KidsMatter Primary Evaluation

Technical Report and User Guide

Katherine L. Dix, John P. Keeves, Phillip T. Slee,
Michael J. Lawson, Alan Russell, Helen Askell-Williams,
Grace Skrzypiec, Laurence Owens, Barbara Spears

Centre for Analysis of Educational Futures
FLINDERS UNIVERSITY 2010

AUSTRALIAN PRIMARY SCHOOLS
MENTAL HEALTH INITIATIVE

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2010

KidsMatter: the Australian Primary Schools Mental Health Initiative is developed in collaboration by the Australian Government Department of Health and Ageing, beyondblue: the national depression initiative, the Australian Psychological Society, Principals Australia, with support by Australian Rotary Health.

KidsMatter information and resources (including electronic copies of this report) are available from www.kidsmatter.edu.au.

Katherine L. Dix, John P. Keeves, Phillip T. Slee, Michael J. Lawson, Alan Russell, Helen Askell-Williams, Grace Skrzypiec, Laurence Owens (Flinders University of South Australia), Barbara Spears (University of South Australia), 2010

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beyondblue: the national depression initiative

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KidsMatter Personnel

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The KidsMatter Primary Initiative

KidsMatter is the Australian primary school mental health promotion, prevention and early intervention initiative developed in collaboration with the Commonwealth Government Department of Health and Ageing, *beyondblue: the national depression initiative*, the Australian Psychological Society, Principals Australia (PA) and supported by the Australian Rotary Health Research Fund.

Website: http://www.kidsmatter.edu.au

Contents

List of Tables

List of Figures

Chapter 1.
Overview of the KidsMatter Database

1.1 Introduction

This Technical Report and User Guide is the culmination of an evaluation investigating the effectiveness of KidsMatter Primary, involving over 5000 participants in 100 Australian primary schools[1] over a two year period. It brings together an extensive data gathering exercise and presents technical aspects of the statistical and thematic analyses used in the KidsMatter Evaluation Final Report (Slee, et al., 2009). The evaluation team was based at Flinders University, School of Education, and was comprised of academics and research specialists.

The series of data files and the analysis in which the files have been used, are from the KidsMatter Evaluation Whole Cohort Longitudinal Study (predominantly quantitative data) and the Stakeholder and Student Voice Studies (qualitative data), in addition to data obtained from Project Officers and school leadership. The broad purpose of the study was to evaluate the effectiveness of the KidsMatter Initiative Stage 1 Pilot Phase, which was a school-based national mental health promotion prevention and early intervention initiative.

The evaluation of KidsMatter covers seven broad areas:

1. Student mental health outcomes,
2. School engagement with the KidsMatter Initiative,
3. School staff knowledge, competence and confidence in working towards improved mental health for students,
4. Parent and family engagement with the Initiative,
5. Parents' knowledge, competence and confidence in supporting the mental health needs of their children,
6. Protective factors targeted by the Initiative, and
7. Educational outcomes.

This Technical Report and User Guide contains an overview of the design, sampling, and data collection activities of the Whole Cohort Longitudinal Study and the Stakeholder and Student Voice Studies. In addition, it reports the technical aspects of the first and second stage statistical and thematic analyses presented in the KidsMatter Evaluation Final Report (Slee, et al., 2009), along with guidelines about using the KidsMatter database.

[1] The KidsMatter Initiative Pilot Phase (KM) was planned to be trialled in 101 schools across Australia during 2007-2008. One school did not participate in the evaluation due to the transient nature of its students, making a longitudinal evaluation design unworkable.

1.2 Evaluation Design and Timeline

The evaluation of KidsMatter was based on the conceptual model presented in Figure 1. In brief, the conceptual model proposed that the strategies implemented by schools in the broad area of mental health, impact on a range of risk and protective factors associated with the school, the family, and the students themselves, which in turn, influenced student mental health outcomes.

A cluster part-randomised study was considered suitable to assess the extent KidsMatter achieved its major goals with respect to student mental health. This study involved 100 primary schools across all States and Territories of Australia, with schools representing a broad cross-section of Government (both metropolitan and non-metropolitan), Catholic and Independent schools. Schools were recruited through an expression of interest process overseen by Principals Australia. The study commenced in late 2006 and was completed in January 2009. One selected school was not able to participate in the evaluation and of the 100 schools, 50 participated as Round 1 Schools (sustained intervention cohort) and 50 participated as Round 2 Schools (start-up comparison cohort). Round 1 Schools commenced the KidsMatter Initiative at the beginning of 2007 and participated for two years, whereas in Round 2 Schools KidsMatter was initiated at the start of 2008. The gathering of evaluation data began in early 2007 in all schools. A series of studies were developed specifically to assess the Initiative's major goals with respect to student mental health. Data were collected from the following sources.

- **The Whole-Cohort Longitudinal Study** involved the parents or caregivers[2] and teachers of students from both groups of Round 1 and Round 2 schools, who were tracked over two years, with assessments conducted on four occasions (early 2007, late 2007, early 2008, late 2008). Assessments took the form of questionnaires that both the child's parent and classroom teacher completed. These multiple-informant measures were appropriate for the whole cohort and for longitudinal comparison. School personnel (members of an Action Team) undertook the administration of questionnaires to parents and teachers with the use of a detailed instruction booklet (see Appendix A) and the support of KidsMatter Project Offices, in addition to phone and email support from the KidsMatter Chief Research Officer.
- **Stakeholder and Student Voice Studies** consisted of focus groups and interviews, conducted by trained interviewers, with principals, teachers, students and parents in 10 purposefully selected Round 1 schools during semester 2 of 2008.
- **KidsMatter Project Officer Proforma** questionnaires were completed online by the State-based KidsMatter Project Officers and recorded school contextual and event data on five occasions in Round 1 schools and on three occasions in Round 2 schools over the duration of KidsMatter. The Proforma contained open-response and multiple-choice items and was appropriately developed for longitudinal analysis, to give an additional perspective based on the views of a 'well-informed outsider'. Since Project Officers had at least six schools to oversee, this gave some assessment of the relative levels of implementation of KidsMatter by the schools within each State.
- **School Leadership Executive Summary** was administered to principals and KidsMatter action team coordinators at the end of the two year pilot phase, inviting them to respond voluntarily to a set of focus questions about key components of the KidsMatter Initiative. The questionnaire contained open-response and multiple-choice items.

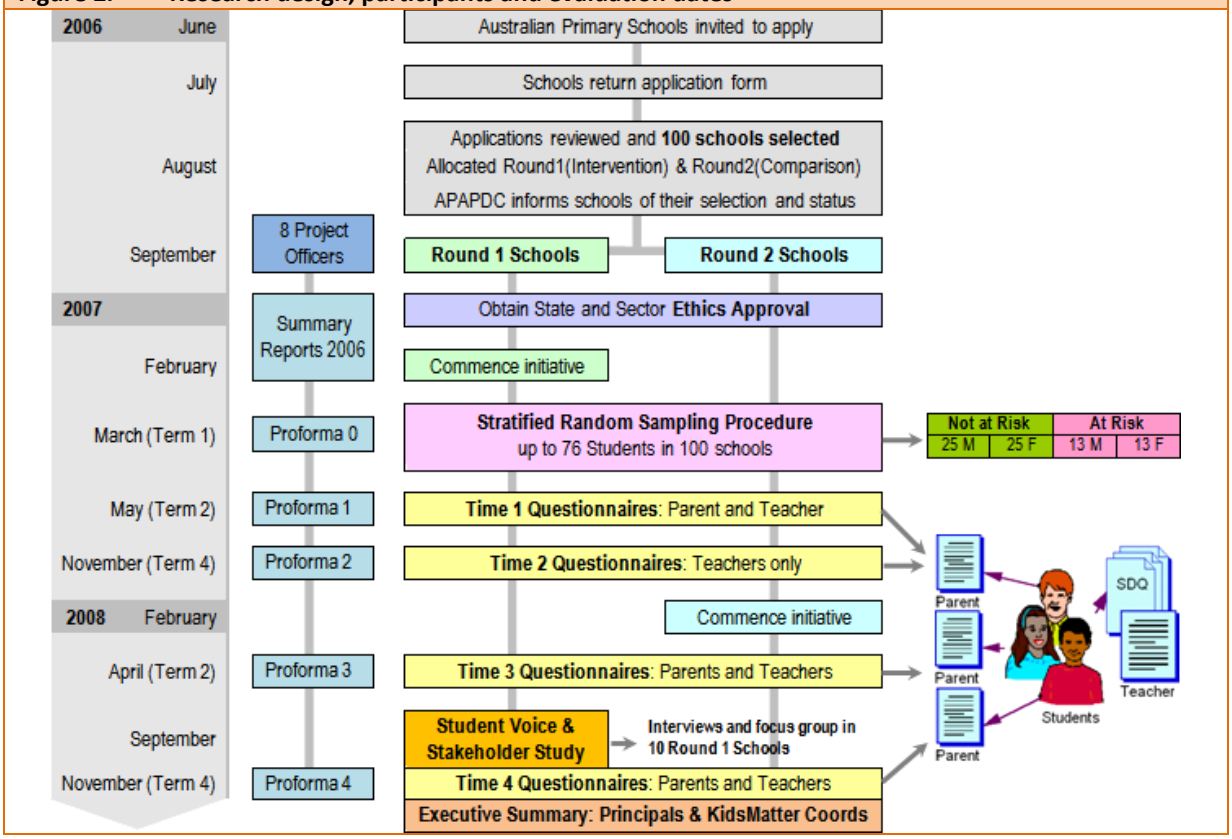
[2] For simplicity, the term 'parent' rather than 'parent or caregiver' is used throughout the report, but is intended to be inclusive of both parents and caregivers.

Figure 1. Conceptual model for KidsMatter

The main purpose of these studies was to assess change over time. Where possible, pre-existing items were used that had established validity and reliability. The various instruments are detailed in Chapter 2.

Clearly, the size of this evaluation is considerable with 17,373 parent cases and 1,393 teacher cases collected over a two year period in 100 schools across Australia – and this is just considering the Whole-cohort longitudinal study. In addition, there were executive summaries from the leadership in 62 schools, and 450 completed Proformas from State-based Project Officers. In addition, there were 10 case study schools, yielding over 80 hours of interview and focus group recordings. In order to clarify the sources and occurrences of data, Figure 2 provides an overview of the research design and the evaluation dates.

Figure 2. Research design, participants and evaluation dates



1.3 Participants in the KidsMatter Initiative

Schools across Australia applied to take part in the KidsMatter Initiative. The KidsMatter pilot study was designed to involve 101 schools selected from the larger pool of applicants based on their State, location (metropolitan, rural or remote), size and sector type, in order to ensure a diverse sample. Distribution of schools across States and Territories was approximately proportional to State size, so large States like Victoria had 20 schools included in KidsMatter, while Tasmania, the Northern Territory and the Australian Capital Territory each had six schools. Each cluster of schools was assigned a State Project Officer to support schools in implementing KidsMatter and to provide professional development.

Near the end of 2008, as part of the qualitative Stakeholder and Student Voice studies, 10 of the Round 1 schools were invited to contribute to interviews and focus groups involving students, staff, leadership, and parents. These schools were drawn from nearly all States and Territories and covered the full socio-demographic range. The interviews and focus groups were designed to access the lived realities of the participants as they were experiencing the implementation of KidsMatter and to

provide opportunities for case study analysis and detailed insight into participants' perceptions of KidsMatter.

For the whole-cohort study, school enrolment lists provided the sampling frame from which up to 76 students were randomly selected from each of the 100 KidsMatter schools. A stratified sampling procedure (see Chapter 2), based on gender, age and 'at risk' status, was developed to ensure balanced representation of gender with a focus on 10 year-old students and those considered to be 'at risk' of social, emotional or behavioural problems as nominated by teachers.

Within the stratified groups, a random sampling procedure was used. However, since schools were encouraged to select replacement students for those parents not wishing to participate in the evaluation, in addition to the KidsMatter schools forming a representative sample rather than a random sample, school or student weights have not been applied to the data and caution should be taken when generalising findings to other students and other primary schools in Australia. However, indicators of statistical significance for estimated relationships can be considered to be meaningful when applied to the selected groups with some degree of generality.

The parents of 4980 primary school students complete the first and subsequent waves of the questionnaires. A parallel set of responses was provided by a total of 1319 teachers of these students during the two year period. It is this data set that is used for the quantitative component of this evaluation. Characteristics of the KidsMatter schools, teachers and students are presented in Table 1.

Table 1. Background characteristics of Project Officers, schools, teachers and students involved in the KidsMatter Initiative

Schools	***N = 100***	***Government***	***Catholic***	***Independent***
	Metro	*36*	*20*	*4*
	Rural	*24*	*9*	*2*
	Remote	*5*	*0*	*0*
	School-wide Characteristics	***Round 1 Schools***		***Round 2 Schools***
	Full-Time Teachers	*58%*		*56.1%*
	Support Teachers	*35.5%*		*23.6%*
	Students with Special Needs	*9.9%*		*9.0%*
	Aboriginal or Torres Strait Islander	*8.3%*		*5.6%*
	Culturally and Linguistically Diverse (CALD/ESL)	*16.7%*		*13.2%*
Project Officers	***N = 8***	***Male***		***Female***
	Gender	*1*		*7*
Teachers	***N = 1393***	***Male***		***Female***
	Gender	*14.9%*		*85.1%*
	Mean Teaching Experience (SD)	*14.6 (10.8)*		*15.2 (10.8)*
Students[a]	***N = 4980***	***Male***		***Female***
	Gender	*47.8%*		*52.2%*
	Mean Age (SD)	*9.6 (1.6)*		*9.7 (1.6)*
	At Risk Status	*14.7%*		*12.3%*
	Aboriginal or Torres Strait Islander	*1.5%*		*1.9%*
	Culturally and Linguistically Diverse (CALD/ESL)	*7.2%*		*8.1%*

[a] *% of relevant subgroups and groups involved*

Teachers show typical population characteristics, such as a predominance of female teachers and the indication of an aging population reflected by the average years of teaching experience. Student characteristics reflect the stratified sampling procedure used. Students considered to be 'at risk' of experiencing social, emotional or behaviour problems were identified using a non-clinical assessment by their teacher or school counsellor. Other demographic characteristics of the sample include Aboriginal or Torres Strait Islander background, English as a Second Language (ESL) background, and the percentage of children who live with both parents in an intact family.

The strategy to maintain an equal gender balance, target 10-year-old students, with up to an additional 26 students per school in order to ensure that students identified as being 'at risk' were included (see Chapter 2), was successfully employed.

1.4 Conceptual Design and Measures

A research framework was developed, in the first instance, to ensure that all aspects of the conceptual model were represented during the design of the teacher and parent questionnaires. The focal points for the generation of information that would inform the analyses were organised into the five main themes, namely, (a) school implementation of KidsMatter, (b) school engagement with mental health initiatives in general, (c) school risk and protective factors, (d) risk and protective factors of the teacher, family, and child, and (e) perceived KidsMatter impact and student mental health outcomes. The items referred to as 'process' items included implementation and engagement with KidsMatter, specifically, and mental health initiatives, generally. The items that assessed the 'impact of KidsMatter', considered school, teacher, family and child risk and protective factors, in addition to looking at participants' perceptions of perceived impact and student mental health outcomes. Table 3 presents the Evaluation framework, followed by a brief description of each quantitative scale that was used to form measures.

Figure 3. Measures used in the KidsMatter Evaluation questionnaires for teachers (T) and parents (P)

PROCESS		IMPACT		
School Implementation of KidsMatter	**School Engagement with mental health**	**School Risk & Protective Factors**	**Teacher, Family & Child Risk & Protective Factors**	**Perceived Impact & Mental Health Outcomes**
Evidence in schools of implementation of KidsMatter and mental health initiatives, in general		School status on the Four Components	Teacher, family & child competencies	Impact on mental health outcomes
KM Engagement (T)	General Engagement (T&P)	C1: A Positive School Community (T&P)	Staff Approach to Teaching SEL (T)	KM Impact of PD on Teachers (T)
KM Implementation (T&P)		C2: Social & Emotional Learning (T)	Staff Attitudes Towards SEL (T)	KM Impact on Parent Involvement (P)
		C3a:Parenting Support by School (T&P)	Teacher Knowledge about SEL (T)	KM Impact on Parent Learning (P)
		C3b: Parenting Support by Staff (T&P)	Teacher SEL Programs & Resources (T)	KM Impact on Child's School Needs (T&P)
		C4: Early Intervention (T&P)	Teacher Self-Efficacy (T)	Mental Health Difficulties (T&P)
			Parenting Knowledge (P)	Mental Health Strengths (T&P)
			Parenting Style (P)	Total Strengths and Difficulties (T&P)
			Child SEL Competencies (T&P)	

The concepts underpinning the assessment data from parents (P) and teachers (T) are described as follows.

KM engagement (T) Chapter 3 of Final Report: Teacher ratings of school engagement with the four KM components. Used to measure general engagement with KM.

KM implementation (T) Chapter 3 of Final Report: Teacher ratings of the KM 7-Step implementation process. Used to measure general implementation of KM.

KM implementation (P) Chapter 3 of Final Report: Parent ratings of their involvement with KM as a measure of the level of implementation from the perspective of parents.

School engagement with students' mental health and wellbeing initiatives in general (P&T) Chapter 3 of Final Report: Teacher and parent ratings of their school's engagement with mental health initiatives, in general, with a focus on social and emotional learning. Used to measure existing levels of engagement with mental health initiatives and changes in this engagement arising from KM.

C1: Positive school community (P&T) Chapter 6 of Final Report: A measure of Component 1. Teacher and parent ratings of their school community, how welcomed they feel and their sense of belonging.

C2: Social and emotional learning (T) Chapter 7 of Final Report: A measure of Component 2. Teacher ratings of the school's provision of social and emotional learning in the curriculum, support for professional development opportunities, and level of appropriate resources.

C3a: Parenting support by school (P&T) Chapter 8 of Final Report: A measure of Component 3. Teacher and parent ratings of support and education provided by the school for parents.

C3b: Parenting support by staff (P&T) Chapter 8 of Final Report: A measure of Component 3. Teacher and parent ratings of how accessible, informative and supportive staff are in providing parenting support and education.

C4: Early intervention (P&T) Chapter 9 of Final Report: A measure of Component 4. Teacher and parent ratings of how effective their school is at supporting students who are experiencing mental health difficulties.

Staff approaches to teaching SEL (T) Chapter 10 of Final Report: Teacher ratings of general staff approach to helping students to develop social and emotional skill. Used to measure KM impact on teachers.

Staff attitudes towards SEL (T) Chapter 10 of Final Report: Teacher ratings of their attitude to teaching social and emotional learning skills. Used to measure KM impact on teachers.

Teacher knowledge about SEL (T) Chapter 10 of Final Report: Teacher ratings of their knowledge and ability to help students to develop social and emotional awareness and skills. Used to measure KM impact on teachers.

Teacher SEL programs & resources (T) Chapter 10 of Final Report: Teacher ratings of their teaching program and resources to help students to develop social and emotional awareness and skills. Used to measure KM impact on teachers.

Teacher self-efficacy (T) Chapter 10 of Final Report: Teacher ratings of their self-efficacy to foster a sense of belonging in others, provide effective support to parents, and identify early signs of social and emotional difficulties in students. Used to measure KM impact on teachers.

Parenting knowledge (P) Chapter 11 of Final Report: Parent ratings of their knowledge of how to help their child foster friendships, provide emotional comfort, and recognise when their child is having difficulties. Used to measure KM impact on families.

Parenting style (P) Chapter 11 of Final Report: Parent ratings of their relationship with their child together with consistency in applying rules. Used to measure KM impact on families.

Child social and emotional competencies (P&T) Chapter 12 of Final Report: Teacher and parent ratings of the child's ability to maintain positive relationships, solve problems, consider others, and make responsible decisions. Used to measure KM impact on children.

KM impact of PD on teachers (T) Chapter 10 of Final Report: Teacher ratings of the impact of the KM professional development on teacher knowledge and actions.

KM impact on parent involvement with school (P) Chapter 8 of Final Report: Parent ratings of the impact of KM on their involvement with support networks, school and community. This is a measure of the perceived impact of KM on Positive school community.

KM impact on parent learning (P) Chapter 11 of Final Report: Parent ratings of the parenting skills that KM has helped them to learn. This is a measure of the perceived impact of KM on family processes. Featured in Parent ratings of their relationship with their child. Used to measure KM impact on families.

KM impact on child (T&P) Chapter 4 of Final Report: Teacher and parent ratings of how well KM has provided for the child's needs at school, especially their socio-emotional needs. This is a measure of the perceived impact of KM on child processes.

Mental health difficulties (T&P) Chapter 13 of Final Report: Teacher and parent ratings of the child's mental health difficulties in terms of poor behaviour, anxiety and depression. This is a measure of student mental health outcomes.

Mental health strengths (T&P) Chapter 13 of Final Report: Teacher and parent ratings of the child's positive mental health in terms of optimism and coping skills. This is a measure of student mental health outcomes.

Total strengths and difficulties (SDQ) (T&P) Chapter 13 of Final Report: Teacher and parent ratings of the child's mental health difficulties in terms of hyperactivity, conduct problems, emotional symptoms and peer problems. This is a measure of student mental health outcomes.

1.5 Ethics

Ethics applications were submitted, and approvals received, from the Flinders University Social and Behavioural Research Ethics Committee (Approval Numbers SBREC3744 and SBREC 4033), and also from all school, jurisdiction and departmental bodies for all studies in all Australian States and Territories.

1.6 Data Collection and Processing

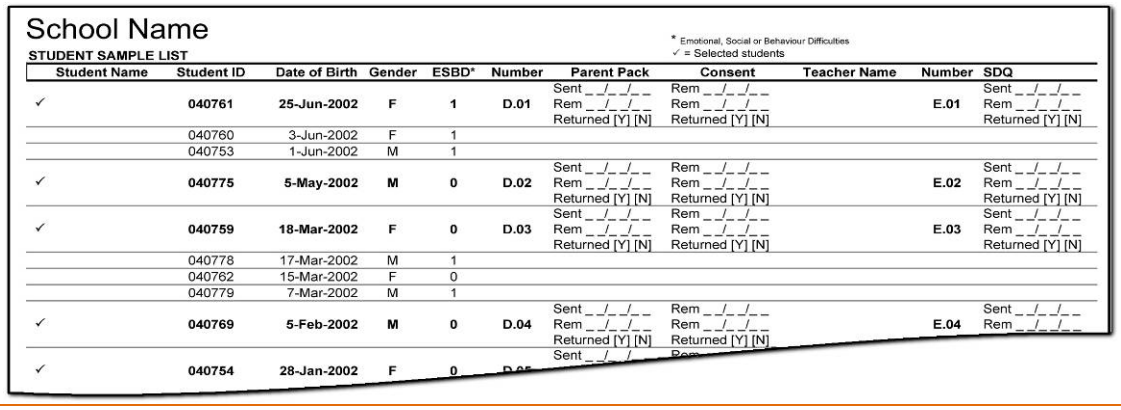
In order to ensure the availability of comparable, high-quality data for analysis, the KidsMatter Evaluation team took rigorous quality control steps to create the complex database, from the design of the data collection procedures to the systematic methods of processing the questionnaires.

The contents of the 'questionnaire pack' sent to each KidsMatter school was carefully considered, given that it was to be administered to the parents and teachers by a member of the school staff, supported by the school Action Team member. Considerations included the system of coding the de-identified questionnaires; the order of questionnaire administration to parents and teachers; the method of obtaining participating teacher and parent consent; the method of replacement of non-consenting parents; the design of the instruction booklet for maximum clarity; and the provision of a small gift to recognise the considerable work that each school's Action Team required in administering the questionnaires. The questionnaires were formatted in Microsoft Word and conformed to the requirements of Remark Office OMR (Gravic, 2007) survey software to enable automatic data extraction using a high-speed document scanner.

At each data collection occasion, each school Action Team Coordinator received a questionnaire pack with a detailed Instruction Booklet (See Appendix A), a Student List to keep track of questionnaires

(sample shown in Figure 4), and all the questionnaires enveloped and labelled, ready for administering. On each occasion, returned questionnaire boxes were systematically processed by a trained university research assistant. Each questionnaire was cross-checked to the Student List and identification codes were confirmed, in order to ensure that the correct questionnaire was assigned to the correct student on each occasion. Where information was missing or insufficient, schools were followed-up. For reasons of confidentiality, the Student List was securely stored in a separate place to the questionnaires, with access restricted to KidsMatter senior staff.

Figure 4. Example of a student sample list used by schools to identify the randomly selected students, match replacement students, and track the progress of questionnaires



School Name

STUDENT SAMPLE LIST

* Emotional, Social or Behaviour Difficulties
✓ = Selected students

	Student Name	Student ID	Date of Birth	Gender	ESBD*	Number	Parent Pack	Consent	Teacher Name	Number	SDQ
✓		040761	25-Jun-2002	F	1	D.01	Sent _ _/_ _/_ _ Rem _ _/_ _/_ _ Returned [Y] [N]	Rem _ _/_ _/_ _ Rem _ _/_ _/_ _ Returned [Y] [N]		E.01	Sent _ _/_ _/_ _ Rem _ _/_ _/_ _ Returned [Y] [N]
		040760	3-Jun-2002	F	1						
		040753	1-Jun-2002	M	1						
✓		040775	5-May-2002	M	0	D.02	Sent _ _/_ _/_ _ Rem _ _/_ _/_ _ Returned [Y] [N]	Rem _ _/_ _/_ _ Rem _ _/_ _/_ _ Returned [Y] [N]		E.02	Sent _ _/_ _/_ _ Rem _ _/_ _/_ _ Returned [Y] [N]
✓		040759	18-Mar-2002	F	0	D.03	Sent _ _/_ _/_ _ Rem _ _/_ _/_ _ Returned [Y] [N]	Rem _ _/_ _/_ _ Rem _ _/_ _/_ _ Returned [Y] [N]		E.03	Sent _ _/_ _/_ _ Rem _ _/_ _/_ _ Returned [Y] [N]
		040778	17-Mar-2002	M	1						
		040762	15-Mar-2002	F	0						
		040779	7-Mar-2002	M	1						
✓		040769	5-Feb-2002	M	0	D.04	Sent _ _/_ _/_ _ Rem _ _/_ _/_ _ Returned [Y] [N]	Rem _ _/_ _/_ _ Rem _ _/_ _/_ _ Returned [Y] [N]		E.04	Sent _ _/_ _/_ _ Rem _ _/_ _/_ _
✓		040754	28-Jan-2002	F	0	D.05	Sent _ _/_ _/_	Rem			

1.7 Summary of Data Collected

Table 2 presents an overview of all of the data collected for the KidsMatter evaluation. In summary, of the 7114 students identified in the 100 schools, data were received at Time 1 from parents and teachers of 4980 students, resulting in an initial response rate of 70%. Of these students, 76% were present for data collection on all four occasions. Accordingly, the sample size and composition, together with the response rates, are considered appropriate for the statistical analyses undertaken in the evaluation.

Table 2. Data map of all data collected in the evaluation

Year	2007				2008					
School Term/Quarter	1	2	3	4	1	2	3	4		
Data Collection Time		**Time 1**		**Time 2**		**Time 3**		**Time 4**		
Student Enrolment Lists	28205									Final returns
Teachers									1397	
Student Sample Lists (B)		7114		4980		4810		4435	3762	
Parent Questionnaire (D)		4346				2995		2404		
Teacher Supplement (E)		4793		4592		3866		3587		
Teacher Questionnaire (F)		812		802		928		716	53%	of original 7114 students
Response Rate at each return		70%		97%		92%		85%	76%	of participating 4980 students
School Profile	100	100		99		100		97		
Project Officer Rpt Round 1 Schools	50	50		50		50		50		
Project Officer Rpt Round 2 Schools				50		50		50		
Leadership Executive Summary								53	62%	School response rate
Coordinator Executive Summary								61		
Principal and Staff Interviews								64		
Parent Focus Groups								19		
Student Focus Groups								20		

All of the KM Project Officer Reports were received, resulting in a 100% response rate. For the voluntary Leadership Executive Summary, 62% of schools responded. In addition, the 10 case study schools yielded over 80 hours of interview and focus group recordings. These involved 64

Stakeholder interviews (principals, KM Action Team, counsellors and teachers), 19 parent focus groups and 20 Student Voice focus groups.

Accordingly, the sample size and composition, together with the response rates, are considered adequate for estimating reliability and validity coefficients and for the statistical and thematic analyses undertaken for the evaluation and presented in the is document.

1.8 Data Analysis and Reporting

This evaluation primarily involves the collection of longitudinal data, on up to four occasions, in order to examine change and the factors that influence change in primary schools to support better the mental health of students. It is important to recognise that the data collected in the investigation of KidsMatter involved samples of schools, students and occasions. While the samples are interrelated and nested or clustered, they are only in part randomly drawn from specified populations. However, representation has been deliberately sought by involving all Australian States and Territories, the three different school sectors, and the many different regions of school location, as well as students considered to be 'at risk' with respect to mental health and students considered to be 'not at risk'. While this investigation involves samples of schools and students nested within schools that are only drawn by a partly random procedure, making it weak with respect to randomisation, it is strong in the other two key characteristics of intervention studies, namely, realism and representation. With respect to randomisation, note that a stratified and part-random sample was drawn but those selected students whose parents did not want to participate were replaced by another student at the school's discretion. Even though schools were instructed to select the next same-gender student on the list sorted by age, the inability to match perfectly profiles of replaced students on the stratum (age, gender, 'at risk' status), meant that calculating probabilities of selection are not meaningful and no longer appropriate for the making of generalisations across Australia. Consequently, any possible weighting of the data from the sample with respect to a defined population is considered inappropriate and generalisation of findings to a wider population can only be made with caution. What are sought in the analyses of the data and the reporting of the analyses are meaningful statements with respect to the relationships between the many components of the situation under investigation. It is also relevant to note that the staged implementation of the pilot phase, across the Round 1 and then the Round 2 schools, provides elements of delayed control and replication.

From inspection of the distributional properties of the collected data it was recognised that much of the data were heavily skewed and that the use of non-parametric approaches were necessary in the analysis of the raw data, where the data were collected at the levels of the student, parent, teacher and school. Thus, intra-student and inter-student levels of analysis were included by largely distribution-free, and where appropriate, maximum-likelihood methods of data analysis.

The wealth of information, strengthened by multiple perspectives on multiple occasions in multiple contexts and with multiple methods, is best appreciated in Table 3, which summarises the analysis conducted for the preparation of the Final Report.

Table 3. An outline of steps in the analysis of the KidsMatter Evaluation database	
Qualitative Data	**Quantitative Data**
Data preparation: organising audio files according to participants within States and Territories; tallying types of audio data (number of parent focus groups, student focus groups, principal interviews); selecting order of priority for transcribing audio files eg principal interviews to be transcribed first	**Data preparation**: Scanning and cleaning the raw data, matching items and students across instruments and occasions, removing wild codes and examining the score distributions for all sets of data.
Transcription: converting audio files to wave formats to facilitate transcription; transcribing word-for-word audio; providing background information about the context of the focus group or interview; reading and correcting text files for spelling, grammar	**Exploratory analyses of scales of measurement**: Undertaking initial exploratory analyses to examine the structure of the scales of measurement using factor analytic models with asymptotically distribution-free estimation.
Analysis: Three approaches based on a) School Change involving an analysis of facilitators and barriers to implementation; b) Thematic analysis – examining the emerging themes from and applied to, mental health, implementation and the four components; c) Exemplars and contextual influences – to determine examples of good implementation	**Constructing** strong scales of measurement and deriving scores associated with these scales.
Evaluator Agreement: 3-4 evaluators analysing data separately then undertook iterative discussion until rater agreement was unanimous on emerging themes.	**Analyses of outcome measures**: Undertaking analyses using the categorical data to test specific hypotheses concerned with the allocation of students to the categorise of 'normal', 'borderline' and 'abnormal' ranges of mental health, and the allocation of schools to categories of 'high' and 'low' with respect to implementation quality, using latent class analysis.
Summary of Core Messages: summarising emerging themes into core messages relating to mental health, implementation and the four components.	**Examination of change with scaled data**: Undertaking analyses with scaled data to investigate the nature and extent of change and the influence of selected individual factors on change using hierarchical linear modelling with associated statistical and practical significance testing (involving the size of effect).
Final Report to the client: Preparing a popular report that involves largely descriptive statements of the findings in addition to the use of modelling procedures.	

Chapter 2.
Sampling Design

This chapter describes the procedures developed to sample the student populations in each participating KidsMatter school. The first aim was to optimise transferability of results by using a sample design that yielded representative samples that gave sound estimates of relationships associated with both realism and representation. However, the second aim was to maintain the sample size through the non-random replacement of non-participating students, resulting in a part-random sampling procedure for which sample weights could not be meaningfully calculated.

2.1 School Recruitment and Selection

Selecting schools to participate in the KidsMatter Initiative was undertaken through a multi-stage process of recruitment, assessment and selection. For practical reasons, a quota of 101 schools was set with schools being recruited from each State and Territory, with numbers in each territory approximating the population distributions. The recruitment of schools during mid-2006 was overseen by Principals Australia. It involved sending a flyer to all 7,739 primary and K-12 schools Australia-wide, inviting schools to submit an expression of interest, which provided information to assist with the selection of schools. The information requested from schools in the Application Form focused on: a) school-level demographic information (for example, school and class sizes, gender ratios, SES information), which would assist with stratification and matching of schools; and b) 'school readiness', which included questions on the extent to which schools were participating in other external projects or programs; the extent of engagement of school staff and parents; school capacity; and willingness to implement the type of strategies identified and discussed in the Conceptual Framework in the KidsMatter Final Report (Slee, et al., 2009).

A Selection Committee was formed, overseen by *beyondblue*. The evaluation team provided advice about sampling design to inform the school selection process. The short-listed schools were stratified on the basis of State or Territory, sector (Government, Catholic, Independent), location (metropolitan, rural, remote), school type (Primary, K-12, Co-Ed, Girls), school size and other contextual criteria of interest indicated in Figure 1 (see Chapter 1). Where possible, schools of similar profile in each territory were paired to optimise an equitable and representative distribution among the stratum and also provided some representation of diverse settings. Each school from a pair was then allocated to either Round 1 (Intervention) or Round 2 (Delayed-start comparison), resulting in two statistically similar and comparable groups. Selected schools were notified during August 2006 for Round 1 commencement in early 2007 and Round 2 commencement in early 2008.

The selected schools ranged in size from 11 students with one staff member, to 1085 students with 100 staff. In terms of language background, schools ranged from those that had no students who were culturally and linguistically diverse (ESL/CALD), to a school with 94 per cent ESL/CALD students. Some schools had no Aboriginal or Torres Strait Islander students, and some had more than 75 per cent Aboriginal or Torres Strait Islander students.

The profile of Round 1 and Round 2 schools involved in the KidsMatter Initiative is presented in Table 4. This shows a statistically comparable distribution across the demographic measures. Accordingly, it is from these 100 schools that the target population of students was drawn.

Table 4. Comparative profile of the Round 1 and Round 2 schools involved in KidsMatter

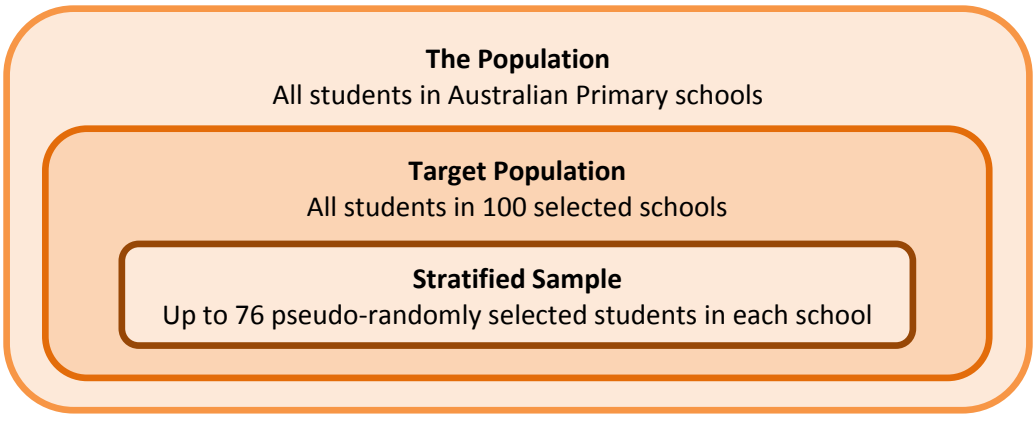
	No. of Students	*Student Age (yrs)*	*Average Percentage of Students At Risk*	*ATSI*	*CALD/ESL*	*Females*	*No. of Teachers*	*Years of teaching*	*% Female Teachers*
Round 1									
ACT	*111*	*10.0*	*22.5%*	*1.1%*	*7.4%*	*74.0%*	*27*	*16.8*	*100.0%*
NSW	*456*	*9.6*	*31.4%*	*5.8%*	*19.7%*	*54.5%*	*81*	*14.1*	*81.3%*
NT	*100*	*9.5*	*31.0%*	*8.5%*	*2.9%*	*61.4%*	*27*	*12.1*	*85.0%*
QLD	*368*	*10.1*	*36.5%*	*11.9%*	*5.1%*	*48.8%*	*64*	*12.8*	*89.0%*
SA	*307*	*9.7*	*22.2%*	*5.1%*	*13.7%*	*57.8%*	*38*	*16.9*	*92.5%*
TAS	*132*	*9.1*	*42.2%*	*3.5%*	*0.0%*	*50.7%*	*21*	*21.5*	*81.3%*
VIC	*550*	*9.5*	*24.5%*	*1.2%*	*37.8%*	*50.5%*	*84*	*16.2*	*94.3%*
WA	*353*	*9.6*	*31.7%*	*2.9%*	*6.0%*	*47.3%*	*47*	*17.0*	*84.7%*
Total	*2377*	*9.6*	*30.1%*	*5.3%*	*15.0%*	*53.0%*	*389*	*15.5*	*88.1%*
Round 2									
ACT	*257*	*10.1*	*30.9%*	*1.4%*	*10.1%*	*50.5%*	*38*	*11.2*	*76.5%*
NSW	*475*	*9.7*	*26.6%*	*2.6%*	*41.4%*	*50.6%*	*70*	*15.1*	*93.3%*
NT	*137*	*9.0*	*21.9%*	*11.1%*	*3.0%*	*47.6%*	*28*	*12.0*	*82.3%*
QLD	*307*	*10.2*	*17.9%*	*3.7%*	*0.0%*	*50.5%*	*59*	*15.1*	*86.6%*
SA	*254*	*9.8*	*30.2%*	*3.9%*	*3.8%*	*58.5%*	*66*	*17.4*	*81.7%*
TAS	*156*	*9.6*	*31.5%*	*9.1%*	*0.0%*	*43.9%*	*18*	*14.4*	*90.3%*
VIC	*561*	*9.5*	*29.9%*	*0.7%*	*16.0%*	*48.7%*	*92*	*14.0*	*90.4%*
WA	*456*	*9.5*	*24.4%*	*6.6%*	*2.6%*	*50.9%*	*50*	*16.0*	*81.3%*
Total	*2603*	*9.7*	*26.6%*	*4.1%*	*12.6%*	*50.7%*	*421*	*14.8*	*86.3%*

2.2 KidsMatter Target Populations

The student population for the KidsMatter Evaluation involved all students enrolled in Australian primary and K-12 schools from Year 1 to the year prior to leaving primary school, which is either Year 5 (in ACT, NSW, TAS, and VIC) or Year 6 (in QLD, SA, WA, and NT). The target population involved only those students who were enrolled in one of the 100 selected primary schools participating in the KidsMatter Initiative.

To enable causal connections to be made between the KidsMatter Initiative and student mental health outcomes, selection from school populations was needed with sufficient sample sizes from sub-populations of interest to enable the multi-level data analysis techniques involving nested populations to be employed in the examination of all data (Luke, 2004). Figure 5 shows the nested nature of the data and the relationship between population, target population and the sample.

Figure 5. The population, target population and sample, showing the nested nature of the data



The 100 KidsMatter schools were requested to submit their student enrolment lists along with the following additional information that provided background information on each student.

- Student school ID number,
- Date of birth,
- Gender,
- Students identified as 'at risk' of social, emotional and behavioural difficulties (school staff non-clinical judgement),
- Home postcode,
- Aboriginal and Torres Strait Islander status (ATSI),
- Culturally and Linguistically Diverse (CALD/ESL) status, and
- School fee subsidy (if applicable).

Information from each school was consolidated into a single database to form the target population and the sampling frame.

2.3 The Stratified Sampling Design

Although some schools were considering the implementation of KidsMatter school-wide, as a minimum requirement schools were requested to focus implementation on those Year levels with students who had turned 10 years of age in 2007. In most schools, this was Year 5. Accordingly, the cohort of students born in 1997 became the proxy target population of students receiving social and emotional learning in their curriculum.

A stratified (age, gender) random sampling design was developed to select 50 mainstream students, in addition to the over-sampling of 26 students nominated by teachers as being 'at risk' of social, emotional or behavioural difficulties in each school. This was done in case the stratified random sampling procedure did not, by chance, generate sufficient participants to report on this subgroup of 'at risk' students. Expected non-response and attrition rates were also taken into account in deciding the initial sample size and the sampling procedure was designed to maximise the chances of achieving the full target sample by overcoming differences in school size.

Accordingly, participants were randomly selected on the stratified criteria of gender, age, and 'at risk' status. The optimal sample size of 76 participants from 100 schools meant that this might include the entire population of the smallest schools. Using SPSS and Excel, a series of programs were written to simplify and automate the random sampling procedure. The sampling design and procedure is presented below as a series of steps.

Step A. Stratifications in order

1. School
2. Receiving Social and Emotional Learning Curriculum (use AGE 10 as a proxy)
3. Gender
4. At Risk (AR) /Not at Risk (NAR)

Step B. Whole school populations < 80 - include whole school population

Step C. To select AGE 10, 25 girls and 25 boys

1. Select 25 AGE 10 boys and 25 AGE 10 girls
2. If < 50 back fill with AGE 10,
3. If < 50 back fill with ALL AGES

Step D. To select AGE 10, 13 girls and 13 boys At Risk (AR)

1. Select 13 AGE 10 boys AR and 13 AGE 10 girls AR
2. If < 26 back fill with AGE 10, AR
3. If < 26 back fill with ALL AGES, AR
4. If < 26 back fill with ALL AGES, NAR

2.4 Sampling Method

The sampling procedure was semi-automated into steps a discrete number of steps. MS Excel provided the tool to summarise the raw data in a single workbook involving 100 individual sheets, labelled by school code, containing the background information as received by the school. A summary sheet listed the schools with code and automatically recorded the school size, the enrolment list size, and the final sample size. In most cases the sample size was 76 students. An additional sheet was formatted to calculate semi-automatically the sample statistics and indicate which sampling step needed to be undertaken in SPSS.

Each school sheet was saved as an individual file (for importing into SPSS) and macros were used to prepare the data by unifying the content and remove unnecessary fields. Using the 'syntax' facility in SPSS, the above sampling design was broken down and automated into six steps, and simply required 'running' the mini-programs with minimal intervention.

Step 1 sorted and computed the statistics in all stratification groups for analysis in MS Excel, showing how to proceed with Steps 2 and 3 or Steps 4 and 5. Steps 2 and 3 were used if backfilling was not required. Step 2 randomly selected 25 girls and 25 boys, age 10 years and 'Not at risk', while Step 3 randomly selected 13 girls and 13 boys, age 10 years and 'At risk'. Alternatively, Steps 4 and 5 were used if backfilling was required. Sometimes a combination of steps was used. Step 6 computed the final sample by combining the previous Steps, provided a summary table (recorded in Excel), and a sorted list by age, gender, and At risk. The final file was saved in Excel format.

2.5 Replacement of Non-Participants

The selection of students involved in the KidsMatter Evaluation used sampling of schools and students to provide representative estimates of student mental health in the 10 year-old student population of Australia. The accuracy of these estimates depended on the quality of information provided by schools and the consistent sampling method applied in selecting the participants. However, due to the importance of maximising the number of returned questionnaires from each school, school personnel were requested to replace non-participants by selecting students, where possible, of the same gender, age and 'at risk' status. Examination of the returned questionnaires showed that approximately eight per cent of the parents of students who were originally selected to participate through the random sampling process, declined to participate or did not return their questionnaire within a reasonable time, and were replaced.

2.6 Sampling Weights

The purposes of weighting schools and students are to compensate for unequal probabilities of selection, to compensate for non-response, and to adjust the weighted sample distribution for key variables of interest (age, gender, 'at risk' status) to make the sample conform to known population distributions. Unbiased survey estimates would depend on estimation procedures that incorporated the selection probabilities for each sampling unit. It was found that selection probabilities for the KidsMatter participants varied greatly from unit to unit because of clustering and over-sampling of students 'at risk'. Moreover, because schools were encouraged to select replacement students for those parents not wishing to participate in the evaluation, the problem of under-coverage arose causing further lack of representation of estimates with respect to the population of interest. Because of these problems, coupled with the fact that the KidsMatter schools formed a representative sample rather than a random sample, it was decided that to calculate and apply sampling weights was not appropriate. Hence, caution should be taken when generalising findings to other students and other primary schools in Australia. Nevertheless, every effort was made to obtain the samples of schools and students to maintain high levels of both realism and representation, for the estimates of relationships arising from the analyses to be as meaningful as possible across the primary schools and their students in Australia.

Chapter 3.
Research Methods and Instruments

This chapter outlines the instruments and methods used to collect the qualitative and quantitative data contained in the KidsMatter Evaluation databases. The main focus of this evaluation is based on the collection and analysis of quantitative information through the use of parent and teacher questionnaires. However, many opportunities are also taken to analyse the qualitative data obtained in the form of open-response written statements and through interview and focus group discussion.

The instruments employed to collect the data necessary to achieve the purpose of gauging longitudinal change in school and student outcomes, comprise a combination of self-developed and pre-existing tools, assembled into seven different documents, and administered at different stages of the KidsMatter Initiative Pilot Phase. In addition, interview and focus group methods were employed near the end of the two years to collect qualitative data to enrich and support the quantitative analysis. The development of each tool and method is briefly discussed. For simplicity, relevant so-called 'screen-shots' are presented of the questionnaires in order to preserve the original format in which participants completed them.

3.1 School Background

For the school recruitment process, information was requested from schools in the Application Form that focused on: a) school-level demographic information, which would assist with stratification and matching of schools; and b) 'school readiness', which included questions on the extent to which schools were participating in other external projects or programs, the extent of engagement of school staff and parents, school capacity, and willingness to implement the type of strategies identified in the Conceptual Framework (see Figure 2 above). For the purposes of secondary analysis, only data about school-level demographic information is available and includes (along with its coding):

- Sector: Government (1), Catholic (2), Independent (3),
- School Round: Round 1 starting in 2007(1), Round 2 starting in 2008 (2),
- State: ACT (1), NSW (2), NT (3), QLD (4), SA (5), TAS (6), VIC (7), WA (8),
- School postcode,
- Relative Socio-disadvantage by postcode (ABS: SEIFA) 2006. Deciles rank areas 1-10,
- Grade range of school: CPC - 7, K-10, K-12, P - 10, Pre - 12, Prim, R-10,
- Location: Metropolitan (1), Rural (2), Remote (3),
- Type: Coeducation (1), Girls (2),
- School size,
- Number of staff,
- Percentage of male teachers,
- Percentage of full time teachers,
- Percentage of supported students,
- Percentage of Aboriginal or Torres Strait Islander (ATSI) students,
- Percentage of Culturally and Linguistically Diverse (CALD/ESL) students,

- Percentage of Special Needs students, and
- School context statements.

3.2 Student Background

The 100 KidsMatter schools were requested to submit their student enrolment lists along with the following additional information that provided background information on each student in the sample.

- Date of birth (Age was then determined at each data collection occasion),
- Gender: Male (1), Female (2),
- Students identified as 'at risk' of social, emotional and behavioural difficulties: Not at risk (0), At risk (1),
- Home postcode,
- Aboriginal and Torres Strait Islander status: non-ATSI (0), ATSI (1),
- ESL/CALD status: English background (0), ESL (1), and
- School fee subsidy (if applicable): unsupported (0), supported (1).

Information from each of the 100 schools was assigned a school and student ID number and consolidated into a single database of over 28,000 students to form the target population and the sampling frame, from which the participants were sampled..

3.3 The Project Officer Proforma

The Evaluation Team designed a reporting Proforma that asked Project Officers to assess aspects of the implementation and to provide reports on important events and activities in each school. Spears and Dix (2008) report preliminary findings. In total, 450 online Proformas were completed using SurveyMonkey[3], on five occasions for each Round 1 school and on three occasions for each Round 2 school (see Figure 2 above for administration dates). After the first completion of the Proforma, Project Officers were asked to give feedback on its usefulness as a tool to record event data and to make any suggestions for improvement. Some changes were made, generally to add more options and items. Hence, for some items there are no data available for the first occasion. The main sections in the Proforma that are outlined here are based on the revised Proforma.

