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KidsMatter for students with a disability

Evaluation Report

Ministerial Advisory Committee: Students with Disabilities
The Centre for Analysis of Educational Futures, Flinders University

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2010

KIDSMATTER FOR
STUDENTS WITH A DISABILITY

EVALUATION REPORT

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The Centre for Analysis of Educational Futures, Flinders University

Government
of South Australia

Foreword

The KidsMatter Primary Mental Health Initiative is a whole of school framework that focuses on mental health care, the prevention of mental health problems and responding appropriately to mental health issue as they arise. The Australian initiative was originally designed for primary school children but has since been extended to early childhood as a separate initiative called KidsMatter Early Childhood.

KidsMatter Primary was piloted in 2007 and 2008 in 101 schools across Australia and has been the subject of extensive evaluation by the KidsMatter Evaluation team based at the Centre for Analysis of Education Futures, Flinders University.

Separate research of the Ministerial Advisory Committee: Students with Disabilities on the mental health of children and students with a disability began in 2006 and coincided with the pilot implementation of KidsMatter Primary. The Minister for Education subsequently requested that the committee collaborate with the KidsMatter Primary Evaluation team to determine the effect of KidsMatter Primary on South Australian students with a disability, in particular. This extension of the evaluation also had approval from the KidsMatter Primary partners— the Australian Government Department of Health and Ageing, *beyondblue: the national depression initiative*, the Australian Psychological Society and Principals Australia.

Upon completion of the Australia wide KidsMatter Evaluation, the data was examined to utilise information relating to students with a disability from South Australian primary schools. The analysis confirmed the previous findings of the Ministerial Advisory Committee that students with a disability are at significantly greater risk of developing mental health problems than students without a disability. The findings also suggest that KidsMatter Primary has had a positive effect on students with a disability by strengthening their wellbeing and reducing mental health difficulties.

We would like to thank all those who contributed to this work, including members of the Flinders University KidsMatter Primary Evaluation team and the Ministerial Advisory Committee: Students with Disabilities. We commend this report to the South Australian Minister for Education for her information.

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Executive Summary

The KidsMatter Primary Mental Health Initiative has a focus on mental health care, the prevention of mental health problems and responding appropriately to mental health issues when they arise. KidsMatter Primary was piloted in 101 primary schools across Australia during 2007 and 2008. In South Australia, 13 schools participated—11 Government schools, one Catholic and one independent school.

KidsMatter Primary was the subject of a comprehensive evaluation by an independent evaluation team based at Flinders University. In the second half of 2009, the Ministerial Advisory Committee: Students with Disabilities worked with the KidsMatter Evaluation team to further analyse the evaluation data with specific interest in the South Australian students with a disability who participated in the initiative.

The Committee was interested in determining:

- The number of South Australian students with an identified disability who participated in the KidsMatter Primary pilot phase.

- Whether there is a correlation between students with an identified disability and mental health problems.

- Whether aspects of the KidsMatter Primary implementation and engagement in the initiative were different for parents/caregivers[1] of students with a disability than of parents of students without a disability.

- How effective KidsMatter Primary was in supporting the parents and teachers of students with a disability.

- Whether having a student with a disability influenced parent and teacher perceptions of the four components of the KidsMatter Primary framework.

- If students with an identified disability experienced improved mental health and well-being and reduced mental health problems as the result of participating in KidsMatter Primary.

- If greater support and assistance was extended to students with a disability at risk of or experiencing mental health problems.

The KidsMatter Evaluation used three measures of mental health in the form of questionnaires, which were completed by the parent and teachers of each student. The measures were:

- Goodman's Strength and Difficulties Questionnaire (SDQ);
- Mental Health Strengths scale;
- Mental Health Difficulties scale.

Data were collected on four occasions at six month intervals (Time 1, Time 2, Time 3 and Time 4) over the two year implementation period. Each student's mental health range was defined as 'normal' (i.e. no mental health problems), 'borderline' (i.e. at risk of mental health problems), or 'abnormal' (i.e. experiencing mental health problems).

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

There was an overall response rate of 70 per cent on the first occasion of data collection (Time 1) in 2007, with 69 per cent of that group still participating by Time 4 at the end of 2008. Regarding the South Australian cohort of students with a disability— 75 per cent of parents and teachers responded at Time 1 (n=46); 40 per cent were still participating by Time 4.

Accordingly, the parents and teachers of 555 South Australian primary school students participated in the KidsMatter Evaluation. Of this group, 494 South Australian students did not have an identified disability and 61 students had an identified disability, which was approximately 11 per cent of the total cohort. Students were identified with a disability according to the verification criteria of the three education sectors (Government, Catholic and independent). No students with a *Social and Emotional* disability participated. Fifty-two students with a disability had received verification of one disability and nine students had received verification of two disabilities. The majority of students with a disability had a *Communication* disability (n = 39; 64 per cent), which included students diagnosed with Autism Spectrum Disorder. No students participating in KidsMatter Primary from the Catholic Education sector had an identified disability, according to the verification criteria.

