities to students. Approximately thirty per cent of teachers nominated the neutral point on this scale. Taken together with the pattern of responses in Table 1, these findings suggest that, as a group, these schools were appropriate sites for an intervention program in that there was a reasonable proportion of students who were not receiving regular, structured teaching about SEC, and that teachers saw a need for further professional development in this area.

Provisions for students at risk of, or experiencing, mental health difficulties

To investigate more specifically the schools' provisions for students experiencing mental health difficulties, we first asked teachers and parents/caregivers: "In the last month, do you think your child

(this student) has had more emotional or social or behaviour difficulties than other boys/girls of his/her age?" From Table 2 it can be seen that teachers and parents/caregivers identified similar proportions (31% and 37% respectively) of students as having relatively more difficulties. This relatively high proportion of students rated as having relatively more difficulties than other children of their age reflects the deliberate inclusion of students identified by school leaders as being 'at risk' of social, emotional or behavioural difficulties, in order to ensure representation of such students in the sample used in this study.

The purpose of this preliminary question about whether students had relatively more difficulties was to identify whether the 31-37 per cent of students so identified were, a) considered to need help, and b) whether they had received such help. It can be seen from Table 2 that, for those students who were nominated as having relatively more difficulties, 72 per cent of parents/caregivers, and 81 per cent of teachers, indicated that the child needed help. Meanwhile, 50 per cent of parents/caregivers, and 59 per cent of teachers indicated that such help was received.

Table 2: Percentage of parent/caregiver responses to questions about child difficulties and support

<i>In the last month, do you think your child (this student) has had more emotional or social or behaviour difficulties than other boys/girls of his/her age?</i>		
	NO	YES
Parents/caregivers	955	437 (31%)
Teachers	932	546 (37%)
<i>Do you think he/she needs or needed school or other professional help with these difficulties?</i>		
Parents/caregivers		315 (72%)
Teachers		444 (81%)
<i>Did your child (this student) get the help he/she needed for these difficulties?</i>		
Parents/caregivers		156 (50%)
Teachers		264 (59%)

N (parent/caregiver) = 1392
N (teacher) = 1478

It is concerning that a substantial proportion of teacher and parent/caregiver informants considered that students rated as experiencing difficulties did not need help. This raises the possibility that students who might need help may not be introduced to appropriate assistance. It is also of concern that teachers believed that only 59 per cent of students needing help received that help. The level of parent/caregiver agreement to this question is also of concern, although it may have been associated with parents/caregivers not knowing what the school was doing for the child, or it might have been that the

parents/caregivers did not think that the school was providing appropriate or sufficient programs for these children. In this paper we are considering only the base-line data collection point, so these interpretations must be treated only as possible explanations of results.

The pattern of findings in this section reinforces the need to provide support for both teachers and for 'at risk' students. For teachers, support might include professional development about the value of early intervention, and the range of assistance that teachers could provide to students.

To investigate further the status of school-based provision of SEC learning opportunities, we asked an extra set of items for teachers and parents/caregivers about school responses to students experiencing social, emotional or behavioural difficulties. Table 3 shows that a range of about 35 to 60 per cent of parents/caregivers and teachers, respectively, strongly agreed that schools were successfully implementing initiatives to address students' social, emotional or behavioural difficulties.

It can be seen in Table 3 that the responses on the individual items tended to be more positive from teachers than from parents/caregivers. The most positive responses were about teachers promoting early intervention, and about teachers' respect for people experiencing emotional, social or behaviour difficulties. In terms of the importance of early intervention, it is reassuring that only 6 per cent of teachers strongly agreed that students tend to grow out of social, emotional and behavioural difficulties, although 15 per cent of parents/caregivers nominated scores six or seven to that item.

These responses do indicate scope for further action on the part of the schools. For example, only 35 per cent of parents/caregivers strongly agreed that their school had strategies to identify students with social or emotional or behavioural difficulties. Again, a mental health promotion initiative that includes SEC teaching and learning, and that accompanies SEC education with other SEC supports, does seem to be warranted for this sample of schools.

The results in Table 3 also throw light on the resources available beyond the school. Teachers' responses indicate that action times following referrals to external support agencies were problematic. Positive actions by teachers related to early identification and referral may be followed by frustration and unwillingness to take future action if quick and effective responses are not received from external agencies. Such interactions between schools and external agencies highlight the complexity of relationships between organisations at the level of the exosystem (Bronfenbrenner 1979; Greenberg et al. 2001) and overall, the systemic nature of mental health promotion initiatives in schools.