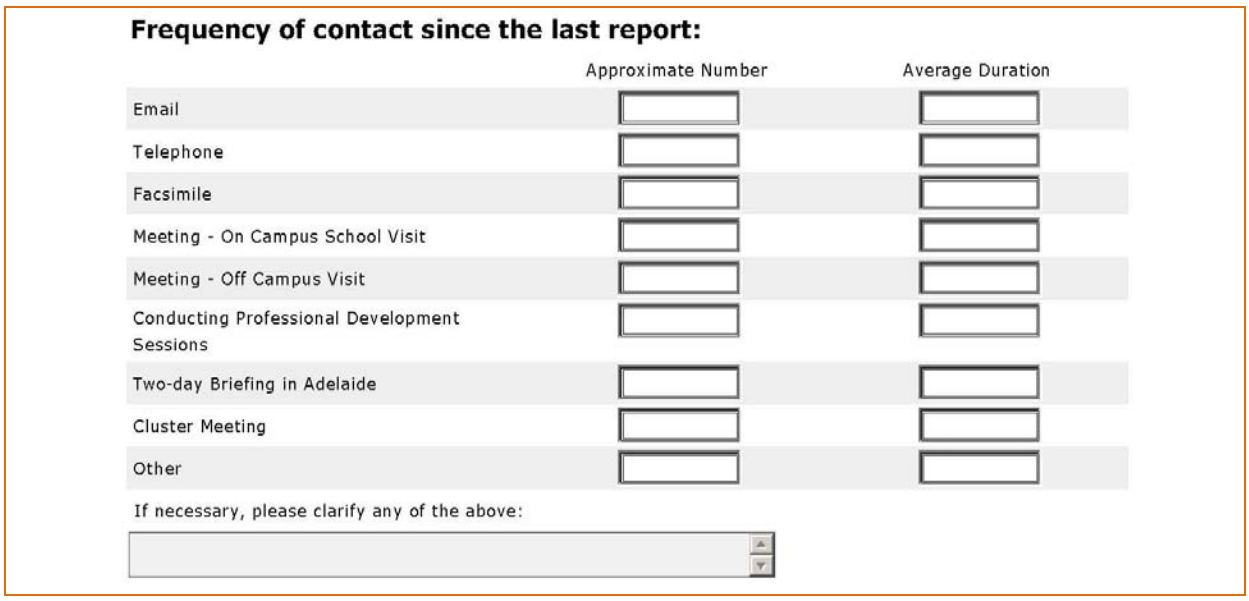
3.3.1 Background: Reporting Period and Location

Project Officers were asked to indicate the period on which they were reporting. These periods and their codes were, Term 1 and Term 2, 2007 combined (1), Semester 2, 2007 (2), Semester 1, 2008 (3), and Semester 2, 2008 (4). They were also asked to identify from the list, on which school they were reporting. In-built into the online survey was coding for State and Round, as described in the school background section.

3.3.2 Contact Details

The evaluation team was interested in the amount and type of contact that Project Officers had with their schools. As part of the evaluation it was of interest to investigate whether the implementation and outcomes of the initiative were related to amount and type of contact Project Officers had with their schools. The following items in Screen 1 were available, to which respondents reported the approximate number (count) and the average duration, coded as 'short/minutes' (1), 'medium/hours' (2), or 'long/days' (3). In addition, Project Officers were given the option to elaborate with an open-response statement.

[3] SurveyMonkey is a private American company that enables users to create their own web-based surveys and is widely used by Tertiary institutions to conduct questionnaires. http://www.surveymonkey.com

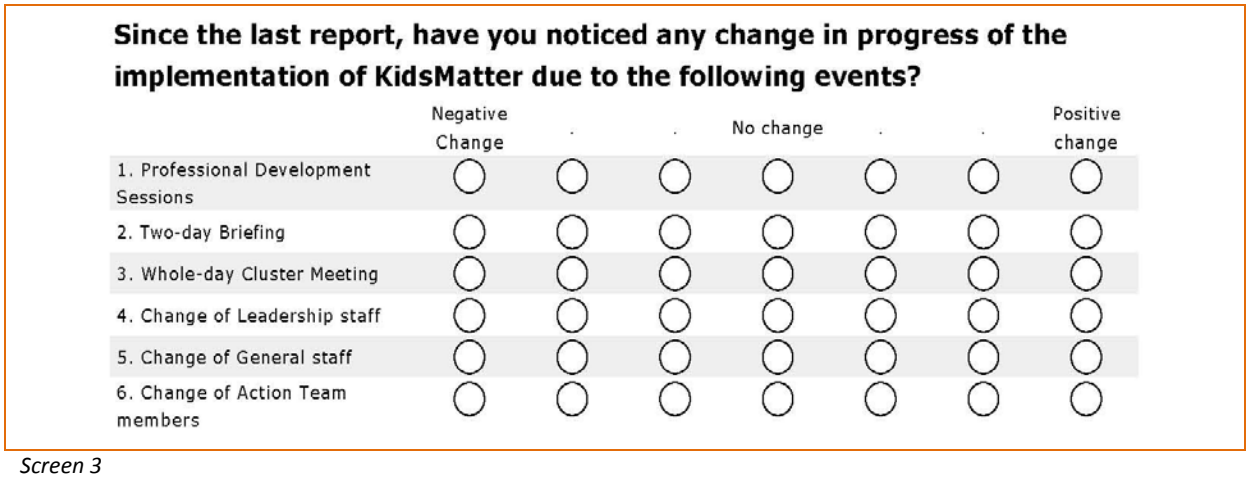


Screen 1

Who was contacted was also of interest. Project Officers were asked to identify as many as necessary from the following list of choices as is shown in Screen 2.

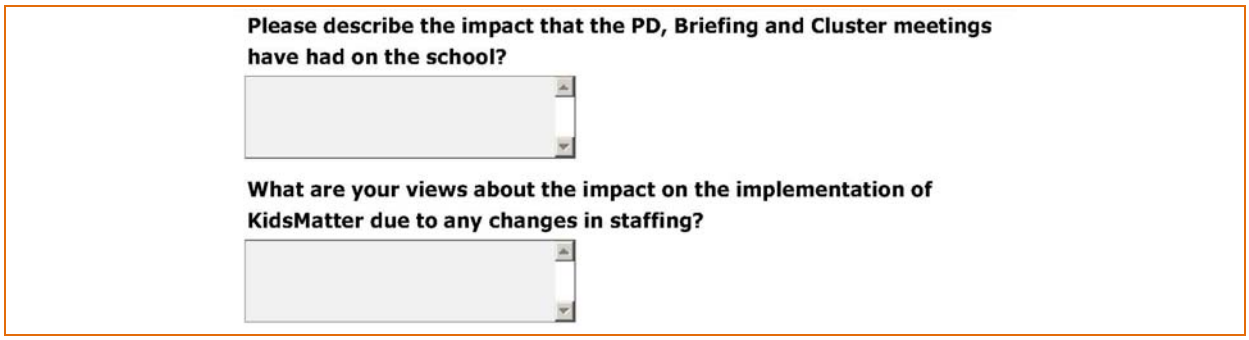
Screen 2

Further questions relating to the impact of this contact were developed, which asked Project Officers to respond on a seven-point Likert-type scale of 'Negative change' (1), 'No change' (4), 'Positive change' (7). The questions and items were presented as is shown in Screen 3.



Screen 3

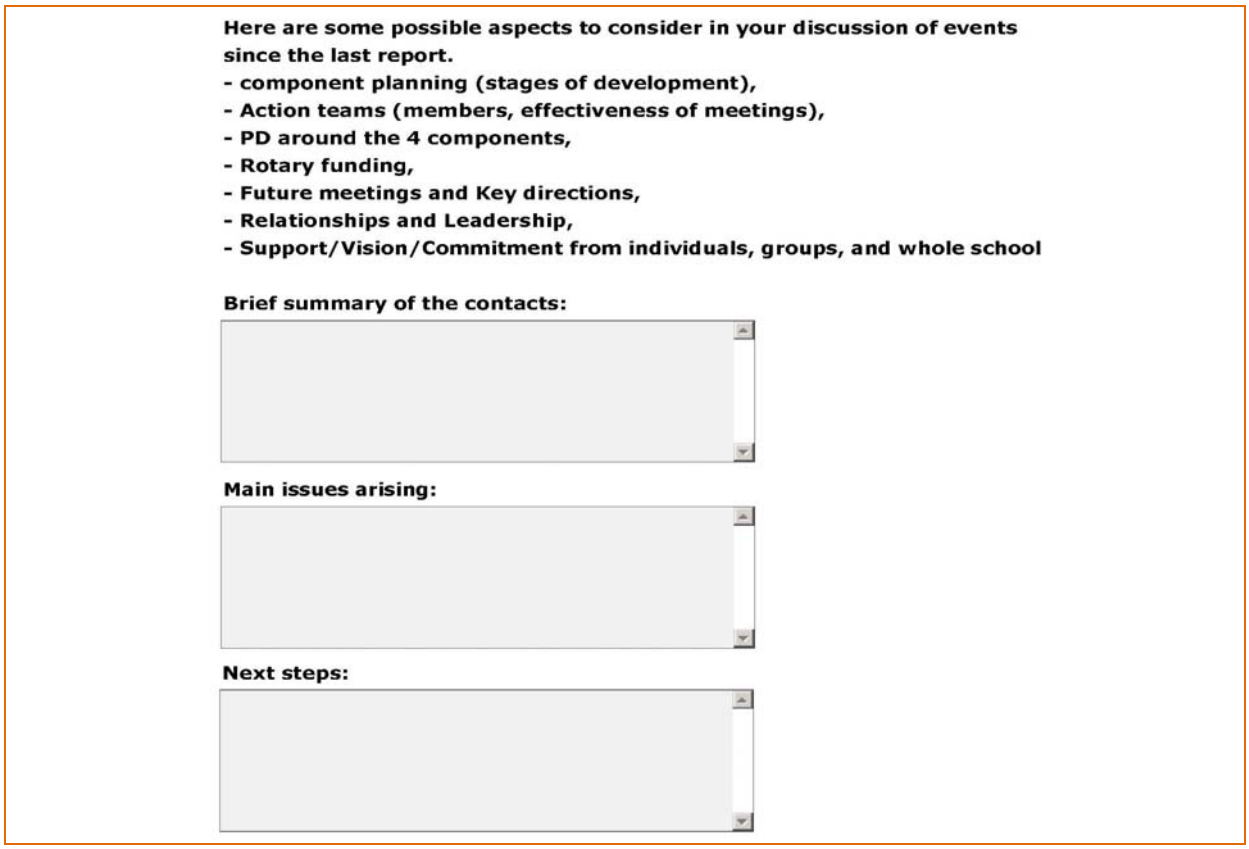
The last set of questions concerning Project Officer contact with schools involved two open-response questions that briefly examined the impact on the implementation of KidsMatter due to professional development activities and staff change, as is shown in Screen 4.



Screen 4

3.3.3 Summary Details

In order to gain a deeper understanding of the nature of the meetings, the challenges faced by the Action Team and their plans to progress the implementation, three open-response questions were developed. The items shown in Screen 5 gave Project Officers an opportunity to summarise their activities with schools.



Screen 5

3.3.4 Progress and process

The Proforma also provided a mechanism for examining the progress of the implementation using a number of different quantitative measures, shown in Screen 6. As a measure of progress in the implementation, a set of items were developed that asked Project Officers to rate the progress of KidsMatter on the four Components using a seven-point scale of 'No progress' (1) to 'Exceptional progress' (7).

Consider what this school has done since the last report.
Please rate the progress of KidsMatter by responding to the following statements.

	No Progress						Exceptional Progress
1. Progress on the KidsMatter component "a positive school community".	◯	◯	◯	◯	◯	◯	◯
2. Progress on the KidsMatter component "social and emotional learning for students".	◯	◯	◯	◯	◯	◯	◯
3. Progress on the KidsMatter component "parenting education and support".	◯	◯	◯	◯	◯	◯	◯
4. Progress on the KidsMatter component "early intervention for students who are at risk or experiencing mental health difficulties".	◯	◯	◯	◯	◯	◯	◯

Screen 6

In order to gather information about implementation, several questions were developed that asked the Project Officers to identify the stage the school was at, without being specific with respect to any of the four Components. This set of questions (see Screen 7) examined school progress on the 7-Step Implementation process and required Project Officers to respond on a Likert scale of 'Strongly disagree' (1) to 'Strongly agree' (7).

This section is designed to measure how effective the school has been in undertaking the Seven-Step Implementation process SINCE COMMENCEMENT of the KidsMatter Initiative. It is not about the components, but rather the implementation process of the whole KidsMatter Initiative.

This school has:

	Strongly Disagree						Strongly Agree
1. Defined the issues related to the components they worked on.	◯	◯	◯	◯	◯	◯	◯
2. Set goals for the components they worked on.	◯	◯	◯	◯	◯	◯	◯
3. Identified difficulties for achieving goals for the components they worked on.	◯	◯	◯	◯	◯	◯	◯
4. Developed strategies for achieving goals for the components they worked on.	◯	◯	◯	◯	◯	◯	◯
5. Evaluated strategies for addressing the components they worked on.	◯	◯	◯	◯	◯	◯	◯
6. Developed and implemented plans for the components they worked on.	◯	◯	◯	◯	◯	◯	◯
7. Reviewed and adjusted plans for the components they worked on.	◯	◯	◯	◯	◯	◯	◯

Screen7

In addition, progress on the implementation process was also assessed Component by Component through the use of a matrix of check-boxes, as is shown in Screen 8, allowing the Project Officer to select as many or as few boxes as necessary. Selected boxes were coded one (1) and unselected boxes were coded zero (0). The last of these items drew attention to our understanding that not all schools would be doing the Components in the same order or at the same rate. See Screen 8.

Now this section is about the progress of implementation of each specific component SINCE COMMENCEMENT of the KidsMatter Initiative. Indicate what the school has done thus far with respect to each of the KidsMatter Components? (See p.27 of the KM Manual)

This school has: (You can select more than one under each component)

	Component 1: A positive school community	Component 2: Social and emotional learning for students	Component 3: Parenting education and support	Component 4: Early intervention for students at risk
1. Defined the issues	☐	☐	☐	☐
2. Set goals	☐	☐	☐	☐
3. Identified concerns	☐	☐	☐	☐
4. Developed strategies	☐	☐	☐	☐
5. Evaluated strategies	☐	☐	☐	☐
6. Developed and implemented a plan	☐	☐	☐	☐
7. Reviewed and adjusted a plan	☐	☐	☐	☐
This component is currently a priority in the school?	☐	☐	☐	☐

Screen 8

3.3.5 Support and involvement

An entirely different assessment of implementation, and one that was possibly more indicative of institutional change, is concerned with the investigation of the support and involvement of school leadership, teachers, parents, and students, in the KidsMatter Initiative, presented in Screen 9. To these 12 items, Project Officers were required to respond on a scale of 'Strongly disagree' (1) to 'Strongly agree' (7).

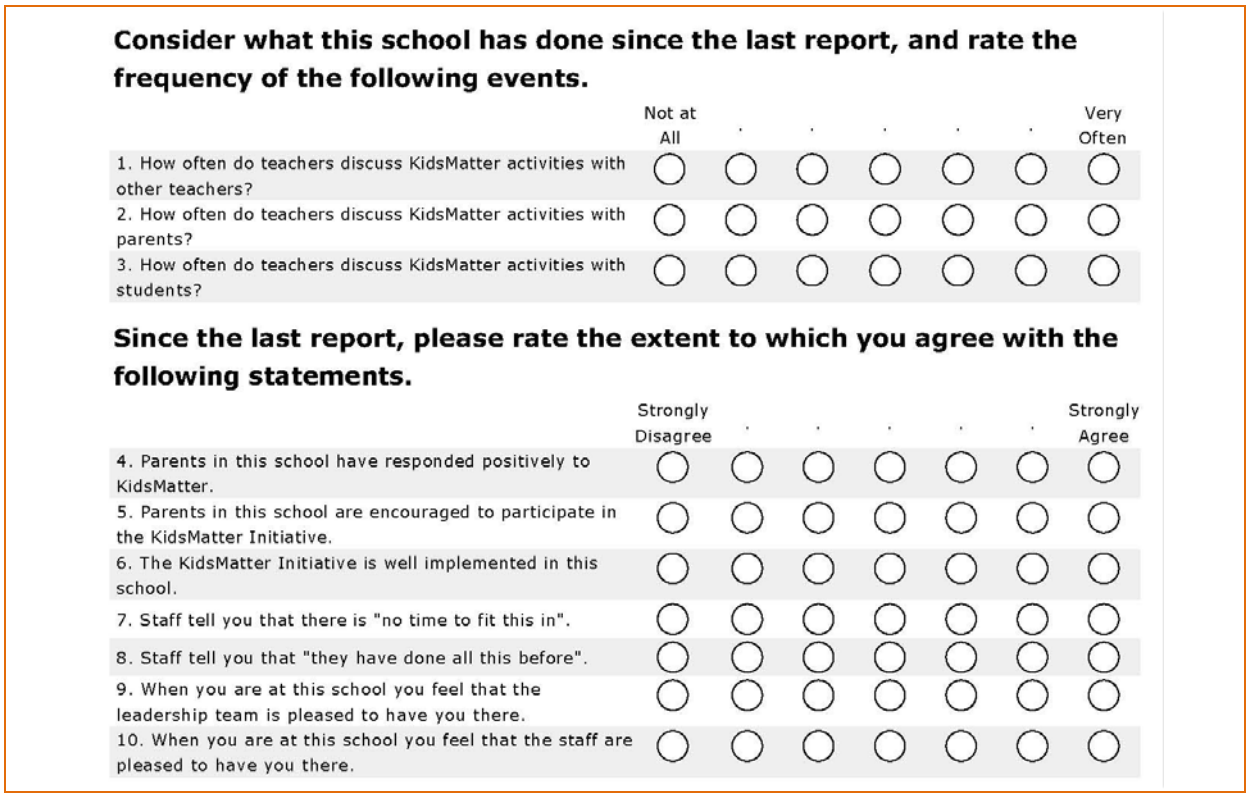
Consider what this school has done since the last report.
Please rate the extent to which you agree with the following statements by selecting the best response.

	Strongly Disagree						Strongly Agree
1. The school leadership encourages staff to become actively involved with the KidsMatter Initiative.	◯	◯	◯	◯	◯	◯	◯
2. Staff are actively involved with the KidsMatter Initiative.	◯	◯	◯	◯	◯	◯	◯
3. The school leadership team is actively involved with the KidsMatter Initiative.	◯	◯	◯	◯	◯	◯	◯
4. Teachers attend professional development associated with the KidsMatter Initiative.	◯	◯	◯	◯	◯	◯	◯
5. School leadership supports the KidsMatter Initiative.	◯	◯	◯	◯	◯	◯	◯
6. As a group, the staff at this school support the KidsMatter Initiative.	◯	◯	◯	◯	◯	◯	◯
7. Parents at this school support the KidsMatter Initiative.	◯	◯	◯	◯	◯	◯	◯
8. Students at this school support the KidsMatter Initiative.	◯	◯	◯	◯	◯	◯	◯
9. This school is provided with adequate resources to implement the KidsMatter Initiative.	◯	◯	◯	◯	◯	◯	◯
10. The whole staff are involved in the planning of KidsMatter?	◯	◯	◯	◯	◯	◯	◯
11. The whole staff are involved in the implementation of KidsMatter?	◯	◯	◯	◯	◯	◯	◯
12. Do you believe that KidsMatter has increased staff awareness of mental health issues?	◯	◯	◯	◯	◯	◯	◯

Screen 9

3.3.6 Engagement

Level of engagement of teachers with the KidsMatter Initiative was measured by three items and Project Officers were asked to gauge how often teachers discussed KidsMatter activities with other teachers, parents and students on a seven-point scale of 'Not at all' (1) to 'Very often' (7). A further set of seven items then examined other aspects of engagement, measured, on a Likert-scale of 'Strongly disagree' (1) to 'Strongly agree' (7). The items are presented in Screen 10.



Consider what this school has done since the last report, and rate the frequency of the following events.

	Not at All						Very Often
1. How often do teachers discuss KidsMatter activities with other teachers?	○	○	○	○	○	○	○
2. How often do teachers discuss KidsMatter activities with parents?	○	○	○	○	○	○	○
3. How often do teachers discuss KidsMatter activities with students?	○	○	○	○	○	○	○

Since the last report, please rate the extent to which you agree with the following statements.

	Strongly Disagree						Strongly Agree
4. Parents in this school have responded positively to KidsMatter.	○	○	○	○	○	○	○
5. Parents in this school are encouraged to participate in the KidsMatter Initiative.	○	○	○	○	○	○	○
6. The KidsMatter Initiative is well implemented in this school.	○	○	○	○	○	○	○
7. Staff tell you that there is "no time to fit this in".	○	○	○	○	○	○	○
8. Staff tell you that "they have done all this before".	○	○	○	○	○	○	○
9. When you are at this school you feel that the leadership team is pleased to have you there.	○	○	○	○	○	○	○
10. When you are at this school you feel that the staff are pleased to have you there.	○	○	○	○	○	○	○

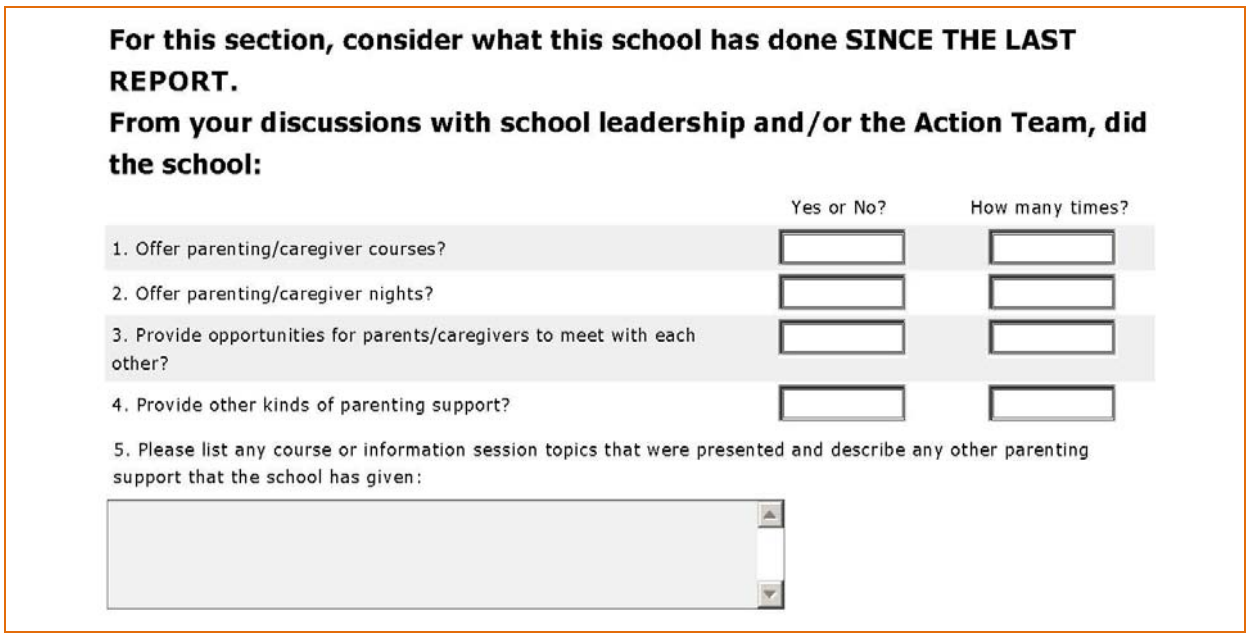
Screen 10

3.3.7 Event data

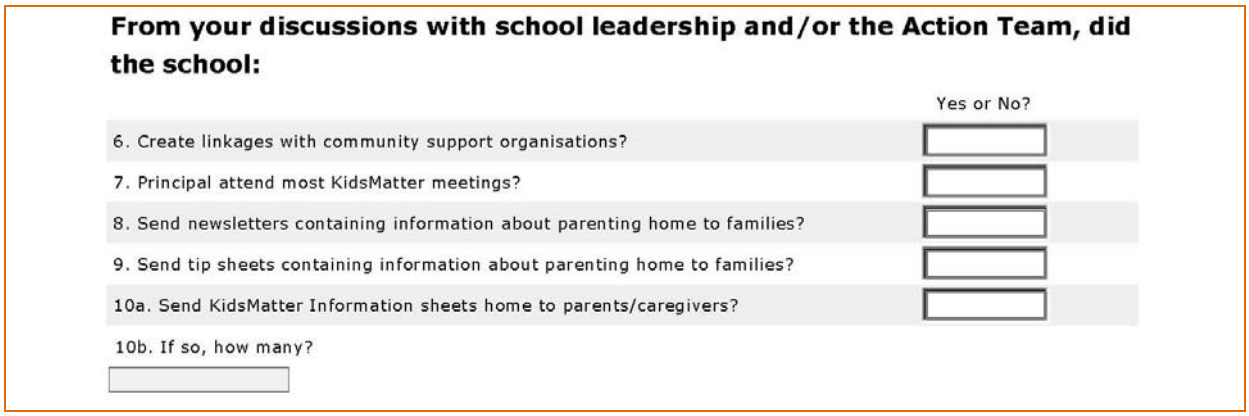
The last section of the Proforma was designed to provide rich contextual information about what schools were doing in terms of implementation activities and how often they were doing it (see Screen 11). Several sets of questions were developed. The first set of items gauged how often the school arranged parenting events or provided parenting support. Project Officers were encouraged to discuss these items with school staff to ensure accuracy of information. A response of 'No' was coded (1) and 'Yes' was coded (2), followed by an indication of how many times, for which Project Officers could select: 'NA' (1), 'None' (2), 'Once' (3), 'Twice' (4), 'Three times' (5), 'Four times' (6), 'Five times' (7), 'Six times' (8), or 'Seven or more times' (9). An open-response question was also provided that allowed respondents to list any course or information session topics that were presented and to describe any other parenting support that the school had given.

The next set of event items, shown in Screen 12, asked about community outreach, principal involvement, and the provision of parenting information. These five items required simple 'Yes' (2) or 'No' (1) responses, followed by an open-response requesting the number of information sheets sent home to parents.

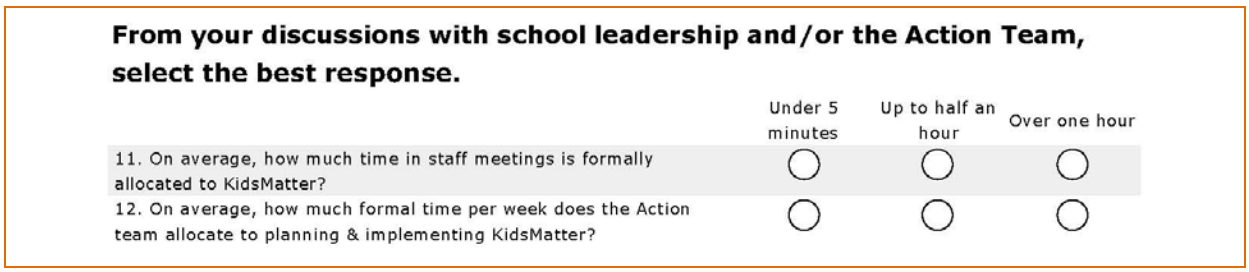
Screen 13 shows two items that were developed to gauge opportunities when schools might allocate time to KidsMatter, which could be viewed as an indicator of commitment to the KidsMatter Initiative. Again, Project Officers were encouraged to talk with the school Action Team, and could respond by selecting 'Under 5 minutes' (1), 'Up to an hour' (2), or 'Over an hour' (3).



Screen 11



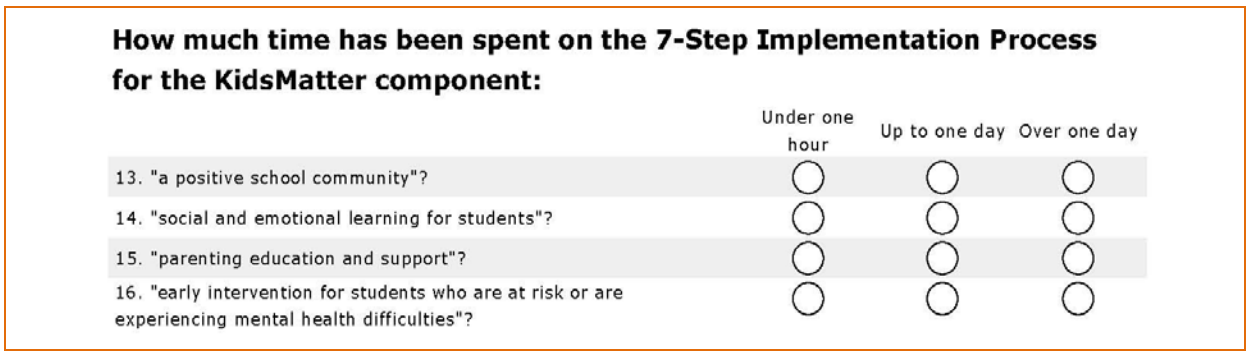
Screen 12



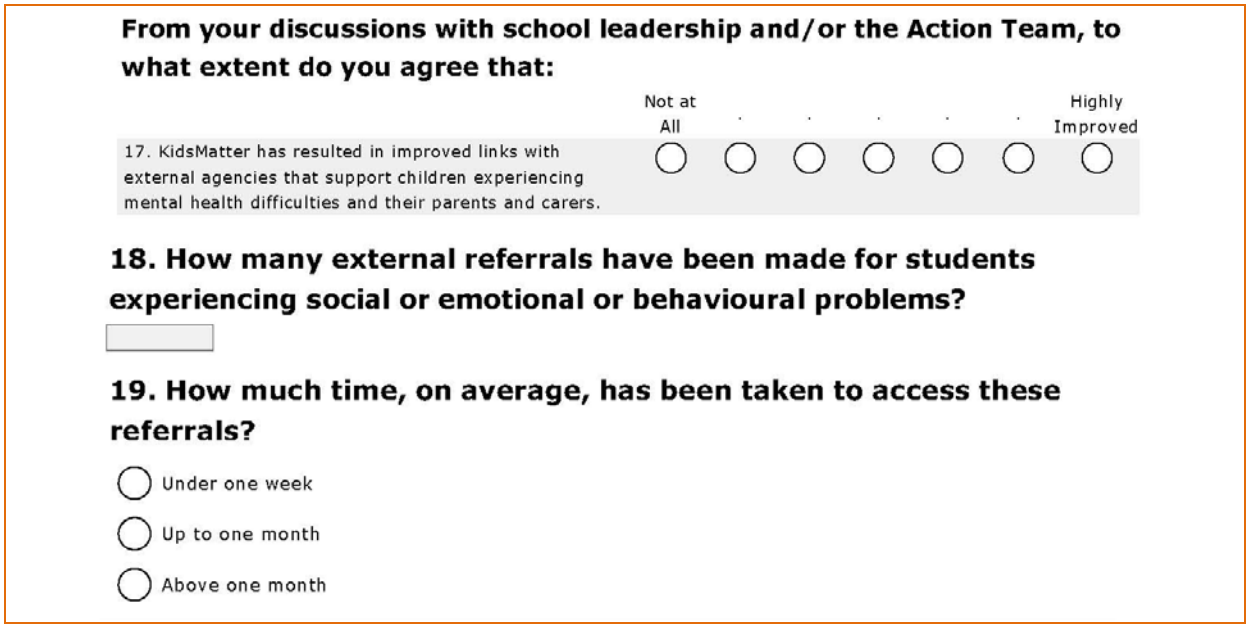
Screen 13

A similar set of items were also developed that gauged the amount of time spent on the 7-Step Implementation Process for each of the four Components (see Screen 14). The response choices were, 'Under one hour' (1), 'Up to one day' (2), or 'Over one day' (3).

The next set of three items in the Proforma, shown in Screen 15, asked Project Officers about various aspects of school outreach. The first item sought general staff beliefs about whether KidsMatter had resulted in improved links with external agencies that supported children experiencing mental health difficulties and their parents and carers. A seven-point scale of 'Not at all' (1) to 'Highly improved' (7) was provided. The next item asked about the number of external referrals using an open-response, and the last item gauged the amount of time taken to access these referrals with the choices 'Under one week' (1), 'Up to one month' (2), or 'Above one month' (3).



Screen 14



Screen 15

The final question in the Proforma asked how many school closure days were allocated to KidsMatter, shown in Screen 16. Project Officers could select 'None' (1), 'One' (2), or 'Two or more' (3).

Screen 16

Specific items from the Proforma feature prominently in the School Implementation Quality Index, discussed in Chapter 7 of this report and presented in the KidsMatter Evaluation Final Report.

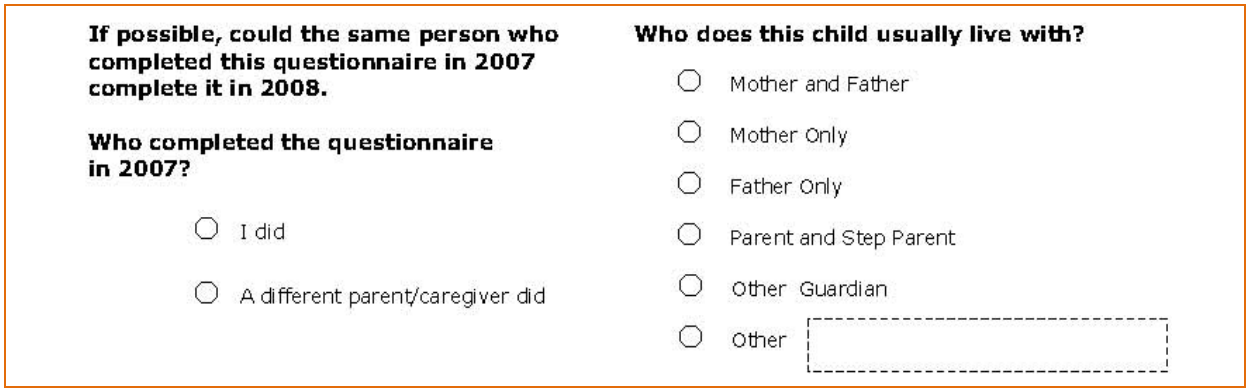
3.4 Whole-Cohort Parent and Teacher Questionnaires

The Whole-cohort Longitudinal Study involved students from both groups of schools, who were followed over two years, with assessments conducted on up to four occasions completed by parents and teachers. The Parent Questionnaire contained items concerned with school, family and child, while the Teacher Questionnaire and Supplement Questionnaire contained items concerned with school, teacher and child. The items were sourced from the identified aims and outcomes for the KidsMatter Initiative (KidsMatter Manual, 2006), from the Strengths and Difficulties Questionnaire (SDQ) (Goodman, 2005), from the five core groups of social and emotional competencies

recommended by CASEL (CASEL, 2006), from a search of relevant literature (for example, Levitt, 2007) and from practical experiences with schooling, families, and student wellbeing (Russell, 2003). A total of 112 items, addressing the key areas of school, family, child, and student mental health outcomes, were presented as attitudinal or belief statements and generally required participants to respond using a seven-point Likert scale of 'Strongly disagree' (1) to 'Strongly agree' (7). A three-point scale of 'Not true (0), 'Somewhat true' (1) and 'Certainly true' (2) was used for the SDQ. Since many items in the Parent and Teacher Questionnaires are in common, for discussion purposes in this section, screen-shots from the Parent Questionnaire are used when items are in common.

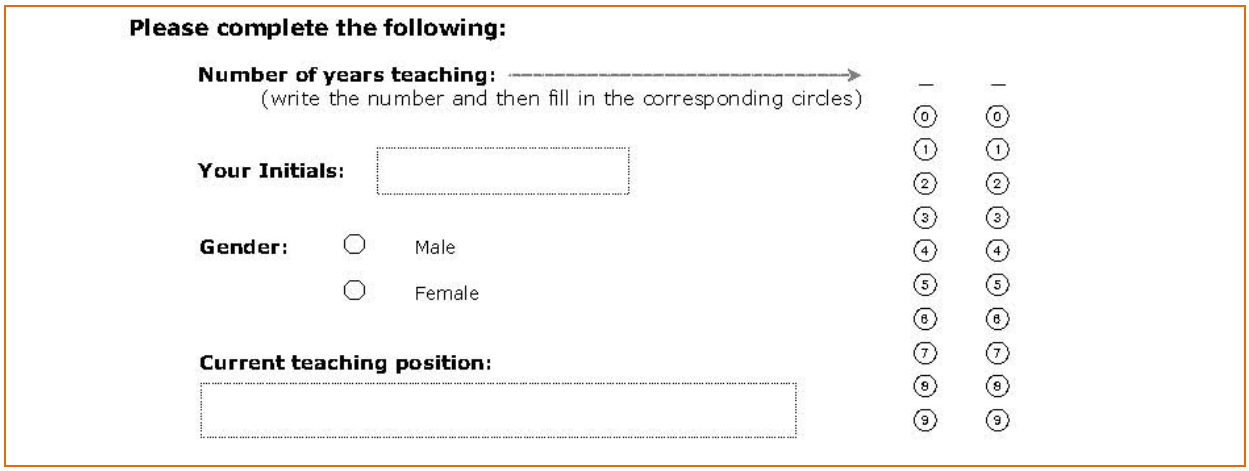
3.4.1 Background: Parents, teachers and students

Parents and teachers were asked a number of background questions, as presented in Screen 17. The parent background item asked about the child's home context. Respondents could choose between 'Mother and father' (1), 'Mother only' (2), 'Father only' (3), 'Parent and step parent' (4), 'Other guardian' (5). Criterion scaling (Pedhazur, 1982) was used to confirm that the order used for coding purposes was also appropriate for use in multilevel analysis.



Screen 17

The teacher background items, shown in Screen 18, included years of teaching experience, gender, and current teaching position, along with the teacher's initials for cross-checking and identification purposes.



Screen 18

In order to gain further understanding and background of the student's experiences at school, one question was first asked of parents and teachers about the student's participation in social and emotional programs. A second question was then asked, which regarded any change in the student's mental health, followed by two lead-on questions, generally treated as optional. Responses of 'Yes' (1) or 'No' (0) were required for these four items as is shown in Screen 19.

	YES	NO
1. Did your child participate in a program teaching social and emotional skills during this semester?	(Y)	(N)
2. In the last month, do you think your child has had more emotional or social or behaviour difficulties than other boys/girls of his/her age?	(Y)	(N)
a) Do you think he/she needs or needed school or other professional help with these difficulties?	(Y)	(N)
b) Did your child get the help he/she needed for these difficulties?	(Y)	(N)

Screen 19

3.4.2 KidsMatter Engagement

Four items (see Screen 20) were developed that examined teacher views of school engagement with the KidsMatter Initiative on the four Components. These items were rated by teachers on a seven-point scale of 'Not at all' (1) to 'A great deal' (7).

Your school has recently become involved in a new national initiative known as KidsMatter. The next questions ask you to consider the ways in which the school community has been involved with the four components of the KidsMatter Initiative

Rate the extent to which you your school has worked on the following four components of KidsMatter	Not At All ← → A Great Deal						
66. A positive school community	(1)	(2)	(3)	(4)	(5)	(6)	(7)
67. Social and emotional learning for students	(1)	(2)	(3)	(4)	(5)	(6)	(7)
68. Parenting education and support	(1)	(2)	(3)	(4)	(5)	(6)	(7)
69. Early intervention for students who are at risk or are experiencing social, emotional or behaviour difficulties	(1)	(2)	(3)	(4)	(5)	(6)	(7)

Screen 20: KidsMatter Engagement

3.4.3 KidsMatter Implementation

One of the main areas of interest in this evaluation study was to collect evidence of how the KidsMatter Initiative was implemented. Furthermore, it was important that this evidence was collected from more than one type of informant, and so a parent scale and two teacher scales were developed.

The first group of 11 items (see Screen 21) considered teacher views of the KidsMatter 7-step Implementation process. A seven-point Likert scale of 'Strongly disagree' (1) to 'Strongly agree' (7) was used to rate the items.

As a measure of the level of implementation of KidsMatter, parent views were sought that reflected their awareness and involvement with the KidsMatter Initiative (see Screen 22). A seven-point Likert scale of 'Strongly disagree' (1) to 'Strongly agree' (7) was used to scale the items.

From your own experience, rate the extent to which you disagree or agree with the following statements	Strongly Disagree ← → Strongly Agree
70. Our school has defined issues related to the four KidsMatter components	① ② ③ ④ ⑤ ⑥ ⑦
71. Our school has set goals for the four components	① ② ③ ④ ⑤ ⑥ ⑦
72. Our school has identified difficulties in achieving our goals	① ② ③ ④ ⑤ ⑥ ⑦
73. Our school has developed strategies for achieving our goals for the four components	① ② ③ ④ ⑤ ⑥ ⑦
74. Our school has evaluated strategies for addressing the four components	① ② ③ ④ ⑤ ⑥ ⑦
75. Our school has developed coherent plans for the four components	① ② ③ ④ ⑤ ⑥ ⑦
76. Our school has implemented plans to develop:	
a) a positive school community	① ② ③ ④ ⑤ ⑥ ⑦
b) social and emotional learning for students	① ② ③ ④ ⑤ ⑥ ⑦
c) parenting education and support	① ② ③ ④ ⑤ ⑥ ⑦
d) early intervention for students who are at risk or are experiencing social, emotional or behaviour difficulties	① ② ③ ④ ⑤ ⑥ ⑦
77. Our school has reviewed and adjusted plans for the four KidsMatter components	① ② ③ ④ ⑤ ⑥ ⑦

Screen 21: KidsMatter 7-step Implementation process

The School has recently become involved in a new national initiative known as KidsMatter. The following questions ask you to consider the ways in which you have been involved with Kids Matter

From your own experience, rate the extent to which you disagree or agree with the following statements	Strongly Disagree ← → Strongly Agree
53. I have heard about KidsMatter	① ② ③ ④ ⑤ ⑥ ⑦
54. I feel positively about KidsMatter	① ② ③ ④ ⑤ ⑥ ⑦
55. I am encouraged to participate in the KidsMatter Initiative	① ② ③ ④ ⑤ ⑥ ⑦

Screen 22: KidsMatter Implementation

3.4.4 General Engagement

From the outset, during the process of selecting the 100 KidsMatter schools, it was evident that many schools already had an established strategy for teaching social and emotional skills in the curriculum and using mental health promotion programs. Accordingly, a series of items were developed to assess teacher and parent views of their school's engagement with mental health initiatives, in general, with a focus on social and emotional learning. Because of their unique perspectives of the school, parents and teachers were asked similar questions but in different ways, so both are presented in Screens 23 and 24 respectively, though Parent Item 47 and Teacher Item 52 are common to both.

The following questions are about the way that the school community has engaged with wellbeing initiatives for students

From your own experience, rate the extent to which you disagree or agree with the following statements	Strongly Disagree ← → Strongly Agree
45. Staff at the school are concerned for children with emotional or social or behaviour difficulties	① ② ③ ④ ⑤ ⑥ ⑦
46. The school encourages parents to discuss their children's emotional or social or behaviour difficulties with staff.	① ② ③ ④ ⑤ ⑥ ⑦
47. The school has good links with professionals who can assist students with emotional or social or behavior difficulties (such as social workers, psychologists, nurses and doctors)	① ② ③ ④ ⑤ ⑥ ⑦
48. Parents/caregivers are involved when staff make decisions about their child's emotional or social or behaviour difficulties	① ② ③ ④ ⑤ ⑥ ⑦
49. The school is doing a good job in helping students who have emotional or social or behaviour difficulties	① ② ③ ④ ⑤ ⑥ ⑦
50. The external school support services (such as psychologists and social workers) do a good job in helping students who have emotional or social or behaviour difficulties	① ② ③ ④ ⑤ ⑥ ⑦
51. I find it easy to discuss my child's social and emotional skills with school staff	① ② ③ ④ ⑤ ⑥ ⑦
52. My child talks about ways to solve his/her emotional or social or behaviour difficulties	① ② ③ ④ ⑤ ⑥ ⑦

Screen 23: General Engagement - Parent views based on eight items

The following questions are about the way that the school community has engaged with wellbeing initiatives for students

From your own experience, rate the extent to which you disagree or agree with the following statements	Strongly Disagree ← → Strongly Agree
46. The school leadership team actively supports the implementation of programs to develop students' social and emotional skills	① ② ③ ④ ⑤ ⑥ ⑦
47. All teaching staff support the teaching of social and emotional skills to students	① ② ③ ④ ⑤ ⑥ ⑦
48. Parents/caregivers actively support the school's program for teaching social and emotional skills	① ② ③ ④ ⑤ ⑥ ⑦
49. Teachers attend professional development about supporting students' with emotional or social or behaviour difficulties	① ② ③ ④ ⑤ ⑥ ⑦
50. Teachers discuss students' emotional or social or behaviour difficulties with the appropriate staff	① ② ③ ④ ⑤ ⑥ ⑦
51. Teachers discuss individual student's emotional or social or behaviour difficulties with the student's parents/caregivers	① ② ③ ④ ⑤ ⑥ ⑦
52. 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	① ② ③ ④ ⑤ ⑥ ⑦
53. Staff consult parents/caregivers about emotional or social or behaviour interventions for their children	① ② ③ ④ ⑤ ⑥ ⑦
54. Our teaching about social and emotional skills engages students' interest	① ② ③ ④ ⑤ ⑥ ⑦
55. Parents/caregivers are positive about teaching social and emotional skills to students at school	① ② ③ ④ ⑤ ⑥ ⑦

Screen 24: General Engagement - Teacher views based on 10 items

3.4.5 Component 1: A Positive School Community

Eleven items were developed to provide an assessment of Component 1: A Positive School Community. Teacher and parent were asked to reflect on their school community, how welcomed they felt and how engaged they felt. They responded on a seven-point Likert scale of 'Strongly disagree' (1) to 'Strongly agree' (7), presented in Screen 25.

These first questions ask you to reflect on your school community

From your own experience, rate the extent to which you disagree or agree with the following statements	Strongly Disagree ← → Strongly Agree
1. My child feels a sense of belonging at school	① ② ③ ④ ⑤ ⑥ ⑦
2. I feel accepted by staff at the school	① ② ③ ④ ⑤ ⑥ ⑦
3. I feel accepted by other parents/caregivers at the school	① ② ③ ④ ⑤ ⑥ ⑦
4. The school is welcoming to students	① ② ③ ④ ⑤ ⑥ ⑦
5. The school is welcoming to families	① ② ③ ④ ⑤ ⑥ ⑦
6. The school encourages caring relationships between staff and families	① ② ③ ④ ⑤ ⑥ ⑦
7. The school encourages caring relationships between students and staff	① ② ③ ④ ⑤ ⑥ ⑦
8. The school publicly recognizes the contributions families make to the school	① ② ③ ④ ⑤ ⑥ ⑦
9. The school encourages students to have a say about school matters	① ② ③ ④ ⑤ ⑥ ⑦
10. The school encourages parents/caregivers to have a say about school matters	① ② ③ ④ ⑤ ⑥ ⑦
11. The school has good links with the local community	① ② ③ ④ ⑤ ⑥ ⑦

Screen 25: A Positive School Community

3.4.6 Component 2: Social and Emotional Learning for Students

As an assessment of Component 2: Social and Emotional Learning, the 10 items shown in Screen 26 were developed. The items, scored 'Strongly disagree' (1) to 'Strongly agree' (7), gauged teacher views about the school's provision of social and emotional learning in the curriculum, support for professional development opportunities, and level of appropriate resources.

3.4.7 Component 3: Parenting Support and Education

In order to assess aspects of Component 3: Parenting Support and Education, Screen 27 and Screen 28 present two sets of items that were developed. Parenting Support by School involved seven items that gauged teacher and parent views, using a scale of 'Strongly disagree' (1) to 'Strongly agree' (7), about information and support provided by the school for parents. Parenting Support by Staff also involved seven items that captured teacher and parent views about how accessible, informative and supportive staff were for providing parenting support, again rated on the scale of 'Strongly disagree' (1) to 'Strongly agree' (7).

3.4.8 Component 4: Early Intervention

For the assessment of Component 4: Early Intervention, teacher and parent views were sought about how effective their school was at supporting students who were at risk, or were experiencing, emotional or social or behaviour difficulties. While parents and teachers were asked 11 similar items, there were four items that were only given to parents and three other items that were only given to teachers, because of their unique perspectives. The screen-shots below present in order, the items in common (see Screen 29), followed by the unique parent items (see Screen 30), and then the unique teacher items (see Screen 31). Upon subsequent confirmatory factor analysis, presented in Chapter 6,

it was found that common Item 29 loaded poorly and was removed from the resulting parent and teacher scales.