The evaluation team found that co-morbidity[2] is present and that a student with a disability is more likely to also have mental health problems. The results show that students without a disability had 1 in 8 chance of having mental health difficulties (i.e. being in the abnormal range), students with one identified disability had a 1 in 3 chance and students with multiple disabilities had a 1 in 2 chance.

Parents and teachers, irrespective of whether they had a student with a disability or not, maintained positive views of the school community during KidsMatter Primary implementation. At the end of the trial, about half of the parents had relatively good awareness of KidsMatter Primary and felt engaged with it—the differences in responses between the two groups of parents (i.e. those with children with a disability and those with children without a disability) were not statistically significant.

Teachers of students with a disability appeared to benefit more than parents from KidsMatter Primary over the evaluation period. Teachers also seemed more knowledgeable than parents about the provision of *Parenting Support and Education*, particularly if they taught a student with a disability. Parent responses suggest that schools appeared to be less effective in supporting parents of students with a disability in the area of parent learning. KidsMatter Primary was also less effective in teaching parents of students with a disability (compared to those with a child without a disability) about how to help their child with social and emotional issues.

During the two year period, parents did not, in general, feel that KidsMatter Primary had had a strong impact on their capacities to help their children with social and emotional issues, and this was particularly so for parents of students with a disability. Similarly, there appeared to be no significant change over time in the number of teachers of students with a disability who strongly agreed that teaching *Social and Emotional Learning* had developed in their school, yet there was a ten per cent increase over time in the number of teachers of students without a disability who strongly agreed with this statement.[3]

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[2] Within the field of disability, individuals with a diagnosis of mental health problems or a mental disorder, in addition to another type of disability such as an intellectual disability, a sensory impairment, autism or a physical disability, may be described as having co-morbid disabilities.

[3] It should be noted that the national KidsMatter Evaluation found that components 3 and 4 (i.e. *Parent support and education* and *Early intervention for students experiencing mental health difficulties*) presented challenges for many schools and least progress was made on these components during the trial implementation period.

Students with a disability were reported by parents and teachers to have more mental health difficulties compared to students without a disability and were also reported to have fewer mental health strengths. The differences between reports from parents and teachers in relation to mental health strengths suggested that parents were more likely to recognise positive attributes in their child with a disability, compared to teachers who were less able to recognise these attributes. These findings suggested that the school context may provide a more challenging environment for students with a disability and that students with a disability may present with greater challenges for teachers in contrast to students without a disability. The same groups of students in the home context were not as distinctly different, according to their parents. These findings suggest that teachers are likely to find it more challenging to accommodate the particular needs of students with a disability in the school environment than the parents do at home. The findings also suggest that from the perspective of parents in the sample, schools were significantly less effective in meeting the child's needs if the child had a disability.

Overall, there were practically significant[4] positive improvements in mental health and wellbeing for students with a disability and this is attributed to the impact of the KidsMatter Primary initiative, but there may also be opportunities for KidsMatter Primary to better support students with a disability. For example, practical ideas for teachers working with students with a disability could be suggested in the KidsMatter Primary documents used by schools. In addition, parents of students with a disability may need further consideration when it comes to the impact of KidsMatter Primary in supporting the school's capacity to meet their children's social, emotional and behavioural needs. It was a recommendation of the national evaluation that:

> *"Additional support be provided for school communities to consolidate and develop the four components, with a particular emphasis on Components 3 and 4: Parent support and education and Early intervention for students who are experiencing mental health difficulties".* (Slee et al., 2009)

In light of this recommendation, there may be opportunity for KidsMatter Primary to better engage parents of students with a disability specifically when the four components of the KidsMatter Primary initiative are implemented in schools.

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[4] For more information on statistical and practical significance refer to the *KidsMatter Technical Report* (Dix et al., 2010).

Recommendations

The following recommendations are provided for the Minister's consideration.

It is recommended that:

1) KidsMatter Primary be supported by the South Australian education sectors because it has been demonstrated that the initiative is effective in reducing mental health difficulties and enhancing mental health strengths of students with a disability.

2) KidsMatter Primary documentation be reviewed to ensure the profile of students with a disability and their needs are explicitly represented.

3) Schools adopting the KidsMatter Primary Mental Health Initiative engage parents of children and students with a disability purposefully in the initiative.

4) The effect of KidsMatter Early Childhood on the mental health of young children with a disability is considered when the pilot implementation of this initiative is evaluated during 2010 and 2011.