Table 3: School initiatives for students at risk of, or experiencing social, emotional or behavioural difficulties

Scale item	% Strongly Agree (Scores 6 & 7)	
	Parents/caregivers	Teachers
The school acts quickly if a child has emotional (e.g. sad, depressed or anxious) or social or behaviour difficulties	39	45
The school has strategies to identify whether students are having emotional or social or behaviour difficulties	35	31
The school has policies to support students with emotional or social or behaviour difficulties	38	40
The school has referral procedures for students experiencing emotional or social or behaviour difficulties	36	59
The school assists students having emotional or social or behaviour difficulties	41	n/a
The school helps families to get professional advice if their child is		
a) having trouble with his or her schoolwork	29	n/a
b) overactive or easily distracted	28	35
c) having emotional problems (e.g. sad, depressed or anxious)	31	38
d) having social problems (e.g. unable to get along with classmates)	30	34
e) having behaviour difficulties (e.g. aggressive, rude and other difficult to manage behaviours)	31	42
The school regularly monitors students who are having emotional or social or behaviour difficulties	34	49
Students who show emotional or social or behaviour difficulties tend to grow out of them	15	6
The school provides information that helps parents/caregivers to know if their child is having emotional or social or behaviour difficulties	27	n/a
The school advises parents/caregivers that it is important to help the child as soon as possible if he/she is having emotional or social or behaviour difficulties	34	49
School staff are respectful and sensitive towards people experiencing emotional or social or behaviour difficulties	48	60
The external school support services (such as psychologists and social workers) act quickly if a child has emotional or social or behaviour difficulties	n/a	23

n/a: this item was not included in this questionnaire

Staff attitudes, approaches, knowledge and actions for teaching about social and emotional capabilities

The delivery of SEC programs is dependent upon staff attitudes, approaches, knowledge and actions for teaching about SEC, which we assessed with four scales in the teacher questionnaire.

General staff attitude was assessed with questions such as,

Students can be taught social and emotional skills.

Staff approach to teaching social and emotional skills was assessed with questions such as,

Staff helps students develop skills for establishing healthy relationships with other children.

The cluster of questions for teacher knowledge about teaching social and emotional learning included items such as,

I know how to help students to develop skills to establish healthy relationships with other children,

Questions about teacher actions included,

My teaching programs and resources help students to develop skills to make responsible decisions.

Table 4 shows that teachers possessed moderately positive assessments of their own knowledge and teaching actions, and of the approaches of other staff in the school. ‘Strongly Agree’ scores were allocated by 55 to 84 per cent of teachers across this set of questions relating to their active provision of social and emotional learning programs for students. In particular, teachers demonstrated strongly positive attitudes towards the importance of teaching SEC. This response from teachers is encouraging, not only for promoting the wellbeing of students in general, but also since researchers such as Roeser, Eccles and Strobel (1998) have argued that academic and emotional difficulties are reciprocally related over the course of a child’s development. In parallel with this literature, 90 per cent of teachers strongly agreed with the questionnaire item “Students who are socially and emotionally competent learn more at school”.

Table 4: Percentage of teachers nominating ‘Strongly Agree’ to scales about their attitudes, knowledge, approach and actions for enhancing students’ social and emotional capabilities (SEC)

Questionnaire scale	Strongly Agree %
SEC Attitude	84
SEC Staff Approach	66
SEC Knowledge	57
SEC Actions	55

Positive teacher attitudes provide a good start towards teachers taking action about students’ SEC. However, around 45 per cent of teachers indicated that their knowledge and teaching approaches in this area are less than strong. Based on evidence that teacher capabilities mediate student outcomes (Rowe 2002; OECD 2005), it is reasonable to predict that improvement in teacher knowledge, competence and confidence is a necessary step if there are to be improvements in students’ SEC learning opportunities. Thus the introduction of SEC curricula into settings where teachers feel under-prepared in their subject-matter and/or pedagogical content knowledge, is unlikely to succeed without providing professional support for the teachers. The allocation of resources to continuing professional learning for teachers in mental health in general, and SEC teaching and learning in particular is supported by the findings in this study.