These questions are about the way that the school implements wellbeing initiatives for students

From your own experience, rate the extent to which you disagree or agree with the following statements	Strongly Disagree ← → Strongly Agree
56. The school teaches social and emotional skills to students in formally structured sessions that adhere to a program manual	① ② ③ ④ ⑤ ⑥ ⑦
57. The school teaches social and emotional skills regularly to all students (at least once per week)	① ② ③ ④ ⑤ ⑥ ⑦
58. The school supports professional development about student emotional, social and behaviour difficulties	① ② ③ ④ ⑤ ⑥ ⑦
59. The school supports professional development about teaching social and emotional skills	① ② ③ ④ ⑤ ⑥ ⑦
60. The school curriculum allocates appropriate time to teach students social and emotional skills	① ② ③ ④ ⑤ ⑥ ⑦
61. The school regularly evaluates its curriculum for teaching social and emotional skills	① ② ③ ④ ⑤ ⑥ ⑦
62. The school's resources for teaching social and emotional skills meet the needs of our students	① ② ③ ④ ⑤ ⑥ ⑦
63. The school is well equipped to meet the needs of students with emotional, social or behaviour difficulties	① ② ③ ④ ⑤ ⑥ ⑦
64. The school teaches about social and emotional skills in a coordinated and supported way throughout the school	① ② ③ ④ ⑤ ⑥ ⑦
65. Developing staff knowledge about emotional, social and behaviour difficulties is a high priority in our school	① ② ③ ④ ⑤ ⑥ ⑦

Screen 26: Social and Emotional Learning

These questions are about the information and support provided by the school for parents/caregivers

From your own experience, rate the extent to which you disagree or agree with the following statements	Strongly Disagree ← → Strongly Agree
12. The school provides parents/caregivers with opportunities to meet with other families/caregivers to develop support networks	① ② ③ ④ ⑤ ⑥ ⑦
13. Information about parenting practices is available at school	① ② ③ ④ ⑤ ⑥ ⑦
14. Information about child development is available at school	① ② ③ ④ ⑤ ⑥ ⑦
15. The school identifies and promotes parenting resources to parents/caregivers	① ② ③ ④ ⑤ ⑥ ⑦
16. The school provides parents/caregivers with help to access parenting courses/programs	① ② ③ ④ ⑤ ⑥ ⑦
17. Information about parenting education courses and programs is available at school	① ② ③ ④ ⑤ ⑥ ⑦
18. Information is available at the school on how to help children with emotional (eg. sad or anxious), social or behaviour difficulties	① ② ③ ④ ⑤ ⑥ ⑦

Screen 27: Parenting Support by School

19. Staff give parents/caregivers ideas about how to help their child if he/she is:							
a) having trouble with his or her schoolwork	①	②	③	④	⑤	⑥	⑦
b) overactive or easily distracted	①	②	③	④	⑤	⑥	⑦
c) having emotional problems (eg. sad, depressed or anxious)	①	②	③	④	⑤	⑥	⑦
d) having social problems (eg. unable to get along with classmates)	①	②	③	④	⑤	⑥	⑦
e) having behaviour difficulties (eg. aggressive, rude and other difficult to manage behaviours)	①	②	③	④	⑤	⑥	⑦
20. Parents/caregivers feel able to discuss their child's emotional or social or behaviour difficulties with school staff	①	②	③	④	⑤	⑥	⑦
21. There is a good working relationship between school staff and parents/caregivers	①	②	③	④	⑤	⑥	⑦

Screen 28: Parenting Support by Staff

These questions are about students who are at risk of, or are experiencing, emotional or social or behaviour difficulties

From your own experience, rate the extent to which you disagree or agree with the following statements	**Strongly Disagree** ← → **Strongly Agree**						
22. The school acts quickly if a child has emotional (eg. sad, depressed or anxious) or social or behaviour difficulties	①	②	③	④	⑤	⑥	⑦
23. The school has strategies to identify whether students are having emotional or social or behaviour difficulties	①	②	③	④	⑤	⑥	⑦
24. The school has policies to support students with emotional or social or behaviour difficulties	①	②	③	④	⑤	⑥	⑦
25. The school has referral procedures for students experiencing emotional or social or behaviour difficulties	①	②	③	④	⑤	⑥	⑦
27. The school helps families to get professional advice if their child is:							
b) overactive or easily distracted	①	②	③	④	⑤	⑥	⑦
c) having emotional problems (eg. sad, depressed or anxious)	①	②	③	④	⑤	⑥	⑦
d) having social problems (eg. unable to get along with classmates)	①	②	③	④	⑤	⑥	⑦
e) having behaviour difficulties (eg. aggressive, rude and other difficult to manage behaviours)	①	②	③	④	⑤	⑥	⑦
28. The school regularly monitors students who are having emotional or social or behaviour difficulties	①	②	③	④	⑤	⑥	⑦
29. Students who show emotional or social or behaviour difficulties tend to grow out of them	①	②	③	④	⑤	⑥	⑦
32. School staff are respectful and sensitive towards people experiencing emotional or social or behaviour difficulties	①	②	③	④	⑤	⑥	⑦

Screen 29: Early Intervention - Items in common

26. The school assists students having emotional or social or behaviour difficulties	①	②	③	④	⑤	⑥	⑦
27. The school helps families to get professional advice if their child is:							
a) having trouble with his or her schoolwork	①	②	③	④	⑤	⑥	⑦
30. The school provides information that helps parents/caregivers to know if their child is having emotional or social or behaviour difficulties	①	②	③	④	⑤	⑥	⑦
31. 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	①	②	③	④	⑤	⑥	⑦

Screen 30: Early Intervention - Unique parent items

33. Staff give parents/caregivers ideas about how to help their child if he/she is:							
a) having learning difficulties	①	②	③	④	⑤	⑥	⑦
37. The external school support services (such as psychologists and social workers) act quickly if a child has emotional or social or behaviour difficulties	①	②	③	④	⑤	⑥	⑦
44. Staff promote the importance of early intervention for students with emotional or social or behaviour difficulties	①	②	③	④	⑤	⑥	⑦

Screen 31: Early Intervention - Unique teacher items

3.4.9 Teacher Protective Factors

Given that teachers were involved in teaching social and emotional curricula to students, it was important to understand their attitudes, approach, knowledge and behaviours towards teaching Social and Emotional Learning (SEL) skills to students, in addition to their self-efficacy. Five sets of statements were developed, all rated by teachers on a seven-point Likert scale of 'Strongly disagree' (1) to 'Strongly agree' (7).

The first set of teacher protective statements, shown in Screen 32, is SEL Attitude and involves three items to examine teachers' views about their attitude to teaching social and emotional learning skills.

The questions in this section are about teaching, including the teaching of social and emotional skills

From your own experience, rate the extent to which you disagree or agree with the following statements	Strongly Disagree ← → Strongly Agree						
12. Staff believe it is important to teach social and emotional skills to students	①	②	③	④	⑤	⑥	⑦
13. Students can be taught social and emotional skills	①	②	③	④	⑤	⑥	⑦
14. Students who are socially and emotionally competent learn more at school	①	②	③	④	⑤	⑥	⑦

Screen 32: SEL Attitude

The second set of teacher protective factors, presented in Screen 33, is Staff Approach involving seven items to gauge teacher views about the general staff approach to helping students to develop social and emotional learning skills.

Screen 34 shows the third set of teacher protective factors, which looks at SEL Knowledge, and involves five items in the assessment of teacher views about their knowledge and ability to help students to develop social and emotional awareness and skills.

15. Staff help students develop an awareness of their own feelings	①	②	③	④	⑤	⑥	⑦
16. Staff help students develop an awareness of other people's thoughts and feelings	①	②	③	④	⑤	⑥	⑦
17. Staff help students to develop skills to manage their own emotions	①	②	③	④	⑤	⑥	⑦
18. Staff help students develop skills for establishing healthy relationships with other children	①	②	③	④	⑤	⑥	⑦
19. Staff help students to develop skills for making responsible decisions	①	②	③	④	⑤	⑥	⑦
20. Staff provide opportunities for students to practice social and emotional skills	①	②	③	④	⑤	⑥	⑦
21. Staff help students to apply social and emotional skills outside the classroom	①	②	③	④	⑤	⑥	⑦

Screen 33: Staff Approach

22. I know how to help students to:							
a) Develop an awareness of their own feelings	①	②	③	④	⑤	⑥	⑦
b) Develop an awareness of the thoughts and feelings of other people	①	②	③	④	⑤	⑥	⑦
c) Develop skills to manage their own emotional or social or behaviour difficulties	①	②	③	④	⑤	⑥	⑦
d) Develop skills to make responsible decisions	①	②	③	④	⑤	⑥	⑦
e) Develop skills to establish healthy relationships with other children	①	②	③	④	⑤	⑥	⑦

Screen 34: SEL Knowledge

The fourth set of teacher protective factors is SEL Actions (see Screen 35), with five items involved in assessing teacher views about their teaching program and resources to help students to develop social and emotional awareness and skills.

23. My teaching programs and resources help students to:							
a) Develop an awareness of their own feelings	①	②	③	④	⑤	⑥	⑦
b) Develop an awareness of the thoughts and feelings of other people	①	②	③	④	⑤	⑥	⑦
c) Develop skills to manage their own emotional or social or behaviour difficulties	①	②	③	④	⑤	⑥	⑦
d) Develop skills to make responsible decisions	①	②	③	④	⑤	⑥	⑦
e) Develop skills to establish healthy relationships with other children	①	②	③	④	⑤	⑥	⑦

Screen 35: SEL Actions

The final set of teacher protective factors is Self-Efficacy, shown in Screen 36. The three items involve teacher views of their self-efficacy to foster a sense of belonging in others, provide effective support to parents, and the identification of early signs of social and emotional difficulties in students.

24. I can help people to develop a sense of belonging within the school community	①	②	③	④	⑤	⑥	⑦
25. I can provide effective support for parents/caregivers about students' emotional or social or behaviour difficulties	①	②	③	④	⑤	⑥	⑦
26. I can identify early signs of emotional or social or behaviour difficulties in students	①	②	③	④	⑤	⑥	⑦

Screen 36: Teacher Self-Efficacy

3.4.10 Family Protective Factors

Under the general concept of family protective factors a collection of items were developed that assessed parenting knowledge, behaviour, and approach. Screen 37 presents four items that were developed to gauge Parenting Knowledge in terms of social and emotional skills. Parent views on their knowledge of how to help their child foster friendships, provide emotional comfort, and recognise when their child is having difficulties were rated on a seven-point Likert scale of 'Strongly disagree' (1) to 'Strongly agree' (7).

These questions are about parenting

From your own experience, rate the extent to which you disagree or agree with the following statements	Strongly Disagree ← → Strongly Agree						
33. I know how to calm my child if he/she is angry or upset	①	②	③	④	⑤	⑥	⑦
34. I know how to help my child when he/she is sad, depressed or anxious	①	②	③	④	⑤	⑥	⑦
35. I know how to assist my child to develop relationships with other children	①	②	③	④	⑤	⑥	⑦
36. I know if my child is having emotional or social or behaviour difficulties	①	②	③	④	⑤	⑥	⑦

Screen 37: Parenting Knowledge

Parenting Behaviour was assessed by four items (see Screen 38) and considered aspects of support, discipline and autonomy. Upon subsequent confirmatory factor analysis, presented in Chapter 6, it was found that there was too much disparity between these individual items to produce a strong scale and so the items were not used in further analysis.

37. I can discuss parenting with friends and family	①	②	③	④	⑤	⑥	⑦
38. I think it is OK to shout at my child if he/she has done something wrong	①	②	③	④	⑤	⑥	⑦
39. I think it is OK to smack my child if he/she has done something wrong	①	②	③	④	⑤	⑥	⑦
40. I think my child should have a say when we set the rules about appropriate behaviour	①	②	③	④	⑤	⑥	⑦

Screen 38: Parenting Behaviour

Screen 39 shows the final group of three items that were developed to assess Parenting style. Parenting style was conceived as comprising close and affectionate parent-child relationships together with consistency in applying rules.

41. I consistently apply the rules with my child	①	②	③	④	⑤	⑥	⑦
42. I am affectionate with my child	①	②	③	④	⑤	⑥	⑦
43. I have a close relationship with my child	①	②	③	④	⑤	⑥	⑦

Screen 39: Parenting style

3.4.11 Child Protective Factors

In the assessment of child protective factors, seven items were developed based on the five core groups of social and emotional competencies identified by CASEL (2006). The Child social and emotional competencies scale was rated by teachers and parents on a scale of 'Strongly disagree' (1) to 'Strongly agree' (7). Their views about the child's ability to maintain positive relationships, solve problems, consider others, and make responsible decisions were sought (see Screen 40).

On average over the last month, my child has shown that he/she:	Strongly Disagree ← → Strongly Agree						
3. Is happy about his or her relationships with other students	1	2	3	4	5	6	7
4. Is happy about his/her family relationships	1	2	3	4	5	6	7
5. Can solve personal and social problems	1	2	3	4	5	6	7
6. Can manage his/her feelings	1	2	3	4	5	6	7
7. Recognises his/her strong points	1	2	3	4	5	6	7
8. Takes account of the feelings of others	1	2	3	4	5	6	7
9. Can make responsible decisions	1	2	3	4	5	6	7

Screen 40: Child Social and Emotional Competencies

3.4.12 Perceived Impact of KidsMatter

In order to gain an understanding about the perceived impact that KidsMatter had on school and teacher processes, 19 items were developed that were arranged under the concepts of professional development, parent engagement, and parenting learning.

KidsMatter Professional Development involved nine items (see Screen 41) to assess the perceived impact of the KidsMatter professional development on teacher and school capacities. All but the last item, which used a response scale of 'Poor' (1) to 'Excellent' (7), were rated by teachers as 'Strongly disagree' (1) to 'Strongly agree' (7).

Rate the extent to which you disagree or agree with the following statements	Strongly Disagree ← → Strongly Agree						
78. The Professional Development related to the KidsMatter Initiative has:							
a) Enhanced my knowledge about students' mental health	1	2	3	4	5	6	7
b) Improved the ways that I interact with students	1	2	3	4	5	6	7
c) Increased my level of commitment to promoting student wellbeing	1	2	3	4	5	6	7
d) Helped me to foster student wellbeing through my practices as a teacher	1	2	3	4	5	6	7

Screen 41: KidsMatter Professional Development

In order to assess the perceived impact of KidsMatter on family processes, two items were developed focusing on parent KidsMatter involvement with schools (see Screen 42). Parent perceptions were rated on a scale of 'Strongly disagree' (1) to 'Strongly agree' (7) to gauge the impact of KidsMatter on parent involvement with support networks and school.

56. I have formed more support networks with other parents/caregivers since KidsMatter	①	②	③	④	⑤	⑥	⑦
57. I have been more involved with the school since KidsMatter	①	②	③	④	⑤	⑥	⑦

Screen 42: KidsMatter impact on parent involvement with school

Screen 43 presents a further measure of the perceived impact of the KidsMatter Initiative on family processes, involving seven items that focused on KidsMatter Parenting Learning. Accordingly, parent perceptions about the skills that KidsMatter had helped them to learn were assessed on a seven-point Likert scale of 'Strongly disagree' (1) to 'Strongly agree' (7).

59. KidsMatter has helped me to learn:							
a) good ideas for parenting	①	②	③	④	⑤	⑥	⑦
b) how to identify if my child is showing emotional or social or behaviour difficulties	①	②	③	④	⑤	⑥	⑦
c) how my child develops relationships with other children	①	②	③	④	⑤	⑥	⑦
d) how to help my child deal with his/her feelings	①	②	③	④	⑤	⑥	⑦
e) how to help my child to understand the feelings of other people	①	②	③	④	⑤	⑥	⑦
f) how to help my child to make responsible decisions	①	②	③	④	⑤	⑥	⑦
g) how to help my child to deal with emotional or social or behaviour difficulties	①	②	③	④	⑤	⑥	⑦

Screen 43: KMI Parenting Learning

In the final assessment of the perceived impact of the KidsMatter Initiative, the focus is on child processes. Four items, shown in Screen 44, were developed that examined KidsMatter Impact on the Child. Teacher and parent perceptions about how well KidsMatter had provided for the child's needs at school, were rated on a scale of 'Strongly disagree' (1) to 'Strongly agree' (7).

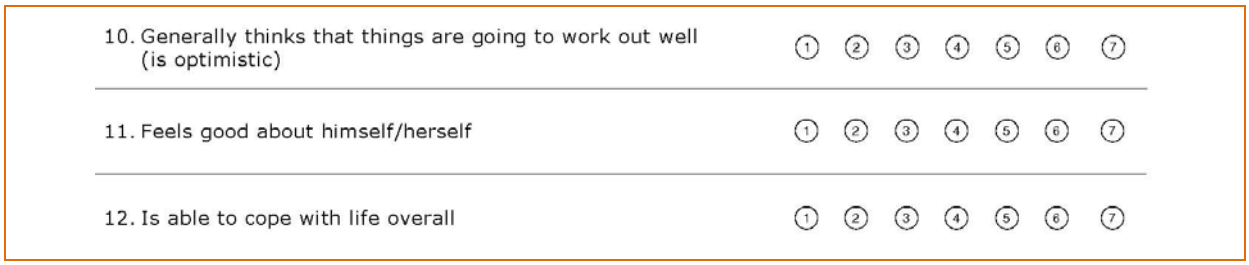
Rate the extent to which you disagree or agree with the following statements	**Strongly Disagree** ← → **Strongly Agree**						
16. KidsMatter has helped the school to focus on my child's emotional or social or behavioural needs	①	②	③	④	⑤	⑥	⑦
17. KidsMatter has led to improvements in my child's school work	①	②	③	④	⑤	⑥	⑦
18. KidsMatter has helped the school to focus on my child's social and emotional development	①	②	③	④	⑤	⑥	⑦
19. KidsMatter enables the school to make more effective decisions about my child's emotional or social or behavioural needs	①	②	③	④	⑤	⑥	⑦

Screen 44: KMI Impact on the Child

3.4.13 Student Mental Health Outcomes

A key focus of this evaluation is to investigate the impact of KidsMatter on student mental health outcomes. Three assessments of mental health, conceived both in terms of strengths and difficulties, are considered desirable. The first two assessments were purposefully designed and both involved three items and were responded to by parents and teachers for each student on a seven-point scale

of ‘Strongly disagree’ (1) to ‘Strongly agree’ (7). The Mental Health Strength items provided an assessment of the perceived impact of the KidsMatter Initiative on student mental health outcomes based on teacher and parent perceptions of the child’s positive mental health in terms of optimism and coping skills (see Screen 45).



Screen 45: Student Mental Health Strengths

Mental Health Difficulty (see Screen 46) items provided an assessment of the perceived impact of the KidsMatter Initiative on student mental health outcomes based on teacher and parent perceptions of the child’s mental health difficulties in terms of poor behaviour, anxiety and depression.

Screen 46: Student Mental Health Difficulties

The final assessment in the parent and teacher whole-cohort study used Goodman’s (2005) Strengths and Difficulties Questionnaire (SDQ) in order to gauge the perceived impact of the KidsMatter Initiative on student mental health outcomes. The 20 items comprising the Total SDQ score were based on teacher and parent perceptions of the child’s mental health difficulties in terms of hyperactivity, conduct problems, emotional symptoms and peer problems. An additional set of five positive items formed a pro-social scale but these are not included in the total. Parents and teachers were required to respond on one of three categories of ‘Not true’ (0), ‘Somewhat true’ (1), and ‘Certainly true’ (2). Screen 47 presents the 25 SDQ items. The ‘follow-up’ version also contained additional items on the back of the form, also presented in Screen 47.

3.5 The School Leadership Executive Summary

The School Leadership Executive Summary was administered to principals and KidsMatter action team coordinators at the end of the two year trial, inviting them to respond voluntarily to a set of focus questions about key components of the KidsMatter Initiative. The main purpose of this questionnaire was to allow school principals to ‘tell their story’ about what happened when KidsMatter came to the school, and to gain an understanding from the KidsMatter Action Team coordinators of the ‘pill and dose’ in terms of which social and emotional learning programs were being used and how often. An electronic Word document was emailed to principals and Action Team coordinators. In some cases, the principal and Action Team member was the same person, and thus he or she was invited to complete both sections of the Leadership Summary. In most cases they were separate people, and were encouraged to submit a shared document or two documents independently, with just their respective section completed. In these cases, data from the two documents were matched back together to form a single school response in the data file. The document contained focused questions that were of open-response or multiple-choice format.

Strengths and Difficulties Questionnaire

P 11-17
FOLLOW-UP

For each item, please mark the box for Not True, Somewhat True or Certainly True. It would help us if you answered all items as best you can even if you are not absolutely certain. Please give your answers on the basis of your child's behaviour **over the last month.**

Date of Birth ..... Male/Female

	Not True	Somewhat True	Certainly True
Considerate of other people's feelings	☐	☐	☐
Restless, overactive, cannot stay still for long	☐	☐	☐
Often complains of headaches, stomach-aches or sickness	☐	☐	☐
Shares readily with other young people, for example CDs, games, food	☐	☐	☐
Often loses temper	☐	☐	☐
Would rather be alone than with other young people	☐	☐	☐
Generally well behaved, usually does what adults request	☐	☐	☐
Many worries or often seems worried	☐	☐	☐
Helpful if someone is hurt, upset or feeling ill	☐	☐	☐
Constantly fidgeting or squirming	☐	☐	☐
Has at least one good friend	☐	☐	☐
Often fights with other young people or bullies them	☐	☐	☐
Often unhappy, depressed or tearful	☐	☐	☐
Generally liked by other young people	☐	☐	☐
Easily distracted, concentration wanders	☐	☐	☐
Nervous in new situations, easily loses confidence	☐	☐	☐
Kind to younger children	☐	☐	☐
Often lies or cheats	☐	☐	☐
Picked on or bullied by other young people	☐	☐	☐
Often volunteers to help others (parents, teachers, children)	☐	☐	☐
Thinks things out before acting	☐	☐	☐
Steals from home, school or elsewhere	☐	☐	☐
Gets along better with adults than with other young people	☐	☐	☐
Many fears, easily scared	☐	☐	☐
Good attention span, sees work through to the end	☐	☐	☐

Screen 47: Strengths and Difficulties Questionnaire (Goodman, 2005)

Since participating in the KidsMatter Initiative is this student's behaviour:

Much worse	A bit worse	About the same	A bit better	Much better
☐	☐	☐	☐	☐

Has participating in the KidsMatter Initiative been helpful in other ways, e.g. providing information or making the problems more bearable?

Not at all	A little	A medium amount	A great deal
☐	☐	☐	☐

Over the last month, has the student had difficulties in one or more of the following areas: emotions, concentration, behaviour or being able to get on with other people?

No	Yes – minor difficulties	Yes – definite difficulties	Yes – severe difficulties
☐	☐	☐	☐

If you have answered "Yes", please answer the following questions about these difficulties:

- Do the difficulties upset or distress this student?

Not at all	A little	A medium amount	A great deal
☐	☐	☐	☐

- Do the difficulties interfere with this student's everyday life in the following areas?

	Not at all	A little	A medium amount	A great deal
Peer Relationships	☐	☐	☐	☐
Classroom Learning	☐	☐	☐	☐

- Do the difficulties put a burden on you or the class as a whole?

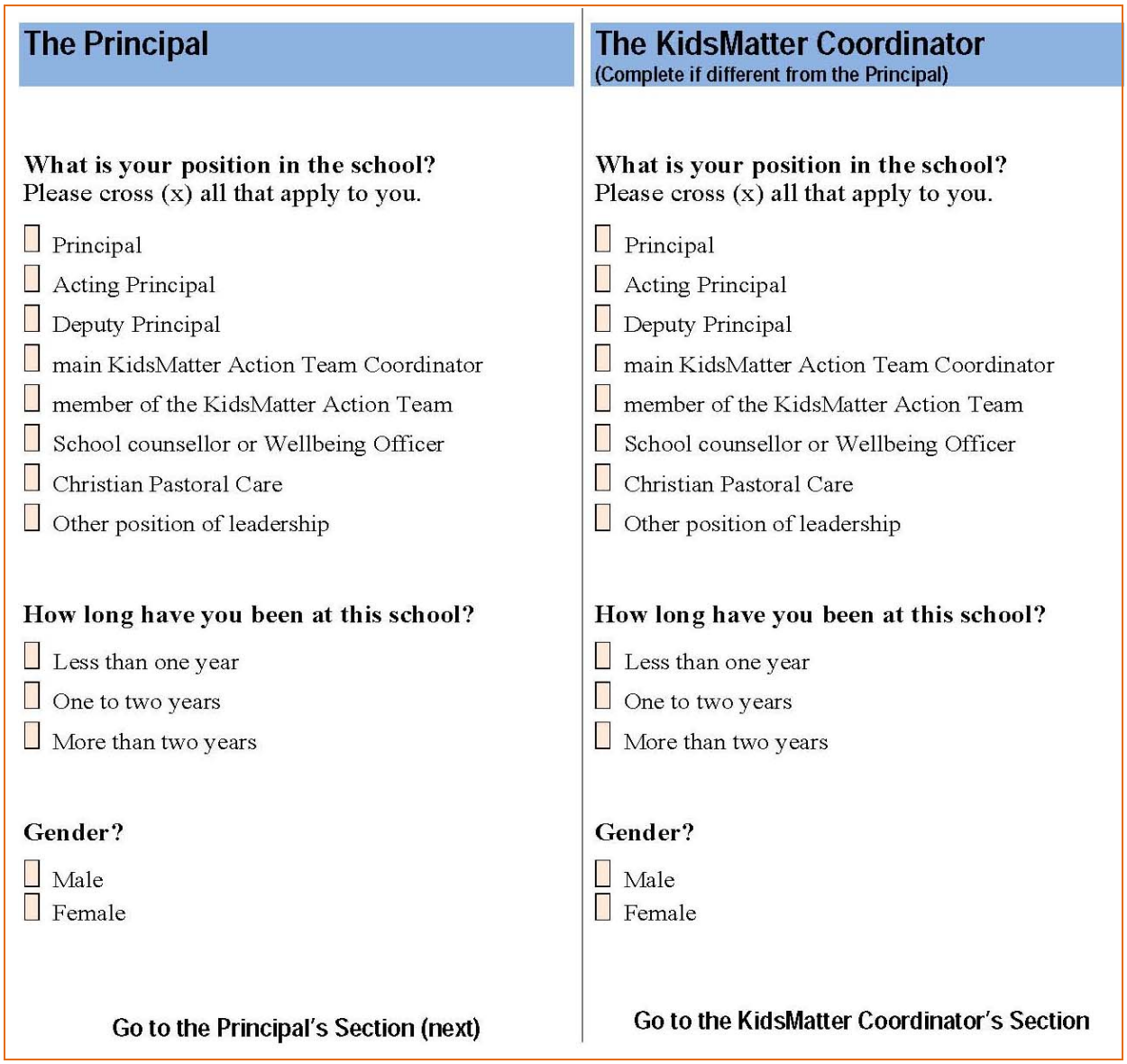
Not at all	A little	A medium amount	A great deal
☐	☐	☐	☐

Screen 47 continued: Strengths and Difficulties Questionnaire (Goodman, 2005)

3.5.1 Background Information

Since one document was sent to all recipients, principals and Action Team coordinators were asked to provide details in the Background section of the Leadership Executive Summary of their school's name and State. This information was also used to match documents if the sections were returned separately.

Information from principals and Action Team coordinators about their positions of leadership were collected using a series of items that involved their position in the school, how long they had been at the school, and their gender (see Screen 48).



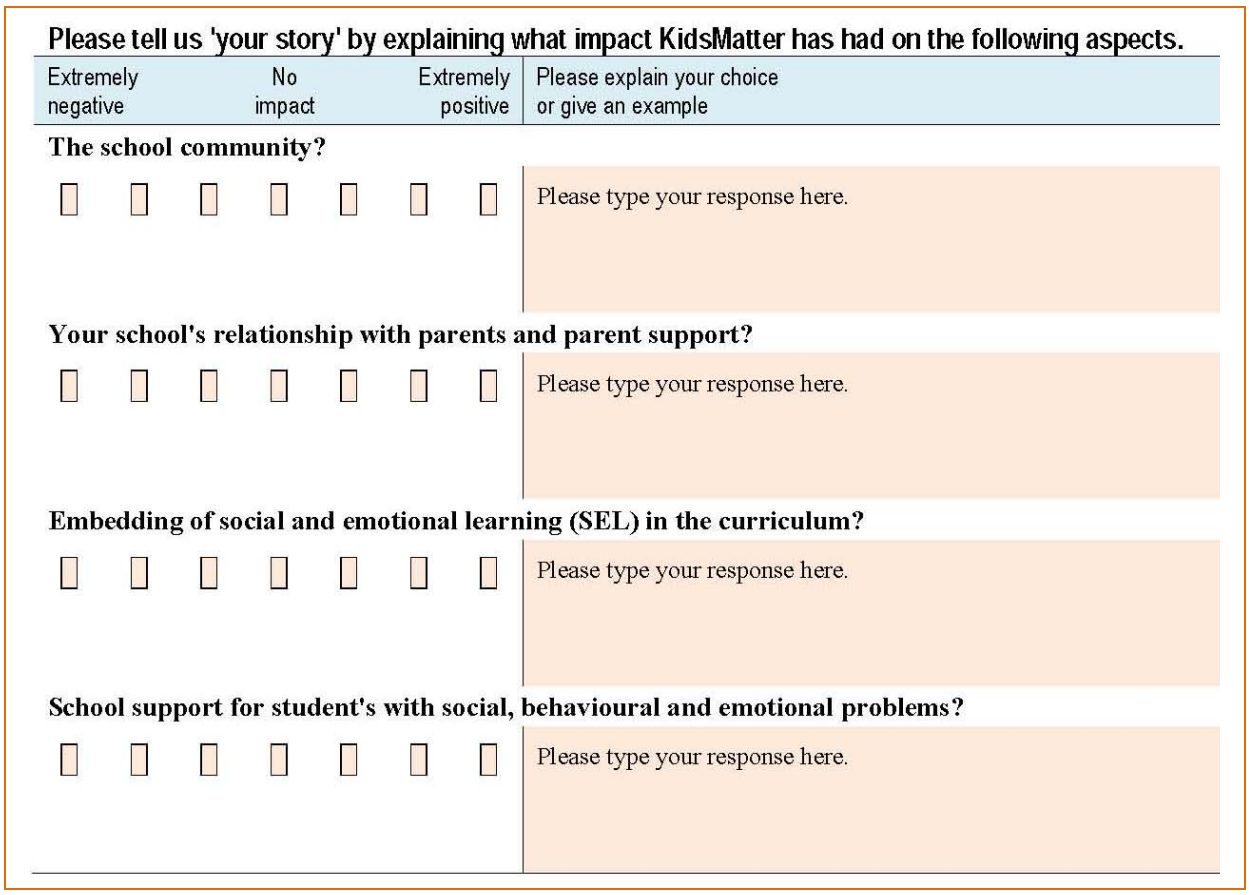
Screen 48: Background Information on leadership

3.5.2 Principal's Section

The Principal's Section was structured to allow the school leaders the opportunity to 'tell their story' by describing how the KidsMatter Initiative was implemented in their school. The first question used an open-response format and asked:

> Why did the school become involved in the KidsMatter Initiative? How was the decision to become involved made?

In order to understand further the impact that KidsMatter had on the school in terms of the four Components, several complementary items, that were both scaled and open-response, were developed. The scaled items, shown in Screen 49, were scored as 'Extremely negative' (1), 'No impact' (4), and 'Extremely positive' (7).



Screen 49: 'Tell your story'

The final set items in the Principal's Section were open-response in nature and invited the school leader to describe aspects about change, sustainability, and the barriers and facilitators that impacted on the implementation of KidsMatter. The following questions were asked:

- What structures or procedures have been changed or developed as a result of being involved in KidsMatter? Were these procedures effective in supporting social and emotional learning in your school and why?
- What is the future of KidsMatter in your school?
- What have been the barriers to implementing KM in your school? What is an example of this in practice?
- What has facilitated the implementation of KM in your school? What is an example of this in practice?

3.5.3 KidsMatter Action Team Coordinator's Section

In order to gain a deeper understanding of what social and emotional programs schools were using (the 'pill') and how often and in what way they were using them (the 'dose'), the KidsMatter Action Team Coordinator's Section was developed. It provided the opportunity to obtain specific details about what programs were being used and how they were being used.

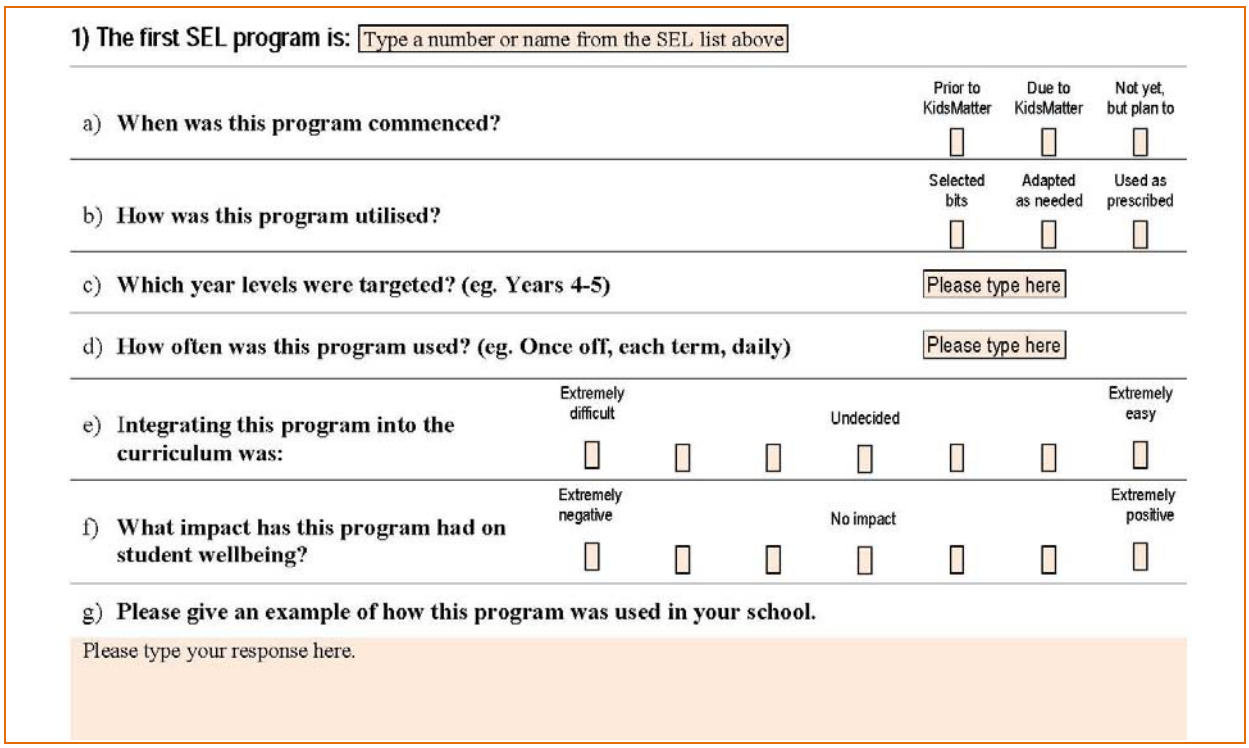
Screen 50 shows a list of all programs presented in the KidsMatter Program Manual (2006) and coordinators were asked to identify the programs used. They could identify as many as necessary.

Please identify all of the Social and Emotional Learning (SEL) programs used in your school by bolding the titles:

1. AusParenting
2. Aussie Optimism
3. Being Me: ABC health series
4. The Better Buddies Framework
5. BodyThink
6. The BOUNCE Back!
7. Bright Ideas
8. Bully-Busters
9. Caring School Community (CSC)
10. Challenges and Choices
11. Changing Tracks
12. Check it Out!
13. Cognitive Behavioural Intervention for Trauma in Schools
14. Confident Kids
15. Cool Kids (School Version)
16. Creating the Future
17. Digging Deep
18. Emotional Literacy: Assessment and intervention
19. Exploring Together
20. Families and Schools Together (FAST)
21. Feeling is Thinking (FisT)
22. Friendly Kids, Friendly Classrooms
23. Friendly Schools and Families Program
24. FRIENDS for Life
25. Fun for Kids Program
26. Girls on the Go!
27. Heart Masters
28. I Can Problem Solve (ICPS)
29. Key Steps to Parenting
30. Kidz Club Program (Primary)
31. Kool Kids Positive Parents (KKPP)
32. Literature for Life
33. 1-2-3 Magic Parenting Program
34. Mpower Girls
35. No Blame Bullying Prevention (Support Group) Approach
36. Parent Effectiveness Training (PET)
37. Passport Program
38. The PATHS curriculum
39. The P.E.A.C.E. Pack: A program to reduce school bullying
40. Peer Mediation
41. Peer Support Program (Peer Support Foundation)
42. Peer Support Program (Stride Foundation)
43. Program Achieve (3rd Edition)
44. Protective Behaviours: A personal safety program
45. Quest 4 Values
46. The Rainbow Program for Children in Refugee Families
47. Rainbows: Guiding kids through life's storms
48. Resilience Education and Drug Information (REDI)
49. Resilient Kids (Primary)
50. Revved Up: Turning angry energy into positive action
51. Roads to Refuge: Refugees in Australia education kit
52. Rock and Water
53. Seasons for Growth
54. Second Step
55. Seeing Red: Girls, boys & anger
56. Signposts for Building Better Behaviour
57. Skills for Growing
58. Social Decision Making and Social Problem Solving Program
59. Steps to Respect: A bullying prevention program
60. Stop Think Do Social Skills Training
61. Stories of Us: Belonging
62. Stories of Us: Bullying
63. Sunshine and Rainbows: A lifeskills program
64. Supporting Kids in Primary Schools (SKIPS)
65. Talk Sense to Yourself: For children & adolescents
66. Thinking, Feeling, Behaving
67. Together Parenting
68. Tribes Learning Communities – Tribes TLC
69. Triple P – Positive Parenting Program: Level 2 prevention
70. Triple P – Positive Parenting Program: Levels 3-5
71. Values Education Toolkit
72. Other Please type here

Screen 50: SEL programs

Coordinators were then asked to detail up to four (4) of the most commonly used SEL programs by responding to a series of questions, which were provided in the document, four times. The items involved mainly multiple choice responses. Item A used a three-point scale of 'Prior to KidsMatter' (1), 'Due to KidsMatter' (2), and 'Not yet, but plan to' (3), as did Item B, but on a scale of 'Selected bits' (1), 'Adapted as needed' (2), and 'Used as prescribed' (3). Items C, D and G involved open-ended responses, and Items E and F were rated on a seven-point scales of 'Extremely difficult/negative' (1) to 'Undecided/No impact' (4), to 'Extremely easy/positive' (7). Screen 51 presents the items.



Screen 51: About the SEL program used

The final set of items in the Action Team Coordinator's Section were open-response in nature and invited the coordinators to give advice and reflect on how 'user-friendly' the KidsMatter framework was. Specifically, the two questions were:

- What advice or strategies would you give to other schools who might consider implementing KidsMatter?
- How easy has it been to incorporate what the school is already doing into KidsMatter?

The items included in the School Leadership Executive Summary are presented in the codebook in Appendix B.

3.6 The Stakeholder and Student Voice Studies

The Stakeholder and Student Voice studies provided a qualitative approach for understanding the implementation process of the KidsMatter Initiative and the effects of the implementation on support and assistance for children. The aim was to engage with people involved in the implementation of KidsMatter from all sectors of the school community, namely, students, parents, teachers, Action Team, counsellors, principals and administration staff. The study was designed to enable the lived realities of the participants to be heard and their perspectives subsequently explored.

Audio-taped transcripts (over 80 hours) were collected during September and October 2008. This involved 64 interviews and 42 focus groups with school principals, teachers, parents, students and other school staff, in Round 1 KidsMatter schools. All of the principals and at least two teaching staff from each of the 10 case-study schools spoke to the evaluator(s) about KidsMatter. The schools also organised parents and students to attend focus group discussions led by the evaluators.

The 30-minute student focus groups were designed to obtain and record students' knowledge, understanding and engagement with KidsMatter with regard to Component 4, as well as other initiatives undertaken by their school as part of KidsMatter. Two groups with five to eight children, 10 years of age, comprised the focus groups at each school.

Parent focus groups, ranging in size from three to 13 and which lasted about an hour, aimed to explore parents' knowledge and understanding of KidsMatter, including their experiences and perceived changes in the school community and their children, during the pilot phase. The focused discussion also sought to elicit parents' views about parental involvement and engagement with parenting education and the Initiative in general.

The intention of the private interviews with principals, Action Team leaders and members, teachers and counsellors was to investigate the facilitators and barriers to implementation and change within the school, as well as to provide an opportunity for them to reflect and comment on the implementation process.

Participants in the focus groups and interviews were assured of anonymity and told that no one outside of the evaluation team would hear the audio recordings or read the full transcripts. This was to ensure that participants would offer honest views and perceptions without fear of reprisal or consequence from the school community, as well as minimise any socially desirable responses.

In addition, during the school visits various artefacts, including CDs of student songs, artwork and writings, and KidsMatter articles published in school newsletters, were collected by the evaluators. These served to orient the evaluators to the contextual nature of the school culture and environment of the Initiative.

3.6.1 Selection of schools for Stakeholder and Student Voice studies

From the sample of 100 schools, the evaluation team, in collaboration with *beyondblue* and Principals Australia, identified 10 schools for the focus groups and interviews. Schools with characteristics that were identified as potentially having an impact upon student wellbeing were selected. These criteria included a consideration of:

- schools with relatively high populations of English as a Second Language students,
- schools from different socio-economic areas,
- schools with relatively higher proportions of identified cultural or ethnic groups,
- schools in rural and remote areas,
- schools located in identified communities (e.g., drought affected communities),
- schools with identified differing levels of parental involvement with school life,
- schools identified as going well with the implementation of KidsMatter, and
- schools identified as struggling with the implementation of KidsMatter.

The 10 schools were selected to provide diverse representation of different geographical areas, and also, to represent schools that, on preliminary analysis of data, appeared either to be going well or finding difficulties with implementing KidsMatter. This is consistent with maximum variation sampling, a purposive strategy which involves selecting a wide range of variation on several dimensions of interest (Patton, 1990). For consistency of approach, one evaluator collected data from all of the 10 schools. For cross-checking of perceptions and methods, the evaluator was accompanied by a second evaluator on five occasions.

3.6.2 Selection of participants

Prior to the evaluator's visit, each of the 10 schools were notified and asked if they were willing to be involved in the Stakeholder and Student Voice component of the KidsMatter evaluation, and if they could recruit suitable participants. They were instructed that the evaluators were particularly interested in talking with:

- the principal and members of the school leadership team,
- the KidsMatter Action Team member(s),
- one or two teachers involved in the implementation of KidsMatter,
- small groups of 10 year-old students,

- small groups of parents (who had and had not completed the KidsMatter evaluation questionnaires), and
- any other key stake-holders that were significantly engaged with KidsMatter in the school, suggested by the principal.

The principal was also asked to indicate which times would be best for the visit in terms of fitting in with the school's program.

3.6.3 Interview and focus group process

Once schools had agreed to participate in the Stakeholder and Student voice studies they were sent packages which contained the following:

1. Information flyers about the study and consent forms for participants, specifically for the principal, general staff, teachers, parents of children participating in the study, and students.
2. A collection bag for artefacts. Schools were asked if they could fill the collection bag with suitable artefacts relating to KidsMatter that the evaluators would collect on their visit.

3.6.4 Pilot study

A pilot study was undertaken at a local non-KidsMatter school to trial the focus group and interview questions and research design with similar target groups. The same procedure was followed with regard to issuing information and consent form collection. The pilot involved questions being tested with a parent focus group, a group of students, a counsellor, an action team member and a teacher. The pilot study confirmed the selection of questions and the evaluation design.

3.6.5 Interview and focus groups

Each of the schools participating in the Stakeholder and Student Voice studies provided a room where all of the focus groups and staff interviews were conducted. Principal interviews were generally conducted in the principal's office.

All participants agreed to the audio recording of the discussion.

Two groups of six to seven parents formed parent focus groups in each school. They comprised a mix of parents who had participated in completing KidsMatter questionnaires (as part of the Whole cohort longitudinal study) and parents who had not been asked to complete evaluation questionnaires. The majority of parents were mothers, although in several of the groups one or two fathers also participated. Parent participants had children in various year levels at the school and had different levels of involvement with the school ranging from minimal involvement to membership and positions in school executive committees. Parent action team members (in schools where they occurred) were also interviewed as were parents involved in the running of parent rooms.

Translators were organised in schools where there was a large ESL population so that non-English speaking parents were also represented in the studies.

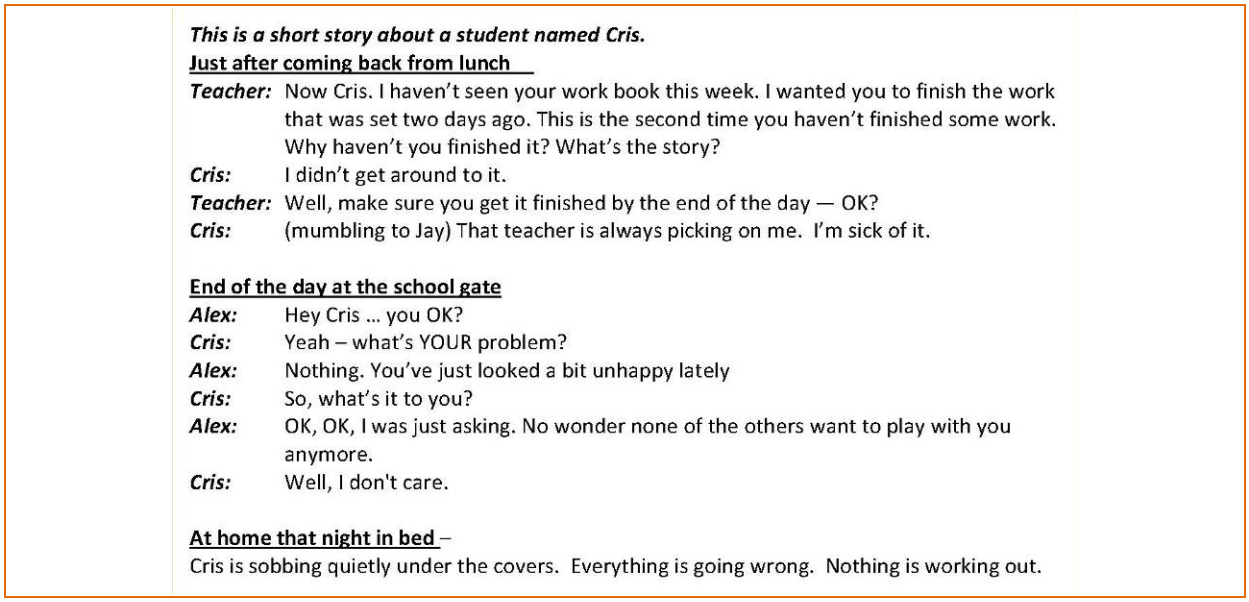
Two groups of male and female students in each school, ranging in ages from nine to 11, participated in the student focus groups. The groups were generally well balanced in terms of gender. Groups varied in size from four to nine children. On four occasions (at two schools) a staff member was present during the student focus groups. In one school, students from the 'student executive' who were peer mentors also formed one of the focus groups.

Non-teaching staff were represented by office administration staff as well as a school gardener, a school maintenance worker, a finance officer, an indigenous student guidance officer and two psychologists. Pastoral care workers and counsellors were also interviewed in many of the schools.

3.6.6 Development of the Focus group and interview questions

The interview and focus group questions were based on concepts used in the MindMatters Classroom Study (Slee et al., 2006) with questions reworded to suit better primary school students and the focus group and interview contexts (compared to a questionnaire context).

For students participating in focus groups, a scenario, similar to one used in the MindMatters Classroom Study and adapted to suit 10 year old students was developed with feedback from KidsMatter. The story about a student named Cris (gender not specified) was presented during the student focus groups to begin a focussed discussion about feelings and to evoke strategies of coping that were not personally centred but hypothetically constructed with regard to another child. The scenario (see Screen 52), which depicted Cris experiencing problems with schoolwork and not coping well with school demands, acted as an ice-breaker and prompted the children to think about situations in which someone is feeling sad and discouraged.



This is a short story about a student named Cris.

Just after coming back from lunch

Teacher: Now Cris. I haven't seen your work book this week. I wanted you to finish the work that was set two days ago. This is the second time you haven't finished some work. Why haven't you finished it? What's the story?

Cris: I didn't get around to it.

Teacher: Well, make sure you get it finished by the end of the day — OK?

Cris: (mumbling to Jay) That teacher is always picking on me. I'm sick of it.

End of the day at the school gate

Alex: Hey Cris … you OK?

Cris: Yeah – what's YOUR problem?

Alex: Nothing. You've just looked a bit unhappy lately

Cris: So, what's it to you?

Alex: OK, OK, I was just asking. No wonder none of the others want to play with you anymore.

Cris: Well, I don't care.

At home that night in bed –

Cris is sobbing quietly under the covers. Everything is going wrong. Nothing is working out.

Screen 52: Story used in the student voice focus groups

In the focus groups the scenario led to a general discussion about feelings and provided students with an opportunity to discuss what they could recall learning about feelings, friendships and related mental health topics. In the discussion students demonstrated their knowledge, understanding and expression of feelings, as well as coping strategies and the outlook for Cris' future.

Questions that followed the reading of the scenario were aimed at exploring students' understanding and engagement with the Social and Emotional Teaching Program selected by the school as part of KidsMatter.

Students were asked the following questions:

1. What is Cris feeling?
2. What do you think Cris should do?
3. What do you think Cris' teacher could do to help Cris?
4. What do you think Cris' parents or caregiver could do to help Cris?
5. What sorts of things have you done at school that help you to manage your own feelings and behaviour?
6. Do you think your school could do something to help Cris? If so- what might that be?
7. How well do you think your school would be able to help students like Cris to
   (a) learn about their own feelings,
   (b) learn about the thoughts and feelings of other people,
   (c) Learn how to manage their own feelings,
   (d) Learn how to make decisions, and

(e) Learn how to get on with other students and make friends?

8. Have you heard of KidsMatter?
9. Do you know what it is?

3.6.7 Field notes

In addition to asking students questions during the focus groups, the evaluators also recorded other pertinent information that provided a context for the audio recordings. This included documenting their reflections with regard to the following areas.

1. Student engagement during the focus group.
2. Did the scenario make sense to the students and did they engage with it?
3. The demeanour of the student participants.
4. Students' use of language.
5. Students' willingness to participate in the discussion.
6. Was there evidence that students had been primed?
7. Did some students dominate the discussion?

3.6.8 Parent focus group

The parent focus groups were concerned with the four KidsMatter components and parents were asked to consider any changes they had noticed since KidsMatter was introduced into the school, particularly with regard to the school culture and their children's behaviour, confidence, mental health and general wellbeing.

The parent focus groups began with a discussion about parents' awareness and knowledge about KidsMatter followed by a discussion about perceived changes since the Initiative had been implemented at the school.

In the focus groups parents were told: *"Your school has been involved in the KidsMatter program"* and then were asked the following questions.

1. Can you tell us what it is all about?
2. How have you been involved in the KidsMatter Initiative?
3. What have been the challenges of becoming involved in the KidsMatter Initiative?
4. What have you noticed as the main activities undertaken by the school as part of the KidsMatter Initiative?
   - What practical things did the school do to engage the school community with the KidsMatter Initiative?
5. What have your children done as part of the KidsMatter Initiative?
6. What have you done, as a parent as a result of what you have heard from KidsMatter? (prompt: and/or in the name of student mental health?)
7. What has been the most valuable part of the KidsMatter Initiative for you as parents?
   - Since KidsMatter, what has been the most useful thing(s) that the school has done to foster positive student mental health?
8. In what ways has the KidsMatter Initiative made any discernable/noticeable difference:
   (a) to the school community?
   (b) what the school does in terms of parenting education/information?
   (c) early intervention for at risk students experiencing social, emotional or behavioural difficulties?
   (d) teaching students about social and emotional capabilities?
   - Have you noticed any difference in behaviour, attitude or knowledge of students, parents and teachers since the KidsMatter Initiative began?

- Since the KidsMatter Initiative began, who do you think has benefited most in terms of understanding about mental health – teachers, parents, students? Why?

9. Is there any part of the KidsMatter Initiative that you think has not worked well for parents or students?
10. Overall, do you think KidsMatter Initiative has been a good thing for this school? Why?

Reserve Questions:

(a) Do you think the school has become a more welcoming place for parents in the last two years? In what way?
(b) Would you advise other parents to take up the KidsMatter Initiative? Why? Do your views apply to all parents?
(c) Do you think your child is better at handing social and emotional difficulties than he or she was prior to KidsMatter?

3.6.9 Staff interviews

Another perspective of the implementation of the KidsMatter Initiative in The Stakeholder and Student Voice studies was obtained from interviews with staff. This included members of staff in each school who were:

- the Action Team Coordinator,
- a teacher who taught the topic of social and emotional learning,
- a teacher who did not teach the topic of social and emotional learning, and
- a general staff member who had some involvement in the KidsMatter Initiative.