5) Further research be undertaken to determine the effect of KidsMatter Primary for students with a disability Australia-wide.

Chapter 1. Introduction

1.1   Background

The Ministerial Advisory Committee: Students with Disabilities (MAC: SWD) has been involved in research regarding the mental health of children and students with a disability since 2006, when they began by investigating issues related to mental health for children from birth to Year 7, (approximately 12 years of age). At that time, the committee found evidence in the literature to suggest that the prevalence of mental health problems among children and students with a disability was greater than in the general population (see for example, Einfeld & Tonge, 1996; Gillott et al., 2001; Ghaziudden et al., 2002; Davies, 2005; The Foundation for People with Learning Disabilities, 2006). However, documentation of the Australian and South Australian Governments and mental health agencies did not appear to have prioritised mental health care for this group. Based on the project's findings, the committee recommended, to the then South Australian Minister for Education and Children's Services, that the increased risk of children and students with a disability developing mental health problems be identified by governments and agencies providing mental health care, and that services be prioritised for these children and their families (Ministerial Advisory Committee: Students with Disabilities, 2007).

Around the same time that MAC: SWD was undertaking their study, the KidsMatter Primary Schools Mental Health Initiative (KidsMatter Primary) was about to be piloted in 101 primary schools across Australia. KidsMatter Primary is a framework designed to address the mental health needs of primary school children with a focus on mental health care, the prevention of mental health problems and responding appropriately to mental health issues when they arise. The framework is designed to complement the primary school curriculum and has four main components: Positive School Community; Social and Emotional Learning for Students; Parent Support and Education and Early Intervention for Students Experiencing Mental Health Difficulties. (See KidsMatter Australian Primary Schools Mental Health Initiative website for more details). Representatives of MAC: SWD met with the national coordinator and national project officer of KidsMatter Primary in 2006, just prior to implementation of the first pilot phase. Draft documents intended for use by schools and families who were participating in the KidsMatter Primary pilot were shared with MAC: SWD to review and provide feedback on the profile of students with a disability. MAC: SWD further recommended to the Minister for Education and Children's Services that the committee continue to liaise with KidsMatter staff and, where appropriate, contribute to the national KidsMatter Primary initiative to support the inclusion of children and students with a disability.

During the pilot phase, KidsMatter Primary was also the subject of a comprehensive evaluation by an independent team of evaluators based at Flinders University, South Australia. Over the two year implementation period (from 2007 to 2008), the KidsMatter Evaluation team gathered information about the implementation and effect of

KidsMatter Primary from the 100[5] participating schools Australia wide, including 13 schools in South Australia. The purpose of the evaluation was to determine whether the KidsMatter Primary initiative leads to improved mental health for primary school students, as well as to inform the subsequent national roll-out of KidsMatter Primary. In October 2009, the Commonwealth Minister for Health and Ageing announced that the Australian Government would provide $12.2 million over the coming three years to support the expansion of the KidsMatter Primary initiative to more primary schools across Australia, based on the evaluation findings, which provided evidence of the positive effect of KidsMatter Primary. The Minister also announced funding of $6.5 million to pilot the KidsMatter Early Childhood initiative in 110 long day care centres and preschools.

In December 2008, the South Australian Minister for Education approved a proposal for MAC: SWD to work with the KidsMatter Evaluation team to further analyse the evaluation data with specific interest in South Australian students with a disability who participated in the initiative, in order to determine the effect of KidsMatter Primary on this particular cohort. Permission to undertake this supplementary evaluation was also granted by the KidsMatter Primary partner groups: the Australian Government Department of Health and Ageing, *beyondblue: the national depression initiative*, the Australian Psychological Society and Principals Australia.

The investigating team for the MAC: SWD/KidsMatter Evaluation project consisted of members from the MAC: SWD committee and members of the KidsMatter Evaluation team from Flinders University (see the Appendix for details of the project group).

1.2   Research aims and questions

In the first instance, the research aim was to analyse the existing KidsMatter Evaluation database to establish whether any students who participated in KidsMatter Primary had been identified with a disability by the education sectors. Once established, the principal aim of the research was to determine if there were any differences in the cohort of students with a disability—in terms of the impact and effectiveness of KidsMatter Primary—compared to students without a disability.

The research questions were:
1. How many South Australian students with an identified disability participated in the KidsMatter Primary pilot?
2. Is there a correlation between students with an identified disability and mental health problems?
3. Were aspects of implementation and engagement different for parents of students with a disability?
4. How effective was KidsMatter Primary in supporting the parents of students with a disability?
5. Does having a student with a disability influence parent and teacher perceptions of the four KidsMatter components?
6. For students with an identified disability, to what extent did KidsMatter Primary achieve its major aims of:
    i.   improved mental health and wellbeing;
    ii.   reduced mental health problems;
    iii.   greater support and assistance for students at risk of or experiencing mental health problems?