Schools’ engagement with mental health initiatives in general

Finally, we were interested in broader views of schools’ engagement with mental health initiatives. We asked teachers and parents/caregivers ten and eight questions respectively, that comprised ‘General engagement with mental health initiatives’ scales.

Table 5: Percentage of teachers responding ‘Strongly Agree’ to schools’ engagement with mental health initiatives in general

Scale Item	% Strongly Agree (Scores 6 & 7)
	Teachers
The school leadership team actively supports the implementation of programs to develop students’ social and emotional skills	62
All teaching staff support the teaching of social and emotional skills to students	56
Parents/caregivers actively support the school’s program for teaching social and emotional skills	33
Teachers attend professional development about supporting students with emotional or social or behaviour difficulties	41
Teachers discuss students' emotional or social or behaviour difficulties with the appropriate staff	69
Teachers discuss individual student’s emotional or social or behaviour difficulties with the student’s parents/caregivers	62
The school has good links with professionals such as social workers, psychologists, nurses and doctors who can support students who have emotional or social or behaviour difficulties	37
Staff consult parents/caregivers about emotional or social or behaviour interventions for their children	52
Our teaching about social and emotional skills engages students' interest	38
Parents/caregivers are positive about teaching social and emotional skills to students at school	36

Overall, 49 per cent of teachers, and 42 per cent of parents/caregivers, gave ratings of strong agreement to the general engagement scales. Median scores were around five and six for most of the general engagement items in both parent/caregiver and teacher reports. By way of illustration, the teachers’ responses are detailed in Table 5, which shows that items about active leadership, the importance of SEC, and consultation and discussion with parents/caregivers rate most highly. Interestingly, the reports indicate lower agreement with items about external influences, including links with external agencies, and teachers’ assessments of parent/caregivers’ responses. Once again, these findings highlight the importance of attending to interactions among key stakeholders involved in a whole-school intervention, especially the interaction between teachers and parents/caregivers.

Conclusions

This paper provides information about the complex environments into which a nation-wide

mental health initiative was launched. There is some indication that most, if not all of the schools in this sample were already giving some attention to their students' SEC. Teachers and parents/caregivers were oriented toward this area of the students' lives, and made judgements about the status of the students. On some of the scales in the questionnaires, the overall high level of ratings points to implications for researchers attempting to measure change across time, as there may be limited scope for registering such change. Furthermore, the direction of change on some scales might vary over the course of an intervention. For example, if an intervention increases teachers' and parents/caregivers' knowledge about mental health strengths and difficulties, the reference points used by these groups to make judgements about a student's mental health status may change, or become more nuanced, so that different indicators of student status may need to be used across the course of the intervention.

The findings also show differences in the perspectives of teachers and parents/caregivers. There are a number of indicators of low-level knowledge held by parents/caregivers about the SEC-related activities of their children. In systems-based mental health promotion interventions, this would reinforce the need for giving attention to the links between the parents/caregivers and the school, links that might address levels of communication between schools and families, and the amount and type of information provided to parents/caregivers.

This study indicates that the schools in this sample were appropriate sites for an intervention aimed at generating change in both teacher knowledge and classroom practices related to developing SEC. Although profiles of students showed generally high SEC skills, there were sub-group differences suggesting important areas of need. A sizeable proportion of students were judged, by teachers and parents/caregivers, to be not engaged in explicit learning opportunities specifically designed to enhance their SEC. Furthermore, the teacher ratings indicated that there was scope in the school curriculum for increased attention to structured teaching about SEC. Also, teachers judged that they could improve the level of their own knowledge and competence in this area. Finally, there was room for increased initiatives in areas of identification and support for students experiencing social or emotional or behavioural difficulties.