In their interview staff members were asked a number of questions.

1. Briefly, how have you been involved in the KidsMatter Initiative?
2. Where in the school day does KidsMatter fit? (prompt: curriculum)
3. What do you personally do in your teaching in the name of KidsMatter, (prompt: and/or in the name of student mental health?)
4. What has been the most valuable part of the KidsMatter Initiative in this school?
5. Since KidsMatter, was has been the most useful thing(s) that the school has done to foster positive student mental health?
6. Is there any part of the KidsMatter Initiative that you think has not worked in this school?
7. If you were implementing KidsMatter from scratch in this school in 2009 what would you do differently?
8. What have been the most challenging aspects of using the KidsMatter Initiative in this school?
9. In what ways has the KidsMatter Initiative made any discernable or noticeable difference to:
    (a) the culture and ethos of your school community?
    (b) what the school does in terms of parenting education or information?
    (c) early intervention for at risk students experiencing social, emotional or behavioural difficulties?
    (d) teaching students about social and emotional capabilities?
10. In the last year, what have you personally learned about student mental health?
11. Have there been any changes in the ways that you think about students as a result of KidsMatter Initiative?
12. What has been the role of leadership of the KidsMatter Initiative in this school?

13. Have you or the school made changes to KidsMatter compared to how you first thought it would work in this school?
14. The KidsMatter Initiative will finish this year. What parts of it should the school continue with in 2009?
15. What advice would you give to other teachers or staff about how to use KidsMatter?
16. Would you advise other schools to take up the KidsMatter Initiative? Why? Do your views apply to all schools?
17. Overall, do you think KidsMatter has been a good thing for this school? Why?

If time permitted an additional (reserve) question was asked at the end of the interviews.

1. Is there space to think about initiatives like the KidsMatter Initiative in this school?

3.6.10 Principal interview

Each principal of the schools that participated in The Stakeholder and Student Voice studies participated in an hour long interview with the evaluators where her or she was asked the following questions.

1. What has been the most valuable part of the KidsMatter Initiative in this school?
2. Is there any part of the KidsMatter Initiative that you think has not worked in this school?
3. If you were implementing the KidsMatter Initiative from scratch in this school in 2009 what would you do differently?
4. What have been the most challenging aspects of using the KidsMatter Initiative in this school?
5. In what ways has the KidsMatter Initiative made any discernable or noticeable difference to:
   (a) your school community?
   (b) what the school does in terms of parenting education and information?
   (c) early intervention for students experiencing social, emotional or behavioural difficulties?
   (d) teaching students about social and emotional capabilities?
6. Have there been any changes in the ways that you think about students as a result of KidsMatter Initiative?
7. Is there space to think about initiatives like the KidsMatter Initiative in this school?
8. Have you done any in-house evaluation of the KidsMatter Initiative?
9. What has been the role of leadership of the KidsMatter Initiative in this school?
   (a) What have been the most difficult aspects of this leadership?
   (b) What have been the easiest aspects of this leadership?
10. You will finish with the special KM Initiative program this year. What part of the KidsMatter program will you use in 2009?
11. What advice would you give to other schools about how to use KM? OR Would you advise other schools to take up the KidsMatter Initiative? Why? Do your views apply to all schools?
12. Overall, do you think KidsMatter Initiative has been a good thing for this school? Why?

At the end of the interview, if there was enough time, the following reserve questions were used.

1. What do you think are the impacts of the KidsMatter Initiative on:
   (a) student behaviour?
   (b) staff knowledge?

(c) what teachers do with their classes?
(d) students experiencing social, emotional or behavioural difficulties?
(e) parents?

3.6.11 Non-teaching staff Interviews

Some of the questions used with teaching staff were not applicable to non-teaching staff. Accordingly, non-teaching staff were asked the following questions.

1. Have you heard of KidsMatter?
2. Do you know what it is? What is it?
3. How does KidsMatter work?
4. Have you had any involvement in KidsMatter? (In what way have you been involved?)
5. Do you know about any of the programs that run under the name of KidsMatter?
6. How long have you been in the school? So you have or have not seen KidsMatter come into the school.
   - Have you noticed any changes since KidsMatter was brought into the school?
   - What have you noticed?
   - How do you think KidsMatter has done that?
7. How do you think KidsMatter has influenced student's social and emotional wellbeing?
8. Have you been involved in any staff meetings or training where KidsMatter has been talked about?
9. Of what benefit do you think KidsMatter is to non-teaching staff?
10. What do you think non-teaching staff need to know about KidsMatter? What makes you say that?
11. Is there any role that you feel you could play in terms of KidsMatter in the school?
12. Do you think KidsMatter has been a good or bad thing for the school community? What makes you say that?

3.6.12 Collection of artefacts

Schools were asked to collect artefacts related to KidsMatter for the study. The artefacts collected included

- a video produced by a Project Officer at one school,
- a CD of songs about depression written and performed by Year 6 students,
- a video of students placing artwork on large "t" figures,
- numerous newsletter articles,
- KidsMatter Merit certificates issued to students at assemblies,
- copies of schools' goals and strategic planning,
- numerous photographs of student work,
- photographs of KidsMatter posters displayed in school corridors and foyers, and
- brochure stands and books in parent rooms.

Some photographs of the artefacts are presented in Figure 6 and served to orient the evaluators to the contextual nature of the school culture and environment of the KidsMatter Initiative.

Figure 6. KidsMatter artefacts

3.6.13 Transcription of Audio Files

Over 80 hours of audio recordings were collected in the Stakeholder and Student Voice studies. These were converted to wave file format to enable easy access through software such as Audacity for transcribing purposes. Audio files were organised according to participants within States and Territories and the types of audio data collected were tallied, as Table 5.

Table 5. Number of Stakeholder and Student Voice Focus groups and interviews

		Number Conducted
Interviews	*Principals*	*10*
	KM-coordinators	*7*
	Action team members	*11*
	Counsellors	*5*
	Teachers	*22*
	Other	*9*
Focus Groups	*Parents*	*19*
	Students	*23*

Before the transcribing process began the files were ranked in order of priority for data analysis as it was not possible to transcribe all of the recordings. Principal interviews were given the highest priority. Transcribing occurred until there was evidence of saturation and no more discernable themes emerged.

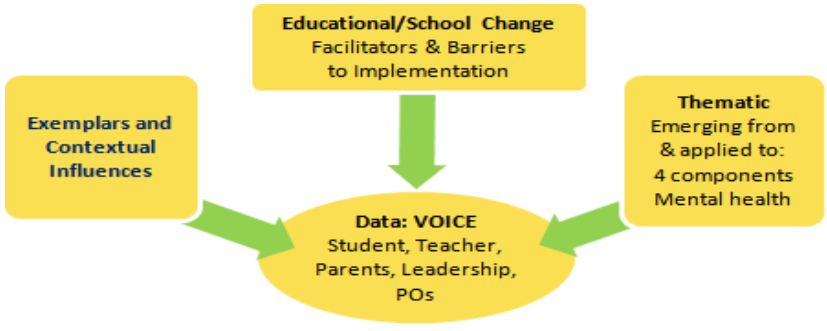
Audio-recordings were transcribed word-for-word so that the essence of the discussion was maintained. Grammatical corrections were only made where this did not change the meaning and spirit of the dialogue.

3.6.14 Analysis of qualitative data

Qualitative data analysis employed three approaches as is illustrated in Figure 7, and include:

1. *An Analysis of Educational and School Change*. This involved an analysis of facilitators and barriers to the implementation evident from the focus group discussions and interviews.
2. *A Thematic Analysis*. The emerging themes from, and applied to, mental health, implementation and the four components were examined from the transcripts,
3. *Contextual Influences*. Exemplars and contextual influences were sought from the transcripts to identify examples of good implementation.

Figure 7. Approaches used for data analysis of Stakeholder and Student Voice studies



Interview and focus group data require some assessment of dependability and consistency (reliability), and accuracy and trustworthiness (validity) (Miles and Huberman, 1994), to address whether the experiences of the participants, their perceptions and understandings, legitimately capture the lived reality of the phenomenon under question. Individual responses, while providing information-rich and intense personal experiences, can sometimes be considered a limitation, because each individual's reality may be quite different from another. This heterogeneity is expected when gathering interview and group data, as each voice represents a unique, subjective and

contextual view of the issue under consideration. In this case, it is the actual, lived reality of those participants experiencing the KidsMatter Initiative in each of these 10 schools.

However, Patton (1990, p.172) reported that multiple voices provided by a maximum variation sampling strategy, such as the one employed in this evaluation of 10 selected schools, turned that possible limitation into a strength: lending credibility to the individual experiences; providing a coherent picture across all schools; and verifying and confirming the core messages, common patterns and issues of central importance that emerged from the data.

3.6.15 Inter-coder agreement

A process of inter-coder agreement was developed for identifying key themes across all data sets (Miles and Huberman, 1994). Three of the researchers involved in this aspect of the program have published widely in relation to the matter of agreement checking (for example, Owens, Shute and Slee, 2000). This entailed each of four evaluators independently reading the transcripts of participants, noting ideas, concepts and issues, and then identifying a level of agreement across four evaluators. This process was carried out with the principals' transcripts and it showed 77 per cent inter-coder agreement. Following this process the evaluators re-grouped and discussions continued until unanimous agreement between the coders on emerging themes was reached.

3.6.16 Summary of key emerging themes and core messages

Once the coders had agreed upon the emerging themes and messages from the Stakeholder and Student Voice studies, a summary was produced which provided common, core messages, which were those identified by the majority of the coders relating to mental health, implementation, and the four Components. The summary of key emerging themes is presented in Table 6. It is these findings that are presented in the KidsMatter Evaluation Final Report (Slee, et al., 2009).

Table 6. Summary of key emerging themes from the qualitative data

Stakeholders	**Principals**	**Project Officers**	**Students**	
Data	Executive Sum. (n=53) Interviews (n=10)	Proformas R 1 (n = 51 x T0, T1) R 2 (n=50 x T2 -T4)	Focus Groups (n=20)	
Key Emerging Themes	Facilitators & barriers to successful implement Strategies evident Ideas for the future Sustainability issues & concerns	Facilitators & barriers to successful implementation	Those using knowledge & language of KM or the Program used at School Anger Management, friendship, peer relationships, bullying, anxiety, depression	Those not using knowledge and language of KM or the program at school
Some issues for consideration	Staff Change, Leadership, Time, Support		Few using it at home. Not filtering through to behavior at home: little change in their opinion	
			Some older students "taught" KM to younger children: This is a "seeding " strategy/ whole school change	
	Implementation and Engagement Principals and POs =Agents of change for overall school direction		Knew KM was in the school, but responded mostly to the Program being taught, eg. Bounceback	
Stakeholders	**Parents**		**Action Team**	**Teachers**
Data	Focus Groups (n=19)		Executive Summaries (61)	Interviews (n=33)
Key Emerging Themes	If seen as Relevant: then held positive view of KMI; engaged with the school	If seen as not relevant to my child; still thought it was good for the school; but didn't see the need to engage	Believed in it New Knowledge re MH Set up strong support for SEL programs KM gave a framework	If they liked the Program they integrated it Hated KMI if it was seen as more work "on top"
Some issues for consideration	New knowledge was appreciated		Needed to be Passionate	Were able to approach kids differently: looked for underlying issue/concern
	Common Language Action Team = Agents of change for parents and teachers			

Chapter 4.
Content and Format of Data Files

The KidsMatter database contains student, teacher, and school data collected in the 100 schools that participated in the KidsMatter Initiative, over four occasions. In total, the database contains responses for 4980 students provided by their parents and teachers, 100 school principals, and eight state-based Project Officers. This chapter describes the content and format of the database, which is contained in eight data files.

Data Files

The eight KidsMatter data files reflect the result of an extensive series of data management steps taken to ensure the comparability, quality, accuracy, and general utility of the database in order to provide a strong foundation for secondary analyses. They contain responses to questionnaires administered on multiple occasions. The arrangement of occasions is vertical, so that for each student there may be up to four cases with duplicate student identification (SID) codes.

Code Book

The Codebook is presented in Appendix B and documents the structure of each of the eight raw KidsMatter Evaluation data files, as well as information about the format and coding of the variables in each of the data files.

4.1 Data File Naming Convention

The filenames of the data files included with this database consist of a character string descriptor followed by a three character file extension, and use the following conventions:

Chars 1-2	**Chars 3-10**	**File extension**
km = KidsMatter	stupop = Student population	.SAV = SPSS data
	school = School background items	.XLS = Excel data
	teacher = Teacher-view items	.DOC = Word data
	parent = Parent-view items	
	student = Student-related items	
	proforma = Proforma items	
	exesum = Executive summary items	
	ssv = Stakeholder and Student Voice quotes	

4.2 Coding Convention

A series of conventions were adopted to code the data included in the data files. The values assigned to each item in the questionnaires depend on the item format and the number of options available. For the multiple-choice items, one-digit numerical values are used to correspond to the response option, for example 1 represents ‘male’ and 2 represents ‘female’. The majority of items developed for the main questionnaires, utilise a seven-point Likert scale response system ranging from ‘Strongly disagree’ to ‘Strongly agree’, and are accordingly coded from 1 to 7. Constructed-response items such as ‘number years of teaching experience’ are coded with the actual number given as a response to

the question. The complete listing of code values for each item in the database are presented in the Codebook in Appendix B.

4.3 Missing Code Value

All non-id-related variable values in the KidsMatter data files are numeric. Some values are reserved for missing data codes. All data files employ a single missing code value (-1) to represent all missing data. During the data cleaning process, all responses that appeared as unreadable (scanning error) or uninterpretable (multiple responses), were visually inspected and all were corrected, yielding no missing data of this form.

For questions or items that a parent, teacher, school principal, or Project Officer should have answered but did not answer, a value of -1 is assigned. These missing values arose for several reasons.

1. The participant might have chosen not to answer an item or inadvertently missed an item.
2. The participant felt that a section of items were not relevant to them personally or at a particular point in time (most commonly found in Round 2 schools) and either left the items blank or wrote N/A next to the item.
3. Items from a whole page of a questionnaire were missing due to the school incorrectly photocopying a questionnaire or a page was detached and misplaced (rarely).
4. The questionnaire was returned only partially completed suggesting that the participant did not have enough time or was not willing to complete the remaining items.
5. The questionnaire was returned uncompleted or was not returned at all. In 800 postal parcels, only one box was never received.
6. The questionnaire was not administered on a particular occasion to a particular group. For example, parents were not involved on Time 2. Some schools also were slow in getting questionnaires sent out or misplaced the box and did not find it in time to administer the questionnaires. On one occasion a box was returned unopened, apparently wrongly addressed.

4.4 Identifying and Matching Teacher to Student

In order to make best use of the extensive database it was important to be able to identify and then link teacher to student, beyond that of the school level, and track them over time. The challenge of matching teacher to student, when there was no mechanism for doing this on the parent or teacher questionnaires, relied on schools to complete a so-called 'Student Sample List' on each evaluation occasion by writing the teacher's name next to each student in a space provided. Figure 3 (see Chapter 1) presents an example of a student sample list used in the administration of questionnaires. The multi-purpose sample list was designed in order to allow schools easily to identify selected students, to choose replacement students on the first occasion, to track the progress and returns of both parent and teacher questionnaires, and ultimately to provide the key to identifying participants and matching teacher to student to questionnaires by using a uniquely identifiable questionnaire numbering system.

4.4.1 Teacher identification and tracking teachers over time

Teacher identification on the teacher questionnaire and supplementary questionnaires were kept at a minimum in order to provide a sense of anonymity and gain more truthful responses. However, other strategies were put in place to capture this information second-hand, through the Student Sample List. There was no identification, other than the student's name, asked for on the teacher supplementary questionnaires for each of their students. The only form of identification requested on the teacher questionnaire was the teacher's initials. These were then checked against the

teacher's name provided on the Student List. Because of the discrepancy in initials provided on various occasions by the same teacher, the lengthy process of matching teacher across occasion and then to the student, was undertaken by hand to avoid errors incurred by mismatched teacher initials.

Questionnaire identification numbers were not pre-assigned to teachers, as was done for the student questionnaires to parents and teachers, since it was not known prior to the evaluation period, which teachers were participating on any particular occasion. Some schools did attempt to match the same teacher to the same questionnaire number across the occasions, even though they were not required to do so, and as such this was not consistently done and was not a reliable method of tracking teachers.

4.4.2 Student identification and tracking students over time

Once the random sample of students were selected and then sorted by age, a uniquely identifiable number was initially assigned to each student for the first evaluation period, based on the school identification number and a questionnaire number. The questionnaires were numbered 1 to 76 consecutively with numbers 77 to 85 provided as spares. The selected students and non-selected students from the enrolment list were then sorted by age to create the student sample list and support in the replacement of students who chose not to participate. Upon return of the first phase of questionnaires and the accompanying student sample lists it was clear that in many cases there were variations in the original sample of randomly selected students and those that actually participated in the evaluation. Participating students were then assigned their final identification number, identifying them for the duration of the evaluation and linking them to the Parent Questionnaire and the Teacher Supplementary Questionnaire, across the four occasions.

4.4.3 Linking teachers to students across occasions

Most schools provided the teacher name against each student on each occasion. However, some schools provided it on only one occasion within each year or not at all. When no data linking teacher to student was available, the school was followed up and the information requested by email. In most instances, this information was provided, minimising the extent of missing data. Nevertheless, there were still instances for individual students where the information was not available on any of the occasions and these remained as missing data. The instances for which data were available on either the first or second occasion in 2007 and on either the third or fourth occasion in 2008, the assumption was made that the student had the same teacher for the full year and the information was used accordingly.

To complicate further the matching process, students did not necessarily have the same teacher or teachers throughout a school year. Furthermore, some students were in classes that had team teaching so their teacher supplementary questionnaire might have been completed by one or both teachers. In a few cases, both teachers completed a teacher questionnaire so that each of their students were linked to two teacher questionnaires. In these circumstances, the two teacher questionnaires were averaged and assigned a new teacher identification number (id numbers 90 to 95), preserving the original questionnaires for maximum flexibility during secondary analysis. There were only a few cases of team-teaching where teacher questionnaires were completed by both teachers and fortunately both teachers in each teaching team were female.

Despite the apparent complexity of this manual method of identifying, matching and tracking respondents, the resulting matched lists are now error free with missing data minimised.

4.5 Using the KidsMatter Database

This section provides an overview and some tips about how to use the KidsMatter data files. While much analysis can be undertaken using the KidsMatter data files independently, there may be a need

to combine files, so discussion about which variable to use to facilitate the merging of files, is presented.

4.5.1 Identification and linkage variables

In all data files, several identification variables are included that provide information used to identify schools (SCHID), students (SID), teachers (TID), and occasions (OCC). These variables are presented in Table 7 and are used to link cases between the different data files. The discussion here refers to the process undertaken using SPSS and its Merge Files facility.

Table 7. Linkage variables across the KidsMatter data files

File Name	*Name*	*Linkage variables*			
kmstupop.sav	*Student Population Background Data*	*SCHID*		*SID*	
kmschool.sav	*School Background Data*	*SCHID*			
kmteacher.sav	*Teacher Questionnaire Data*	*SCHID*	*OCC*		*TID*
kmparent.sav	*Parent Questionnaire Data*	*SCHID*	*OCC*	*SID*	*TID*
kmstudent.sav	*Student Background and Mental Health Data*	*SCHID*	*OCC*	*SID*	*TID*
kmproforma.sav	*Project Officer Proforma (Quantitative) Data*	*SCHID*	*OCC*		
kmproforma.xls	*Project Officer Proforma (Qualitative) Data*	*SCHID*	*OCC*		
kmexesum.xls	*School Leadership Executive Summary Data*	*SCHID*			

Each school has a unique identification number (SCHID) from 1 to 101. Each, student has a unique identification number (SID) starting with their school ID and followed by two digits. These so called 'student' cases actually contain the responses from the parent and teacher of the student. Each teacher has a unique teacher identification number (TEAID) and a non-unique student-teacher identification number (TID), which allows one teacher to be linked to one or more of their students. The occasions on which the questionnaires were administered have unique identification numbers (OCC) from 1 to 4. In order to identify and link appropriate cases in each file across occasions, OCC is used in combination with the other linkage variables.

4.5.2 Examples of how to link files

The tips described here for linking files make use of the Merge Files facility in SPSS Version 15.

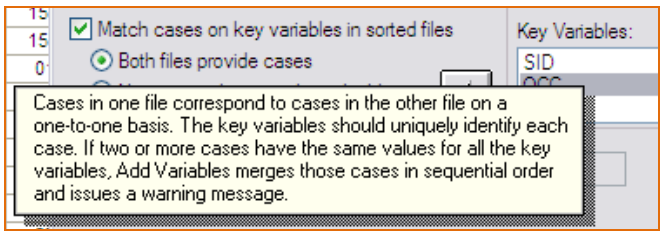
Some basic steps are provided here.

1. Before merging files it is necessary to decide what variables need to be brought together and sort the files on the appropriate linkage variables first. In most cases it is probably necessary to sort and then match by SID and OCC.
2. Since all files contain different numbers of cases, it is necessary to decide which of the two files is going to be the keyed table. The choices are (a) Both files, shown in Screen 53, (b) Non-active, given in Screen 54, or (c) Active, shown in Screen 55, and depending on what is selected, will combine them in different ways.
3. It is strongly recommended that a copy is made of the starting (Active) file before merging because it cannot be undone.

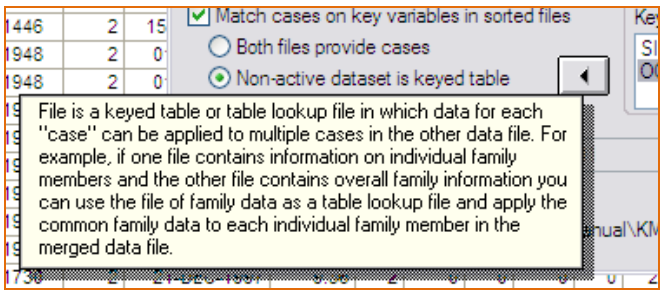
Example: Merging parent with student and retaining the same number of parent cases (assuming they have already been sorted by SID and OCC).

1. With a copy of kmstudent.sav open, select Data → Merge file → add variables.
2. Browse and Select kmparent.sav
3. Match cases on SID and OCC using Active Dataset (see Screen 55), then remove items that are not wanted in the merged data file → OK.

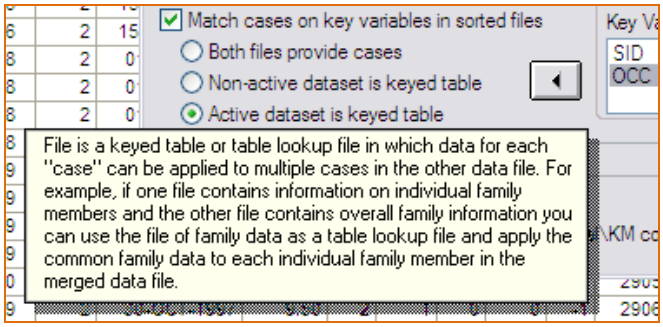
The merged file should have 230 variables and 9746 cases. This choice preserves the fact that the kmparent.sav file has Time 2 missing, and so removes all students on Time 2, otherwise the amount of missing data is substantial.



Screen 53



Screen 54



Screen 55

Chapter 5.
Treatment of Missing Data

This evaluation primarily involves the collection of longitudinal data, on up to four occasions. Inevitably there are missing data in the information collected both within and between occasions. This chapter is concerned with the issues that arise in this investigation in the treatment of the missing data in subsequent analyses.

5.1 Background

The existence of missing data is likely to bias the findings of the study with respect to its representativeness, unless care is taken in the treatment of the problems raised by the occurrence of the missing data. Some of the issues raised by the lack of randomisation can be overcome by the use of procedures of statistical control in the analyses of the data in order to remove the effects of bias that may arise from imbalance, for example, the imbalance associated with the regions in which the schools are located. Likewise, the effects of the missing data on the representativeness of the sample can be provided for by replacing the data that are missing by values that serve an appropriate purpose in the particular analyses being carried out. Random selection of missing values serves little purpose, because the principal of randomisation has largely been abandoned from the outset in this study.

In this investigation there are two general types of data that are available for statistical analysis and for describing the characteristics of the schools, parents, teachers and students involved in this study and in the situation under examination. The first type of data relates to the characteristics of the schools, parents, teachers, and the students and, in the main, involves the assignment of coded values to categories associated with a specific characteristic, for example, whether a student is a boy or a girl. The second type of data relates to measures obtained using instruments developed or modified for the specific purpose of yielding information about the mental health of each student that is likely to change over time as the result of an intervention in the school or the home, or merely the passing of time. The data obtained from the use of these assessment instruments or questionnaires are best scaled on an interval scale of measurement in such a way that changes in score values between occasions are equivalent across the different levels of the scale. The replacement of the missing values for these two types of data must necessarily be carried out in different ways, because the data differ in kind, since one type is categorical and the other type involves scores on scales of measurement. However, the difference between the two types of data may not appear to be as great as suggested above. In the instruments employed to assess the level of mental health of a student, the respondent is required to choose a response category that is best incorporated into and calibrated within a measurement scale. However, in the collection of the first type of data the assigned category is merely given a rank scale score so that the data can be subjected to statistical analysis, for example, with boys coded one (1) and girls coded two (2). In the subsequent statistical analysis, the computer must work with the numbers involved in similar ways, and the differences between the two types of data may seem to have largely disappeared.

An issue arises with both types of data with respect to the degree or extent of the data that are missing, before it must be argued that the information on a particular characteristic is inadequate for appropriate replacement, since the representativeness of the data no longer holds. Currently, the PISA Studies conducted by the OECD argue that if in excess of 15 per cent of the data on any specific characteristic, such as Reading Literacy, are missing, then the country providing the data is best removed from consideration in subsequent reporting and analyses. This seems to have set a specific standard for the treatment of missing data, although the new standard is not widely acknowledged. However, countries now strive to achieve this standard.

5.2 Types of Missing Data

Analysis of missing data within the whole-cohort longitudinal database revealed an acceptable range below 5 per cent on most items, but up to an unacceptable level of 50 per cent on a few items. Those items with high levels of missing data were anticipated and correspond to the items that were optional. Other forms of missing data also occurred. Some of the missing data were due to participants inadvertently missing an item or choosing not to answer it, often writing 'N/A' next to the item. This was particularly evident, and not unexpected, in the Round 2 schools for which the KidsMatter Initiative had not commenced within their school. Hence, it was difficult for participants to respond to statements about the impact of KidsMatter. In another example, one school had photocopied the questionnaire incorrectly, missing the even pages, prior to sending it out to parents. Another form of missing data occurred from the decision not to include parents in the second occasion of data collection, thus there was a whole occasion missing. In addition, missing data also occurred due to the non return of one or two questionnaires for a particular student. For example, a parent-rated questionnaire may have been returned, but the complementary teacher-rated form for that student may not have been returned. In such circumstances, if the parent had given consent for the teacher to participate, the school was contacted and the missing teacher-rated form was requested. Very few parents did not want the teacher to complete a questionnaire on their child, and in some cases, parents gave consent for the teacher to participate but chose not to participate themselves. Where a parent-rated form was missing, there was no additional follow-up beyond the agreed strategies to maximise questionnaire completions.

5.3 Analysis of Missing Data and Possible Sources of Bias

An analysis of missing data was undertaken to establish any group differences so that the importance of replacing missing data could be established and decisions made about their treatment. An initial series of group comparisons were made using independent sample t-tests in SPSS, but it is acknowledged that this analysis should be further examined using WesVar5.1, to take into consideration the nested nature of the data. However, given the skewed nature of many of the items, this is also problematic, since WesVar depends on assumptions of normality (Brick, et al., 1997).

5.3.1 Participant with population comparison

Analysis of group differences between those students who were nominated through random selection or were a replacement, and those who did not, suggest that there were significant differences between the student groups on a number of variables. Table 8 presents the results of this analysis. In the nominated group there were fewer young students (as expected), more student identified 'at risk' (as expected), fewer males, and fewer Aboriginal and Torres Strait Islander students. Accordingly, nominated students are not missing at random and findings need to be viewed in this context, acknowledging this potential bias.

5.3.2 Those who were selected versus those who participated

Table 9 presents the results of the analysis of group differences between those students who were nominated and those who actually received parent consent for questionnaires to be completed. It

suggests that there are significant differences between the student groups on gender, 'at risk' status and ATSI. In the participating group there are fewer males, fewer 'at risk' and fewer ATSI than the non-participant group. Accordingly, respondents are not missing at random and findings need to be viewed in this context, acknowledging this potential bias.

Table 8. Analysis of group differences in missing data for participant with non-participant comparison

						t-test for Equality of Means					
	Sample	*N*	*Mean*	*Std. Dev.*	*Std. Error Mean*		*t*	*df*	*Sig. 2-tailed*	*Mean Diff.*	*Std. Error Diff.*
AGE	*non-participant*	*3081*	*9.71*	*1.65*	*0.03*	*EVA*	*0.478*	*7421*	*0.632*	*0.018*	*0.038*
	participant	*4342*	*9.69*	*1.59*	*0.02*						
SEX	*non-participant*	*3081*	*1.47*	*0.50*	*0.01*	*EVA*	*-3.927*	*7421*	***0.000***	*-0.046*	*0.012*
	participant	*4342*	*1.52*	*0.50*	*0.01*						
RISK	*non-participant*	*3081*	*0.35*	*0.48*	*0.01*	*EVNA*	*6.194*	*6393*	***0.000***	*0.068*	*0.011*
	participant	*4342*	*0.28*	*0.45*	*0.01*						
ATSI	*non-participant*	*2758*	*0.08*	*0.28*	*0.01*	*EVNA*	*5.978*	*4878*	***0.000***	*0.037*	*0.006*
	participant	*3942*	*0.05*	*0.21*	*0.00*						
ESL	*non-participant*	*2648*	*0.17*	*0.37*	*0.01*	*EVA*	*0.310*	*6428*	*0.757*	*0.003*	*0.009*
	participant	*3782*	*0.16*	*0.37*	*0.01*						

EVA = Equal variances assumed; EVNA = Equal variances not assumed.

Table 9. Analysis of group differences in missing data for those who were selected versus those who participated

						t-test for Equality of Means					
	Sample	*N*	*Mean*	*Std. Dev.*	*Std. Error Mean*		*t*	*df*	*Sig. 2-tailed*	*Mean Diff.*	*Std. Error Diff.*
AGE	*non-participant*	*23169*	*8.72*	*1.97*	*0.01*	*EVNA*	*-36.9*	*8519*	***0.000***	*-0.965*	*0.026*
	participant	*4979*	*9.69*	*1.60*	*0.02*						
SEX	*non-participant*	*23169*	*1.49*	*0.50*	*0.00*	*EVNA*	*-3.7*	*7277*	***0.000***	*-0.029*	*0.008*
	participant	*4979*	*1.52*	*0.50*	*0.01*						
RISK	*non-participant*	*23169*	*0.17*	*0.37*	*0.00*	*EVNA*	*-16.6*	*6530*	***0.000***	*-0.113*	*0.007*
	participant	*4979*	*0.28*	*0.45*	*0.01*						
ATSI	*non-participant*	*21416*	*0.11*	*0.50*	*0.00*	*EVNA*	*2.2*	*6984*	***0.025***	*0.017*	*0.008*
	participant	*4515*	*0.09*	*0.45*	*0.01*						
ESL	*non-participant*	*20517*	*0.15*	*0.36*	*0.00*	*EVNA*	*-1.2*	*6254*	*0.221*	*-0.007*	*0.006*
	participant	*4353*	*0.16*	*0.37*	*0.01*						

EVA = Equal variances assumed; EVNA = Equal variances not assumed.

5.3.3 Groups with parents who did not participate versus groups with parents who did

Of those students who were selected, analysis of group difference between those parent informants who did not want to participate but consented for the teacher to participate, versus students with at least one parent response, suggests that there is significant difference between the students groups on 'at risk' status and Aboriginal and Torres Strait Islander students.. The results of the analyses are presented in Table 10. For the group of parent informants that chose to participate there were fewer students 'at risk' and fewer Aboriginal and Torres Strait Islander students. Accordingly, respondents are not missing at random and findings need to be viewed in this context, acknowledging this potential bias.

5.3.4 Groups with teachers who did participate versus groups with teachers who were missing

Analysis of group differences (in the students about whom teachers reported) between those teacher informants who did not participate versus those with at least one response suggests that there are significant differences between the (student) groups on ESL and marginally on AGE (see Table 11). For the teachers who chose to participate, there were fewer older students and fewer students with

English as a second language. Accordingly, respondents are not missing at random and findings need to be viewed in this context, acknowledging this potential bias. There were no apparent reasons suggested by schools to explain any differential response rates.

Table 10. Analysis of group differences in missing data for groups with parents who did not to participate versus groups with parents who did

						t-test for Equality of Means				
								Sig.		Std. Error
	Sample	*N*	*Mean*	*Std. Dev.*	*Std. Error Mean*	*t*	*df*	*2-tailed*	*Mean Diff.*	*Diff.*
AGE	*parent missing*	*435*	*9.76*	*1.59*	*0.08*	*EVA*	*1.058*	*4977*	*0.290*	*0.085*	*0.080*
	parent present	*4544*	*9.68*	*1.61*	*0.02*					
SEX	*parent missing*	*435*	*1.49*	*0.50*	*0.02*	*EVA*	*-1.482*	*4977*	*0.138*	*-0.037*	*0.025*
	parent present	*4544*	*1.52*	*0.50*	*0.01*					
RISK	*parent missing*	*435*	*0.34*	*0.47*	*0.02*	*EVNA*	*2.714*	*510*	***0.007***	*0.064*	*0.024*
	parent present	*4544*	*0.27*	*0.44*	*0.01*					
ATSI	*parent missing*	*432*	*0.13*	*0.34*	*0.02*	*EVNA*	*5.816*	*458*	***0.000***	*0.097*	*0.017*
	parent present	*4369*	*0.04*	*0.19*	*0.00*					
ESL	*parent missing*	*379*	*0.16*	*0.36*	*0.02*	*EVA*	*-0.126*	*4563*	*0.899*	*-0.002*	*0.020*
	parent present	*4186*	*0.16*	*0.36*	*0.01*					

EVA = Equal variances assumed; EVNA = Equal variances not assumed.

Table 11. Analysis of group differences in missing data for groups with teachers who did participate versus groups with teachers who were missing

						t-test for Equality of Means				
								Sig.		Std. Error
	sample	*N*	*Mean*	*Std. Dev.*	*Std. Error Mean*	*t*	*df*	*2-tailed*	*Mean Diff.*	*Diff.*
AGE	*teacher missing*	*87*	*10.05*	*1.49*	*0.16*	*EVA*	*2.135*	*4977*	***0.033***	*0.370*	*0.173*
	teacher present	*4892*	*9.68*	*1.60*	*0.02*					
SEX	*teacher missing*	*87*	*1.53*	*0.50*	*0.05*	*EVA*	*0.184*	*4977*	*0.854*	*0.010*	*0.054*
	teacher present	*4892*	*1.52*	*0.50*	*0.01*					
RISK	*teacher missing*	*87*	*0.29*	*0.46*	*0.05*	*EVA*	*0.214*	*4977*	*0.830*	*0.010*	*0.048*
	teacher present	*4892*	*0.28*	*0.45*	*0.01*					
ATSI	*teacher missing*	*78*	*0.03*	*0.16*	*0.02*	*EVA*	*-0.866*	*4799*	*0.386*	*-0.021*	*0.024*
	teacher present	*4723*	*0.05*	*0.21*	*0.00*					
ESL	*teacher missing*	*80*	*0.28*	*0.45*	*0.05*	*EVNA*	*2.358*	*81*	***0.021***	*0.119*	*0.051*
	teacher present	*4485*	*0.16*	*0.36*	*0.01*					

EVA = Equal variances assumed; EVNA = Equal variances not assumed.

5.4 General Conditions for the Replacement of Missing Data

The general conditions associated with the removal from analyses of variables for which more than 15 per cent of the expected data are missing must be considered to be appropriate. However, for the Parent and Teacher Questionnaires, where responses are obtained on two or more occasions, it is likely that on the final occasion there is a loss of more than 20 per cent of the cases. Under these circumstances some flexibility is required, in so far as two or more occasions are required for the assessment of change. Consequently, lack of adequate data for the assessment of change is automatically dealt with by the computer program where the data are associated with the criterion variable. Where the criterion variable is subjected to these automatic procedures, two alternative approaches can be pursued.

First, the automatic procedure can be employed with all available cases involved, referred to as available cases (AC) analysis or pairwise deletion approach. This inclusion requires the subsequent examination of the reliability of relationships and may lead to abandoning this approach.

Secondly, a listwise deletion (LD) approach can be pursued, even though this may lead to a substantial loss of data and to an unknown degree of bias, but is likely to yield stable estimated

relationships that are meaningful. Both approaches require examination, even though they may involve less than 85 per cent of the original numbers of cases for which data are available.

When the data are associated with an independent variable, the 15 per cent deletion rule is best employed. However, this does not, in the main, pose problems since the first occasion can generally be considered to be complete, or at least satisfy the 85 per cent deletion requirement. Moreover, in the testing of causal relationships within multivariate and multilevel models, the first occasion prior to an intervention is the logically preferred values in the analyses. However, the imputation of data assumes an underlying normal distribution that cannot, for many variables, be meaningfully employed. Where the computer program makes provision for the use of median values or specific distributions these can be employed for coping with missing data. The use of plausible values and conditioning procedures must be considered to involve underlying normal distributions and thus must, in general, be rejected on these and other grounds. Where the data are categorical in nature and where the variable involved operates as an independent variable, it would appear that the MPlus missing data modules can be employed, provided the 85 per cent requirement is satisfied (see Schafer and Graham, 2002). Where the data are associated with a scale of measurement, procedures involving item response theory are commonly employed.

5.5 Treatment of Non-Parametric Missing Data

Based on the steps involved in the data analyses outlined in Chapter 1, a discussion about the treatment of missing data is summarised in Table 12 and gives some understanding of the challenges of appropriately undertaking this task. Analyses presented in the Final Report took a conservative approach and, where possible, selected procedures that did not require complete data and the need for imputation.

Clearly, these six different tasks associated with the analysis of data involve different demands on the data. Consequently, the replacement of missing data is associated with different analytical procedures being used within some of the programs employed for the testing of models and the estimation of effects involving skewed data and the use of non-normal distribution or asymptotic distribution-free estimation, as well as internal provisions within the program for missing data. Under these circumstances it is necessary to consider not only general procedures for the replacement of missing data, but also the procedures that need to be considered when a particular computer program is employed. Some programs available provide for the analysis of data that do not satisfy the conditions for both the dependent and independent variables, as well as empirical Bayes estimation procedures (Darmawan, 2002).

Table 12. Treatment of missing data at different stages of analysis		
	Stage of Analysis	**Treatment of non-parametric missing data**
1	**Data preparation**: Scanning and cleaning the raw data, matching items and students across instruments and occasions, removing wild codes and examining the score distributions for all sets of data.	Ensure all missing data are replaced by the missing value code: -1
2	**Exploratory analyses of scales**: Undertaking initial exploratory analyses to examine the structure of the scales using canonical analysis with asymptotically distribution-free (ADF) estimation.	It is suggested that pairwise deletion is best employed here, since it provides values that are examined and relationships are estimated with all available data and these estimates are assumed to apply for cases where data are missing. ADF requires complete data. For a preliminary analysis to establish strongly scaled scores, missing data are best replaced by median values for scaled data.
3	**Constructing and calibrating strong scales**: Deriving scores associated with these scales.	Analyses are best carried out as are outlined, with cases that, in general, have (i) less than 85 per cent of item responses removed from the initial analysis; (ii) responses to all items being the only cases involved in calibration; and (iii) scores estimated for only those cases that have responded to at least 85 per cent of items on the scale or have responded to at least three out of five items on the subscale.
4	**Analyses of outcome measures**: Undertaking analyses using the categorical data to test specific hypotheses concerned with the identification of mental health categories and implementation categories using latent class analysis.	Missing data replacement for categorical sets of data are best undertaken with the MPlus program using the appropriate procedures incorporated in the program.
5	**Examination of change with scaled data**: Undertaking simple analyses with scaled data to investigate the nature and extent of change and the influence of selected individual factors on change using hierarchical linear modelling with associated statistical and practical significance testing.	HLM is best employed and in general, linear change is to be expected with Poisson score distributions providing for the skewness of the scaled data. However, with four occasions under consideration curvilinear change can be considered, and only cases with four data points are required. For the examination of linear change, at least two data points are required and at least three or four data points may be required to obtain adequate indexes of reliability of relationships for effective analysis.
6	**Final Report to the Client**: Preparing a popular report that involves largely descriptive statements of the findings in addition to the use of simple structural equation modelling and simple hierarchical linear modelling.	If necessary, missing data are best replaced by median values for scaled data and modal or median values for categorical data, since means and standard deviations are not reported and standard errors are not required.

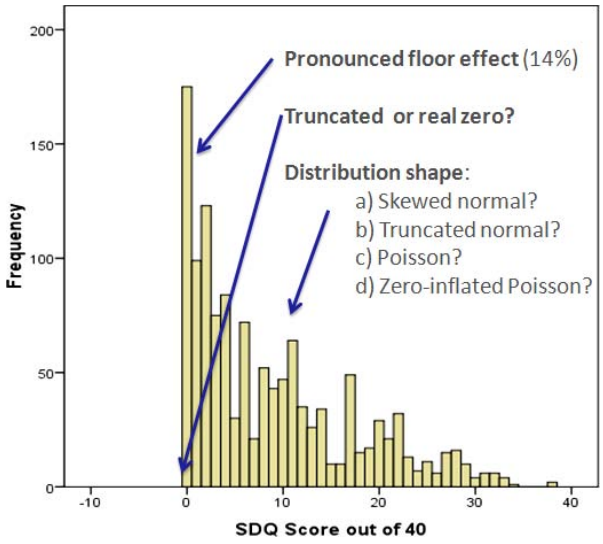
Chapter 6.
Scaling Methods and Procedures

This chapter continues with the discussion of preparing the raw data for subsequent analysis by examining the distributional characteristics of the 620 items, their validity and reliability, as well as the development of the factors used in the analysis presented in the Final Report.

6.1 Non-Parametric Distribution

Before scaling the KidsMatter data to derive variables for analysis and reporting, a range of diagnostic statistics were used to examine and evaluate the psychometric characteristics of each item. This review played a crucial role in the quality assurance of the KidsMatter data, enabling the detection of unusual item properties that could signal a problem on a particular occasion and identify appropriate methods of subsequent analysis. From the outset of this diagnostic process, it was clear that the majority of items in the Parent and Teacher questionnaires were heavily skewed and possibly truncated. One example is the distribution of the SDQ, shown in Figure 8, which clearly violated assumptions of normality. The decision was made to undertake all analyses at the item level with a non-parametric approach (Gregory, Lawson, Russell and Dix, 2008).

Figure 8. SDQ scores for a sample of Australian 10 year-olds



6.2 Confirmatory Factor Analysis using ADF

As implied in Chapter 3, items in the Parent and Teacher Questionnaires were developed or chosen with the intention of scaling the items in order to optimise validity and reliability.

The validity of a value is a descriptive term used to indicate how accurately the recorded values reflect the concept being measured. Burns (1998) describes five types of validity, which include predictive, concurrent, content, construct and face validity. From a research point of view, construct

validity is generally considered most important, and is the type of validity employed in this evaluation. Construct validity refers to the degree to which inferences can legitimately be made from the measures being studied to the theoretical constructs on which those measures are based (Trochim, 2000). Factor analytic procedures have been widely used, especially in the behavioural sciences, to assess the construct validity of a measure (for example, see Dix, 2007). However, due to the non-parametric distribution of the items, the usual methods involving factor analysis and other traditional techniques are considered to be inappropriate. For example, the outliers evident in the SDQ can distort correlations and the variance-covariance matrix, so the outliers may also distort the factor analysis.

While validity indicates how accurately and meaningfully a value reflects the concept being measured, reliability refers to how dependable the measure is. Both are important in establishing that an instrument truly measures what it purports to measure and that it does so consistently for every respondent. Reliability refers to the consistency, stability over time, and dependability of the values (Burns, 1998), or in other words, how free they are from random error. Although there are four commonly used methods for computing reliability estimates, which include test-retest, alternate forms, split-half, and internal-consistency, none of these methods were appropriate in this evaluation study due to the nature of longitudinal change.

Because many of the items had skewed distributions, the estimation of scale validity and reliability required the use of distribution-free techniques in preference to using transformations to normalise the data. In order to assess the unidimensionality of scale constructs, confirmatory factor analysis was carried out using AMOS (Arbuckle, 2007). Given the non-normal distributions and the large sample size it was seen as appropriate to use asymptotically distribution-free (ADF) estimation for each factor model (Browne, 1984; Garson, 2009; Hox, 1998; Kline, 1998). Asymptotically distribution-free estimation did not assume multivariate normality, and for this reason it was preferred over maximum-likelihood estimation methods. However, in order to use this feature of AMOS, complete data were necessary and imputation was unavoidable.

Analysis of missing data revealed a tolerable range below 20 per cent on items within each scale being confirmed. In the interests of simplicity, it was desirable that for common parent and teacher scales for the child, it was decided that the item structures should be the same for both. Accordingly, where parent and teacher items were in common, their scores were averaged to produce a single response for that item on each occasion. For the purpose of preparing the data to confirm the item structure of each scale, new data files were prepared, which contained parent-only items (N=9,745), teacher-only items (N=3,063), and averaged parent and teacher responses to the three shared student items (N=17,372) pertaining to mental health. The remaining missing values in these files were then replaced using the median of nearby points as an approximation for a complex sample, where design effects arose from the nested nature of students within schools. Analysis was conducted using data on four occasions (only three occasions for parents) further to ensure the reliability of the scales.

Simple factor models were built for each scale under consideration and assessed for goodness of fit. While inspection of the models provided an intuitive and aesthetic understanding of the strengths of relationships, the text output provided the actual information on which judgements could be based. By inspecting critical ratios, levels of significance, and magnitudes, items could be assessed for their significance and trimmed if they did not meet pre-determined criteria. In this evaluation, the criteria for trimming paths were based on a significance level of 0.05 and a minimum cut-off magnitude of the standardised weight and loading estimates of 0.1 and 0.3, respectively. Modification indices provided additional assistance in optimising models, by suggesting the possible addition of covariance paths between error terms. However, for simplicity, the error terms and any covariance between error terms are not shown in the models summarised in Table 13 and presented in the remainder of this chapter.

Table 13. Summary of confirmatory factor analysis (ADF), with goodness of fit indices, assessment of normality, and number of items

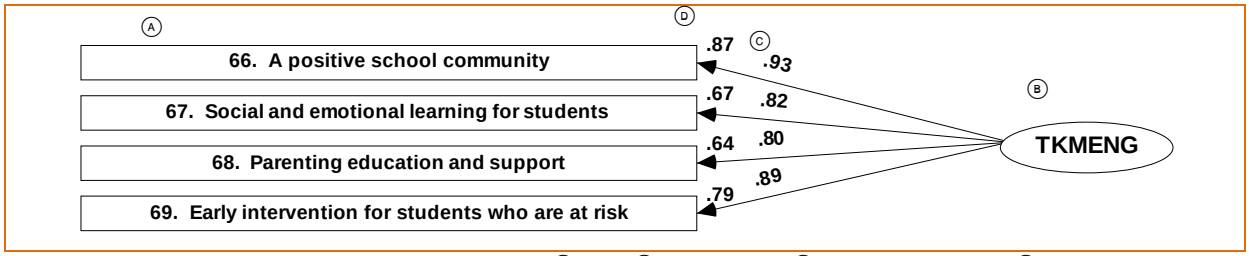
	RMSEA ≤ 0.05	*SRMR* ≤ 0.06	*CFI* ≥ 0.95	χ^2/*DF* ≤ 3.0	*Mardia's coefficient*	*No of items*
KM Engagement (TKMENG)	0.06	0.019	0.99	11.39	16.56	4
KM Implementation (TKMIMP)	0.02	0.011	0.99	2.51	136.35	11
KM Implementation (PKMIMP)	0.32	0.000	1.00		5.27	3
General Engagement (TMHENG)	0.02	0.012	0.99	2.29	64.62	10
General Engagement (PMHENG)	0.01	0.005	1.00	2.75	56.88	8
C1: Positive School Community (TPSC)	0.03	0.017	0.96	4.34	100.18	11
C1: Positive School Community (PPSC)	0.01	0.004	1.00	1.79	137.36	11
C2: Social and Emotional Learning (TSEL)	0.01	0.006	1.00	1.38	70.9	10
C3a: Parenting Support by School (TSUPSC)	0.00	0.002	1.00	0.50	28.39	6
C3a: Parenting Support by School (PSUPSC)	0.00	0.002	1.00	0.70	46.36	7
C3b: Parenting Support by Staff (TSUPST)	0.02	0.007	0.99	2.30	54.78	7
C3b: Parenting Support by Staff (PSUPST)	0.00	0.002	1.00	0.70	46.36	7
C4: Early Intervention (TEINT)	0.05	0.077	0.87	3.05	81.55	12
C4: Early Intervention (PEINT)	0.00	0.004	1.00	1.02	267.81	14
Staff Approach (TSTAFF)	0.00	0.009	1.00	0.85	43.07	7
Teacher SEL Attitude (TSELAT)	0.18	0.000	1.00		18.44	3
Teacher SEL Knowledge (TSELKN)	0.00	0.002	1.00	0.28	29.25	5
Teacher SEL Programs & Resources (TSELPR)	0.00	0.002	1.00	0.54	30.23	5
Teacher Self-Efficacy (TSELEF)	0.31	0.063	1.00		5.00	3
Parenting Knowledge (PARKNO)	0.02	0.003	1.00	4.05	27.00	4
Parenting Style (PARSTY)	0.15	0.000	1.00		33.51	2
Social and Emotional Competencies (TCSEC, PCSEC)	0.00	0.001	1.00	0.61	44.67	7
KM Professional Development (TKMPD)	0.00	0.001	1.00	0.11	42.35	4
KM Impact on Parent Involvement with School (PKMINV)	0.73	0.000	1.00		7.18	3
KM Impact on Parent Learning (PKMLRN)	0.00	0.001	1.00	1.08	235.94	7
KM Impact on Child (TKMCHI)	0.32	0.000	1.00		37.34	4
KM Impact on Child (PKMCHI)	0.39	0.000	1.00		26.95	4
Mental Health Difficulties (TMHD, PMHD)	0.33	0.000	1.00		5.25	3
Mental Health Strengths (TMHS, PMHS)	0.31	0.000	1.00		13.83	3
Total SDQ Difficulties (PSDQ, TSDQ)	0.01	0.007	1.00	2.65	125.01	20

Each model was tested using ADF estimation and non-significant items were removed when standardised weights were less than 0.1 (Bryne, 2001). The desirable indices of goodness-of-fit were, the Root mean square error of approximation (RMSEA ≤ 0.05), the Standardized root mean square residual (SRMR ≤ 0.06), and the Comparative fit index (CFI ≥ 0.95), in addition to the Chi-squared statistic (χ^2/DF ≤ 3.0). These indices were argued to perform better than other indices under non-normal distribution conditions and were less sensitive to sample size (Fan, et al., 1999; Marsh, et al., 1988; Schumacker and Lomax 2004). The SRMR and CFI returned indexes that suggested the factor models were acceptable; however, RMSEA was over inflated for models with few degrees of freedom in which the Chi statistic was not calculated. For scales with only three items, there were not sufficient degrees of freedom to compute certain statistics. Though, scales based on less than five items was not recommended, capturing these views was important and the scales were retained. Table 13 presents a summary of the confirmatory factor analysis (ADF) in terms of the goodness of fit indices and number of items. In addition, analysis of normality is also summarised in Table 13, with the reporting of the multivariate kurtosis value, known as Mardia's coefficient (Tabachnick and Fidell, 2007). Values of 2.0 or less mean there is non-significant kurtosis. Values greater than 2.0 mean there is significant kurtosis, which means significant non-normality. In all cases, Mardia's coefficients are well above the cut-off, confirm the need for using non-parametric methods.

The remainder of this chapter presents the confirmatory factor analysis models for each scale with asymptotically distribution-free estimation. Analysis was conducted using AMOS Version 17 (Arbuckle, 2007). The simplified models present the key features of the final arrangement of items (A) with non-significant items removed, the latent variable (B), along with standardised loading (C) and estimates of variance (D), indicated in the first figure.

6.2.1 KM engagement (TKMENG)

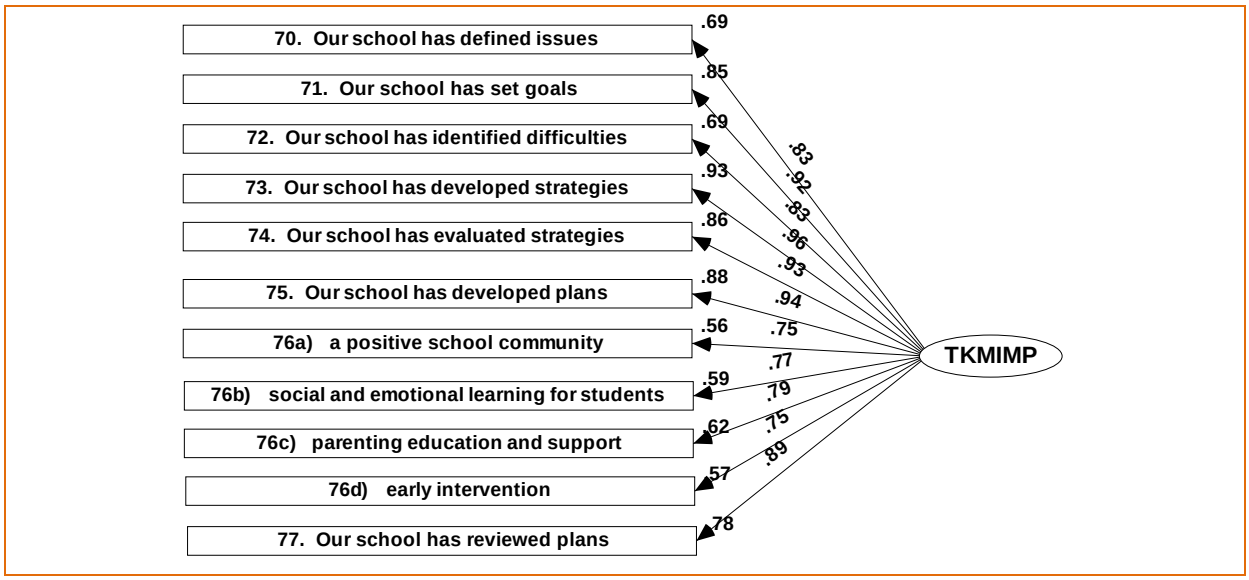
CFA with ADF estimation for the model of teacher views of school engagement with the KidsMatter Initiative (TKMENG) on the four Components is presented in Screen 56.



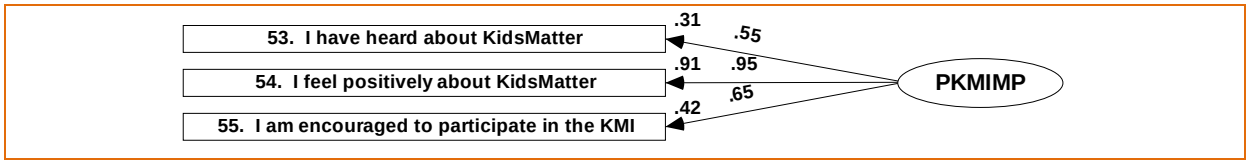
Screen 56: KM engagement (TKMENG) (Teacher) Ⓐ *items,* Ⓑ *latent variable,* Ⓒ *standardised loadings,* Ⓓ *estimates of variance*

6.2.2 KM implementation (TKMIMP, PKMIMP)

Screen 57 shows items in the KM implementation scale (TKMIMP) pertaining to teacher views of the 7-Step implementation process, while Screen 58 presents parent views of their involvement with the KidsMatter Initiative as a scale for the level of implementation (PKMIMP).



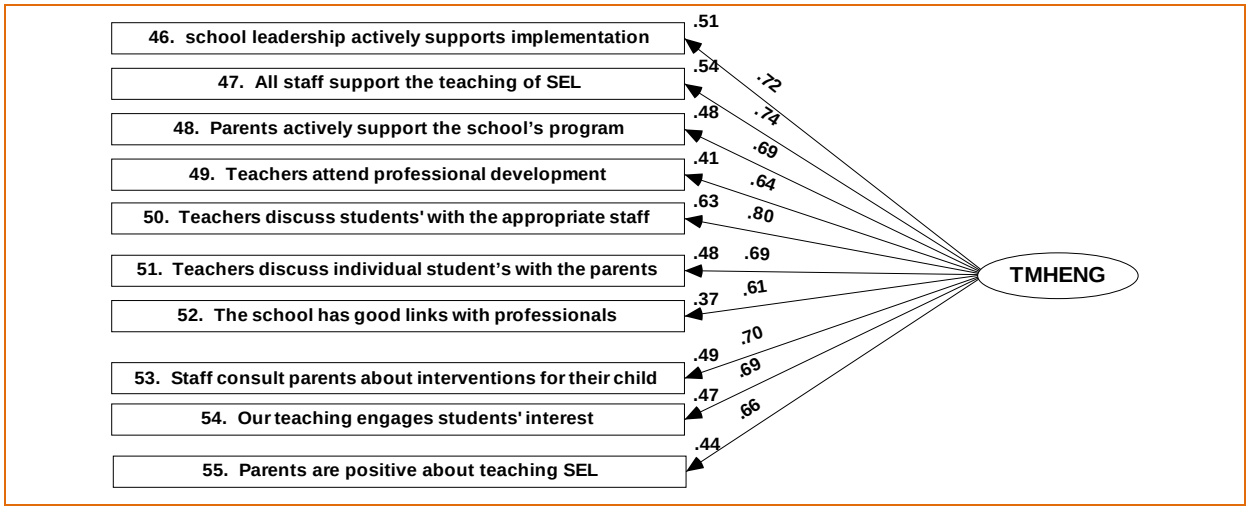
Screen 57: KM implementation (TKMIMP) (Teacher)



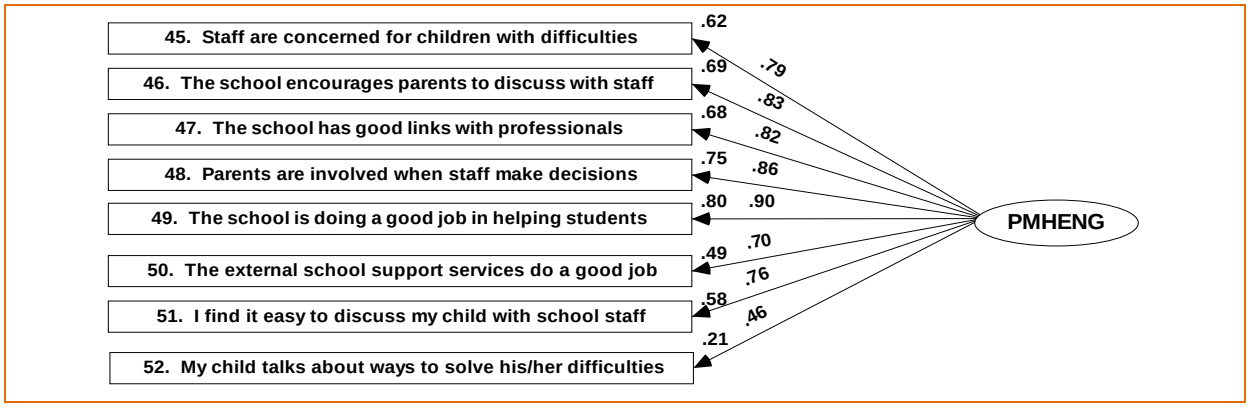
Screen 58: KM implementation (PKMIMP) (Parent)

6.2.3 General engagement with mental health & wellbeing (TMHENG, PMHENG)

The scales for teacher and parent views of their school's general engagement with mental health initiatives (TMHENG, PMHENG), with a focus on social and emotional learning are presented in Screens 59 and 60, respectively.



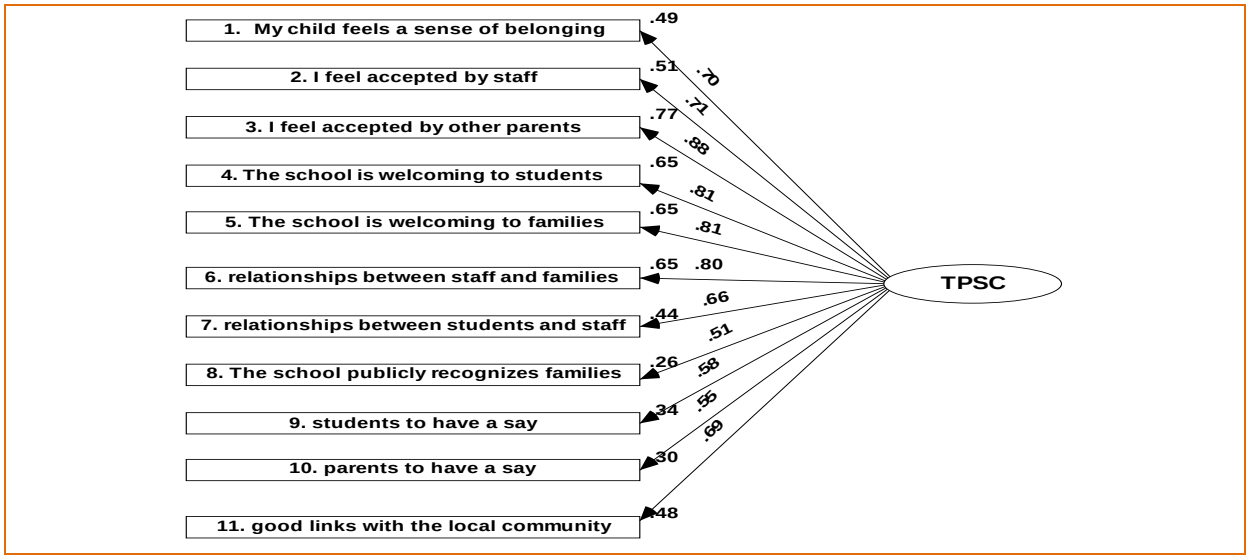
Screen 59: General engagement with students' mental health and wellbeing (TMHENG) (Teacher)



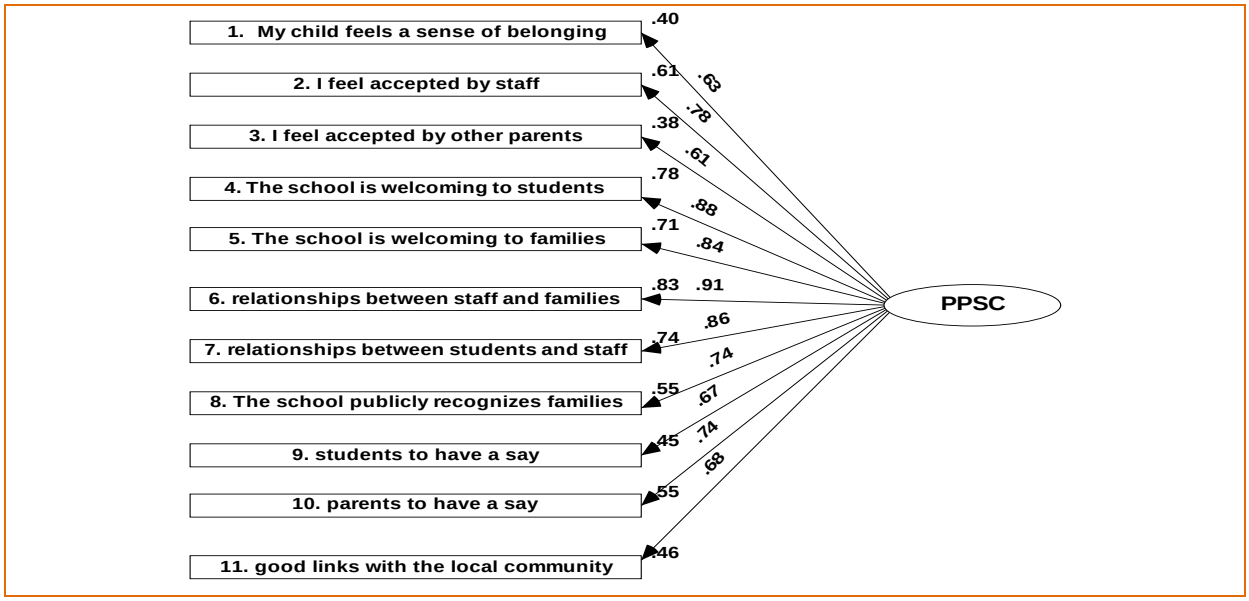
Screen 60: General engagement with students' mental health and wellbeing (PMHENG) (Parent)

6.2.4 C1: Positive school community (TPSC, PPSC)

The scales for Component 1, concerning a positive school community, are given in Screens 61 and 62 respectively, and show items about teacher (TPSC) and parent (PPSC) reflections on their school community, how welcomed they feel, and how engaged they feel.



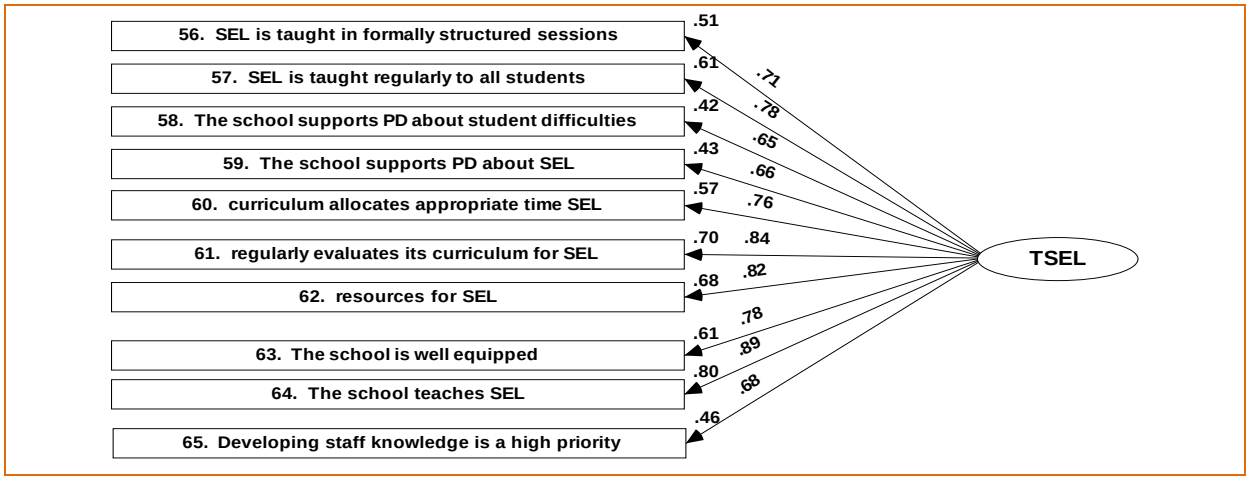
Screen 61: Positive school community (TPSC) (Teacher)



Screen 62: Positive school community (PPSC) (Parent)

6.2.5 C2: Social and emotional learning (TSEL)

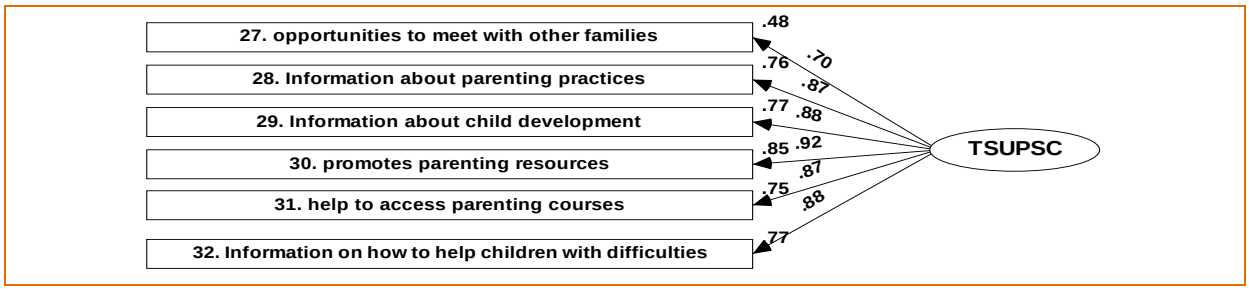
Screen 63 presents the scale for Component 2 (TSEL) and the items relating to teacher views about the school's provision of social and emotional learning in the curriculum, support for professional development opportunities, and level of appropriate resources.



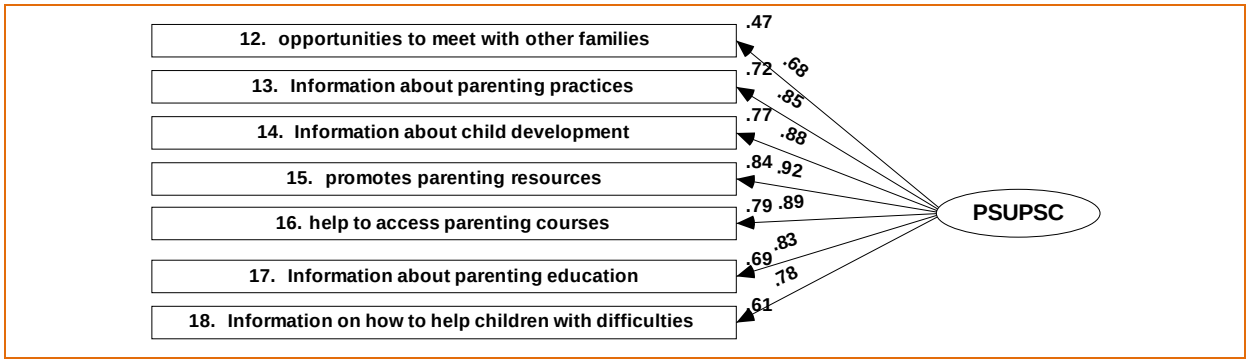
Screen 63: Social and emotional learning (TSEL) (Teacher)

6.2.6 C3a: Parenting support by school (TSUPSC, PSUPSC)

The scales of the first aspect of Component 3, concerning parenting support by schools, are presented in Screens 64 and 65. Items pertain to teacher (TSUPSC) and parent (PSUPSC) views about information and support provided by the school for parents.



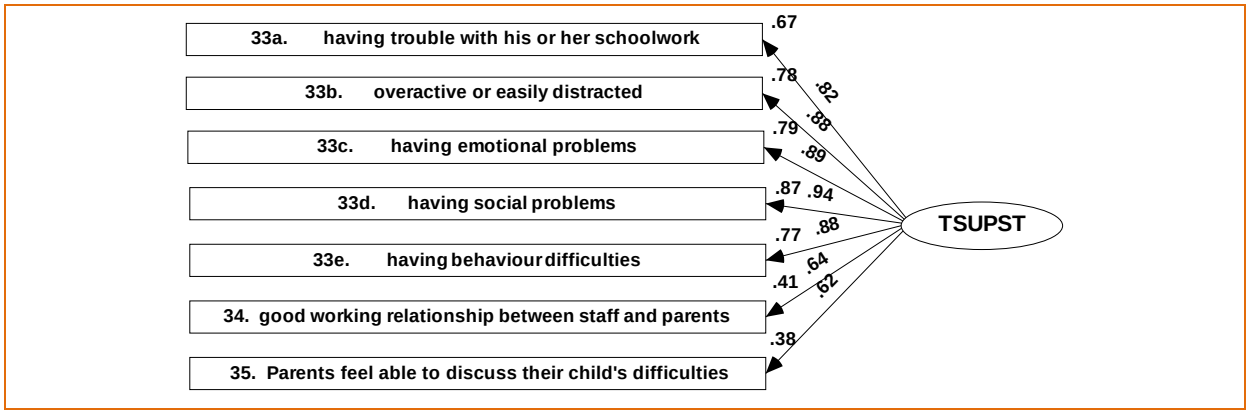
Screen 64: Parenting support by school (TSUPSC) (Teacher)



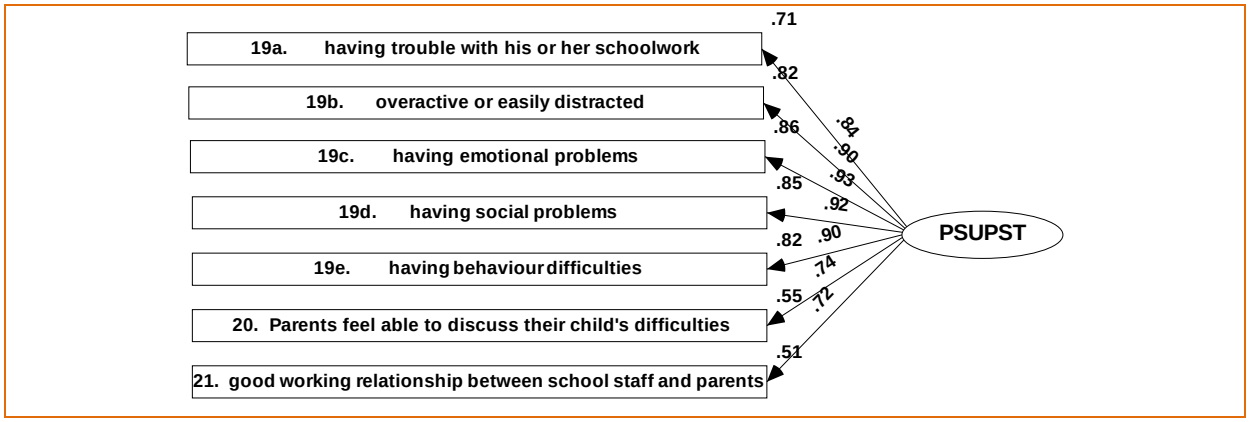
Screen 65: Parenting Support by School (PSUPSC) (Parent)

6.2.7 C3b: Parenting support by staff (TSUPST, PSUPST)

Screens 66 and 67 present the scales for the second aspect of Component 3, concerning parenting support by staff, and assess teacher (TSUPST) and parent (PSUPST) views about how accessible, informative and supportive staff are for providing parenting support.



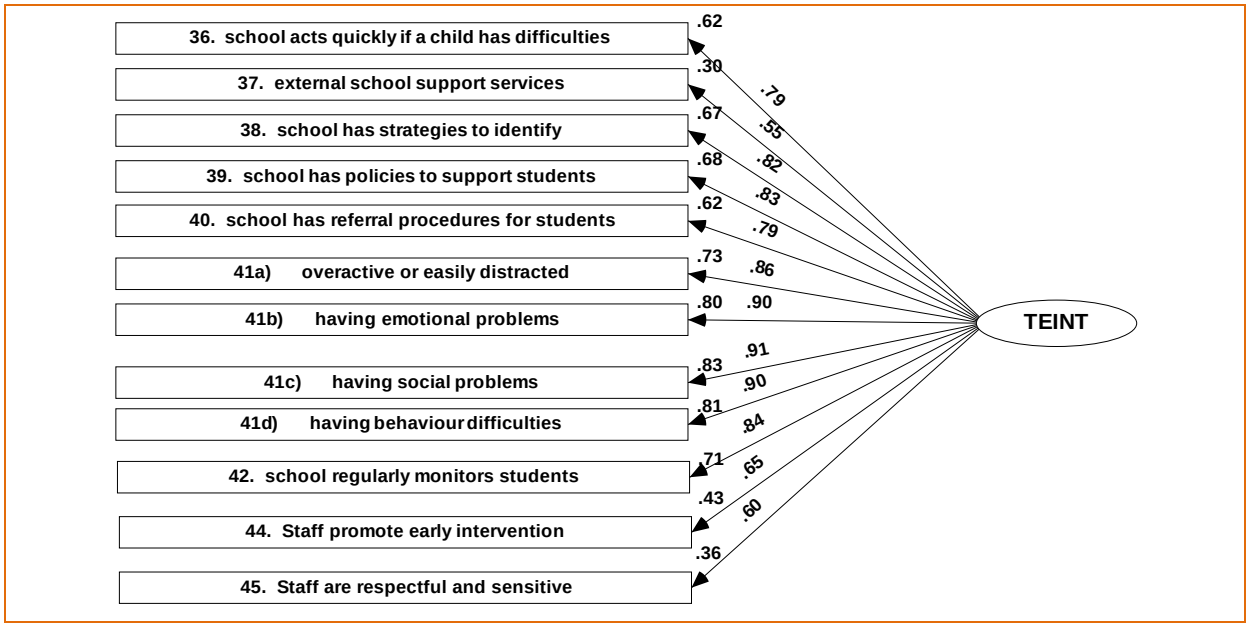
Screen 66: Parenting support by staff (TSUPST) (Teacher)



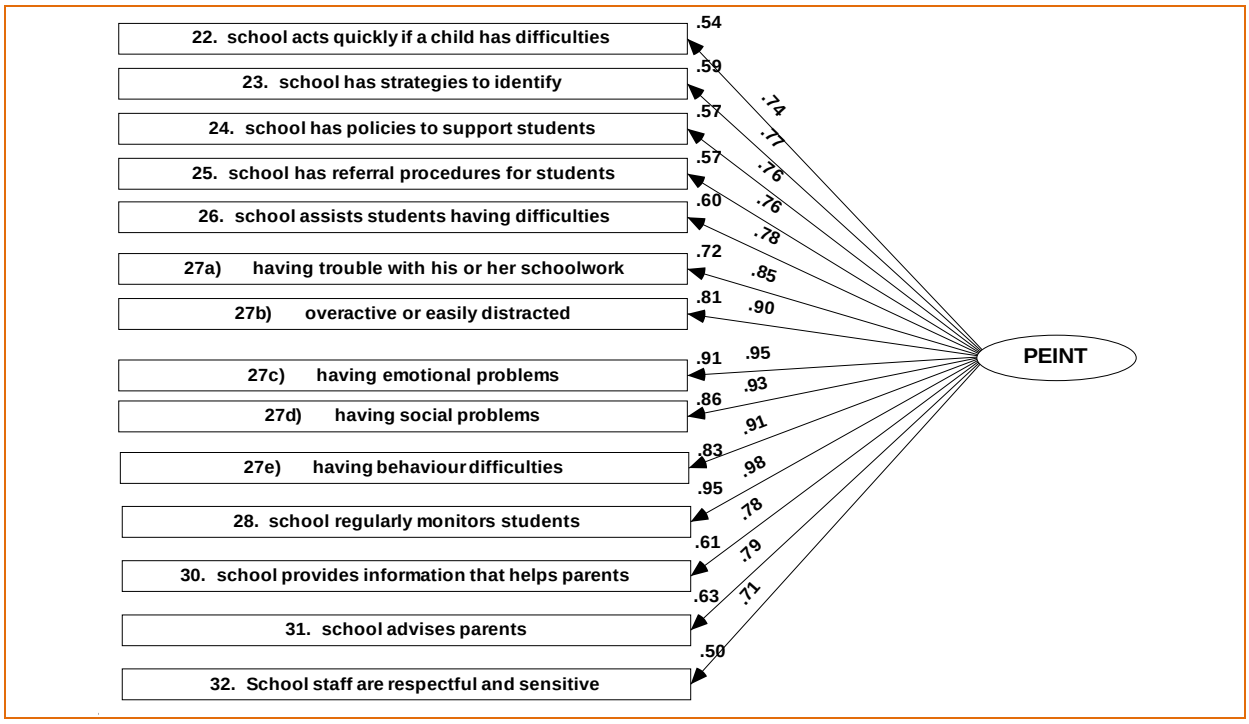
Screen 67: Parenting support by staff (PSUPST) (Parent)

6.2.8 C4: Early intervention (TEINT, PEINT)

The teacher (TEINT) and parent (PEINT) scales for Component 4, concerning early intervention, are presented in Screens 68 and 69, respectively, and assess teacher and parent views about how effective their school is at supporting students who are at risk of, or are experiencing, emotional or social or behaviour difficulties.



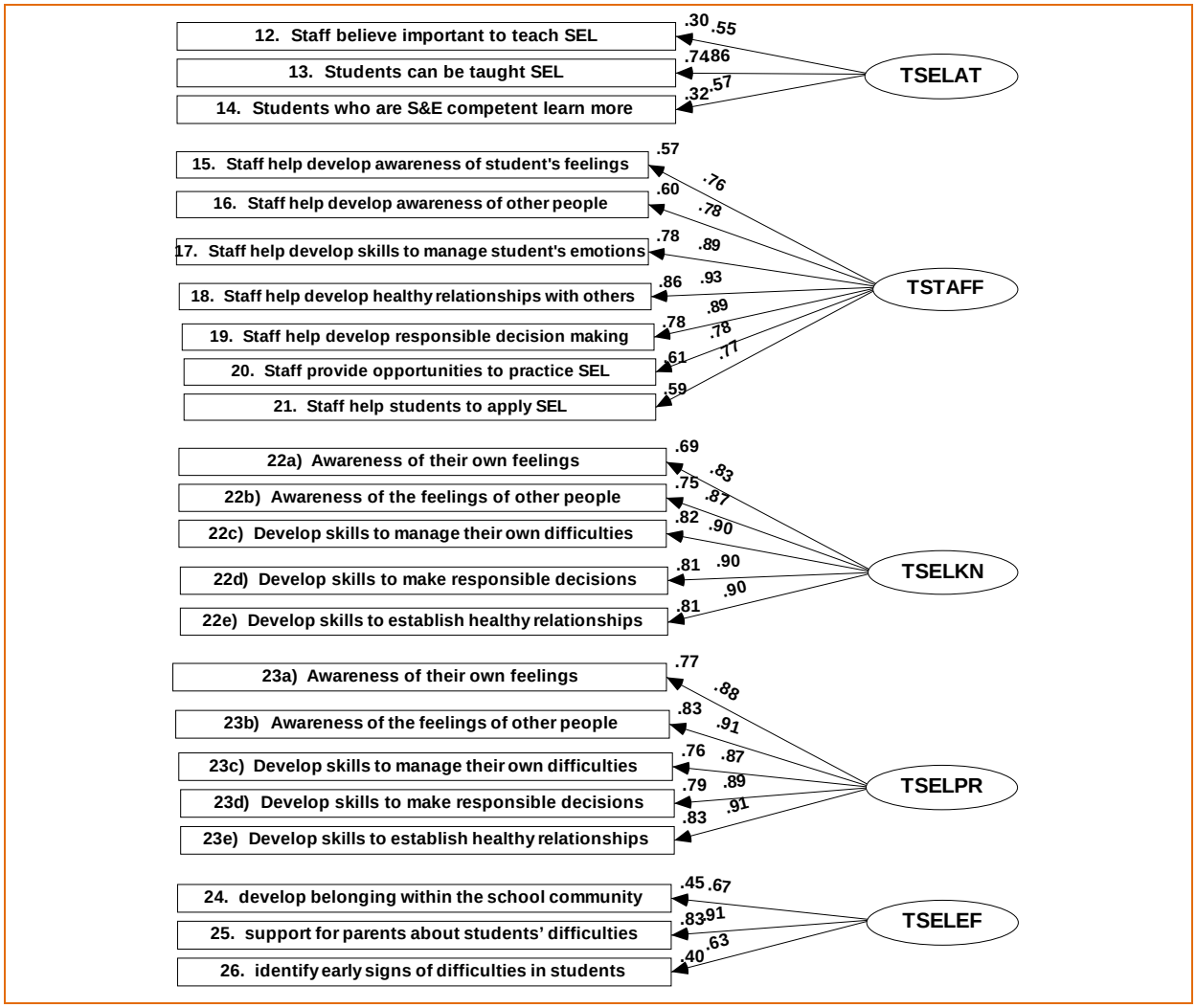
Screen 68: Early intervention (TEINT) (Teacher)



Screen 69: Early intervention (PEINT) (Parent)

6.2.9 Staff approaches to teaching SEL (TSTAFF), Staff attitudes towards SEL (TSELAT), Teacher knowledge about SEL (TSELKN), Teacher SEL programs & resources (TSELPR), and Teacher self-efficacy (TSELEF)

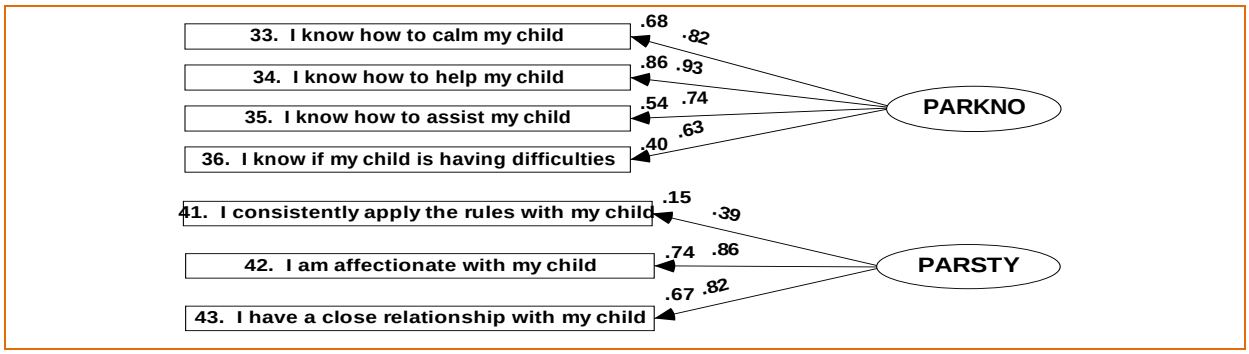
The five scales for assessing teacher competencies are presented in Screen 70. Teacher views about general staff approach to helping students to develop social and emotional skills (TSTAFF) are considered, in addition to teacher views about their attitude to teaching social and emotional learning skills (TSELAT), their knowledge and ability to help students to develop social and emotional awareness and skills (TSELKN), their teaching program and resources to help students to develop social and emotional awareness and skills (TSELPR), and their self-efficacy to foster a sense of belonging in others, provide effective support to parents, and identify early signs of social and emotional difficulties in students (TSELEF).



Screen 70: Staff approaches to teaching SEL (TSTAFF), Staff attitudes towards SEL (TSELAT), Teacher knowledge about SEL (TSELKN), Teacher SEL programs & resources (TSELPR), and Teacher self-efficacy (TSELEF) (Teacher)

6.2.10 Parenting knowledge (PARKNO) and Parenting style (PARSTY)

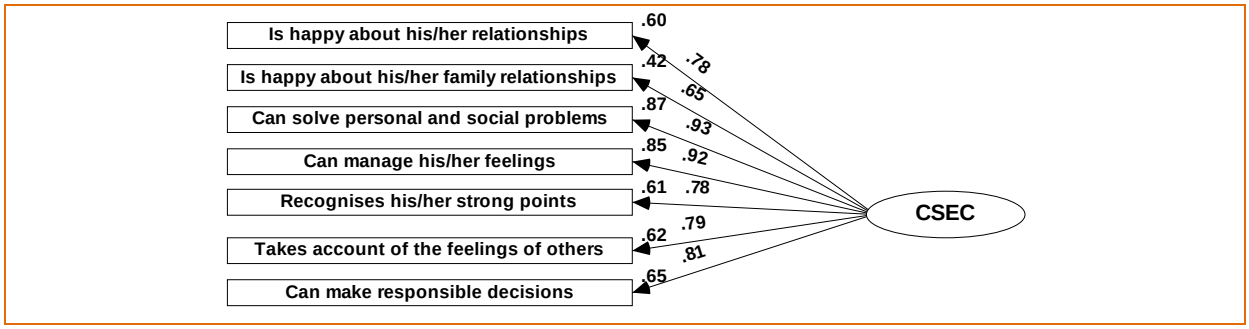
Screen 71 shows the scales for assessing parent competencies as an indication of family protective factors. Knowledge items (PARKNO) include parent views on their knowledge of how to help their child foster friendships, provide emotional comfort, and recognise when their child is having difficulties. Parenting style items (PARSTY) include parent views of their relationship with their child and their effectiveness as a parent overall.



Screen 71: Parenting knowledge (PARKNO) and Parenting style (PARSTY) (Parent)

6.2.11 Child social and emotional competencies (TCSEC, PCSEC)

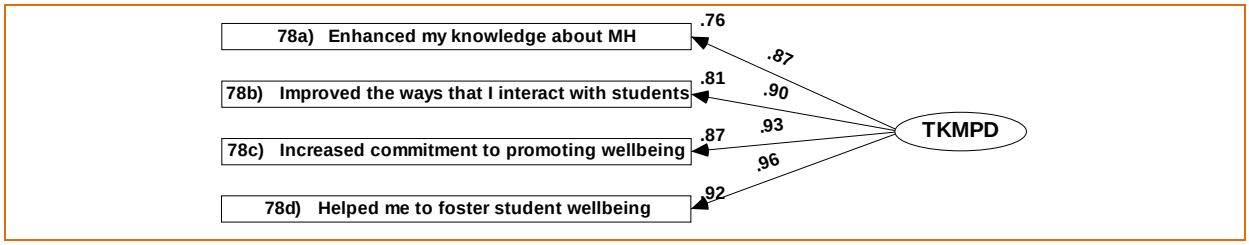
Items pertaining to teacher (TCSEC) and parent (PCSEC) views about the child's ability to maintain positive relationships, solve problems, consider others, and make responsible decisions are presented in Screen 72 for the scale assessing child social and emotional competencies. In order to maintain the same item structure for parents and teachers, a single analysis was undertaken on the combined (averaged) responses.



Screen 72: Child social and emotional competencies (TCSEC, PCSEC) (Parent and Teacher)

6.2.12 KM impact of PD on teachers (TKMPD)

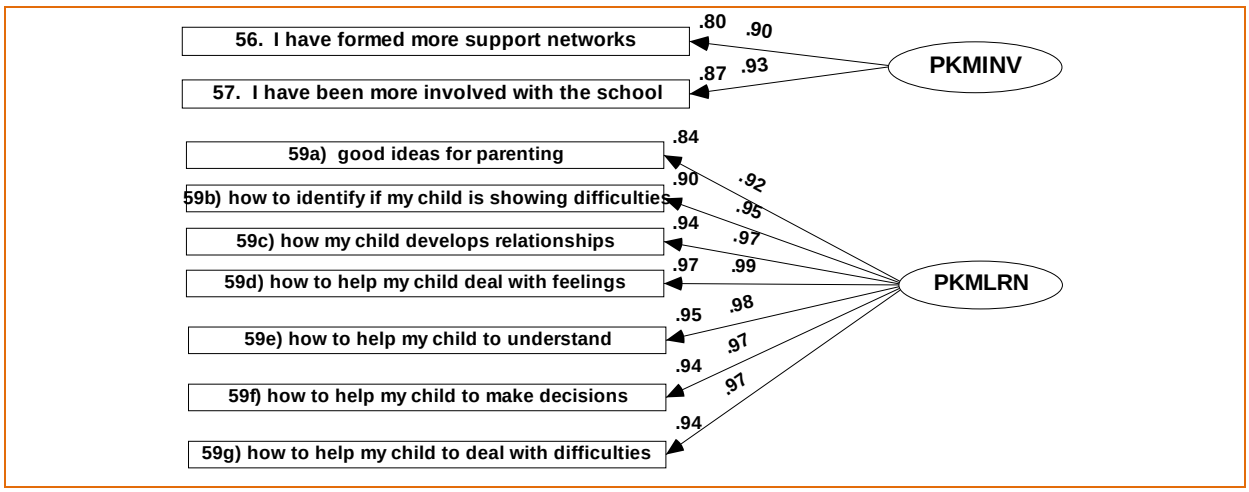
Screen 73 presents items assessing the perceived impact of the KidsMatter Initiative on school and teacher processes. The scale can be described as teacher perceptions on the impact of the KidsMatter professional development on teacher and school capacities (TKMPD).



Screen 73: KM impact of PD on teachers (TKMPD) (Teacher)

6.2.13 KM impact on parent involvement with school (PKMINV) and KM impact on parent learning (PKMLRN)

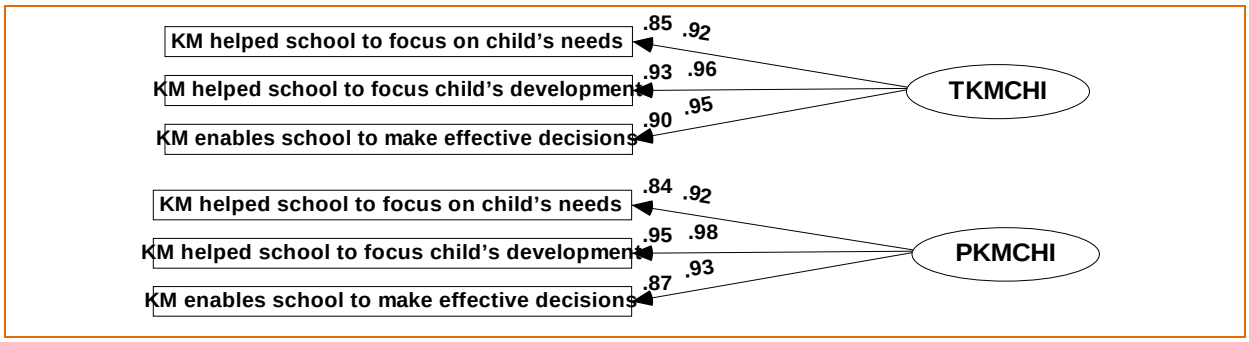
Screen 74 presents two scales that assess parent perceptions on the impact of KidsMatter on involvement with support networks, school and community (PKMINV), and on parenting skills that KidsMatter has helped parents to learn (PKMLRN).



Screen 74: KM impact on parent involvement with school (PKMINV) and KM impact on parent learning (PKMLRN) (Parent)

6.2.14 KM impact on child (TKMCHI, PKMCHI)

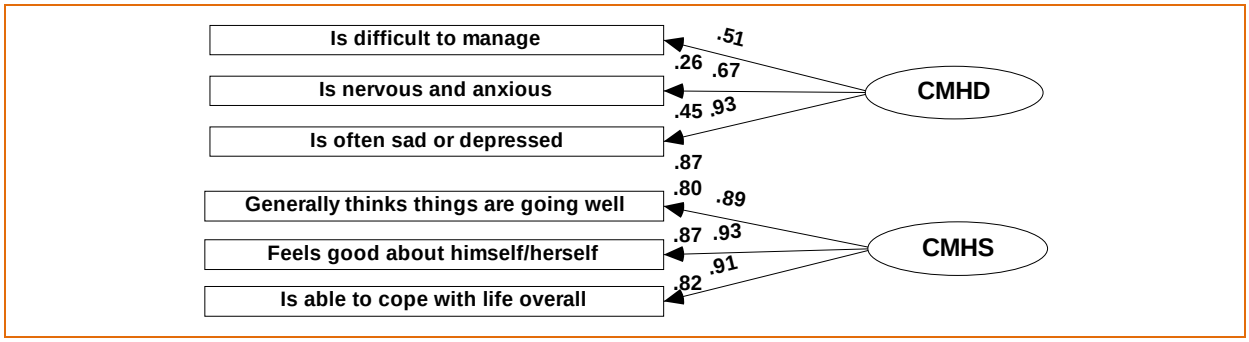
Screen 75 presents the teacher (TKMCHI) and parent (PKMCHI) scales developed to assess teacher and parent perceptions about how well KidsMatter has provided for the child's needs at school.



Screen 75: KM impact on child (TKMCHI, PKMCHI) (Parent and Teacher)

6.2.15 Mental health difficulties (TMHD, PMHD) and Mental health strengths (PMHS, TMHS)

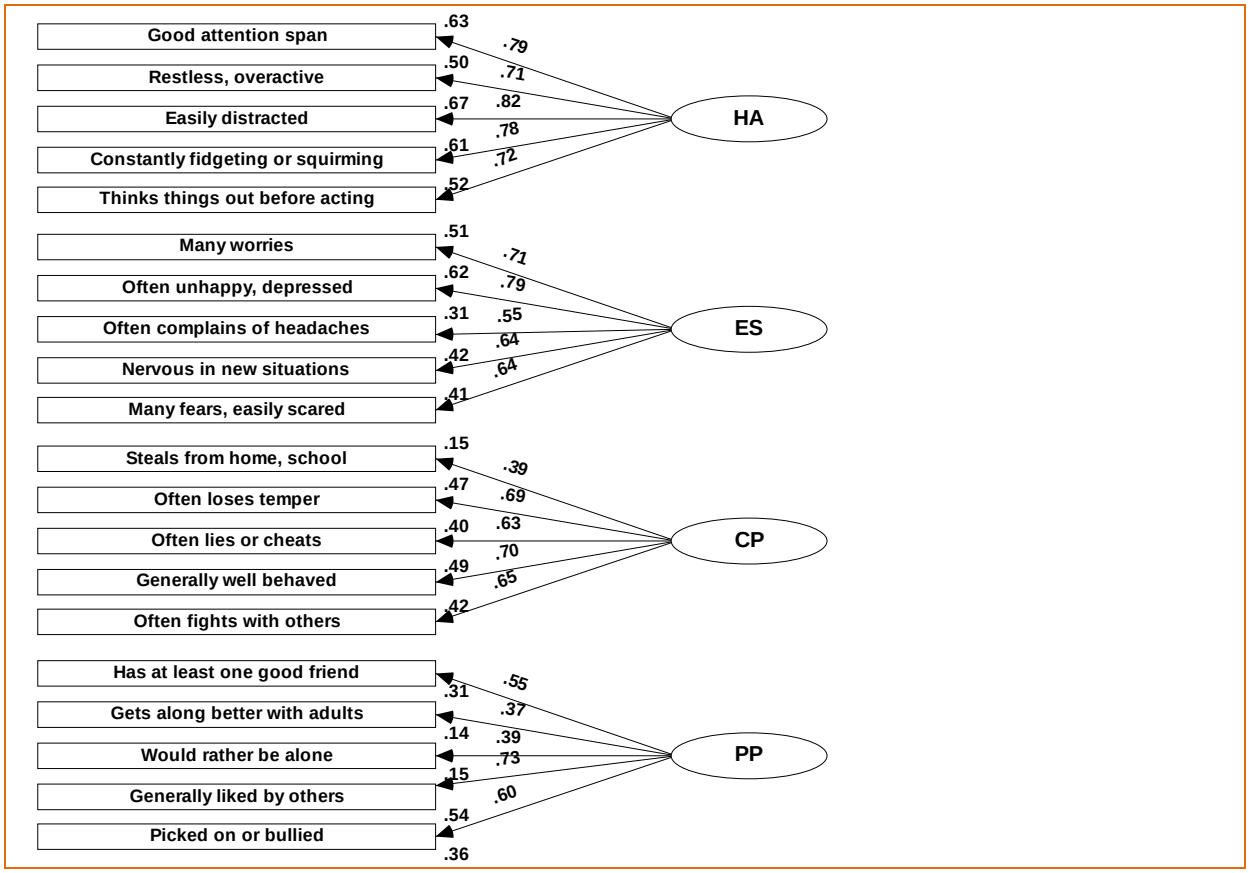
As a scale to assess the perceived impact of the KidsMatter Initiative on student mental health outcomes, Screen 76 shows the items underpinning the Mental Health Difficulties scale (CMHD) and the Mental Health Strengths scale (CMHS). Items include teacher and parent perceptions of the child's mental health difficulties in terms of poor behaviour, anxiety and depression and of the child's positive mental health in terms of optimism and coping skills. In order to maintain the same item structure for parents and teachers, a single analysis was undertaken for each scale using the combined (averaged) parent and teacher responses.



Screen 76: Child mental health difficulties (TMHD, PMHD) and Mental health strengths (PMHS, TMHS) (Parent and Teacher)

6.2.16 Total strengths and difficulties (TSDQ, PSDQ)

The final scale of the perceived impact of the KidsMatter Initiative on student mental health outcomes is presented Screen 77 and shows the items involved in the SDQ, which examine combined teacher (TSDQ) and parent (PSDQ) perceptions of the child's mental health difficulties in terms of hyperactivity (HA), conduct problems (CP), emotional symptoms (ES) and peer problems (PP). In order to maintain the same item structure for parents and teachers, a single analysis was undertaken on the combined (averaged) responses.



Screen 77: Total strengths and difficulties (SDQ) (Parent and Teacher)

6.3 Constructing Factor Scores

Once the factor structures were confirmed, construction of factor scores was undertaken using the raw data in accordance with Goodman's (2005) recommendation. When at least 60 per cent of items in a scale were completed, then the remaining items were prorated. When more than 40 per cent of items were missing in a scale then the case was removed and coded as missing data (coded -1).