Several findings draw attention to the situation of 'at risk' students in this sample. First, the findings about availability of help to students experiencing social, emotional or behavioural difficulties; second, the finding that about one quarter of students were not exposed to regular and sustained delivery of SEC programs; and third, the generally lower level of 'at risk' students' SEC. Together, these findings indicate some cause for concern for students in the 'at risk' group in these schools. Health

intervention models based upon whole school approaches to SEC teaching and learning aim to move the capabilities of the whole cohort in a positive direction, recognising that people with both strengths and difficulties benefit from being located in settings where the overall level of capability is improved (EMHIP 2006). Considering once again Mrazek and Haggerty's (1994) three-level model, this study suggests the need to not only resource whole school approaches, but also, to make provision for selective SEC program delivery for the group of students identified as being 'at risk'. However, this study indicates that sources of variation are not limited to students. A school-based intervention around, say, SEC, will not simply affect the students, like the provision of a pill to a patient. This study reinforces the importance of also attending to the needs of school staff and parents/caregivers. SEC programs for students require teachers to teach the program, leaders who provide vision about the potential of the program, school communities that support the program, parents/caregivers who respond in positive ways to their children's emerging capabilities, departments who are willing to fund the program in sustainable ways, and so on. It is therefore recommended that when delivering school-based interventions about mental health, attention should be paid to observed variations in a range of 'baseline' conditions, certainly including student capabilities, but also including the capabilities of all members of the school and its community.

The data collected in this study were from schools who volunteered to join KidsMatter. Thus, these schools are not a simple random sample, and as such the findings can only provide guides to interpreting similar contexts. The data were highly skewed and therefore cautious approaches to data analysis were adopted.

References

- Askill-Williams, H., Lawson, M. J., Murray-Harvey, R., and Slee, P. T. (2005). *An investigation of the implementation of a MindMatters teaching module in secondary school classrooms. Report to the MindMatters consortium of the Australian Principals Association Professional Development Council. Flinders University, Adelaide.* Adelaide: Centre for the Analysis of Educational Futures, Flinders University.
- Bronfenbrenner, U. (1979). *The ecology of human development: Experiments by nature and design*. Cambridge, MA: Harvard University Press.
- CASEL. (2009). *What is SEL: Skills & Competencies.* Retrieved 15th July 2009, from <http://www.casel.org/basics/skills.php>

- Collings, S., and Beautrais, A. (2005). *Suicide Prevention in New Zealand. A contemporary perspective: Social explanations for suicide in New Zealand* Wellington, N. Z.: Ministry of Health. Retrieved 9th Oct 2009 from <http://www.moh.govt.nz/suicideprevention>
- DCSF. (2009). *Promoting and supporting positive behaviour in primary schools. Developing social and emotional aspects of learning (SEAL)*. Nottingham, UK: Department for Children, Schools and Families.
- Dix, K. L., Askill-Williams, H., and Lawson, M. J. (2008). *Different measures, different informants, same outcomes? Investigating multiple perspectives of primary school students' mental health*. Paper presented at the AARE 2008 International Education Research Conference Brisbane. Retrieved 9th Oct 2009 from <http://www.aare.edu.au/08pap/abs08.htm#D>
- Domitrovich, C. E. (2008). Maximizing the implementation quality of evidence-based preventive interventions in schools. A conceptual framework. *Advances in School Mental Health Promotion, 1*: 6-28.
- EMHIP. (2006). Mental Health Promotion. Retrieved 1st Oct 2009, from http://www.emip.org/mental_health_promotion.html
- ENSEC. (2009). *European Network for Social and Emotional Competence*. Retrieved 22nd Jul 2009, from <http://www.enseceurope.org/>
- Garson, G. D. (2009). Structural Equation Modeling. *Statnotes: Topics in Multivariate Analysis* Retrieved 5th May 2009, from <http://faculty.chass.ncsu.edu/garson/pa765/statnote.htm>
- Goodman, R. (2005). *Strengths and Difficulties Questionnaire*. Retrieved 7th Aug 2007 from <http://www.sdqinfo.com/questionnaires/austral/aus10.pdf>
- Greenberg, M. T., Domitrovich, C., and Bumbarger, B. (2001). The Prevention of Mental Disorders in School-Aged Children: Current State of the Field *Prevention & Treatment, 4*(1) n.p.
- Greenberg, M. T., Domitrovich, C. E., Graczyk, P. A., and Zins, J. E. (2005). The study of implementation in school-based preventive interventions: Theory, research, and practice. *Promotion of Mental Health and Prevention of Mental and Behavioral Disorders 2005 Series V3*. Retrieved 9th Oct 2009, from <http://www.casel.org/downloads/Implementation%20VOL%2031.pdf>
- Gregory, K., Lawson, M. J., Russell, A., and Dix, K. L. (2008). *Issues in measuring student mental health. Symposium: Evaluating whole school approaches to mental health promotion: transferring learning to practice*. Paper presented at the Margins to Mainstream: 5th World

Conference on the Promotion of Mental Health and the Prevention of Mental and Behavioural Disorders. Melbourne 10-12 September.