The construction of variables was undertaken in SPSS using syntax programming. In the case of the SDQ, scores were summed (max = 40), and for all other scales, item scores were averaged to produce the factor score (max = 7). For completeness, the syntax for the construction of the teacher, parent and student variables, along with the teacher and parent SDQ, are presented in the remainder of this section. It should be noted that even though the factor analysis of the scales concerning child competencies and mental health outcomes were undertaken using combined parent and teacher data, the calculation of the scores produced separate parent and teacher variables so that differences could be examined. The variables resulting from this extensive analysis are located in the respective parent, teacher and student data files as summarised in the codebook presented in Appendix B.

6.3.1 Syntax for constructing Teacher variables

KM Engagement (TKMENG)

```
COMPUTE tkmeng = mean(t66,t67,t68,t69) .
VARIABLE LABELS tkmeng 'KMI Engagement (T)' .
EXECUTE .
```

KM Implementation (TKMIMP)

```
COMPUTE tkmimp = mean(t70,t71,t72,t73,t74,t75,t76a,t76b,t76c,t76d,t77) .
VARIABLE LABELS tkmimp 'KMI Implementation (T)' .
EXECUTE .
```

General Engagement (TMHENG)

```
COMPUTE tmheng = mean(t46,t47,t48,t49,t50,t51,t52,t53,t54,t55) .
VARIABLE LABELS tmheng 'General Engagement (T)' .
EXECUTE .
```

SEL Attitude (TSELAT)

```
COMPUTE tselat = mean(t12,t13,t14) .
VARIABLE LABELS tselat 'SEL Attitude (T)' .
EXECUTE .
```

Staff Approach (TSTAFF)

```
COMPUTE tstaff = mean(t15,t16,t17,t18,t19,t20,t21) .
VARIABLE LABELS tstaff 'Staff Approach (T)' .
EXECUTE .
```

SEL Knowledge (TSELKN)

```
COMPUTE tselkn = mean(t22a,t22b,t22c,t22d,t22e) .
VARIABLE LABELS tselkn 'SEL Knowledge (T)' .
EXECUTE .
```

Teacher SEL Programs and Resources (TSELPR)

```
COMPUTE tselpr = mean(t23a,t23b,t23c,t23d,t23e) .
VARIABLE LABELS tselpr ' SEL programs and resources (T)' .
EXECUTE .
```

Teacher Self-Efficacy (TSELEF)

```
COMPUTE tselef = mean(t24,t25,t26) .
VARIABLE LABELS tselef 'Self-Efficacy (T)' .
EXECUTE .
```

C1: Positive School Community (TPSC)

```
COMPUTE tpsc = mean(t01,t02,t03,t04,t05,t06,t07,t08,t09,t10,t11) .
VARIABLE LABELS tpsc 'Positive School Community (T)' .
EXECUTE .
```

C2: Social and Emotional Learning (TSEL)

```
COMPUTE tsel = mean(t56,t57,t58,t59,t60,t61,t62,t63,t64,t65) .
VARIABLE LABELS tsel 'Social and Emotional Learning (T)' .
EXECUTE .
```

C3a: Parenting Support by School (TSUPSC)

```
COMPUTE tsupsc = mean(t27,t28,t29,t30,t31,t32) .
VARIABLE LABELS tsupsc 'Parenting Support by School (T)' .
EXECUTE .
```

C3b: Parenting Support by Staff (TSUPST)

```
COMPUTE tsupst = mean(t33a,t33b,t33c,t33d,t33e,t34,t35) .
VARIABLE LABELS tsupst 'Parenting Support by Staff (T)' .
EXECUTE .
```

C4: Early Intervention (TEINT)

```
COMPUTE teint = mean(t36,t37,t38,t39,t40,t41a,t41b,t41c,t41d,t42,t44,t45) .
VARIABLE LABELS teint 'Early Intervention (T)' .
EXECUTE .
```

KM Professional Development (TKMPD)

```
COMPUTE tkmpd = mean(t78a,t78b,t78c,t78d) .
VARIABLE LABELS tkmpd ' KM PD (T)' .
EXECUTE .
```

6.3.2 Syntax for constructing Parent variables

KM Implementation (PKMIMP)

```
COMPUTE pkmimp = mean(p53,p54,p55) .
VARIABLE LABELS pkmimp 'KMI Implementation (P)' .
EXECUTE .
```

General Engagement (PMHENG)

```
COMPUTE pmheng = mean(p45,p46,p47,p48,p49,p50,p51,p52) .
VARIABLE LABELS pmheng 'General Engagement (P)' .
EXECUTE .
```

C1: Positive School Community (PPSC)

```
COMPUTE ppsc = mean(p01,p02,p03,p04,p05,p06,p07,p08,p09,p10,p11) .
VARIABLE LABELS ppsc 'Positive School Community (P)' .
EXECUTE .
```

C3a: Parenting Support by School (PSUPSC)

```
COMPUTE psupsc = mean(p12,p13,p14,p15,p16,p17,p18) .
VARIABLE LABELS psupsc 'Parenting Support by School (P)' .
EXECUTE .
```

C3b: Parenting Support by Staff (PSUPST)

```
COMPUTE psupst = mean(p19a,p19b,p19c,p19d,p19e,p20,p21) .
VARIABLE LABELS psupst 'Parenting Support by Staff (P)' .
EXECUTE .
```

C4: Early Intervention (PEINT)

```
COMPUTE peint = mean(p22,p23,p24,p25,p26,p27a,p27b,p27c,p27d,p27e,p28,p30,p31,p32) .
VARIABLE LABELS peint 'Early Intervention (P)' .
EXECUTE .
```

Parenting Knowledge (PARKNO)

```
COMPUTE parkno = mean(p33,p34,p35,p36) .
VARIABLE LABELS parkno 'Parenting Knowledge (P)' .
EXECUTE .
```

Parenting Style (PARSTY)

```
COMPUTE parsty = mean(p41,p42,p43) .
VARIABLE LABELS parsty 'Parenting Style (P)' .
EXECUTE .
```

KM Impact on Parent Involvement with School (PKMINV)

```
COMPUTE pkminv = mean(p56,p57) .
VARIABLE LABELS pkminv 'KM Involvement with School (P)' .
EXECUTE .
```

KM Impact on Parent Learning (PKMLRN)

```
COMPUTE pkmlrn = mean(p59a,p59b,p59c,p59d,p59e,p59f,p59g) .
VARIABLE LABELS pkmlrn 'KM Parent Learning (P)' .
EXECUTE .
```

6.3.3 Syntax for constructing Student variables

KM Impact on Child: Teacher (TKMCHI)

```
COMPUTE tkmchi = mean(ts16,ts18,ts19) .
VARIABLE LABELS tkmchi ' KMI Impact on Child (T)' .
EXECUTE .
```

KM Impact on Child: Parent (PKMCHI)

```
COMPUTE pkmchi = mean(p78,p80,p81) .
VARIABLE LABELS pkmchi ' KMI Impact on Child (P)' .
EXECUTE .
```

Child Social and Emotional Competencies: Teacher (TCSEC)

```
COMPUTE tcsec = mean(ts03,ts04,ts05,ts06,ts07,ts08,ts09) .
VARIABLE LABELS tcsec 'Child Social and Emotional Competencies (T)' .
EXECUTE .
```

Child Social and Emotional Competencies: Parent (PCSEC)

```
COMPUTE pcsec = mean(p65,p66,p67,p68,p69,p70,p71) .
VARIABLE LABELS pcsec 'Child Social and Emotional Competencies (P)' .
EXECUTE .
```

Mental Health Difficulties: Teachers (TMHD)

```
COMPUTE tmhd = mean(ts13,ts14,ts15) .
VARIABLE LABELS tmhd 'Mental Health Difficulties (T)' .
EXECUTE .
```

Mental Health Difficulties: Parents (PMHD)

```
COMPUTE pmhd = mean(p75,p76,p77) .
VARIABLE LABELS pmhd 'Mental Health Difficulties (P)' .
EXECUTE .
```

Mental Health Strengths: Teachers (TMHS)

```
COMPUTE tmhs = mean(ts10,ts11,ts12) .
VARIABLE LABELS tmhs 'Mental Health Strengths (T)' .
EXECUTE .
```

Mental Health Strengths: Parents (PMHS)

```
COMPUTE pmhs = mean(p72,p73,p74) .
VARIABLE LABELS pmhs 'Mental Health Strengths (P)' .
EXECUTE .
```

6.3.4 Syntax used for constructing the Teacher SDQ

To replace missing values with individual mean component score (for those with 3 or more scores) need to calculate the mean score first.

++++++++++++++++++++++++++++++++++

To calculate the mean of individual component score first calculate number of questions answered:

```
COUNT
 ES_no = tsdq03 tsdq08 tsdq13 tsdq16 tsdq24 (0 thru 2) .
VARIABLE LABELS ES_no 'numb of ES questions answered' .
EXECUTE .

COUNT
 CP_no = tsdq05 tsdq07 tsdq12 tsdq18 tsdq22 (0 thru 2) .
VARIABLE LABELS CP_no 'numb of CP questions answered' .
EXECUTE .

COUNT
 HA_no = tsdq02 tsdq10 tsdq15 tsdq21 tsdq25 (0 thru 2) .
VARIABLE LABELS HA_no 'number of HA questions answered' .
EXECUTE .

COUNT
 PP_no = tsdq06 tsdq11 tsdq14 tsdq19 tsdq23 (0 thru 2) .
VARIABLE LABELS PP_no 'numb of PP questions answered' .
EXECUTE .

COUNT
 PS_no = tsdq01 tsdq04 tsdq09 tsdq17 tsdq20 (0 thru 2) .
VARIABLE LABELS PS_no 'numb of PS questions answered' .
EXECUTE .
```

++++++++++++++++++

then calculate the individual mean component score

```
IF (ES_no >= 3) mean_ES = SUM(tsdq03,tsdq08,tsdq13,tsdq16,tsdq24)/ES_no .
EXECUTE .

IF (CP_no >= 3) mean_CP = SUM(tsdq05,tsdq07 ,tsdq12,tsdq18,tsdq22)/CP_no .
EXECUTE .

IF (HA_no >= 3) mean_HA = SUM(tsdq02,tsdq10,tsdq15,tsdq21,tsdq25)/HA_no .
EXECUTE .
```

```
IF (PP_no >= 3) mean_PP = SUM(tsdq06,tsdq11,tsdq14,tsdq19,tsdq23)/PP_no .
EXECUTE .

IF (PS_no >= 3) mean_PS = SUM(tsdq01,tsdq04,tsdq09,tsdq17,tsdq20)/PS_no .
EXECUTE .

++++++++++++++++++
remove missing values definitions.
replacing missing values with average individual component score using mean_ES

IF (ES_no >= 3 & ES_no < 5 & tsdq03=-1) tsdq03 = RND(mean_ES).
EXECUTE .

IF (ES_no >= 3 & ES_no < 5 & tsdq08=-1) tsdq08 = RND(mean_ES).
EXECUTE .

IF (ES_no >= 3 & ES_no < 5 & tsdq13=-1) tsdq13 = RND(mean_ES).
EXECUTE .

IF (ES_no >= 3 & ES_no < 5 & tsdq16=-1) tsdq16 = RND(mean_ES).
EXECUTE .

IF (ES_no >= 3 & ES_no < 5 & tsdq24=-1) tsdq24 = RND(mean_ES).
EXECUTE .

++++++++++++ replacing missing values with average individual component score using mean_CP

IF (CP_no >= 3 & CP_no <5 & tsdq05 = -1) tsdq05 = RND(mean_CP).
EXECUTE .

IF (CP_no >= 3 & CP_no <5 & tsdq07 = -1) tsdq07 = RND(mean_CP).
EXECUTE .

IF (CP_no >= 3 & CP_no <5 & tsdq12 = -1) tsdq12 = RND(mean_CP).
EXECUTE .

IF (CP_no >= 3 & CP_no <5 & tsdq18 = -1) tsdq18 = RND(mean_CP).
EXECUTE .

IF (CP_no >= 3 & CP_no <5 & tsdq22 = -1) tsdq22 = RND(mean_CP).
EXECUTE .

++++++++++++ replacing missing values with average individual component score using mean_HA

IF (HA_no >= 3 & HA_no <5 & tsdq02 = -1) tsdq02 = RND(mean_HA).
EXECUTE .

IF (HA_no >= 3 & HA_no <5 & tsdq10 = -1) tsdq10 = RND(mean_HA).
EXECUTE .

IF (HA_no >= 3 & HA_no <5 & tsdq15 = -1) tsdq15 = RND(mean_HA).
EXECUTE .

IF (HA_no >= 3 & HA_no <5 & tsdq21 = -1) tsdq21 = RND(mean_HA).
EXECUTE .

IF (HA_no >= 3 & HA_no <5 & tsdq25 = -1) tsdq25 = RND(mean_HA).
EXECUTE .

++++++++++++++  replacing missing values with average individual component score using mean_PP

IF (PP_no >= 3 & PP_no <5 & tsdq06 = -1) tsdq06 = RND(mean_PP).
EXECUTE .
```

```
IF (PP_no >= 3 & PP_no <5 & tsdq11 = -1) tsdq11 = RND(mean_PP).
EXECUTE .

IF (PP_no >= 3 & PP_no <5 & tsdq14 = -1) tsdq14 = RND(mean_PP).
EXECUTE .

IF (PP_no >= 3 & PP_no <5 & tsdq19 = -1) tsdq19 = RND(mean_PP).
EXECUTE .

IF (PP_no >= 3 & PP_no <5 & tsdq23 = -1) tsdq23 = RND(mean_PP).
EXECUTE .

++++++++++ replacing missing values with average individual component score using mean_PS

IF (PS_no >= 3 & PS_no <5 & tsdq01 = -1) tsdq01 = RND(mean_PS).
EXECUTE .

IF (PS_no >= 3 & PS_no <5 & tsdq04 = -1) tsdq04 = RND(mean_PS).
EXECUTE .

IF (PS_no >= 3 & PS_no <5 & tsdq09 = -1) tsdq09 = RND(mean_PS).
EXECUTE .

IF (PS_no >= 3 & PS_no <5 & tsdq17 = -1) tsdq17 = RND(mean_PS).
EXECUTE .

IF (PS_no >= 3 & PS_no <5 & tsdq20 = -1) tsdq20 = RND(mean_PS).
EXECUTE .

++++++++++++++++++
return definition of missing values

COMPUTE TES = tsdq03+tsdq08+tsdq13+tsdq16+tsdq24 .
VARIABLE LABELS TES 'Emotional symptoms' .
EXECUTE .

COMPUTE TCP = tsdq05+tsdq07+tsdq12+tsdq18+tsdq22 .
VARIABLE LABELS TCP 'Teacher Conduct problems' .
EXECUTE .

COMPUTE THA = tsdq02+tsdq10+tsdq15+tsdq21+tsdq25 .
VARIABLE LABELS THA 'Hyperactivity' .
EXECUTE .

COMPUTE TPP = tsdq06+tsdq11+tsdq14+tsdq19+tsdq23 .
VARIABLE LABELS TPP 'Peer problems' .
EXECUTE .

COMPUTE TPS = tsdq01+tsdq04+tsdq09+tsdq17+tsdq20 .
VARIABLE LABELS TPS 'Prosocial' .
EXECUTE .

COMPUTE TSDQ = TES + TCP + THA + TPP.
VARIABLE LABELS TSDQ 'Total SDQ (T)' .
EXECUTE .

++++++++++++++++++++++++++++++++++
recode missing values =-1

RECODE
 TSDQ TES TCP THA TPP (SYSMIS=-1) .
EXECUTE .
```

6.3.5 Syntax used for constructing the Parent SDQ

To replace missing values with individual mean component score (for those with 3 or more scores) need to calculate the mean score first.

++++++++++++++++++++++++++++++++++++

To calculate the mean of individual component score
first calculate number of questions answered:

```
COUNT
 ES_no = psdq03 psdq08 psdq13 psdq16 psdq24 (0 thru 2) .
VARIABLE LABELS ES_no 'numb of ES questions answered' .
EXECUTE .

COUNT
 CP_no = psdq05 psdq07 psdq12 psdq18 psdq22 (0 thru 2) .
VARIABLE LABELS CP_no 'numb of CP questions answered' .
EXECUTE .

COUNT
 HA_no = psdq02 psdq10 psdq15 psdq21 psdq25 (0 thru 2) .
VARIABLE LABELS HA_no 'number of HA questions answered' .
EXECUTE .

COUNT
 PP_no = psdq06 psdq11 psdq14 psdq19 psdq23 (0 thru 2) .
VARIABLE LABELS PP_no 'numb of PP questions answered' .
EXECUTE .

COUNT
 PS_no = psdq01 psdq04 psdq09 psdq17 psdq20 (0 thru 2) .
VARIABLE LABELS PS_no 'numb of PS questions answered' .
EXECUTE .
```

++++++++++++++++++

then calculate the individual mean component score

```
IF (ES_no >= 3) mean_ES = SUM(psdq03,psdq08,psdq13,psdq16,psdq24)/ES_no .
EXECUTE .

IF (CP_no >= 3) mean_CP = SUM(psdq05,psdq07 ,psdq12,psdq18,psdq22)/CP_no .
EXECUTE .

IF (HA_no >= 3) mean_HA = SUM(psdq02,psdq10,psdq15,psdq21,psdq25)/HA_no .
EXECUTE .

IF (PP_no >= 3) mean_PP = SUM(psdq06,psdq11,psdq14,psdq19,psdq23)/PP_no .
EXECUTE .

IF (PS_no >= 3) mean_PS = SUM(psdq01,psdq04,psdq09,psdq17,psdq20)/PS_no .
EXECUTE .
```

++++++++++++++++++++

remove missing values definition. replacing missing values with average individual component score using mean_ES

```
IF (ES_no >= 3 & ES_no < 5 & psdq03=-1) psdq03 = RND(mean_ES).
EXECUTE .

IF (ES_no >= 3 & ES_no < 5 & psdq08=-1) psdq08 = RND(mean_ES).
EXECUTE .

IF (ES_no >= 3 & ES_no < 5 & psdq13=-1) psdq13 = RND(mean_ES).
EXECUTE .
```

```
IF (ES_no >= 3 & ES_no < 5 & psdq16=-1) psdq16 = RND(mean_ES).
EXECUTE .

IF (ES_no >= 3 & ES_no < 5 & psdq24=-1) psdq24 = RND(mean_ES).
EXECUTE .

++++++++++++ replacing missing values with average individual component score using mean_CP

IF (CP_no >= 3 & CP_no <5 & psdq05 = -1) psdq05 = RND(mean_CP).
EXECUTE .

IF (CP_no >= 3 & CP_no <5 & psdq07 = -1) psdq07 = RND(mean_CP).
EXECUTE .

IF (CP_no >= 3 & CP_no <5 & psdq12 = -1) psdq12 = RND(mean_CP).
EXECUTE .

IF (CP_no >= 3 & CP_no <5 & psdq18 = -1) psdq18 = RND(mean_CP).
EXECUTE .

IF (CP_no >= 3 & CP_no <5 & psdq22 = -1) psdq22 = RND(mean_CP).
EXECUTE .

++++++++++++ replacing missing values with average individual component score using mean_HA

IF (HA_no >= 3 & HA_no <5 & psdq02 = -1) psdq02 = RND(mean_HA).
EXECUTE .

IF (HA_no >= 3 & HA_no <5 & psdq10 = -1) psdq10 = RND(mean_HA).
EXECUTE .

IF (HA_no >= 3 & HA_no <5 & psdq15 = -1) psdq15 = RND(mean_HA).
EXECUTE .

IF (HA_no >= 3 & HA_no <5 & psdq21 = -1) psdq21 = RND(mean_HA).
EXECUTE .

IF (HA_no >= 3 & HA_no <5 & psdq25 = -1) psdq25 = RND(mean_HA).
EXECUTE .

+++++++++ replacing missing values with average individual component score using mean_PP

IF (PP_no >= 3 & PP_no <5 & psdq06 = -1) psdq06 = RND(mean_PP).
EXECUTE .

IF (PP_no >= 3 & PP_no <5 & psdq11 = -1) psdq11 = RND(mean_PP).
EXECUTE .

IF (PP_no >= 3 & PP_no <5 & psdq14 = -1) psdq14 = RND(mean_PP).
EXECUTE .

IF (PP_no >= 3 & PP_no <5 & psdq19 = -1) psdq19 = RND(mean_PP).
EXECUTE .

IF (PP_no >= 3 & PP_no <5 & psdq23 = -1) psdq23 = RND(mean_PP).
EXECUTE .

++++++++++++ replacing missing values with average individual component score using mean_PS

IF (PS_no >= 3 & PS_no <5 & psdq01 = -1) psdq01 = RND(mean_PS).
EXECUTE .

IF (PS_no >= 3 & PS_no <5 & psdq04 = -1) psdq04 = RND(mean_PS).
EXECUTE .
```

```
IF (PS_no >= 3 & PS_no <5 & psdq09 = -1) psdq09 = RND(mean_PS).
EXECUTE .

IF (PS_no >= 3 & PS_no <5 & psdq17 = -1) psdq17 = RND(mean_PS).
EXECUTE .

IF (PS_no >= 3 & PS_no <5 & psdq20 = -1) psdq20 = RND(mean_PS).
EXECUTE .

++++++++++++++++++
return definition of missing values

COMPUTE PES = psdq03+psdq08+psdq13+psdq16+psdq24 .
VARIABLE LABELS PES 'Emotional symptoms' .
EXECUTE .

COMPUTE PCP = psdq05+psdq07+psdq12+psdq18+psdq22 .
VARIABLE LABELS PCP 'Conduct problems' .
EXECUTE .

COMPUTE PHA = psdq02+psdq10+psdq15+psdq21+psdq25 .
VARIABLE LABELS PHA 'Hyperactivity' .
EXECUTE .

COMPUTE PPP = psdq06+psdq11+psdq14+psdq19+psdq23 .
VARIABLE LABELS PPP 'Peer problems' .
EXECUTE .

COMPUTE PPS = psdq01+psdq04+psdq09+psdq17+psdq20 .
VARIABLE LABELS PPS 'Prosocial' .
EXECUTE .

COMPUTE PSDQ = PES+ PCP+ PHA+ PPP.
VARIABLE LABELS PSDQ 'Total SDQ (P)' .
EXECUTE .

++++++++++++++++++++++++++++++++++
recode missing values =-1

RECODE
 PES PCP PHA PPP PPS PSDQ (SYSMIS=-1) .
EXECUTE .
```

6.4 In Summary

The resulting confirmatory factor analysis (ADF) proved to be a useful non-parametric method for confirming the factor structure of variables. Moreover, it confirmed that the original conceptual research framework, presented in Chapter 1 and the selection of items, presented in Chapter 3, were well considered, with the majority of variables being constructed as intended. By doing so, reliability and validity are optimised and any subsequent secondary analysis can be interpreted and reported on the conceptual factor rather than attempting to deal with each of the questionnaire items separately.

Chapter 7.
Secondary Analyses

This chapter provides detailed statistical discussion to elaborate upon the general treatment of statistical analyses presented in the KidsMatter Evaluation Final Report. It outlines the main techniques that are used in the secondary analysis of the data, namely, Latent Class Analysis (LCA), Canonical Analysis, and Hierarchical Linear Modelling (HLM).

7.1 Identifying Categories of Student Mental Health using Latent Class Analysis

This section investigates teacher and parent assessments of students' mental health based upon data from the evaluation of KidsMatter on three occasions. Three different scales of mental health were developed and administered to parents and teachers of 4970 primary school students in KidsMatter schools on three separate occasions.

The first scale of mental health was Goodman's (2005) *Strength and Difficulties Questionnaire* (SDQ). The SDQ was developed as a brief mental health screening instrument and was widely used in many nations, including Australia (Levitt, Saka et al. 2007). Perceptions of the child's mental health difficulties, in terms of, hyperactivity, conduct problems, emotional symptoms and peer problems were combined to give a score ranging between 'normal' (0) to 'abnormal' (40).

The second scale of mental health was the specifically developed, *Mental Health Strengths* scale (MHS) and scores ranged between 'low strengths' (1) to 'high strengths' (7). The MHS provided teacher and parent perceptions of the child's positive mental health in terms of optimism and coping skills. The final scale for student mental health was the *Mental Health Difficulties* scale (MHD). Like the SDQ, the MHD scale placed those with 'few difficulties' at the low end (1) and those with 'many difficulties' at the high end (7). The MHD scale provided teacher and parent perceptions of the child's mental health difficulties in terms of poor behaviour, anxiety and depression. These two scales were comprised of items that provided assessments of the five core groups of indicators of students' social and emotional competencies identified by the Collaborative for Academic, Social and Emotional Learning (CASEL, 2006), namely, self-awareness, self-management, social awareness, relationship skills, and responsible decision making, as well as students' optimism and problem solving capabilities.

Preliminary analysis of these scales were presented in an article by Dix, et al. (2008) and concluded that there was reasonable agreement between parent and teacher ratings of the same student. Nevertheless, while it was clear that there was a group of students for which parents and teachers agreed, there was also a group of students for which parent and teacher ratings were in contradiction between each other and between the different scales. The challenge, and the focus of this discussion, was how then could a single score for student mental health status be assigned to the student, particularly for those students where there was poor agreement between the multiple informants and multiple instruments?

7.1.1 Latent Class Analysis

Attention was drawn to the use of Latent Class Analysis (LCA), a statistical method for finding subtypes of related cases (latent classes) from multivariate categorical data, using the program MPlus Version 5.2 (Muthén and Muthén, 2007). The benefits of using LCA, was its non-dependence on assumptions of normality, and its ability to manage complex nested data and missing data.

Preparation of the data was first necessary in order to change scaled data into categorical data. Accordingly, Goodman's (2005) cut-point for the parent and teacher rated SDQ were differentially applied. For teachers, the cut-points were 'normal' (0-11), 'borderline' (12-15), and 'abnormal' (16-40). For parents, the cut-points were 'normal' (0-13), 'borderline' (14-16), and 'abnormal' (17-40). The visual binning command in SPSS was used and it was done separately for each occasion. Appropriate cut-points for the other measures of mental health (MHS and MHD) were then determined by using the percentage of students in each of the normal, borderline and abnormal categories, at each occasion. Once again, SPSS was used to undertake the analysis for each of the parent and teacher variables. Combined into this already complex categorisation process, the positively viewed scale (MHS) was reverse coded to align with the negatively viewed scales (SDQ and MHD). Accordingly, the resulting categories for each of the four scales were 'normal' (1), 'borderline' (2), and 'abnormal' (3). Three files were prepared for Time 1, Time 3 and Time 4, first by saving in comma delimited (variable names not included) and then renaming the file extension to DAT format, for compatibility with MPlus. A Time 2 data file was not created because questionnaires were not administered to parents at Time 2.

Preliminary latent class analysis in MPlus was conducted, taking into consideration missing data and clustering at the school level, using the three parent-rated and three teacher-rated scales of mental health. Three classes were requested and revealed that for one group of students, the normal group, there was good separation of probability estimates and good agreement between parents and teachers. However, for the other two classes of students, the differences between raters was of greater influence than the differences between students. One reason for this could be that students exhibited different behaviours at home than they did at school. It is acknowledged that these differences are an aspect worthy of further investigation, as other researchers have indicated (see for example, Dix, 2009; Miller-Lewis et al., 2006). However, for the purposes of this research a practical approach was taken and equivalent parent and teacher scales were averaged to form three composite measures on each occasion. Three input files were prepared according to the syntax, the first of which is given in Screen 78.

```
Title:
 KidsMatter SMH LCA: Occasion 1.
Data:
 File is km_LCA_SMH1.dat ;
Variable:
 names = schid sid SDQ MHD MHS;
 usevariables = sid SDQ MHD MHS;
 categorical = SDQc SDQ MHD MHS;
 missing are all(-1);
 cluster = schid;
 classes = class(3);
Analysis:
 Type=mixture;
 Type=missing;
 Type=complex;
Plot:
 type is plot3;
 series is SDQ (1) MHD (2) MHS (3);
Savedata:
 file is km_LCA_SMH1.txt ;
 save is cprob;
 format is free;
Output:
 tech11 tech14;
```

Screen 78: LCA syntax

Figure 9, Figure 10, and Figure 11 present the resulting probability estimates of the three classes for Time 1, Time 3, and Time 4, respectively. The vertical axis in each graph can be interpreted as the

probability of being 'normal'. Accordingly, students in the 'abnormal' range have the lowest probability and are near the bottom of the graph. Conversely, the students in the 'normal' range have the highest probability of being normal. Each graph also shows that combining parent and teacher data sets was highly effective in overcoming their differences, with good separation between the probabilities.

Figure 9. Latent class probabilities of being in the 'normal' range on Time 1

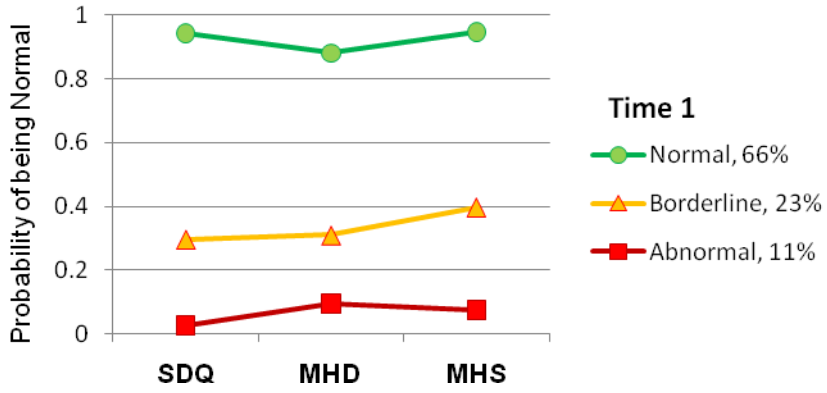


Figure 10. Latent class probabilities of being in the 'normal' range on Time 3

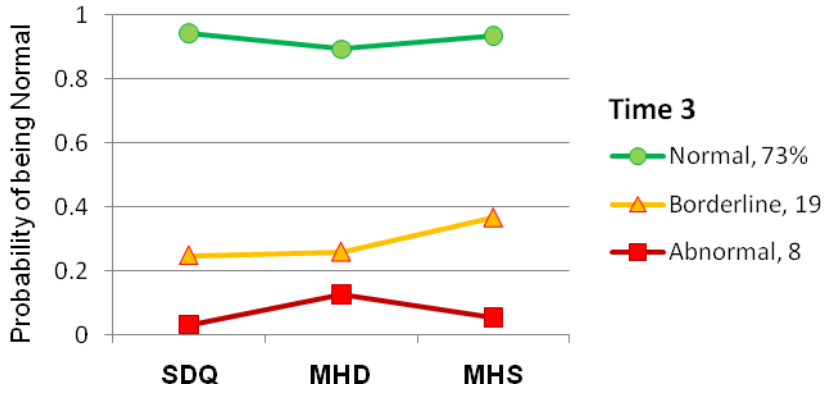
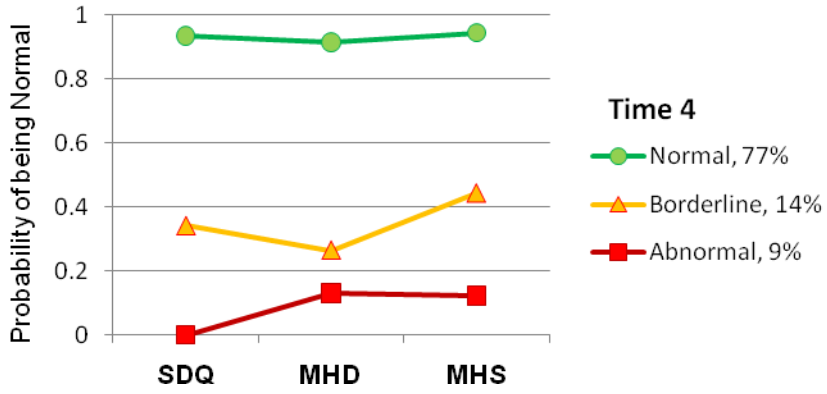


Figure 11. Latent class probabilities of being in the 'normal' range on Time 4



Although visually convincing, goodness of fit measures were considered to assess whether the right number of classes was chosen. The Vuong-Lo-Mendell-Rubin test and the bootstrapped parametric likelihood ratio test were requested using TECH 11 and TECH 14, to compare the model with K classes (in this case 3 classes) to a model with K-1 classes (2 classes). The results are presented in Table 14 and show that on Time 1 the Vuong-Lo-Mendell-Rubin test has a p-value of 0.0595 and the Lo-Mendell-Rubin adjusted LRT test has a p-value of 0.0595. The tests are marginal and suggest two

classes are possibly sufficient and that three classes may not really be needed. However, the bootstrapped parametric likelihood ratio test has a p-value of 0.0000, so this test suggests that three classes are indeed better than two classes. UCLA (2009) reports unpublished results that indicate the bootstrap method may be more reliable. Moreover, the three class model fits our theoretical expectations. With similar results for Time 3 and Time 4, three classes were chosen and are identified in Figure 9, Figure 10, and Figure 11 as normal, borderline and abnormal, along with the percentage of students in each group.

Table 14. Latent class analysis tests for number of mental health classes

	Time 1	*Time 3*	*Time 4*
Vuong-Lo-Mendell-Rubin Likelihood Ratio Test For 2 (H0) Versus 3 Classes			
H0 Loglikelihood Value	*-61234.207*	*-49008.566*	*-44692.939*
2 Times the Loglikelihood Difference	*1180.335*	*859.539*	*681.557*
Difference in the Number of Parameters	*10*	*10*	*10*
Mean	*14.328*	*13.855*	*12.756*
Standard Deviation	*939.493*	*652.450*	*634.877*
P-Value	*0.0581*	*0.0515*	*0.0747*
Lo-Mendell-Rubin Adjusted Lrt Test			
Value	*1166.628*	*849.317*	*673.378*
P-Value	*0.0595*	*0.0529*	*0.0764*
Parametric Bootstrapped Likelihood Ratio Test For 2 (H0) Versus 3 Classes			
H0 Loglikelihood Value	*-61234.207*	*-49008.566*	*-44692.939*
2 Times the Loglikelihood Difference	*1180.335*	*859.539*	*681.557*
Difference in the Number of Parameters	*10*	*10*	*10*
P-Value	*0.0000*	*0.0000*	*0.0000*

7.1.2 Student mental health status (SMH)

From the three output data files produced from the latent class analyses for Time 1, Time 3 and Time 4, classes were matched across occasions and the files were merged. The reconstructed student data file contained, in addition to the student's identification number (SID), the probability scores of being in each class, along with their final assigned group. This last variable achieved the definitive placement of each student into one category of mental health, be it the 'normal', 'borderline' or 'abnormal' range. It did this for all students and overcame the problem of missing data. Using SID and occasion to link data files, this new categorical measure of student mental health (SMH) was merged back into the Student data file for subsequent analysis, the results of which are presented in the KidsMatter Evaluation Final Report.

7.2 Identifying Categories of School Implementation Quality using Latent Class Analysis

Implementation of the KidsMatter Initiative was an important aspect of the analysis and is reported in full in the Final Report. The development of an 'Implementation Index' went beyond the requirements of the evaluation and the following technical details relate mainly to the development of this Index.

Many quantitative indicators from the various questionnaires were initially collected for possible inclusion in an Implementation Index that would be suitable for classifying KidsMatter schools according to the quality of their implementation of KidsMatter.

In order to identify schools as being low or high implementers of KidsMatter, a Implementation Index framework was developed, based on Domitrovich's (2008) recommendations, using information from

participants who were involved in the implementation of KidsMatter within the school, and from the Project Officers who were providing the support and resources and were external to the school. The implementation Index framework is presented in Table 15.

Table 15. The KidsMatter Implementation Index framework

	INTERVENTION	***SUPPORT SYSTEM***
FIDELITY *Degree to which an intervention is conducted as planned*	*School view of progress 7-step implementation process, SEL curriculum*	*Project Officer views of progress 7 Step Implementation Process*
DOSAGE *Specific units of an intervention and support system*	*In-school activities, time allocated to planning and implementation, principal participation, amount of professional development*	*Project Officer activities contact with school leadership, parent events and information dissemination*
QUALITY OF DELIVERY *Affective engagement with the process and support responsiveness*	*School and leadership views quality of PD, parent and teacher engagement*	*Project Officer views, Leadership and staff and parent encouragement and involvement*

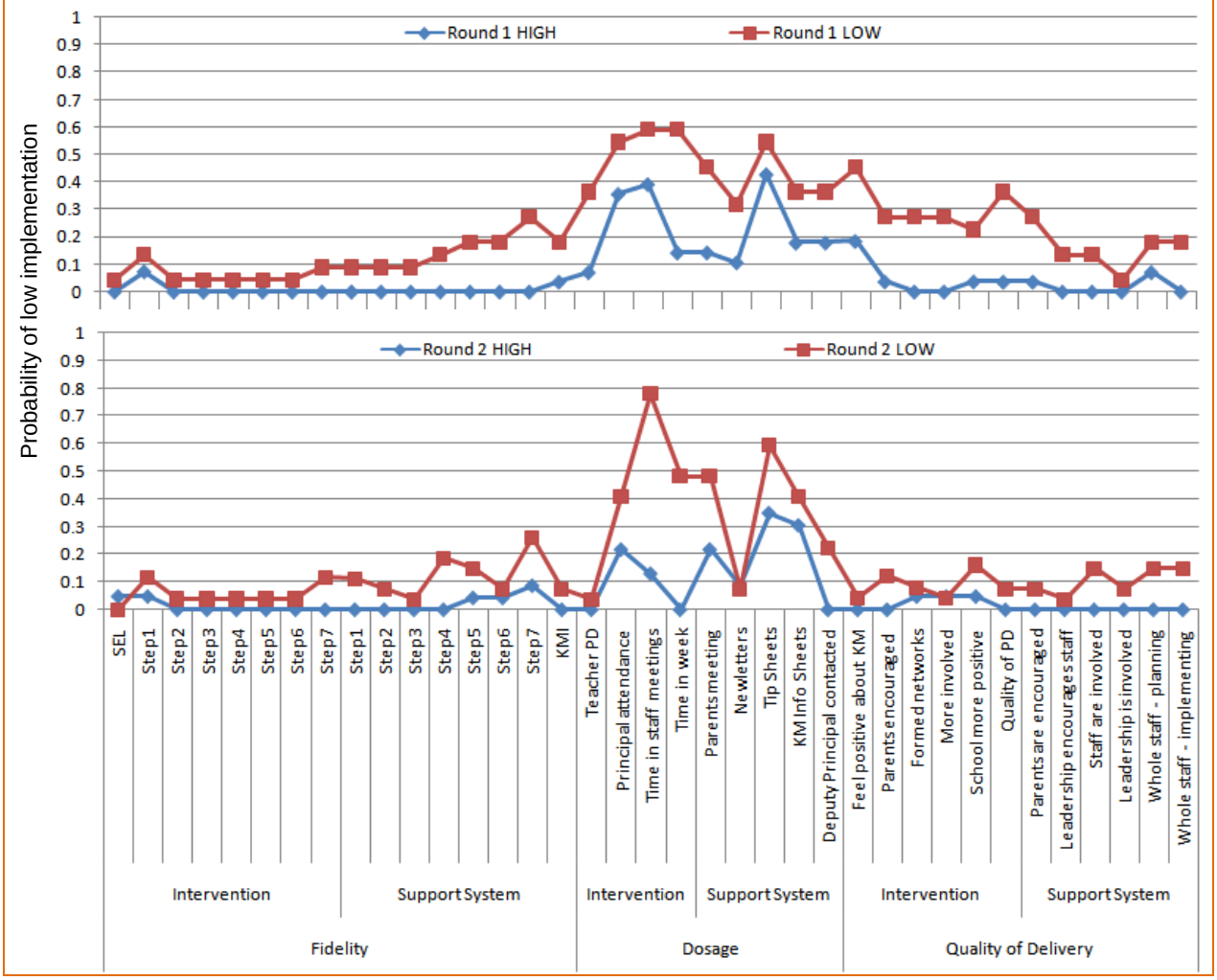
In developing this Implementation Index, 50 items from Parent, Teacher and Project Officer Questionnaires, that might provide useful discriminants of school implementation, were selected and classified within the framework. Items specifically about the four components were not considered to be clear indicators of fidelity since schools could choose in which order to implement the components and the ranking of schools was based only on Time 4 data. Time 4 was chosen because it captured information about the schools at a point at which they should have achieved a reasonable level of implementation.

The behaviour of Round 1 and Round 2 schools on these 50 items were examined in MPlus 5.2 (Muthén and Muthén, 2007) using Latent Class Analysis to identify the questionnaire items that best discriminated between schools. Two theoretical classes of school were chosen for the analysis and these were described as 'high' and 'low' implementation. A systematic procedure was undertaken using LCA to inspect items and removed those items that 'crossed-over', thereby interpreting these items to be poor discriminants and poor indicators of implementation. Consideration was also given to the differences in the ways Round 1 and Round 2 schools behaved on each item. Round 1 schools were a reflection of sustained implementation, while Round 2 schools were a reflection of early implementation. Hence, items were first removed that were poor indicators in both settings. Next, items that were not so effective in one setting but were effective at discriminating in the other setting were considered, in conjunction with the overall representation and 'balance' of items across fidelity, dosage and quality. Of less concern was the goodness of fit statistics, because the focus was on item discrimination and not categorisation of schools. The Implementation Index comprised 37 items in the final selection, with balanced representation in each section of the Implementation Framework. Figure 12 presents the LCA probability estimates of Round 1 and Round 2 schools, respectively. The vertical axes can be interpreted as the probability of low implementation, hence the High implementing schools have the lowest probability of being poor implementers on the items. The detailed list of selected items and their scores are presented in the Final Report.

7.2.1 School implementation index (SCHINDEX)

Using the response scores for each item, a total index score was calculated for each school, with a maximum score of 226 indicating a high level of implementation and a minimum score of 42 indicating a low level of implementation. Missing values, which were below five per cent, were replaced with the local median. The KidsMatter schools ranged from a low score of 89 to a high score of 205 and form the data comprising the SCHINDEX variable.

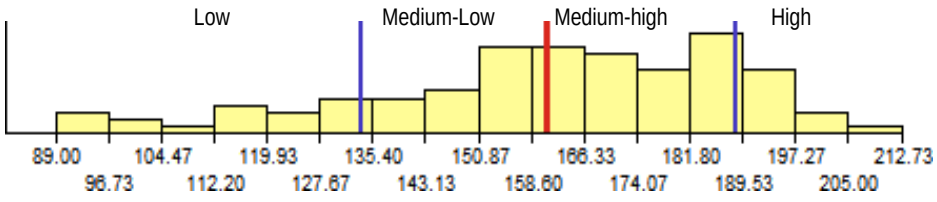
Figure 12. Latent Class probability estimates of being high or low implementing Round 1 and Round 2 schools, as a means of selecting discriminants



7.2.2 School implementation group (SCHGRP)

In order to form categories or groups of schools for subsequent analysis, the visual binning procedure in SPSS was used on the scaled index data (SCHINDEX). Cut-points were applied at the mean and at ±1 standard deviation to form four levels of implementation. Accordingly, 'Low implementation' (1) included scores below the cut-point of 143, 'Medium-low implementation' (2) included scores between 143 and 161, 'Medium-high implementation' (3) included scores between 161 and 188, and 'High' implementation (4) involved scores above 188. Figure 13 presents the visual-binning profile in SPSS with applied cut-points at -1SD, mean, and +1SD, resulting in the School Implementation Group variable (SCHGRP).

Figure 13. Visual binning cut-points applied to the School Implementation Index



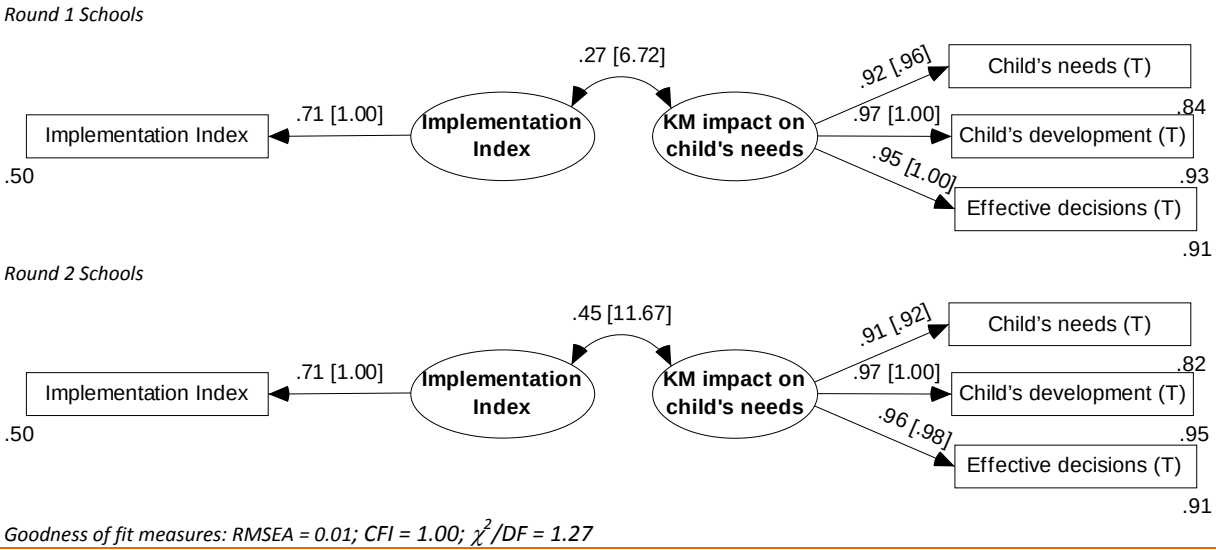
7.3 Canonical Analysis

One aspect of interest in this evaluation was to ascertain the relationship between the quality of implementation of KidsMatter in schools and its possible impact on student outcomes. In this case, the student outcome of choice was KM impact on child's needs as reported by teachers (TKMCHI). Accordingly, the question can be asked, is there a relationship between schools identified on the Implementation Index as being 'low', 'medium-low', 'medium-high', or 'high' implementers, and the schools' ability to meet better children's social, emotional and behavioural needs?

A multivariate technique called Canonical Analysis (Garson, 2008; Tabichnick and Fidell, 2007) was used to test the strength of relationships between Implementation index and KM impact on child (TKMCHI). This technique considers more completely the complexity of relationships than does a simple correlation or regression analysis. Given the skewed nature of the distributions obtained for the questionnaire data and the large sample size, it was appropriate to use asymptotically distribution-free (ADF) estimation for each canonical model (Browne, 1984; Garson, 2009; Hox and Bechger, 1998). Figure 14, presents the full canonical models for the separate relationships between Round 1 and Round 2 schools with KM impact on child. The canonical analysis indicates significant moderate standardised correlations of 0.27 in Round 1 schools and 0.45 in Round 2 schools.

While inspection of the canonical models provides an intuitive and aesthetic understanding of the relationships, the text output provides the actual information on which judgements can be based. By inspecting critical ratios, levels of significance, and magnitudes of effect, items can be assessed for their significance and trimmed if they do not meet pre-determined criteria. In this study, the criteria for trimming paths are based on a significance level of 0.05 and a minimum cut-off magnitude of the standardised weight of 0.1 and loading of 0.3 are employed.

Figure 14. Canonical model of the Implementation index with KM impact on child's needs for Round 1 and Round 2 schools, showing standardised and [unstandardised] coefficients



The desirable indices of goodness-of-fit are, the Root mean square error of approximation (RMSEA ≤ 0.05), the Comparative fit index (CFI ≥ 0.95), and the Chi-squared statistic (χ^2/DF ≤ 3.0). These indices were selected as they performed better than other indices under non-parametric conditions and were less sensitive to sample size (Fan, Thompson, and Wang, 1999; Lei and Lomax, 2005; Marsh, Balla, and McDonald, 1988; Schumacker and Lomax, 2004). Accordingly, the goodness of fit measures presented in Figure 14 suggests that the Round 1 and Round 2 school models meet these criteria and indicate a good model fit.

In each model, both the metric or unstandardised and the standardised weights and correlation coefficients are presented. An indication of the relative importance of a path within a model is indicated by the relative magnitude of the associated standardised coefficient. Therefore, in order to compare the relative strengths of paths to one another within a model, the scale-free standardised coefficients are used (Pedhazur, 1997). However, the standardised coefficients are not suitable for the comparison of paths between models. According to Pedhazur (1997), the standardised path weights and loadings reflect not only the presumed effects of the associated variables but also the variance and the covariance of variables included in the model, in addition to the variance of the excluded variables subsumed under the error term. Because these variables are sample-specific and may vary from one population to another, the standardised coefficient is not generalisable across settings or populations. Therefore, use of the unstandardised or metric path coefficients for between-model comparisons are appropriate, but several issues need to be considered when making such comparisons (Pedhazur, 1997). First, being unstandardised, the magnitude of the coefficient depends on the unit used in the measurement of the variable, so the magnitude of a coefficient belies its significance. Secondly, many variables used in social and behavioural research do not employ an interval scale, which limits comparison with such variables to a dichotomous scale (for example, male = 1, female = 2). Lastly, when the reliability of an independent variable differs across groups, comparisons of the coefficients may lead to an erroneous interpretation. Accordingly, when comparing the effects of different variables within a single model, the standardised path coefficients are used, and for the comparison of the same variables between models, the unstandardised path coefficients are used. In this evaluation there is the need to report both standardised and unstandardised regression coefficients.

Since a purpose in this technical report is to consider the statistical rigour behind the more simply presented analysis provided in the Final Report, the canonical models shown in Figure 14 include the standardised and unstandardised regression estimates, in addition to the variance explained by each item. However, it is not the place of this technical report to discuss the findings from the secondary analyses, for which the Final Report can be consulted.