Hattie, J. (2009). *Visible Learning*. Oxon: Routledge.

Hazell, T. (n.d.). *Beyond the Rhetoric "Coming to terms" with re-orienting a mental health service*. Hunter Institute of Mental Health Retrieved 30th Sept 2009, from <http://cc.bingj.com/cache.aspx?q=mrazek+hagerty&d=76763335623328&mkt=en-AU&setlang=en-AU&w=7c759547,2e035064>

KidsMatter. (2006). *KidsMatter Implementation Manual Stage 1*. Canberra: Commonwealth of Australia.

KidsMatter. (2009a). *Funding Announced for KidsMatter*. Retrieved 12th Oct 2009, from <http://www.kidsmatter.edu.au/news/funding-announced-for-kidsmatter/>

KidsMatter. (2009b). *KidsMatter Primary Framework*. Retrieved 15th July 2009, from <http://www.apapdc.edu.au/kidsmatter/>

KidsMatter. (2009c). *Social and emotional learning*. Retrieved 15th July 2009, from <http://www.apapdc.edu.au/kidsmatter/>

Kimber, B., Sandell, R., and Bremberg, S. (2008). Social and emotional training in Swedish schools for the promotion of mental health: an effectiveness study of 5 years of intervention. *Health Education Research*, 23: 931-940.

MindMatters. (n.d.). About MindMatters. Retrieved 24th April 2009, from http://www.mindmatters.edu.au/about/about_landing.html

Mrazek, P. J., and Haggerty, R. J. (Eds.). (1994). *Reducing Risks for Mental Disorders: Frontiers for preventive intervention research*. Washington, DC: National Academy Press. Washington, DC: National Academy Press.

Naylor, P. B., Cowie, H. A., Walters, S. J., Talamelli, L., and Dawkins, J. (2009). Impact of a mental health teaching programme on adolescents. *The British Journal of Psychiatry*, 194: 365–370.

Payton, J., Weissberg, R. P., Durlak, J. A., Dymnicki, A. B., Taylor, R. D., Schellinger, K. B., et al. (2008). *The Positive Impact of Social and Emotional Learning for Kindergarten to Eighth-Grade Students*. Retrieved 1st Sept 2009, from <http://www.casel.org/downloads/PackardES.pdf>

Peth-Pierce, R. (2000). *A good beginning: Sending America's children to school with the social and emotional competence they need to succeed*. Retrieved 7th Oct 2009, from <http://www.casel.org/downloads/goodbeginning.pdf>

- Roeser, R. W., Eccles, J. S., and Strobel, K. R. (1998). Linking the study of schooling and mental health. *Educational Psychologist*, 33(4): 153-176.
- Sawyer, M. G., Miller-Lewis, L. R., and Clark, J. J. (2007). The Mental Health of 13–17 Year-Olds in Australia: Findings from the National Survey of Mental Health and Well-Being. *Journal of Youth and Adolescence*, 36: 185–194.
- Slee, P. T., Michael J. Lawson, Alan Russell, Askeel-Williams, H., Katherine L. Dix, Owens, L., et al. (2009). *KidsMatter Evaluation Final Report*. Adelaide: Flinders University.
- Stanley, F. (2009) *Transforming Australia for our children's future: Making prevention work* Keynote address. Retrieved 30th Sept 2009, from <http://www.aracyconference.org.au/Wed%20Plen1%200900%20Stanley.pdf>
- Tabachnick, B. G., and Fidell, L. S. (2001). *Using Multivariate Statistics* (4th ed.). Needham Heights, MA: Allyn & Bacon. .
- WHO. (2007a). *Mental health: strengthening mental health promotion*. Retrieved 15th July 2009, from <http://www.who.int/mediacentre/factsheets/fs220/en/>
- WHO. (2007b). *What is a health promoting school?* Retrieved 12th Jan 2006, from http://www.who.int/school_youth_health/gshi/hps/en/index.html
- WHO Europe. (2006) *Opening address*. Paper presented at the Fifth workshop on practice of evaluation of the Health Promoting School - concepts, indicators and evidence, Sigriswil, Switzerland. 8–11 June 2006