7.4 Estimating Change Over Time Using Hierarchical Linear Modelling

The KidsMatter Evaluation questionnaires required parents and teachers to respond (mostly on a 7-point Likert scale) to statements about various aspects of the KidsMatter Pilot Initiative. There were approximately 112 items in each of the parent and teacher questionnaires. Those 112 items were divided into sub-groups, where each group of items dealt with different aspects of interest to the evaluation. For example, one group of items dealt with implementation, another group dealt with teachers' knowledge, and another group dealt with a positive school community, and so on. These groups of items or variables, have been discussed in the previous chapter, but essentially, were subjected to confirmatory factor analysis using asymptotically distribution-free estimation (CFA-ADF) in AMOS, to identify the factor structure of the groups of items (Tabachnick and Fidell, 2007). Factor scores for each variable were calculated and brought together to form a longitudinal database appropriate for secondary analysis.

Of primary interest, was the identification of significant change over time across all scales. However, given the nature of the large, complex, non-parametric, longitudinal data set, simple t-test comparisons between Time 1 and Time 4 were inappropriate and such results would be misleading. An alternative method, which best optimised the characteristics of the data, is being increasingly used (for example see, Darmawan, 2003; Dix, 2007; Hungi, 2003).

In order to test for significant change over time using a technique that takes into consideration the nested nature of the data and does not depend on assumptions of normality, three-level hierarchical linear models (HLM) were employed for each variable as a direct function of the occasion at which the variable is involved. Version 5 of the HLM program was used in preference to more recent

versions since it has greater capacity to handle missing data (Bryk and Raudenbush, 1992). Hierarchical linear modelling seeks to take into consideration the hierarchical nature of complex multilevel data, resulting from nested samples like the one used in this evaluation. In HLM, each level in the nested structure is formally represented by its own sub-model. Raudenbush and Bryk (1994, p.7) explained that "these sub-models express relationships among variables within a given level, and specify how variables at one level influence relations occurring at another". According to Raudenbush and Bryk (2002), the advantages that HLM had over single-level techniques, involved its ability to improve the estimation of individual effects, to formulate and test for cross-level effects, and to partition variance and covariance components between levels of analysis. For these reasons, HLM was used in this evaluation and gave rise to models that were applied more meaningfully to the situation in which KidsMatter was conducted.

7.4.1 Building a three-level model

When building a three-level model using the HLM program, three stages are typically involved (Raudenbush, Bryk and Congdon, 2000). The first stage requires the construction of the sufficient statistics matrix (SSM) file. This preparatory process involves assigning the appropriate raw data file to each level, linked by a common unit of identification. If, for example, Levels 1, 2 and 3 are assigned the data files containing occasion (within-student), student (between-student, within-school), and school (between-school), respectively, then the linking unit is School ID and Student ID. Once the SSM file is formed, it provides the input for all subsequent analyses. Level 1 permits missing data, and pairwise deletion can be selected as the appropriate method of handling missing data. However, Level 2 and Level 3 data files require complete data. In the preparation of the Level 2 and Level 3 data files for the simple analysis undertaken, only the ID variables and Round are necessary, so missing data at these levels is not an issue in the analyses that follows. In other words, factors were not tested at the second or third level because this complex analysis was beyond the scope of the requirements of the Final Report. Nevertheless, the configuration of having three levels is sufficient to take into account the nestedness of the data – of occasions, within students (parent or teacher), within schools. The straightforward step of only examining occasion as a predictor, however, is made more complex by creating two sets of three files, one set for each school Round, so that analyses can be conducted separately. In addition, to simplify interpretation, occasion is recoded to Time 1 (0), Time 2 (1), Time 3 (2), and Time 4 (3).

The second stage involves the execution of analyses based on the SSM files, or in other words, specifying the models. Level 1 models are specified for each variable as a direct function of the occasion at which the variable is involved. No other predictor variables are included in the final Level 1 model.

In the discussion that follows, at Level 1 the outcome of interest (for example, Mental Health Difficulties) of each parent or teacher on one or more occasions is modelled as a function of the intercept (mean) plus a slope, as a function of the occasion, plus a random error.

$Y = \pi_0 + \text{OCC}\pi_1 + e$

where: Y is the outcome variable on any occasion of a participant in one of the 100 Round 1 or Round 2 KidsMatter schools;

π_0 is the mean over the four occasions of that participant in their school, specified as the intercept;

π_1 is the change over time, specified as the slope; and

e is a random within-participant effect estimated by the deviation of that participant's score from their mean score over the four occasions.

Given that the focus of this investigation is to examine change over time, the variable of occasion (OCC) is the first and only predictor to be entered into the Level 1 equation. Accordingly, in order to examine if there is significant change in Mental Health Difficulties, for example, it is simply a matter of viewing the HLM output and seeing if the HLM analysis records that occasion is a significant

predictor of change in Mental Health Difficulties. The more rigorous significance level of 0.01 (rather than 0.05) is chosen, to take into account the multiple comparisons involved in the analysis.

With 34 parent (P) and teacher (T) rated variables to test in Round 1 and Round 2 schools, a total of 68 separate HLM models were developed and analysed to identify any significant change over time. The intercept, slope and level of significance were extracted from each HLM output file and trajectory graphs, or line of best fit, were constructed by calculating Y on each occasion (OCC = 0, 1, 2, 3) using the estimated values obtained from each analysis. Microsoft Excel was used to present the equations in line-graph format to facilitate easy interpretation against the original scale, which in most cases was 'Strongly disagree' (1) to 'Strongly agree' (7). In addition to the line of best fit, the 'raw' mean response was also presented on the same axis in bar-graph format. In addition to reporting HLM means at Time 1 and Time 4, the statistical significance, *p*, is also reported at three levels, where *** is equivalent to $p < 0.000$, ** is given for $p < 0.001$, * is presented as $p < 0.01$, and not significant (ns) is $p > 0.01$.

It is necessary to emphasise that the analyses and graphs that are discussed here and in the Final Report are concerned with change between occasions associated with students, parents or teachers within schools, averaged across the schools involved in the particular Round of the evaluation under consideration. This approach is meaningful since each school is the unit of operation of the intervention.

Although the more rigorous significance level of 0.01 (rather than 0.05) was chosen, to take into account multiple comparisons, an additional measure of practical significance using an effect size was also employed and is considered in the next section.

7.4.2 Calculating a practical effect size from HLM

Ferguson (1971, p.113) presents a simple formula that relates the correlation coefficient, *r*, and the slope of a regression line, *b*, where the form of the regression line is $y = bx + a$. In this case, *y* is an outcome variable (for example, Mental Health Difficulties), *x* is occasion and *a* is the intercept, given as the mean at the first occasion. Ferguson's relationship, expressed in deviation-score (*s*) form, is:

$$b_{yx} = r\frac{s_y}{s_x}$$

In fitting the regression line to the data, HLM provides a sigma squared (σ^2) score as the estimated within Level 1 variance. Sigma (σ) can be interpreted as the standard deviation of the *y* component, s_y, after allowance has been made for the multilevel structure of the data. The standardised regression coefficient b_{yx} is equivalent to a part correlation (*r*) between the variable *x* and the part of *y* associated with Level 1 after allowance has been made for variance at Level 2 and Level 3.

Accordingly, the equation can be re-arranged to calculate correlation, *r*, as an estimation of the effect size:

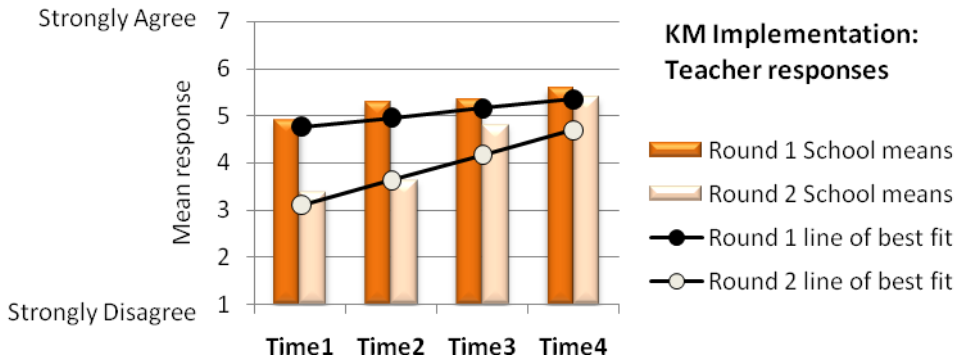
$$r = \frac{b_{yx}s_x}{s_y} = \frac{b_{yx}s_x}{\sqrt{\sigma^2}}$$

The standard deviation of the *x* component, s_x, is calculated from the occasions. So if data are available on all four occasions (1 to 4), then the standard deviation of the numbers 1, 2, 3 and 4 is $s_x = 1.118$. Likewise, if data are missing from the first occasion or the second occasion then $s_x = 0.816$ or $s_x = 1.247$, respectively. Since a regression coefficient that is equivalent to a part correlation coefficient is being estimated, Kirk (1996) suggests 0.10, 0.24, and 0.37 as indicative of the cut points between trivial, small, medium and large effects, respectively.

7.4.3 An example of the HLM analysis

Since the purpose here is simply to detail the analysis and not interpret it, the graphs for each variable are featured in the Final Report, in conjunction with statistics of interest. However, for convenience, an example is presented in Figure 15. The final graph shows the line of best fit and mean bar-graph representation for Round 1 and Round 2 schools, along with the accompanying statistics and effect size results.

Figure 15. Example of the HLM analysis



	Time 1 Mean	*Time 4 Mean*	*Significance p*	*r*	*Effect Size*
Round 1	*4.77*	*5.35*	*****	*0.31*	*medium*
Round 2	*3.94*	*4.95*	*****	*0.44*	*large*

Chapter 8. In Summary

This Technical Report and User Guide provides a record of the comprehensive body of information collected and analysed for the evaluation of KidsMatter presented in the Final Report. Having a dual purpose, however, means that this document also needs to provide support for further use of the data. Accordingly, this chapter provides both a summary of the major analysis and guidance for further analysis.

8.1 Summary of the Longitudinal Analysis

Central to the evaluation was the whole-cohort longitudinal study. A total of 34 variables on up to four occasions were developed from the Teacher and Parent Questionnaires using confirmatory factor analysis with asymptotically distribution-free estimation and were tested for significant change over time using hierarchical linear modelling followed by further examination of practical significance using an effect size. In order to bring all of the preliminary and secondary analyses together in a concise but accessible format, a final step in the process is to produce a summarising table, and Table 16 attempts to achieve just that. The 34 variables are arranged according to the conceptual design and by school Round.

Accordingly, Table 16 focuses on measuring significant change over time and presents for each variable a mean responses on Time 1 and Time 4 (as shown in the line of best fit graphs) along with the associated level of significant difference ($p < 0.01$). For several of these measures the change was not statistically significant. In addition, Table 16 presents the measure of practical significance using an effect size, accompanied by Kirk's (1996) labels of small, medium and large as indicative of exceeding 0.10, 0.24, and 0.37, respectively. The associated clustered box-plots, based on raw data at each occasion, are also presented to demonstrate that most measures violate the assumptions of normality (Burns, 1998) and serve to reinforce the notion of change over time.

As an outcome, Table 16 provides a summary of the main features of the evaluation of the KidsMatter Initiative and a sound framework from which all subsequent analyses can be explored.

Table 16. Factors from the KidsMatter Teacher (T) and Parent(P) Questionnaires by school Round, with change in HLM-derived means on Time 1 and Time 4, level of significant difference (*p*), and practical level of significance (*r*)

Variable Names		Round 1 Schools					Round 2 Schools				
	No. of Items	Time 1 Mean	Time 4 Mean	*p*[b] sig.	*r* correlation	Effect[c] Size	Time 1 Mean	Time 4 Mean	*p*[b] sig.	*r* correlation	Effect[c] Size
School Implementation of KMI											
KM Engagement (TKMENG)	4	5.06	5.53	**0.000**	0.26	medium	3.53	4.93	**0.000**	0.51	large
KM Implementation (TKMIMP)	11	4.77	5.35	**0.000**	0.31	medium	3.94	4.95	**0.000**	0.44	large
KM Implementation (PKMIMP)	3	4.99	5.43	**0.000**	0.27	medium	4.14	5.34	**0.000**	0.66	large
School Engagement with Mental Health Initiatives in General											
General Engagement (TMHENG)	10	5.31	5.56	0.002	0.17	small	5.03	5.35	0.001	0.20	small
General Engagement (PMHENG)	8	5.08	5.09	0.871	0.01		5.01	5.04	0.342	0.03	
School Risk and Protective Factors											
C1: Positive School Community (TPSC)	11	5.61	5.71	0.216	0.07		5.67	5.6	0.299	-0.05	
C1: Positive School Community (PPSC)	11	5.81	5.74	0.043	-0.07		5.76	5.68	**0.007**	-0.08	
C2: Social and Emotional Learning (TSEL)	10	4.97	5.45	**0.000**	0.25	medium	3.10	4.70	**0.000**	0.64	large
C3a: Parenting Support by School (TSUPSC)	6	4.43	5.20	**0.000**	0.39	large	4.36	4.94	**0.000**	0.25	medium
C3a: Parenting Support by School (PSUPSC)	7	4.84	5.01	**0.001**	0.13	small	4.82	5.01	**0.000**	0.15	small
C3b: Parenting Support by Staff (TSUPST)	7	5.35	5.68	**0.000**	0.19	small	5.35	5.46	0.172	0.06	
C3b: Parenting Support by Staff (PSUPST)	7	5.11	5.18	0.254	0.04		5.12	5.12	0.963	0.00	
C4: Early Intervention (TEINT)	12	4.89	5.32	**0.000**	0.25	medium	4.83	5.07	**0.009**	0.13	small
C4: Early Intervention (PEINT)	14	4.8	4.84	0.460	0.03		4.71	4.8	0.057	0.06	
Teacher Risk and Protective Factors											
Staff Approach (TSTAFF)	7	5.75	6.01	**0.000**	0.17	small	5.64	5.85	**0.005**	0.13	small
Teacher SEL Attitude (TSELAT)	3	6.24	6.35	0.051	0.08		6.25	6.3	0.480	0.03	
Teacher SEL Knowledge (TSELKN)	5	5.41	5.84	**0.000**	0.29	medium	5.39	5.62	**0.005**	0.13	small
SEL Programs & Resources (TSELPR)	5	5.47	5.86	**0.000**	0.26	medium	5.33	5.64	**0.000**	0.19	small
Teacher Self-Efficacy (TSELEF)	3	5.18	5.55	**0.000**	0.23	small	5.2	5.38	**0.010**	0.10	small

[a] Parent(P); Teacher (T). [b] Significant levels (p<0.01) of slope are shown in bold.
[c] Interpretation of the part-correlation coefficient, *r*, as an effect size, according to Kirk (1996).

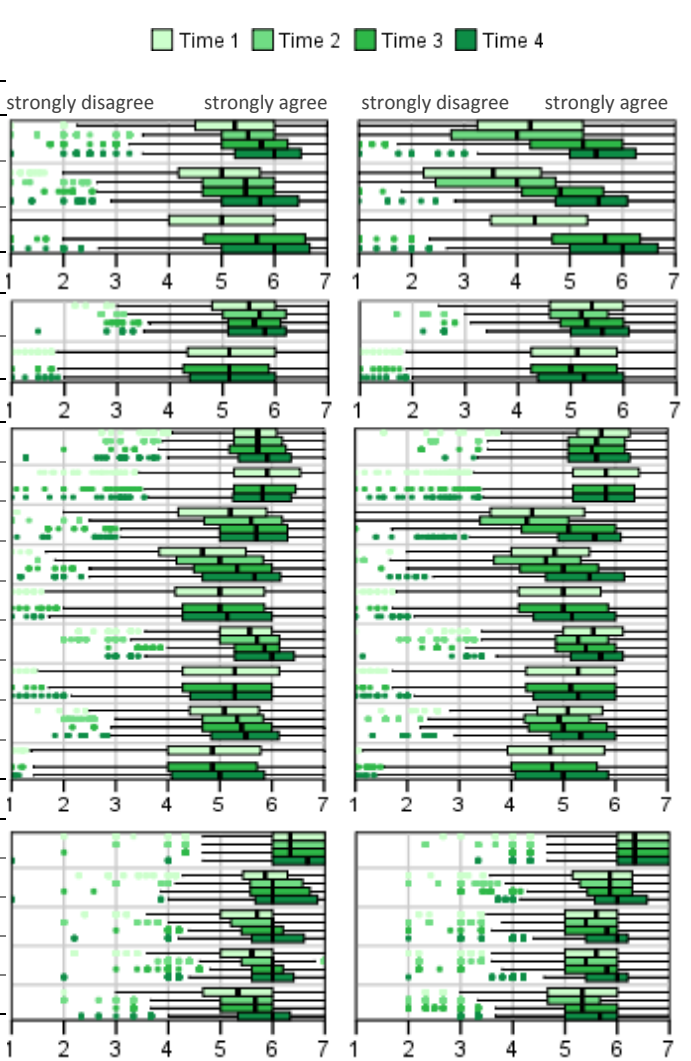
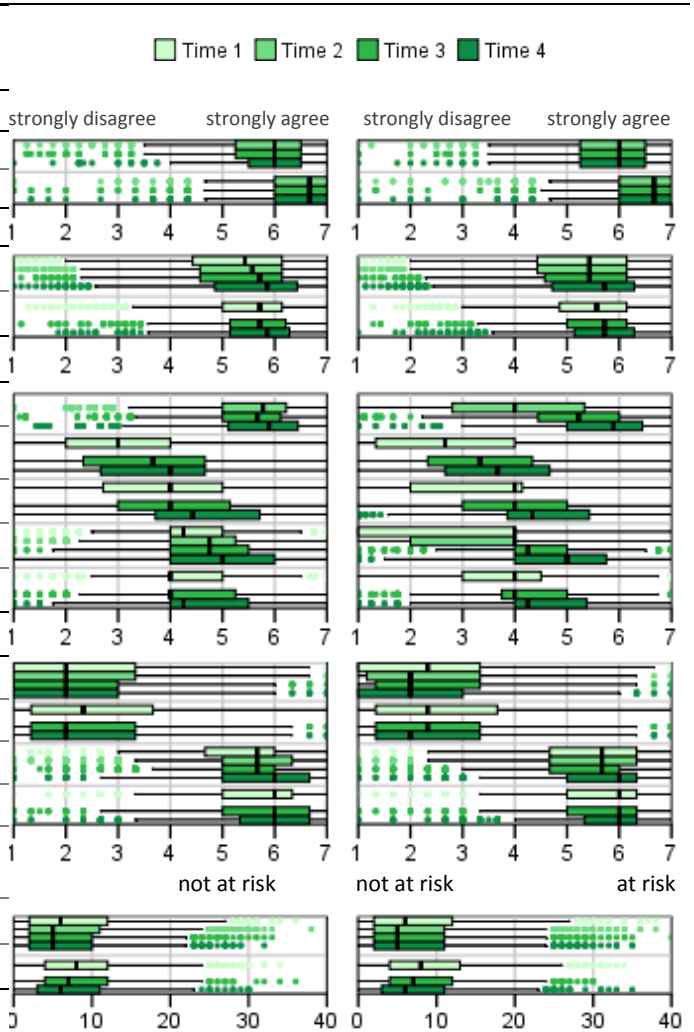


Table 16. Continued

Variable Names	No. of Items	Round 1 Schools Time 1 Mean	Round 1 Schools Time 4 Mean	Round 1 Schools p[b] sig.	Round 1 Schools *r* correlation	Round 1 Schools Effect[c] Size	Round 2 Schools Time 1 Mean	Round 2 Schools Time 4 Mean	Round 2 Schools p[b] sig.	Round 2 Schools *r* correlation	Round 2 Schools Effect[c] Size
Family Risk and Protective Factors											
Parenting Knowledge (PARKNO)	2	5.83	5.83	0.361	0		5.76	5.81	0.152	0.05	
Parenting Style (PARSTY)	2	6.23	6.12	0.000	0.08		6.22	6.15	0.006	0.05	
Child Risk and Protective Factors											
Social and Emotional Competencies (TCSEC)	7	5.22	5.50	**0.000**	0.16	small	5.24	5.4	**0.007**	0.09	
Social and Emotional Competencies (PCSEC)	7	5.47	5.61	**0.000**	0.13	small	5.39	5.56	**0.000**	0.16	small
Perceived KM Impact											
KM Professional Development (TKMPD)	4	5.39	5.50	0.018	0.12	small	4.17	5.07	0.000	0.76	large
KM Impact on Parent Involvement with School (PKMINV)	3	2.59	3.18	0.000	0.23	small	2.28	3.02	0.000	0.31	medium
KM Impact on Parent Learning (PKMLRN)	7	3.65	4.15	**0.000**	0.27	medium	3.27	4.01	**0.000**	0.41	large
KM Impact on Child (TKMCHI)	4	4.42	4.83	0.002	0.15	small	3.22	4.36	0.000	0.42	large
KM Impact on Child (PKMCHI)	4	4.22	4.37	0.021	0.1		3.73	4.21	0.000	0.31	medium
Student Mental Health Outcomes											
Mental Health Difficulties (TMHD)	3	2.33	2.22	0.057	0.05		2.41	2.32	0.046	0.04	
Mental Health Difficulties (PMHD)	3	2.69	2.53	**0.001**	0.09		2.71	2.55	**0.003**	0.09	
Mental Health Strengths (TMHS)	3	5.35	5.56	**0.001**	0.11	small	5.39	5.48	0.152	0.04	
Mental Health Strengths (PMHS)	3	5.55	5.72	**0.000**	0.14	small	5.47	5.65	**0.000**	0.14	small
Total SDQ Difficulties (TSDQ)	20	7.53	6.51	**0.000**	0.12	small	7.59	6.98	**0.007**	0.07	
Total SDQ Difficulties (PSDQ	20	8.9	8.29	**0.000**	0.11	small	9.57	8.43	**0.000**	0.21	small

[a] Parent(P); Teacher (T). [b] Significant levels (p<0.01) of slope are shown in bold.
[c] Interpretation of the correlation coefficient, *r*, as an effect size, according to Kirk (1996).



8.2 Suggestions for Further Analysis

Echoed in one of the last sections presented in the Final Report, is the consideration of and need for further research over and above that which was carried out in fulfilling the analysis required for the successful completion of the Final Report. For example, further longitudinal analysis could be undertaken to examine the nature and influence of risk and protective factors associated with student mental health. A number of other suggestions are presented here.

- Scaling procedures: Analyses could be carried out using Rasch Scaling and non-parametric IRT in order to determine which procedure is best employed and for which scale.
- Exploratory multivariate analysis with mediated direct and indirect effects: Examining the direct and indirect effects of selected variables on selected outcomes at the student, teacher, parent and school levels.
- Cross-level moderating effects with multilevel direct effects: Examining the effects of selected variables on change in selected outcomes using multilevel analysis.
- Examination of two and three level models: Examining multi-level models for students, parents, teachers and schools effects on change in outcomes.
- Examination of changes in structure over three and four occasions: Examining the factors that influence the attitudes associated with mental health.

Clearly, the KidsMatter Evaluation database is an extensive body of data that warrants further analysis. As such, these final notes are provided as a basis for discussion with respect to how best to proceed with future secondary analyses of the large and valuable body of data that has been collected for the evaluation of KidsMatter.

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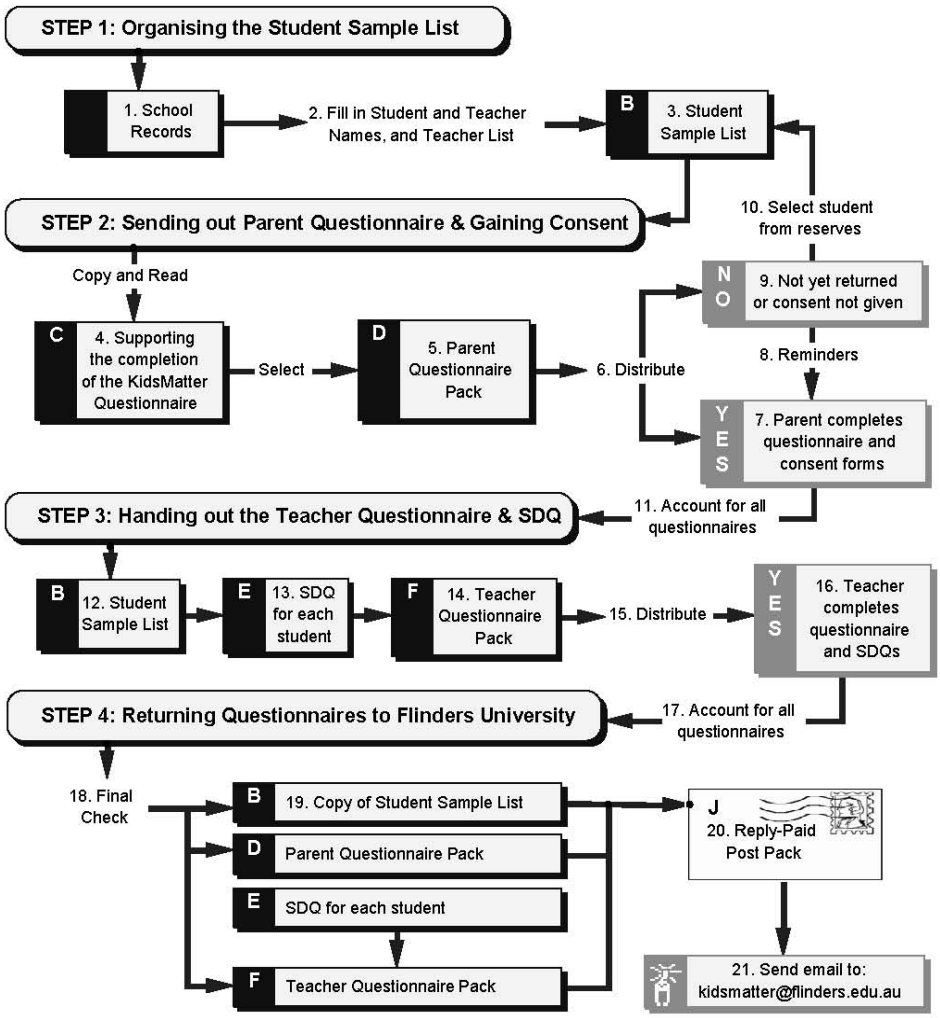
Appendix A: Instructions for Administering the Questionnaires

SUMMARY OF THE FOUR MAIN STEPS

Start at STEP 1 and follow the arrows. Cross-match the letters with the items given in the Contents list (at the beginning of this booklet). Cross-match the numbers at each stage through the process by referring to the numbered items provided in the previous pages. The details of each step are only a guide and may need to be adapted for individual circumstances within each school.



A larger version of this flow-chart (see C) is provided for sharing between team members and can be pinned up for quick reference. Key dates could also be added.

Appendix B: Codebook

This Codebook documents the structure of each of the eight raw KidsMatter Evaluation data files listed below, as well as information about the format and coding of the variables in each of the data files. Note that items are given in lowercase and variables are given in uppercase.

File Name	Name	Description
kmstupop.sav	Student Population Background Data	The sampling frame containing student enrolment lists from the 100 KM Schools.
kmschool.sav	School Background Data	Contains demographic information on each of the participating schools.
kmteacher.sav	Teacher Questionnaire Data	Contains teacher responses to the Teacher Questionnaire item and the formed variables of these items on four occasions.
kmparent.sav	Parent Questionnaire Data	Contains parent responses to the Parent Questionnaire item and the formed variables of these items on three occasions.
kmstudent.sav	Student Background and Mental Health Data	Contains information on student background characteristics, parent/caregiver responses to student mental health items on three occasions, teacher responses to student mental health items on four occasions, and the formed variables of these parent and teacher items.
kmproforma.sav	Project Officer Proforma (Quantitative) Data	Contains quantitative responses to the Proforma on four occasions the formed variables of some of these items.
kmproforma.xls (excel file)	Project Officer Proforma (Qualitative) Data	Contains qualitative responses to the Proforma on five occasions.
kmexesum.xls (excel file)	School Leadership Executive Summary Data	Contains qualitative and quantitative responses from Principals and KM Action Team Coordinators on one occasion.
kmssv.doc (word file)	Stakeholder and Student Voice Study Themed Quotes	Contains transcribed interview and focus group quotes resulting from the Stakeholder and Student Voice study, arranged by theme.

Permission to use these data files should be gained from *beyondblue*.
Please contact Dr Brian Graetz (email: brian.graetz@beyondblue.org.au)

To the best of our knowledge, these files are error free and should contain the information and operate as described. Flinders University accepts no liability or responsibility for any damage to your computer system or data that may result from the use of these data files found on the enclosed CD.

B.1 Student Population Background Data

File Name: kmstupop.sav

Description: Students enrolment lists from the 100 KidsMatter Schools. Used to provide the sampling frame from which the participating students were randomly selected.

Variable	Format	N	Missing	Codes	Description
SCHID	numeric	28148	0	1-101	School ID
SID	numeric	4980	23168	1xx-101xx	Student ID
SCODE	string	28148	0		School student ID code
DOB	date	28148	0		Date of Birth (dd-mmm-yy)
SAGE	numeric	28148	0		Age in years at 31-Dec-2007 (student born in 1997 turned 10)
SSEX	numeric	28148	0	1=Male, 2=Female	Student Gender
RISK	numeric	28148	0	0=not at risk, 1=at risk	At Risk Status
ATSI	numeric	25931	2217	0=not ATSI, 1=ATSI	Aboriginal or Torres Straight Islander
HOMEPC	numeric	22991	5157		Student's home postcode (or school postcode if information NA)
FEE	numeric	18401	9747	0=not assisted, 1=fee assisted	Fee Assisted
ESL	numeric	24870	3278	0=English, 1=ESL	English as a Second Language
SELECT	numeric	28148	0	1=selected, 0=not selected originally	Selected in the random sample
PARTIC	numeric	28148	0	1=participated, 0=not participate	Participated in the study (have SID assigned)
REPLAC	numeric	28148	0	1=replacement, 0=not selected originally	Replacement student, not sampled but participated

B.2 School Background Data

File Name: kmschool.sav

Description: The School Background data file contains demographic information on each of the participating schools.

Variable	Format	N	Missing	Codes	Description
SCHID	numeric	100	0	1-101	School ID
ROUND	numeric	100	0	1=starting 2007, 2=starting 2008	School Round
STATE	numeric	100	0	1=ACT, 2=NSW, 3=NT, 4=QLD, 5=SA, 6=TAS, 7=VIC, 8=WA	State or Territory
SECTOR	string	100	0	1=Government, 2=Catholic, 3=Independent	Sector
POSTCODE	numeric	100	0		School Postcode
RSED	numeric	100	0		Relative Socio-disadvantage by postcode (ABS: SEIFA) 2006. Deciles rank areas 1-10 (groups of 10%)
GRADES	string	100	0		Aboriginal K-12, CPC - 7, K-10, K-12, P - 10, Pre - 12, Prim, R-10
LOCATION	numeric	100	0	1=Metro, 2=Rural, 3=Remote	Location
TYPE	numeric	100	0	1=Co-Ed, 2=Girls	School Type

Variable	Format	N	Missing	Codes	Description
SIZE	numeric	100	0		School size
STAFFSIZE	numeric	100	0		Number of staff
MALEPC	numeric	100	0		Percentage of male teachers
FULLTPC	numeric	100	0		Percentage of full time teachers
SUPPORTPC	numeric	100	0		Percentage of supported students
ATSIPC	numeric	100	0		Percentage of ATSI students
ESLPC	numeric	100	0		Percentage of ESL students
SPECNEEDPC	numeric	100	0		Percentage of Special Needs students
SCHINDEX	numeric	100	0	(min=42, max=226)	Implementation Quality Index
SCHGRP	numeric	100	0	1=Low, 2=Medium Low, 3=Medium High, 4=High	Implementation Quality Categories

B.3 Teacher Questionnaire Data on Four Occasions

File Name: kmteacher.sav

Description: The KM Teacher data file contains teacher responses to the Teacher Questionnaire item on four occasions. It also contains the formed variables of these items.

Variable	Format	N	Missing	Codes	Description
SCHID	numeric	3063	0	1-101	School ID
TEAID	numeric	3063	0	1xx-101xx	Teacher ID (same across occasions)
OCC	numeric	3063	0	1=Time 1, 2=Time 2, 3=Time 3, 4=Time 4	Occasion
ROUND	numeric	3063	0	1=starting 2007, 2=starting 2008	School Round
TID	numeric	3063	0	1xxx-101xxx	Teacher ID used to link to student (different across occasions)
TSEX	numeric	3063	0	1=Male, 2=Female	Teacher Gender
TEXP	numeric	3056	7		Teaching experience (years)
TPOSITION	string	3063	0		Teaching position
t01	numeric	3047	16	1=SD, 7=SA	1. Students feel a sense of belonging at this school
t02	numeric	3048	15	1=SD, 7=SA	2. Staff feel a sense of belonging at this school
t03	numeric	3050	13	1=SD, 7=SA	3. The school is welcoming to students
t04	numeric	3047	16	1=SD, 7=SA	4. The school is welcoming to families
t05	numeric	3048	15	1=SD, 7=SA	5. The school encourages caring relationships between staff and families
t06	numeric	3048	15	1=SD, 7=SA	6. The school encourages caring relationships between students and staff
t07	numeric	3041	22	1=SD, 7=SA	7. The school publicly recognises the contributions families make to the school
t08	numeric	3047	16	1=SD, 7=SA	8. Students have a say in decisions affecting them
t09	numeric	3048	15	1=SD, 7=SA	9. Staff participate in shared decision making
t10	numeric	3048	15	1=SD, 7=SA	10. The school encourages parents/caregivers to have a say about how the school operates

Variable	Format	N	Missing	Codes	Description
t11	numeric	3041	22	1=SD, 7=SA	11. The school has policies and practices that help all members of the school community to feel included
t12	numeric	3046	17	1=SD, 7=SA	12. Staff believe it is important to teach social and emotional skills to students
t13	numeric	3049	14	1=SD, 7=SA	13. Students can be taught social and emotional skills
t14	numeric	3046	17	1=SD, 7=SA	14. Students who are socially and emotionally competent learn more at school
t15	numeric	3048	15	1=SD, 7=SA	15. Staff help students develop an awareness of their own feelings
t16	numeric	3048	15	1=SD, 7=SA	16. Staff help students develop an awareness of other people's thoughts and feelings
t17	numeric	3059	4	1=SD, 7=SA	17. Staff help students to develop skills to manage their own emotions
t18	numeric	3058	5	1=SD, 7=SA	18. Staff help students develop skills for establishing healthy relationships with other children
t19	numeric	3052	11	1=SD, 7=SA	19. Staff help students to develop skills for making responsible decisions
t20	numeric	3052	11	1=SD, 7=SA	20. Staff provide opportunities for students to practice social and emotional skills
t21	numeric	3054	9	1=SD, 7=SA	21. Staff help students to apply social and emotional skills outside the classroom
t22a	numeric	3056	7	1=SD, 7=SA	22a) Develop an awareness of their own feelings
t22b	numeric	3058	5	1=SD, 7=SA	22b) Develop an awareness of the thoughts and feelings of other people
t22c	numeric	3057	6	1=SD, 7=SA	22c) Develop skills to manage their own emotional or social or behaviour difficulties
t22d	numeric	3057	6	1=SD, 7=SA	22d) Develop skills to make responsible decisions
t22e	numeric	3054	9	1=SD, 7=SA	22e) Develop skills to establish healthy relationships with other children
t23a	numeric	3055	8	1=SD, 7=SA	23a) Develop an awareness of their own feelings
t23b	numeric	3055	8	1=SD, 7=SA	23b) Develop an awareness of the thoughts and feelings of other people
t23c	numeric	3055	8	1=SD, 7=SA	23c) Develop skills to manage their own emotional or social or behaviour difficulties
t23d	numeric	3055	8	1=SD, 7=SA	23d) Develop skills to make responsible decisions
t23e	numeric	3054	9	1=SD, 7=SA	23e) Develop skills to establish healthy relationships with other children
t24	numeric	3048	15	1=SD, 7=SA	24. I can help people to develop a sense of belonging within the school community
t25	numeric	3055	8	1=SD, 7=SA	25. I can provide effective support for parents/caregivers about students' emotional or social or behaviour difficulties
t26	numeric	3054	9	1=SD, 7=SA	26. I can identify early signs of emotional or social or behaviour difficulties in students

Variable	Format	N	Missing	Codes	Description
t27	numeric	3017	46	1=SD, 7=SA	27. The school provides parents with opportunities to meet with other families to develop support networks
t28	numeric	3012	51	1=SD, 7=SA	28. Information about parenting is available at school
t29	numeric	3010	53	1=SD, 7=SA	29. Information about child development is available at school
t30	numeric	3011	52	1=SD, 7=SA	30. The school identifies and promotes resources to support parents/caregivers
t31	numeric	3007	56	1=SD, 7=SA	31. The school provides parents/caregivers with help to access parenting courses/programs
t32	numeric	3006	57	1=SD, 7=SA	32. Information is available at the school about how to help children with emotional (eg. sad, depressed or anxious), social or behaviour difficulties
t33a	numeric	3024	39	1=SD, 7=SA	33a) having learning difficulties
t33b	numeric	3019	44	1=SD, 7=SA	33b) overactive or easily distracted
t33c	numeric	3021	42	1=SD, 7=SA	33c) having emotional problems (eg. sad, depressed or anxious)
t33d	numeric	3021	42	1=SD, 7=SA	33d) having social problems (eg. unable to get along with classmates)
t33e	numeric	3021	42	1=SD, 7=SA	33e) having behaviour difficulties (eg. aggressive, rude and other difficult to manage behaviours)
t34	numeric	3021	42	1=SD, 7=SA	34. There is a good working relationship between school staff and parents/caregivers
t35	numeric	3013	50	1=SD, 7=SA	35. Parents/caregivers are encouraged to discuss their child's emotional or social or behaviour difficulties with school staff
t36	numeric	2996	67	1=SD, 7=SA	36. The school acts quickly if a child has emotional or social or behaviour difficulties
t37	numeric	2989	74	1=SD, 7=SA	37. The external school support services (such as psychologists and social workers) act quickly if a child has emotional or social or behaviour difficulties
t38	numeric	3037	26	1=SD, 7=SA	38. The school has strategies to identify whether students are having emotional or social or behaviour difficulties
t39	numeric	3027	36	1=SD, 7=SA	39. The school has policies to support students with emotional or social or behaviour difficulties
t40	numeric	3032	31	1=SD, 7=SA	40. The school has referral procedures for students experiencing emotional or social or behaviour difficulties
t41a	numeric	3018	45	1=SD, 7=SA	41a) overactive or easily distracted
t41b	numeric	3024	39	1=SD, 7=SA	41b) having emotional problems (eg. sad, depressed or anxious)
t41c	numeric	3026	37	1=SD, 7=SA	41c) having social problems (eg. unable to get along with classmates)
t41d	numeric	3023	40	1=SD, 7=SA	41d) having behaviour difficulties (eg. aggressive, rude and other difficult to manage behaviours)

Variable	Format	N	Missing	Codes	Description
t42	numeric	3032	31	1=SD, 7=SA	42. The school regularly monitors students who are having emotional or social or behaviour difficulties
t43	numeric	3023	40	1=SD, 7=SA	43. Students with emotional or social or behaviour difficulties tend to grow out of them
t44	numeric	3029	34	1=SD, 7=SA	44. Staff promote the importance of early intervention for students with emotional or social or behaviour difficulties
t45	numeric	3033	30	1=SD, 7=SA	45. Staff are respectful and sensitive towards people with emotional or social or behaviour difficulties
t46	numeric	3036	27	1=SD, 7=SA	46. The school leadership team actively supports the implementation of programs to develop students' social and emotional skills
t47	numeric	3029	34	1=SD, 7=SA	47. All teaching staff support the teaching of social and emotional skills to students
t48	numeric	3011	52	1=SD, 7=SA	48. Parents/caregivers actively support the school's program for teaching social and emotional skills
t49	numeric	3029	34	1=SD, 7=SA	49. Teachers attend professional development about supporting students' with emotional or social or behaviour difficulties
t50	numeric	3033	30	1=SD, 7=SA	50. Teachers discuss students' emotional or social or behaviour difficulties with the appropriate staff
t51	numeric	3017	46	1=SD, 7=SA	51. Teachers discuss individual student's emotional or social or behaviour difficulties with the student's parents/caregivers
t52	numeric	3012	51	1=SD, 7=SA	52. 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
t53	numeric	3014	49	1=SD, 7=SA	53. Staff consult parents/caregivers about emotional or social or behaviour interventions for their children
t54	numeric	3007	56	1=SD, 7=SA	54. Our teaching about social and emotional skills engages students' interest
t55	numeric	2995	68	1=SD, 7=SA	55. Parents/caregivers are positive about teaching social and emotional skills to students at school
t56	numeric	2996	67	1=SD, 7=SA	56. The school teaches social and emotional skills to students in formally structured sessions that adhere to a program manual
t57	numeric	2998	65	1=SD, 7=SA	57. The school teaches social and emotional skills regularly to all students (at least once per week)
t58	numeric	3005	58	1=SD, 7=SA	58. The school supports professional development about student emotional, social and behaviour difficulties
t59	numeric	3004	59	1=SD, 7=SA	59. The school supports professional development about teaching social and emotional skills
t60	numeric	3001	62	1=SD, 7=SA	60. The school curriculum allocates appropriate time to teach students social and emotional skills

Variable	Format	N	Missing	Codes	Description
t61	numeric	2990	73	1=SD, 7=SA	61. The school regularly evaluates its curriculum for teaching social and emotional skills
t62	numeric	2994	69	1=SD, 7=SA	62. The school's resources for teaching social and emotional skills meet the needs of our students
t63	numeric	3002	61	1=SD, 7=SA	63. The school is well equipped to meet the needs of students with emotional, social or behaviour difficulties
t64	numeric	2994	69	1=SD, 7=SA	64. The school teaches about social and emotional skills in a coordinated and supported way throughout the school
t65	numeric	3006	57	1=SD, 7=SA	65. Developing staff knowledge about emotional, social and behaviour difficulties is a high priority in our school
t66	numeric	2868	195	1=Not at all, 7=A great deal	66. A positive school community
t67	numeric	2850	213	1=NAA, 7=AGD	67. Social and emotional learning for students
t68	numeric	2847	216	1=NAA, 7=AGD	68. Parenting education and support
t69	numeric	2847	216	1=NAA, 7=AGD	69. Early intervention for students who are at risk or are experiencing social, emotional or behaviour difficulties
t70	numeric	2818	245	1=SD, 7=SA	70. Our school has defined issues related to the four KM components
t71	numeric	2813	250	1=SD, 7=SA	71. Our school has set goals for the four components
t72	numeric	2799	264	1=SD, 7=SA	72. Our school has identified difficulties in achieving our goals
t73	numeric	2797	266	1=SD, 7=SA	73. Our school has developed strategies for achieving our goals for the four components
t74	numeric	2784	279	1=SD, 7=SA	74. Our school has evaluated strategies for addressing the four components
t75	numeric	2782	281	1=SD, 7=SA	75. Our school has developed coherent plans for the four components
t76a	numeric	2798	265	1=SD, 7=SA	76a) a positive school community
t76b	numeric	2791	272	1=SD, 7=SA	76b) social and emotional learning for students
t76c	numeric	2783	280	1=SD, 7=SA	76c) parenting education and support
t76d	numeric	2785	278	1=SD, 7=SA	76d) early intervention for students who are at risk or are experiencing social, emotional or behaviour difficulties
t77	numeric	2751	312	1=SD, 7=SA	77. Our school has reviewed and adjusted plans for the four KM components
t78a	numeric	2090	973	1=SD, 7=SA	78a) Enhanced my knowledge about students' mental health
t78b	numeric	2086	977	1=SD, 7=SA	78b) Improved the ways that I interact with students
t78c	numeric	2086	977	1=SD, 7=SA	78c) Increased my level of commitment to promoting student wellbeing
t78d	numeric	2083	980	1=SD, 7=SA	78d) Helped me to foster student wellbeing through my practices as a teacher
t79a	numeric	2074	989	1=SD, 7=SA	79a) Develop a positive school community

Variable	Format	N	Missing	Codes	Description
t79b	numeric	2077	986	1=SD, 7=SA	79b) Provide social and emotional learning for all students
t79c	numeric	2068	995	1=SD, 7=SA	79c) Provide parent information and support
t79d	numeric	2067	996	1=SD, 7=SA	79d) Facilitate early intervention and support for students at risk
t80	numeric	2037	1026	1=Poor, 7=Excellent	80. In general, the quality of the Prof Dev for KM has been
TKMENG	numeric	2871	192	1=SD, 7=SA	KM Engagement (T)
TKMIMP	numeric	2837	226	1=SD, 7=SA	KM Implementation (T)
TMHENG	numeric	3047	16	1=SD, 7=SA	General Engagement (T)
TSELAT	numeric	3049	14	1=SD, 7=SA	SEL Attitude (T)
TSTAFF	numeric	3061	2	1=SD, 7=SA	SEL Staff Approach (T)
TSELKN	numeric	3059	4	1=SD, 7=SA	SEL Knowledge (T)
TSELPR	numeric	3055	8	1=SD, 7=SA	SEL Programs and Resources (T)
TSELEF	numeric	3058	5	1=SD, 7=SA	Self-Efficacy (T)
TPSC	numeric	3051	12	1=SD, 7=SA	C1: A Positive School Community (T)
TSEL	numeric	3017	46	1=SD, 7=SA	C2: Social and Emotional Learning (T)
TSUPSC	numeric	3025	38	1=SD, 7=SA	C3a:Parenting Support by School (T)
TSUPST	numeric	3025	38	1=SD, 7=SA	C3b: Parenting Support by Staff (T)
TEINT	numeric	3045	18	1=SD, 7=SA	C4: Early Intervention (T)
TKMPD	numeric	2098	965	1=SD, 7=SA	KM Professional Development (T)

B.4 Parent Questionnaire Data on Three Occasions

File Name: kmparent.sav

Description: The KM Parent data file contains parent/caregiver responses to the first section of the Parent Questionnaire item on three occasions. It also contains the formed variables of these items.

Variable	Format	N	Missing	Codes	Description
SCHID	numeric	9746	0	1-101	School ID
SID	numeric	9746	0	1xx-101xx	Student ID
OCC	numeric	9746	0	1=Time 1, 2=Time 2, 3=Time 3, 4=Time 4	Occasion
ROUND	numeric	9746	0	1=starting 2007, 2=starting 2008	School Round
TID	numeric	9727	19	1xxx-101xxx	Teacher ID used to link to student (different across occasions)
PCOMP	numeric	5178	4568	1=yes, 2=no	Are you the same person?
PLIVE	numeric	9419	327	Who does this child usually live with? 1=Mother & Father, 2=Mother Only, 3=Father Only, 4=Parent and Step Parent, 5=Other Guardian	
p01	numeric	9637	109	1=SD, 7=SA	1. My child feels a sense of belonging at school
p02	numeric	9666	80	1=SD, 7=SA	2. I feel accepted by staff at the school
p03	numeric	9641	105	1=SD, 7=SA	3. I feel accepted by other parents/caregivers at the school
p04	numeric	9670	76	1=SD, 7=SA	4. The school is welcoming to students
p05	numeric	9662	84	1=SD, 7=SA	5. The school is welcoming to families

Variable	Format	N	Missing	Codes	Description
p06	numeric	9653	93	1=SD, 7=SA	6. The school encourages caring relationships between staff and families
p07	numeric	9649	97	1=SD, 7=SA	7. The school encourages caring relationships between students and staff
p08	numeric	9617	129	1=SD, 7=SA	8. The school publicly recognizes the contributions families make to the school
p09	numeric	9593	153	1=SD, 7=SA	9. The school encourages students to have a say about school matters
p10	numeric	9637	109	1=SD, 7=SA	10. The school encourages parents/caregivers to have a say about school matters
p11	numeric	9609	137	1=SD, 7=SA	11. The school has good links with the local community
p12	numeric	9607	139	1=SD, 7=SA	12. The school provides parents/caregivers with opportunities to meet with other families/caregivers to develop support networks
p13	numeric	9562	184	1=SD, 7=SA	13. Information about parenting practices is available at school
p14	numeric	9639	107	1=SD, 7=SA	14. Information about child development is available at school
p15	numeric	9618	128	1=SD, 7=SA	15. The school identifies and promotes parenting resources to parents/caregivers
p16	numeric	9596	150	1=SD, 7=SA	16. The school provides parents/caregivers with help to access parenting courses/programs
p17	numeric	9551	195	1=SD, 7=SA	17. Information about parenting education courses and programs is available at school
p18	numeric	9577	169	1=SD, 7=SA	18. Information is available at the school on how to help children with emotional (eg. sad or anxious), social or behaviour difficulties
p19a	numeric	9655	91	1=SD, 7=SA	19a. having trouble with his or her schoolwork
p19b	numeric	9579	167	1=SD, 7=SA	19b. overactive or easily distracted
p19c	numeric	9583	163	1=SD, 7=SA	19c. having emotional problems (eg. sad, depressed or anxious)
p19d	numeric	9582	164	1=SD, 7=SA	19d. having social problems (eg. unable to get along with classmates)
p19e	numeric	9529	217	1=SD, 7=SA	19e. having behaviour difficulties (eg. aggressive, rude and other difficult to manage behaviours)
p20	numeric	9668	78	1=SD, 7=SA	20. Parents/caregivers feel able to discuss their child's emotional or social or behaviour difficulties with school staff
p21	numeric	9681	65	1=SD, 7=SA	21. There is a good working relationship between school staff and parents/caregivers
p22	numeric	9441	305	1=SD, 7=SA	22. The school acts quickly if a child has emotional (eg. sad, depressed or anxious) or social or behaviour difficulties
p23	numeric	9401	345	1=SD, 7=SA	23. The school has strategies to identify whether students are having emotional or social or behaviour difficulties
p24	numeric	9423	323	1=SD, 7=SA	24. The school has policies to support students with emotional or social or behaviour difficulties
p25	numeric	9340	406	1=SD, 7=SA	25. The school has referral procedures for students experiencing emotional or social or behaviour difficulties

Variable	Format	N	Missing	Codes	Description
p26	numeric	9410	336	1=SD, 7=SA	26. The school assists students having emotional or social or behaviour difficulties
p27a	numeric	9285	461	1=SD, 7=SA	27a) having trouble with his or her schoolwork
p27b	numeric	9228	518	1=SD, 7=SA	27b) overactive or easily distracted
p27c	numeric	9242	504	1=SD, 7=SA	27c) having emotional problems (eg. sad, depressed or anxious)
p27d	numeric	9221	525	1=SD, 7=SA	27d) having social problems (eg. unable to get along with classmates)
p27e	numeric	9180	566	1=SD, 7=SA	27e) having behaviour difficulties (eg. aggressive, rude and other difficult to manage behaviours)
p28	numeric	9225	521	1=SD, 7=SA	28. The school regularly monitors students who are having emotional or social or behaviour difficulties
p29	numeric	9268	478	1=SD, 7=SA	29. Students who show emotional or social or behaviour difficulties tend to grow out of them
p30	numeric	9257	489	1=SD, 7=SA	30. The school provides information that helps parents/caregivers to know if their child is having emotional or social or behaviour difficulties
p31	numeric	9258	488	1=SD, 7=SA	31. 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
p32	numeric	9325	421	1=SD, 7=SA	32. School staff are respectful and sensitive towards people experiencing emotional or social or behaviour difficulties
p33	numeric	9604	142	1=SD, 7=SA	33. I know how to calm my child if he/she is angry or upset
p34	numeric	9596	150	1=SD, 7=SA	34. I know how to help my child when he/she is sad, depressed or anxious
p35	numeric	9591	155	1=SD, 7=SA	35. I know how to assist my child to develop relationships with other children
p36	numeric	9587	159	1=SD, 7=SA	36. I know if my child is having emotional or social or behaviour difficulties
p37	numeric	9592	154	1=SD, 7=SA	37. I can discuss parenting with friends and family
p38	numeric	9577	169	1=SD, 7=SA	38. I think it is OK to shout at my child if he/she has done something wrong
p39	numeric	9548	198	1=SD, 7=SA	39. I think it is OK to smack my child if he/she has done something wrong
p40	numeric	9588	158	1=SD, 7=SA	40. I think my child should have a say when we set the rules about appropriate behaviour
p41	numeric	9634	112	1=SD, 7=SA	41. I consistently apply the rules with my child
p42	numeric	9613	133	1=SD, 7=SA	42. I am affectionate with my child
p43	numeric	9645	101	1=SD, 7=SA	43. I have a close relationship with my child
p44	numeric	9622	124	1=SD, 7=SA	44. I am effective overall as a parent/caregiver
p45	numeric	9486	260	1=SD, 7=SA	45. Staff at the school are concerned for children with emotional or social or behaviour difficulties
p46	numeric	9472	274	1=SD, 7=SA	46. The school encourages parents to discuss their children's emotional or social or behaviour difficulties with staff.
p47	numeric	9317	429	1=SD, 7=SA	47. The school has good links with professionals who can assist students with emotional or social or behavior difficulties (such as social workers, psychologists, nurses and doctors)

Variable	Format	N	Missing	Codes	Description
p48	numeric	9344	402	1=SD, 7=SA	48. Parents/caregivers are involved when staff make decisions about their child's emotional or social or behaviour difficulties
p49	numeric	9358	388	1=SD, 7=SA	49. The school is doing a good job in helping students who have emotional or social or behaviour difficulties
p50	numeric	9057	689	1=SD, 7=SA	50. The external school support services (such as psychologists and social workers) do a good job in helping students who have emotional or social or behaviour difficulties
p51	numeric	9489	257	1=SD, 7=SA	51. I find it easy to discuss my child's social and emotional skills with school staff
p52	numeric	9435	311	1=SD, 7=SA	52. My child talks about ways to solve his/her emotional or social or behaviour difficulties
p53	numeric	9569	177	1=SD, 7=SA	53. I have heard about KM
p54	numeric	9501	245	1=SD, 7=SA	54. I feel positively about KM
p55	numeric	9456	290	1=SD, 7=SA	55. I am encouraged to participate in KM
p56	numeric	9050	696	1=SD, 7=SA	56. I have formed more support networks with other parents/caregivers since KM
p57	numeric	9041	705	1=SD, 7=SA	57. I have been more involved with the school since KM
p58	numeric	8945	801	1=SD, 7=SA	58. I feel that the school community is more positive since KM
p59a	numeric	8684	1062	1=SD, 7=SA	59a) good ideas for parenting
p59b	numeric	8648	1098	1=SD, 7=SA	59b) how to identify if my child is showing emotional or social or behaviour difficulties
p59c	numeric	8643	1103	1=SD, 7=SA	59c) how my child develops relationships with other children
p59d	numeric	8651	1095	1=SD, 7=SA	59d) how to help my child deal with his/her feelings
p59e	numeric	8649	1097	1=SD, 7=SA	59e) how to help my child to understand the feelings of other people
p59f	numeric	8637	1109	1=SD, 7=SA	59f) how to help my child to make responsible decisions
p59g	numeric	8630	1116	1=SD, 7=SA	59g) how to help my child to deal with emotional or social or behaviour difficulties
PKMIMP	numeric	9746	0	1=SD, 7=SA	KM Implementation (P)
PMHENG	numeric	9746	0	1=SD, 7=SA	General Engagement (P)
PPSC	numeric	9746	0	1=SD, 7=SA	C1: A Positive School Community (P)
PSUPSC	numeric	9746	0	1=SD, 7=SA	C3a: Parenting Support by School (P)
PSUPST	numeric	9746	0	1=SD, 7=SA	C3b: Parenting Support by Staff (P)
PEINT	numeric	9746	0	1=SD, 7=SA	C4: Early Intervention (P)
PARKNO	numeric	9746	0	1=SD, 7=SA	Parenting Knowledge (P)
PARSTY	numeric	9746	0	1=SD, 7=SA	Parenting Style (P)
PKMINV	numeric	9746	0	1=SD, 7=SA	KM Involvement with School (P)
PKMLRN	numeric	9746	0	1=SD, 7=SA	KM Parent Learning (P)

B.5 Student Background and Mental Health Data on Four Occasions

File Name: kmstudent.sav

Description: The KM Student data file contains information on:

a) student background characteristics,
b) parent/caregiver responses to the end section of the Parent Questionnaire regarding student mental health items on three occasions (Time 2 was not administered),
c) teacher responses to the Teacher Supplementary Questionnaire regarding student mental health items on four occasions, and
d) the formed variables of these parent and teacher items.

Variable	Format	N	Missing	Codes	Description
SCHID	numeric	17372	0	1-101	School ID
SID	numeric	17372	0	1xx-101xx	Student ID
OCC	numeric	17372	0	1=Time 1, 2=Time 2, 3=Time 3, 4=Time 4	Occasion
SCHSID	numeric	17372	0		School student ID code
ROUND	numeric	17372	0	1=starting 2007, 2=starting 2008	School Round
DOB	date	17372	0		Date of Birth (dd-mmm-yy)
SAGE	numeric	17372	0		Age in years at each occasiont
SSEX	numeric	17372	0	1=Male, 2=Female	Student Gender
RISK	numeric	17372	0	0=not at risk, 1=at risk	At Risk Status
ATSI	numeric	16725	647	0=not ATSI, 1=ATSI	Aboriginal or Torres Straight Islander
ESL	numeric	15984	1388	0=English, 1=ESL	English as a Second Language
FEE	numeric	13740	3632	0=not assisted, 1=fee assisted	Fee Assisted
HOMEPC	numeric	17372	0		Student's home postcode (or school postcode if information NA)
SELECT	numeric	17372	0	1=selected, 0=not selected originally	Selected in the random sample
PARTIC	numeric	17372	0	1=participated, 0=not participate	Participated in the study (have SID assigned)
REPLAC	numeric	17372	0	1=replacement, 0=not selected originally	Replacement student, not sampled but participated
TID	numeric	17330	42	1xxx-101xxx	Teacher ID used to link to student (different across occasions)
p61	numeric	8208	9164	0=No, 1=Yes	1. Did your child participate in a program teaching social and emotional skills during this semester?
p62	numeric	9168	8204	0=No, 1=Yes	2. In the last month, do you think your child has had more emotional or social or behaviour difficulties than other boys/girls of his/her age?
p63	numeric	8580	8792	0=No, 1=Yes	2a) Do you think he/she needs or needed school or other professional help with these difficulties?
p64	numeric	6422	10950	0=No, 1=Yes	2b) Did your child get the help he/she needed for these difficulties?
p65	numeric	9443	7929	1=SD, 7=SA	5. Is happy about his or her relationships with other students
p66	numeric	9457	7915	1=SD, 7=SA	6. Is happy about his/her family relationships
p67	numeric	9442	7930	1=SD, 7=SA	7. Can solve personal and social problems

Variable	Format	N	Missing	Codes	Description
p68	numeric	9450	7922	1=SD, 7=SA	8. Can manage his/her feelings
p69	numeric	9437	7935	1=SD, 7=SA	9. Recognises his/her strong points
p70	numeric	9449	7923	1=SD, 7=SA	10. Takes account of the feelings of others
p71	numeric	9448	7924	1=SD, 7=SA	11. Can make responsible decisions
p72	numeric	9432	7940	1=SD, 7=SA	12. Generally thinks that things are going to work out well
p73	numeric	9426	7946	1=SD, 7=SA	13. Feels good about himself/herself
p74	numeric	9417	7955	1=SD, 7=SA	14. Is able to cope with life overall
p75	numeric	9408	7964	1=SD, 7=SA	15. Is difficult to manage
p76	numeric	9410	7962	1=SD, 7=SA	16. Is nervous and anxious
p77	numeric	9412	7960	1=SD, 7=SA	17. Is often sad or depressed
p78	numeric	8481	8891	1=SD, 7=SA	18. KM has helped the school to focus on my child's emotional or social or behavioural needs
p79	numeric	8450	8922	1=SD, 7=SA	19. KM has led to improvements in my child's school work
p80	numeric	8449	8923	1=SD, 7=SA	20. KM has helped the school to focus on my child's social and emotional development
p81	numeric	8447	8925	1=SD, 7=SA	21. KM enables the school to make more effective decisions about my child's emotional or social or behavioural needs
psdq01	numeric	9449	7923	0=Not true, 1=Somewhat true, 2=Certainly true	PS+ Considerate of other people's feelings
psdq02	numeric	9447	7925	0=NT, 1=ST, 2=CT	HA+ Restless, overactive, cannot stay still for long
psdq03	numeric	9447	7925	0=NT, 1=ST, 2=CT	ES+ Often complains of headaches, stomach-aches or sickness
psdq04	numeric	9445	7927	0=NT, 1=ST, 2=CT	PS+ Shares readily with other young people, for example books, games, food
psdq05	numeric	9446	7926	0=NT, 1=ST, 2=CT	CP+ Often loses temper
psdq06	numeric	9448	7924	0=NT, 1=ST, 2=CT	PP+ Would rather be alone than with other young people
psdq07	numeric	9446	7926	2=NT, 1=ST, 0=CT	CP- Generally well behaved, usually does what adults request
psdq08	numeric	9444	7928	0=NT, 1=ST, 2=CT	ES+ Many worries or often seems worried
psdq09	numeric	9447	7925	0=NT, 1=ST, 2=CT	PS+ Helpful if someone is hurt, upset or feeling ill
psdq10	numeric	9440	7932	0=NT, 1=ST, 2=CT	HA+ Constantly fidgeting or squirming
psdq11	numeric	9445	7927	2=NT, 1=ST, 0=CT	PP- Has at least one good friend
psdq12	numeric	9443	7929	0=NT, 1=ST, 2=CT	CP+ Often fights with other young people or bullies them
psdq13	numeric	9445	7927	0=NT, 1=ST, 2=CT	ES+ Often unhappy, depressed or tearful
psdq14	numeric	9446	7926	2=NT, 1=ST, 0=CT	PP- Generally liked by other young people
psdq15	numeric	9442	7930	0=NT, 1=ST, 2=CT	HA+ Easily distracted, concentration wanders
psdq16	numeric	9446	7926	0=NT, 1=ST, 2=CT	ES+ Nervous in new situations, easily loses confidence
psdq17	numeric	9447	7925	0=NT, 1=ST, 2=CT	PS+ Kind to younger children
psdq18	numeric	9443	7929	0=NT, 1=ST, 2=CT	CP+ Often lies or cheats
psdq19	numeric	9445	7927	0=NT, 1=ST, 2=CT	PP+ Picked on or bullied by other young people
psdq20	numeric	9445	7927	0=NT, 1=ST, 2=CT	PS+ Often volunteers to help others (parents, teachers, children)

Variable	Format	N	Missing	Codes	Description
psdq21	numeric	9443	7929	2=NT, 1=ST, 0=CT	HA- Thinks things out before acting
psdq22	numeric	9445	7927	0=NT, 1=ST, 2=CT	CP+ Steals from home, school or elsewhere
psdq23	numeric	9444	7928	0=NT, 1=ST, 2=CT	PP+ Gets along better with adults than with other young people
psdq24	numeric	9444	7928	0=NT, 1=ST, 2=CT	ES+ Many fears, easily scared
psdq25	numeric	9444	7928	2=NT, 1=ST, 0=CT	HA- Good attention span, sees work through to the end
psdq26	numeric	5132	12240	1=Much worse, 2=A bit worse, 3= About the same, 4=A bit better, 5=Much better	Since participating in KM is your child's behaviour:
psdq27	numeric	4991	12381	0=Not at all, 0=A little, 1=A medium amount, 2=A great deal	Has participating in KM been helpful in other ways, e.g. providing information or making the problems more bearable?
psdq28	numeric	5232	12140	0=No, 1=Yes-minor difficulty, 2=Yes-definite difficulty, 3=Yes-severe difficulty	Over the last month, has your child had difficulties in one or more of the following areas: emotions, concentration, behaviour or being able to get on with other people?
psdq29	numeric	2485	14887	0=Not at all, 0=A little, 1=A medium amount, 2=A great deal	Do the difficulties upset or distress your child?
psdq30	numeric	2477	14895		Home Life
psdq31	numeric	2466	14906		Friendships
psdq32	numeric	2450	14922		Classroom Learning
psdq33	numeric	2453	14919		Leisure Activities
psdq34	numeric	2498	14874	0=Not at all, 0=A little, 1=A medium amount, 2=A great deal	Do the difficulties put a burden on you or the family as a whole?
ts01	numeric	16425	947	0=No, 1=Yes	1. Did this student participate in a program teaching social and emotional skills during this semester?
ts02	numeric	16538	834	0=No, 1=Yes	2. In the last month, do you think this student has had more emotional or social or behaviour difficulties than other boys/girls of his/her age?
ts02a	numeric	14020	3352	0=No, 1=Yes	2a) Do you think he/she needs or needed school or other professional help with these difficulties?
ts02b	numeric	10345	7027	0=No, 1=Yes	2b) Did this student get the help he/she needed for these difficulties?
ts03	numeric	16752	620	1=SD, 7=SA	3. Is happy about his/her relationships with other children
ts04	numeric	16674	698	1=SD, 7=SA	4. Is happy about his/her family relationships
ts05	numeric	16756	616	1=SD, 7=SA	5. Can solve personal and social problems
ts06	numeric	16756	616	1=SD, 7=SA	6. Can manage his/her feelings
ts07	numeric	16755	617	1=SD, 7=SA	7. Recognises his/her strong points
ts08	numeric	16758	614	1=SD, 7=SA	8. Takes account of the feelings of others
ts09	numeric	16754	618	1=SD, 7=SA	9. Can make responsible decisions
ts10	numeric	16709	663	1=SD, 7=SA	10. Generally thinks that things are going to work out well
ts11	numeric	16724	648	1=SD, 7=SA	11. Feels good about himself/herself
ts12	numeric	16720	652	1=SD, 7=SA	12. Is able to cope with life overall
ts13	numeric	16724	648	1=SD, 7=SA	13. Is difficult to manage
ts14	numeric	16725	647	1=SD, 7=SA	14. Is nervous and anxious

Variable	Format	N	Missing	Codes	Description
ts15	numeric	16704	668	1=SD, 7=SA	15. Is often sad or depressed
ts16	numeric	14197	3175	1=SD, 7=SA	16. KM has helped the school to focus on this student's emotional or social or behavioural needs
ts17	numeric	14138	3234	1=SD, 7=SA	17. KM has led to improvements in this student's school work
ts18	numeric	14164	3208	1=SD, 7=SA	18. KM has helped the school to focus on this student's social and emotional skill development
ts19	numeric	14152	3220	1=SD, 7=SA	19. KM enables the school to make more effective decisions about this student's emotional or social or behavioural needs
tsdq01	numeric	16676	696	0=Not true, 1=Somewhat true, 2=Certainly true	PS+ Considerate of other people's feelings
tsdq02	numeric	16675	697	0=NT, 1=ST, 2=CT	HA+ Restless, overactive, cannot stay still for long
tsdq03	numeric	16672	700	0=NT, 1=ST, 2=CT	ES+ Often complains of headaches, stomach-aches or sickness
tsdq04	numeric	16670	702	0=NT, 1=ST, 2=CT	PS+ Shares readily with other young people, for example books, games, food
tsdq05	numeric	16672	700	0=NT, 1=ST, 2=CT	CP+ Often loses temper
tsdq06	numeric	16672	700	0=NT, 1=ST, 2=CT	PP+ Would rather be alone than with other young people
tsdq07	numeric	16675	697	2=NT, 1=ST, 0=CT	CP- Generally well behaved, usually does what adults request
tsdq08	numeric	16669	703	0=NT, 1=ST, 2=CT	ES+ Many worries or often seems worried
tsdq09	numeric	16665	707	0=NT, 1=ST, 2=CT	PS+ Helpful if someone is hurt, upset or feeling ill
tsdq10	numeric	16671	701	0=NT, 1=ST, 2=CT	HA+ Constantly fidgeting or squirming
tsdq11	numeric	16670	702	2=NT, 1=ST, 0=CT	PP- Has at least one good friend
tsdq12	numeric	16667	705	0=NT, 1=ST, 2=CT	CP+ Often fights with other young people or bullies them
tsdq13	numeric	16671	701	0=NT, 1=ST, 2=CT	ES+ Often unhappy, depressed or tearful
tsdq14	numeric	16668	704	2=NT, 1=ST, 0=CT	PP- Generally liked by other young people
tsdq15	numeric	16671	701	0=NT, 1=ST, 2=CT	HA+ Easily distracted, concentration wanders
tsdq16	numeric	16667	705	0=NT, 1=ST, 2=CT	ES+ Nervous in new situations, easily loses confidence
tsdq17	numeric	16665	707	0=NT, 1=ST, 2=CT	PS+ Kind to younger children
tsdq18	numeric	16668	704	0=NT, 1=ST, 2=CT	CP+ Often lies or cheats
tsdq19	numeric	16666	706	0=NT, 1=ST, 2=CT	PP+ Picked on or bullied by other young people
tsdq20	numeric	16667	705	0=NT, 1=ST, 2=CT	PS+ Often volunteers to help others (parents, teachers, children)
tsdq21	numeric	16670	702	2=NT, 1=ST, 0=CT	HA- Thinks things out before acting
tsdq22	numeric	16669	703	0=NT, 1=ST, 2=CT	CP+ Steals from home, school or elsewhere
tsdq23	numeric	16667	705	0=NT, 1=ST, 2=CT	PP+ Gets along better with adults than with other young people
tsdq24	numeric	16666	706	0=NT, 1=ST, 2=CT	ES+ Many fears, easily scared
tsdq25	numeric	16674	698	2=NT, 1=ST, 0=CT	HA- Good attention span, sees work through to the end

Variable	Format	N	Missing	Codes	Description
tsdq26	numeric	10396	6976	1=Much worse, 2=A bit worse, 3= About the same, 4=A bit better, 5=Much better	Since participating in KM is this student's behaviour:
tsdq27	numeric	10129	7243	0=Not at all, 0=A little, 1=A medium amount, 2=A great deal	Has participating in KM been helpful in other ways, e.g. providing information or making the problems more bearable?
tsdq28	numeric	11245	6127	0=No, 1=Yes-minor difficulty, 2=Yes-definite difficulty, 3=Yes-severe difficulty	Over the last month, has the student had difficulties in one or more of the following areas: emotions, concentration, behaviour or being able to get on with other people?
tsdq29	numeric	4437	12935	0=Not at all, 0=A little, 1=A medium amount, 2=A great deal	Do the difficulties upset or distress this student?
tsdq30	numeric	4363	13009		Peer Relationships
tsdq31	numeric	4363	13009		Classroom Learning
tsdq32	numeric	4382	12990		Do the difficulties put a burden on you or the class as a whole?
TKMCHI	numeric	14216	3156	1=SD, 7=SA	KMI Impact on Child's needs at school (T)
PKMCHI	numeric	8521	8851	1=SD, 7=SA	KMI Impact on Child's needs at school (P)
TCSEC	numeric	16769	603	1=SD, 7=SA	Social and Emotional Competencies (T)
PCSEC	numeric	9470	7902	1=SD, 7=SA	Social and Emotional Competencies (P)
TES	numeric	16665	707	0=Norm, 10=Abnorm	Emotional symptoms (T)
PES	numeric	9444	7928	0=Norm, 10=Abnorm	Emotional symptoms (P)
TCP	numeric	16667	705	0=Norm, 10=Abnorm	Conduct problems (T)
PCP	numeric	9442	7930	0=Norm, 10=Abnorm	Conduct problems (P)
THA	numeric	16670	702	0=Norm, 10=Abnorm	Hyperactivity (T)
PHA	numeric	9440	7932	0=Norm, 10=Abnorm	Hyperactivity (P)
TPP	numeric	16665	707	0=Norm, 10=Abnorm	Peer problems (T)
PPP	numeric	9443	7929	0=Norm, 10=Abnorm	Peer problems (P)
TPS	numeric	16664	708	0=Abnorm, 10=Norm	Prosocial (T)
PPS	numeric	9445	7927	0=Abnorm, 10=Norm	Prosocial (P)
PSDQ	numeric	9434	7938	0=Norm, 40=Abnorm	Total SDQ (P)
TSDQ	numeric	16659	713	0=Norm, 40=Abnorm	Total SDQ (T)
TMHD	numeric	16729	643	1=SD, 7=SA	Mental Health Difficulties (T)
PMHD	numeric	9427	7945	1=SD, 7=SA	Mental Health Difficulties (P)
PMHS	numeric	9500	7872	1=SD, 7=SA	Mental Health Strengths (P)
TMHS	numeric	16734	638	1=SD, 7=SA	Mental Health Strengths (T)
SMH	numeric	12790	4582	1=Normal, 2=Borderline, 3=Abnormal	Student Mental Health Category

B.6 Project Officer Proforma (Quantitative) Data on Four Occasions

File Name: kmproforma.sav

Description: The KM Project Officer Proforma data file contains quantitative responses to the Proforma on four occasions. It also contains the formed variables of some of these items.

Variable	Format	N	Missing	Codes	Description
SCHID		350	0	1-101	School ID

Variable	Format	N	Missing	Codes	Description
OCC		350	0	1=Time 1, 2=Time 2, 3=Time 3, 4=Time 4	Occasion
ROUND		350	0	1=starting 2007, 2=starting 2008	School Round
STATE		350	0	1=ACT, 2=NSW, 3=NT, 4=QLD, 5=SA, 6=TAS, 7=VIC, 8=WA	State (proxy for Project Officer)
con_email	numeric	350	0		Email
con_email_dur	numeric	221	129	1=short/minutes, 2=medium/hours, 3=long/days	Email - Average Duration
con_phone	numeric	319	31		Telephone
con_phone_dur	numeric	211	139	1=short/minutes, 2=medium/hours, 3=long/days	Telephone - Average Duration
con_fax	numeric	24	326		Facsimile
con_fax_dur	numeric	12	338	1=short/minutes, 2=medium/hours, 3=long/days	Facsimile - Average Duration
con_schvisit	numeric	335	15		Meeting - On Campus
con_schvisit_dur	numeric	241	109	1=short/minutes, 2=medium/hours, 3=long/days	Meeting - On Campus School Visit - Average Duration
con_nonschmeet	numeric	91	259		Meeting - Off Campus
con_nonschmeet_dur	numeric	62	288	1=short/minutes, 2=medium/hours, 3=long/days	Meeting - Off Campus Visit - Average Duration
con_pd	numeric	138	212		Conducting PD Sessions
con_pd_dur	numeric	114	236	1=short/minutes, 2=medium/hours, 3=long/days	Conducting Professional Development Sessions - Average Duration
con_briefing	numeric	49	301		Two-day Briefing
con_briefing_dur	numeric	40	310	1=short/minutes, 2=medium/hours, 3=long/days	Two-day Briefing in Adelaide - Average Duration
con_cluster	numeric	147	203		Cluster Meeting
con_cluster_dur	numeric	123	227		Cluster Meeting - Average Duration
con_sumrept	numeric	10	340		Summary Report
con_other	numeric	59	291		Other - Approximate Number
con_other_dur	numeric	40	310	1=short/minutes, 2=medium/hours, 3=long/days	Other - Average Duration
con_desc	string	350	0		con_desc
pos_principal	numeric	350	0		Principal
pos_deprincipal	numeric	350	0		Deputy Principal
pos_counsellor	numeric	350	0		School Counsellor
pos_teacher	numeric	350	0		Teacher
pos_parents	numeric	350	0		Parent
pos_student	numeric	350	0		Student
pos_other	string	350	0		pos_other

Variable	Format	N	Missing	Codes	Description
event_pd	numeric	234	116	1=negative change, 7=positive change	1. Professional Development Sessions
event_debrief	numeric	211	139	1=negative change, 7=positive change	2. Two-day Briefing
event_cluster	numeric	210	140	1=negative change, 7=positive change	3. Whole-day Cluster Meeting
event_ leaderchange	numeric	196	154	1=negative change, 7=positive change	4. Change of Leadership staff
event_ staffchange	numeric	184	166	1=negative change, 7=positive change	5. Change of General staff
event_atchange	numeric	211	139	1=negative change, 7=positive change	6. Change of Action Team members
progress1	numeric	342	8	1=no progress, 7=exceptional progress	1. Progress on "a positive school community".
progress2	numeric	342	8	1=no progress, 7=exceptional progress	2. Progress on "social and emotional learning for students".
progress3	numeric	341	9	1=no progress, 7=exceptional progress	3. Progress on "parenting education and support".
progress4	numeric	340	10	1=no progress, 7=exceptional progress	4. Progress on "early intervention for students who are at risk".
process01	numeric	331	19	1=SD, 7=SA	1. Defined the issues
process02	numeric	329	21	1=SD, 7=SA	2. Set goals
process03	numeric	329	21	1=SD, 7=SA	3. Identified difficulties
process04	numeric	328	22	1=SD, 7=SA	4. Developed strategies
process05	numeric	321	29	1=SD, 7=SA	5. Evaluated strategies
process06	numeric	318	32	1=SD, 7=SA	6. Developed and implemented plans
process07	numeric	312	38	1=SD, 7=SA	7. Reviewed and adjusted plans
step1_comp1	numeric	300	50	1=done, 0=not done	1. Defined the issues - Component 1: A positive school community
step1_comp2	numeric	300	50	1=done, 0=not done	1. Defined the issues - Component 2: Social and emotional learning for students
step1_comp3	numeric	300	50	1=done, 0=not done	1. Defined the issues - Component 3: Parenting education and support
step1_comp4	numeric	300	50	1=done, 0=not done	1. Defined the issues - Component 4: Early intervention for students at risk
step2_comp1	numeric	300	50	1=done, 0=not done	2. Set goals - Component 1: A positive school community
step2_comp2	numeric	300	50	1=done, 0=not done	2. Set goals - Component 2: Social and emotional learning for students
step2_comp3	numeric	300	50	1=done, 0=not done	2. Set goals - Component 3: Parenting education and support
step2_comp4	numeric	300	50	1=done, 0=not done	2. Set goals - Component 4: Early intervention for students at risk
step3_comp1	numeric	300	50	1=done, 0=not done	3. Identified concerns - Component 1: A positive school community
step3_comp2	numeric	300	50	1=done, 0=not done	3. Identified concerns - Component 2: Social and emotional learning for students
step3_comp3	numeric	300	50	1=done, 0=not done	3. Identified concerns - Component 3: Parenting education and support
step3_comp4	numeric	300	50	1=done, 0=not done	3. Identified concerns - Component 4: Early intervention for students at risk

Variable	Format	N	Missing	Codes	Description
step4_comp1	numeric	300	50	1=done, 0=not done	4. Developed strategies - Component 1: A positive school community
step4_comp2	numeric	300	50	1=done, 0=not done	4. Developed strategies - Component 2: Social and emotional learning for students
step4_comp3	numeric	300	50	1=done, 0=not done	4. Developed strategies - Component 3: Parenting education and support
step4_comp4	numeric	300	50	1=done, 0=not done	4. Developed strategies - Component 4: Early intervention for students at risk
step5_comp1	numeric	300	50	1=done, 0=not done	5. Evaluated strategies - Component 1: A positive school community
step5_comp2	numeric	300	50	1=done, 0=not done	5. Evaluated strategies - Component 2: Social and emotional learning for students
step5_comp3	numeric	300	50	1=done, 0=not done	5. Evaluated strategies - Component 3: Parenting education and support
step5_comp4	numeric	300	50	1=done, 0=not done	5. Evaluated strategies - Component 4: Early intervention for students at risk
step6_comp1	numeric	300	50	1=done, 0=not done	6. Developed and implemented a plan - Component 1: A positive school community
step6_comp2	numeric	300	50	1=done, 0=not done	6. Developed and implemented a plan - Component 2: Social and emotional learning for students
step6_comp3	numeric	300	50	1=done, 0=not done	6. Developed and implemented a plan - Component 3: Parenting education and support
step6_comp4	numeric	300	50	1=done, 0=not done	6. Developed and implemented a plan - Component 4: Early intervention for students at risk
step7_comp1	numeric	300	50	1=done, 0=not done	7. Reviewed and adjusted a plan - Component 1: A positive school community
step7_comp2	numeric	300	50	1=done, 0=not done	7. Reviewed and adjusted a plan - Component 2: Social and emotional learning for students
step7_comp3	numeric	300	50	1=done, 0=not done	7. Reviewed and adjusted a plan - Component 3: Parenting education and support
step7_comp4	numeric	300	50	1=done, 0=not done	7. Reviewed and adjusted a plan - Component 4: Early intervention for students at risk
comp1	numeric	300	50	1=priority, 0=not a priority	Component 1 is a current priority
comp2	numeric	300	50	1=priority, 0=not a priority	Component 2 is a current priority
comp3	numeric	300	50	1=priority, 0=not a priority	Component 3 is a current priority
comp4	numeric	300	50	1=priority, 0=not a priority	Component 4 is a current priority
supp01	numeric	339	11	1=SD, 7=SA	1. The school leadership encourages staff to become actively involved with KM.
supp03	numeric	342	8	1=SD, 7=SA	3. The school leadership team is actively involved with KM.
supp05	numeric	342	8	1=SD, 7=SA	5. School leadership supports KM.
supp02	numeric	331	19	1=SD, 7=SA	2. Staff are actively involved with KM.
supp04	numeric	305	45	1=SD, 7=SA	4. Teachers attend professional development associated with KM.
supp06	numeric	331	19	1=SD, 7=SA	6. As a group, the staff at this school support KM.

Variable	Format	N	Missing	Codes	Description
supp10	numeric	275	75	1=SD, 7=SA	10. The whole staff are involved in the planning of KM?
supp11	numeric	274	76	1=SD, 7=SA	11. The whole staff are involved in the implementation of KM?
supp07	numeric	323	27	1=SD, 7=SA	7. Parents at this school support KM.
supp08	numeric	319	31	1=SD, 7=SA	8. Students at this school support KM.
supp09	numeric	327	23	1=SD, 7=SA	9. This school is provided with adequate resources to implement KM.
supp12	numeric	276	74	1=SD, 7=SA	12. Do you believe that KM has increased staff awareness of mental health issues?
eng01	numeric	331	19	1=not at all, 7=very often	1. How often do teachers discuss KM activities with other teachers?
eng02	numeric	331	19	1=not at all, 7=very often	2. How often do teachers discuss KM activities with parents?
eng03	numeric	330	20	1=not at all, 7=very often	3. How often do teachers discuss KM activities with students?
eng04	numeric	328	22	1=SD, 7=SA	4. Parents in this school have responded positively to KM.
eng05	numeric	329	21	1=SD, 7=SA	5. Parents in this school are encouraged to participate in KM.
eng06	numeric	327	23	1=SD, 7=SA	6. KM is well implemented in this school.
eng07	numeric	330	20	1=SD, 7=SA	7. Staff tell you that there is "no time to fit this in".
eng08	numeric	330	20	1=SD, 7=SA	8. Staff tell you that "they have done all this before".
eng09	numeric	335	15	1=SD, 7=SA	9. When you are at this school you feel that the leadership team is pleased to have you there.
eng10	numeric	330	20	1=SD, 7=SA	10. When you are at this school you feel that the staff are pleased to have you there.
event01	numeric	333	17	1=no, 2=yes	1. Offer parenting/caregiver courses?
event01time	numeric	82	268	1. Offer parenting/caregiver courses? - How many times? 1=NA, 2=None, 3=once, 4=twice, 5=three times, 6=four times, 7=five times, 8=six times, 9=seven or more than three times	
event02	numeric	335	15	1=no, 2=yes	2. Offer parenting/caregiver nights?
event02time	numeric	103	247	2. Offer parenting/caregiver nights? - How many times? 1=NA, 2=None, 3=once, 4=twice, 5=three times, 6=four times, 7=five times, 8=six times, 9=seven or more than three times	
event03	numeric	336	14	1=no, 2=yes	3. Provide opportunities for parents/caregivers to meet with each other?
event03time	numeric	208	142	3. Provide opportunities for parents/caregivers to meet with each other? - How many times? 1=NA, 2=None, 3=once, 4=twice, 5=three times, 6=four times, 7=five times, 8=six times, 9=seven or more than three times	
event04	numeric	326	24	1=no, 2=yes	4. Provide other kinds of parenting support?
event04time	numeric	147	203	4. Provide other kinds of parenting support? - How many times? 1=NA, 2=None, 3=once, 4=twice, 5=three times, 6=four times, 7=five times, 8=six times, 9=seven or more than three times	
event05	string	350	0	Open-Ended Response	5. Please list any course or information session topics that were presented and describe any other parenting support that the school has given:

Variable	Format	N	Missing	Codes	Description
event06	numeric	338	12	1=no, 2=yes	6. Create linkages with community support organisations?
event07	numeric	338	12	1=no, 2=yes	7. Principal attend most KM meetings?
event08	numeric	339	11	1=no, 2=yes	8. Send newsletters containing information about parenting home to families?
event09	numeric	338	12	1=no, 2=yes	9. Send tip sheets containing information about parenting home to families?
event10a	numeric	283	67	1=no, 2=yes	10a. Send KM Information sheets home to parents/caregivers?
event10b	string	350	0	Open-Ended Response	10b. If so, how many?
event11	numeric	330	20	1=under 5 minutes, 2=up to an hour, 3=over an hour	11. On average, how much time in staff meetings is formally allocated to KM?
event12	numeric	326	24	1=under 5 minutes, 2=up to an hour, 3=over an hour	12. On average, how much formal time per week does the Action team allocate to planning & implementing KM?
event13	numeric	320	30	1=under one hour, 2=up to one day, 3=over one day	13. "a positive school community"?
event14	numeric	316	34		14. "social and emotional learning for students"?
event15	numeric	308	42		15. "parenting education and support"?
event16	numeric	309	41	1=under one hour, 2=up to one day, 3=over one day	16. "early intervention for students who are at risk or are experiencing mental health difficulties"?
event17	numeric	268	82	1=not at all, 7=highly improved	17. To what extent do you agree that KM has resulted in improved links with external agencies that support children experiencing mental health difficulties and their parents and carers.
event18	string	262	88	Open-Ended Response	18. How many external referrals have been made for students experiencing social or emotional or behavioural problems?
event19	numeric	261	89	1=under one week, 2=up to one month, 3=up to one month	19. How much time, on average, has been taken to access these referrals?
event20	numeric	302	48	1=none, 2=one, 3=two or more	20. How many school closure days were allocated to KM?
COMP17	numeric	300	50	1=Step1, 7=Step7	Component 1 progress on steps (summed stepx_comp1 items)
COMP27	numeric	300	50	1=Step1, 7=Step7	Component 2 progress on steps (summed stepx_comp2 items)
COMP37	numeric	300	50	1=Step1, 7=Step7	Component 3 progress on steps (summed stepx_comp3 items)
COMP47	numeric	300	50	1=Step1, 7=Step7	Component 4 progress on steps (summed stepx_comp4 items)

B.7 Project Officer Proforma (Qualitative) Data on Five Occasions

File Name: kmproforma.xls (excel file)

Description: The KM Project Officer Proforma Excel data file contains qualitative responses to the Proforma on five occasions.

Variable	Format	N	Missing	Codes	Description
SCHID	numeric	404	0	1-101	School ID

Variable	Format	N	Missing	Codes	Description
OCC	numeric	404	0	1=Time 1, 2=Time 2, 3=Time 3, 4=Time 4	Occasion
ROUND	numeric	404	0	1=starting 2007, 2=starting 2008	School Round
STATE	numeric	404	0	1=ACT, 2=NSW, 3=NT, 4=QLD, 5=SA, 6=TAS, 7=VIC, 8=WA	State
event_meet_open	string	353	51	Open-Ended Response	
event_leaderchange_open	string	338	66	Open-Ended Response	
brief summary of the contacts	string	404	0	Open-Ended Response	
main issues arising	string	402	2	Open-Ended Response	
next steps	string	403	1	Open-Ended Response	

B.8 School Leadership Executive Summary Data on One Occasions

File Name: kmexesum.xls (excel file)

Description: The School Leadership Executive Summary Excel data file contains qualitative and quantitative responses from Principals and KidsMatter Action Team Coordinators on one occasion.

Variable	Format	N	Missing	Codes	Description
SCHID	numeric			1-101	School ID
STATE	numeric			1=ACT, 2=NSW, 3=NT, 4=QLD, 5=SA, 6=TAS, 7=VIC, 8=WA	State
es_principal	numeric	39	60	0=not selected, 1 = selected	Principal
es_actprincipal	numeric	4	95	0=not selected, 1 = selected	Acting Principal
es_deprincipal	numeric	20	79	0=not selected, 1 = selected	Deputy Principal
es_kmcoord	numeric	32	67	0=not selected, 1 = selected	main KM Action Team Coordinator
es_kmteam	numeric	15	84	0=not selected, 1 = selected	member of the KM Action Team
es_counsellor	numeric	11	88	0=not selected, 1 = selected	School counsellor or Wellbeing Officer
es_pastoral	numeric	0	99	0=not selected, 1 = selected	Christian Pastoral Care
es_other	numeric	2	97	0=not selected, 1 = selected	Other position of leadership
es_time	numeric	46	53	1=Less than one year, 2=One to two years, 3=More than two years	How long have you been at this school?
es_gender	numeric	49	50	1=Male, 2=Female	Gender?
es_involved	string	99	0	open	Why did the school become involved in KM? How was the decision to become involved made?
es_schcom	numeric	50	49	1=Extremely Negative, 7=Extremely Positive	The school community?
es_schcom_eg	string	99	0	open	
es_parsup	numeric	49	50	1=Extremely Negative, 7=Extremely Positive	Your school's relationship with parents and parent support?
es_parsues_eg	string	99	0	open	
es_sel	numeric	49	50	1=Extremely Negative, 7=Extremely Positive	Embedding of social and emotional learning (SEL) in the curriculum?
es_sel_eg	string	99	0	open	

Variable	Format	N	Missing	Codes	Description
es_interv	numeric	49	50	1=Extremely Negative, 7=Extremely Positive	School support for student's with social, behavioural and emotional problems?
es_interv_eg	string	99	0	open	
es_change	string	99	0	open	What structures or procedures have been changed or developed as a result of being involved in KM? Were these procedures effective in supporting social and emotional learning in your school and why?
es_future	string	99	0	open	What is the future of KM in your school?
es_barr	string	99	0	open	What have been the barriers to implementing KM in your school? What is an example of this in practice?
es_facil	string	99	0	open	What has facilitated the implementation of KM in your school? What is an example of this in practice?
es_sel1	numeric	2	97	0=not selected, 1=selected	AusParenting
es_sel2	numeric	6	93	0=not selected, 1=selected	Aussie Optimism
es_sel3	numeric	1	98	0=not selected, 1=selected	Being Me: ABC health series
es_sel4	numeric	1	98	0=not selected, 1=selected	The Better Buddies Framework
es_sel5	numeric	0	99	0=not selected, 1=selected	BodyThink
es_sel6	numeric	39	60	0=not selected, 1=selected	The BOUNCE Back!
es_sel7	numeric	0	99	0=not selected, 1=selected	Bright Ideas
es_sel8	numeric	2	97	0=not selected, 1=selected	Bully-Busters
es_sel9	numeric	1	98	0=not selected, 1=selected	Caring School Community (CSC)
es_sel10	numeric	1	98	0=not selected, 1=selected	Challenges and Choices
es_sel11	numeric	0	99	0=not selected, 1=selected	Changing Tracks
es_sel12	numeric	1	98	0=not selected, 1=selected	Check it Out!
es_sel13	numeric	0	99	0=not selected, 1=selected	Cognitive Behavioural Intervention for Trauma in Schools
es_sel14	numeric	0	99	0=not selected, 1=selected	Confident Kids
es_sel15	numeric	3	96	0=not selected, 1=selected	Cool Kids (School Version)
es_sel16	numeric	0	99	0=not selected, 1=selected	Creating the Future
es_sel17	numeric	0	99	0=not selected, 1=selected	Digging Deep
es_sel18	numeric	0	99	0=not selected, 1=selected	Emotional Literacy: Assessment and intervention
es_sel19	numeric	0	99	0=not selected, 1=selected	Exploring Together
es_sel20	numeric	1	98	0=not selected, 1=selected	Families and Schools Together (FAST)
es_sel21	numeric	0	99	0=not selected, 1=selected	Feeling is Thinking (FisT)
es_sel22	numeric	18	81	0=not selected, 1=selected	Friendly Kids, Friendly Classrooms
es_sel23	numeric	10	89	0=not selected, 1=selected	Friendly Schools and Families Program
es_sel24	numeric	6	93	0=not selected, 1=selected	FRIENDS for Life
es_sel25	numeric	0	99	0=not selected, 1=selected	Fun for Kids Program
es_sel26	numeric	0	99	0=not selected, 1=selected	Girls on the Go!
es_sel27	numeric	3	96	0=not selected, 1=selected	Heart Masters
es_sel28	numeric	1	98	0=not selected, 1=selected	I Can Problem Solve (ICPS)
es_sel29	numeric	0	99	0=not selected, 1=selected	Key Steps to Parenting
es_sel30	numeric	1	98	0=not selected, 1=selected	Kidz Club Program (Primary)

Variable	Format	N	Missing	Codes	Description
es_sel31	numeric	1	98	0=not selected, 1=selected	Kool Kids Positive Parents (KKPP)
es_sel32	numeric	0	99	0=not selected, 1=selected	Literature for Life
es_sel33	numeric	5	94	0=not selected, 1=selected	1-2-3 Magic Parenting Program
es_sel34	numeric	2	97	0=not selected, 1=selected	Mpower Girls
es_sel35	numeric	0	99	0=not selected, 1=selected	No Blame Bullying Prevention (Support Group) Approach
es_sel36	numeric	1	98	0=not selected, 1=selected	Parent Effectiveness Training (PET)
es_sel37	numeric	0	99	0=not selected, 1=selected	Passport Program
es_sel38	numeric	2	97	0=not selected, 1=selected	The PATHS curriculum
es_sel39	numeric	1	98	0=not selected, 1=selected	The P.E.A.C.E. Pack: A program to reduce school bullying
es_sel40	numeric	8	91	0=not selected, 1=selected	Peer Mediation
es_sel41	numeric	3	96	0=not selected, 1=selected	Peer Support Program (Peer Support Foundation)
es_sel42	numeric	0	99	0=not selected, 1=selected	Peer Support Program (Stride Foundation)
es_sel43	numeric	24	75	0=not selected, 1=selected	Program Achieve (3rd Edition)
es_sel44	numeric	11	88	0=not selected, 1=selected	Protective Behaviours: A personal safety program
es_sel45	numeric	1	98	0=not selected, 1=selected	Quest 4 Values
es_sel46	numeric	0	99	0=not selected, 1=selected	The Rainbow Program for Children in Refugee Families
es_sel47	numeric	5	94	0=not selected, 1=selected	Rainbows: Guiding kids through life's storms
es_sel48	numeric	5	94	0=not selected, 1=selected	Resilience Education and Drug Information (REDI)
es_sel49	numeric	3	96	0=not selected, 1=selected	Resilient Kids (Primary)
es_sel50	numeric	1	98	0=not selected, 1=selected	Revved Up: Turning angry energy into positive action
es_sel51	numeric	1	98	0=not selected, 1=selected	Roads to Refuge: Refugees in Australia education kit
es_sel52	numeric	4	95	0=not selected, 1=selected	Rock and Water
es_sel53	numeric	12	87	0=not selected, 1=selected	Seasons for Growth
es_sel54	numeric	0	99	0=not selected, 1=selected	Second Step
es_sel55	numeric	0	99	0=not selected, 1=selected	Seeing Red: Girls, boys & anger
es_sel56	numeric	0	99	0=not selected, 1=selected	Signposts for Building Better Behaviour
es_sel57	numeric	2	97	0=not selected, 1=selected	Skills for Growing
es_sel58	numeric	0	99	0=not selected, 1=selected	Social Decision Making and Social Problem Solving Program
es_sel59	numeric	0	99	0=not selected, 1=selected	Steps to Respect: A bullying prevention program
es_sel60	numeric	7	92	0=not selected, 1=selected	Stop Think Do Social Skills Training
es_sel61	numeric	0	99	0=not selected, 1=selected	Stories of Us: Belonging
es_sel62	numeric	0	99	0=not selected, 1=selected	Stories of Us: Bullying
es_sel63	numeric	0	99	0=not selected, 1=selected	Sunshine and Rainbows: A lifeskills program
es_sel64	numeric	0	99	0=not selected, 1=selected	Supporting Kids in Primary Schools (SKIPS)
es_sel65	numeric	0	99	0=not selected, 1=selected	Talk Sense to Yourself: For children & adolescents

Variable	Format	N	Missing	Codes	Description
es_sel66	numeric	1	98	0=not selected, 1=selected	Thinking, Feeling, Behaving
es_sel67	numeric	0	99	0=not selected, 1=selected	Together Parenting
es_sel68	numeric	6	93	0=not selected, 1=selected	Tribes Learning Communities - Tribes TLC
es_sel69	numeric	2	97	0=not selected, 1=selected	Triple P - Positive Parenting Program: Level 2 prevention
es_sel70	numeric	1	98	0=not selected, 1=selected	Triple P - Positive Parenting Program: Levels 3-5
es_sel71	numeric	4	95	0=not selected, 1=selected	Values Education Toolkit
es_sel72	string	99	0	open	Other
es_sela	numeric	99	0	#1-72	1) The first SEL program is:
es_sela_1	numeric	57	42	1=Prior to KM, 2=Due to KM, 3=Not yet, but plan to	When was this program commenced?
es_sela_2	numeric	57	42	1=Selected bits, 2=Adapted as needed, 3=Used as prescribed	How was this program utilised?
es_sela_3	string	99	0	open	Which year levels were targeted? (eg. Years 4-5)
es_sela_4	string	99	0	open	How often was this program used? (eg. Once off, each term, daily)
es_sela_5	numeric	56	43	1=Extremely difficult, 7=Extremely easy	Integrating this program into the curriculum was:
es_sela_6	numeric	54	45	1=Extremely negative, 7=Extremely positive	What impact has this program had on student wellbeing?
es_sela_7	string	99	0	open	Please give an example of how this program was used in your school.
es_selb	numeric	99	0	#1-72	1) The first SEL program is:
es_selb_1	numeric	46	53	1=Prior to KM, 2=Due to KM, 3=Not yet, but plan to	When was this program commenced?
es_selb_2	numeric	47	52	1=Selected bits, 2=Adapted as needed, 3=Used as prescribed	How was this program utilised?
es_selb_3	string	99	0	open	Which year levels were targeted? (eg. Years 4-5)
es_selb_4	string	99	0	open	How often was this program used? (eg. Once off, each term, daily)
es_selb_5	numeric	44	55	1=Extremely difficult, 7=Extremely easy	Integrating this program into the curriculum was:
es_selb_6	numeric	46	53	1=Extremely negative, 7=Extremely positive	What impact has this program had on student wellbeing?
es_selb_7	string	99	0	open	Please give an example of how this program was used in your school.
es_selc	numeric	99	0	#1-72	1) The first SEL program is:
es_selc_1	numeric	35	64	1=Prior to KM, 2=Due to KM, 3=Not yet, but plan to	When was this program commenced?
es_selc_2	numeric	35	64	1=Selected bits, 2=Adapted as needed, 3=Used as prescribed	How was this program utilised?
es_selc_3	string	99	0	open	Which year levels were targeted? (eg. Years 4-5)
es_selc_4	string	99	0	open	How often was this program used? (eg. Once off, each term, daily)
es_selc_5	numeric	32	67	1=Extremely difficult, 7=Extremely easy	Integrating this program into the curriculum was:

Variable	Format	N	Missing	Codes	Description
es_selc_6	numeric	32	67	1=Extremely negative, 7=Extremely positive	What impact has this program had on student wellbeing?
es_selc_7	string	99	0	open	Please give an example of how this program was used in your school.
es_seld	numeric	99	0	#1-72	1) The first SEL program is:
es_seld_1	numeric	21	78	1=Prior to KM, 2=Due to KM, 3=Not yet, but plan to	When was this program commenced?
es_seld_2	numeric	20	79	1=Selected bits, 2=Adapted as needed, 3=Used as prescribed	How was this program utilised?
es_seld_3	string	99	0	open	Which year levels were targeted? (eg. Years 4-5)
es_seld_4	string	99	0	open	How often was this program used? (eg. Once off, each term, daily)
es_seld_5	numeric	22	77	1=Extremely difficult, 7=Extremely easy	Integrating this program into the curriculum was:
es_seld_6	numeric	22	77	1=Extremely negative, 7=Extremely positive	What impact has this program had on student wellbeing?
es_seld_7	string	99	0	open	Please give an example of how this program was used in your school.
es_advice	string	99	0	open	What advice or strategies would you give to other schools who might consider implementing KM?
es_doing	string	99	0	open	How easy has it been to incorporate what the school is already doing into KM?
es_othercom	string	99	0	open	Any other comments?

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