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[5] The KidsMatter Evaluation was undertaken with 100 schools — one school was not included because of the transient nature of their unique student population.

1.3 About this report

This report has been written and prepared as a complement to the KidsMatter Primary Evaluation Final Report (Slee et al., 2009). Accordingly, background information to the KidsMatter Primary Evaluation has been kept to a minimum with the main focus of this report addressing the research questions above, regarding students with a disability in South Australia. For full details about the evaluation design, the data collected, analyses conducted, conclusions drawn and recommendations for policy and practice resulting from the nation-wide two-year evaluation of the KidsMatter Primary initiative, consult the full Final Report (Slee et al., 2009). For further information about the statistical analysis presented in this report, please refer to the KidsMatter Technical Report (Dix et al., 2010).

Chapter 2. Investigation Methods

2.1 Students with a disability in South Australian schools

Currently in South Australia, students attending Government, Catholic and independent schools are verified as having a disability in accordance with the Department of Education and Children's Services (DECS) *Disability Support Program 2007 Eligibility Criteria.* The seven categories of disability are:

- Autistic Disorder/Asperger's Disorder (A)
- Global Developmental Delay (G)
- Sensory Disability - Hearing (H)
- Sensory Disability - Vision (V)
- Intellectual Disability (I)
- Physical Disability (P)
- Speech and/or Language (S)

In addition, the Catholic and independent sectors also include the category of Social and Emotional disorder.

Coincidentally, KidsMatter Primary was piloted in South Australian schools during a time when the categories for classifying students' disabilities were changing. Prior to 2007, the education sectors used different categories to classify students' verified disabilities by type. In particular, the category 'Communication' was used before a separate category for Autistic Disorder/Asperger's Disorder (A) was developed, (the Communication category included students with speech and language difficulties and Autism Spectrum Disorder). When the new categories were introduced, the decision was taken not to re-classify students according to the new categories; rather a 'grandfather clause' was applied to ensure ongoing support. Hence, most of the students involved with KidsMatter Primary had been verified with a disability using the earlier DECS classification system.

When the KidsMatter Evaluation team began to identify students with a disability from their data base, they found that many students' disabilities could be transferred easily to the new categories, without need for further explanation, except in the case of students with Autism Spectrum Disorder. It was not possible to differentiate retrospectively students with Autism Spectrum Disorder from those with other communication disabilities. As a consequence, it was possible that DECS students with Autism Spectrum Disorder could be included both in the Communication category or in the more recent Autistic Disorder/Asperger's Disorder category.

The codes presented in Table 1 are the codes used by the KidsMatter Evaluation team. The list includes the categories of Communication (C) and Social and Emotional (SE) (the latter of which is used by the Catholic and independents sectors only). The

codes were used to determine students verified with a disability who participated in the KidsMatter Primary pilot across the three education sectors.

Table 1.	Disability Categories for Verification
Disability Code	Disability Category
A	Autistic Disorder/Asperger's Disorder
C	Communication
G	Global Development Delay
H	Sensory Disability (Hearing)
I	Intellectual Disability
P	Physical Disability
S	Speech and/or Language
V	Sensory Disability (Vision)
SE	Social and Emotional

2.2   Measures of mental health

Mental health is a multidimensional concept, comprising of both strengths and difficulties (Askell-Williams et al., 2008). The mental health of students in KidsMatter Primary schools was assessed by multiple informants using multiple measures to determine improvement in students' mental health over time.

The three measures of mental health, which were completed by the parent and teacher of each student, involved Goodman's Strength and Difficulties Questionnaire (SDQ), the Mental Health Strengths scale, and the Mental Health Difficulties scale. The SDQ was selected as the preferred outcome measure for KidsMatter Primary but this scale only focused on the difficulties dimension of mental health. The evaluation team considered it important to also include alternative measures of mental health that focused on positive dimensions. Therefore, the Mental Health Strengths and Mental Health Difficulties scales were designed purposefully for the KidsMatter Evaluation to supplement the SDQ.

Data were collected on four occasions at six month intervals (Time 1, Time 2, Time 3 and Time 4) over the two year implementation period. The three assessments of mental health (based on parent and teacher questionnaires) were combined to provide an overall assessment of the students' mental health. They where brought together using Latent Class Analysis—a statistical technique—to best identify each child's mental health range as 'normal' (i.e. no mental health problems), 'borderline' (i.e. at risk of mental health problems), or 'abnormal' (i.e. experiencing mental health problems), as defined by Goodman (2005).

Chapter 3. Overview of the Participants

3.1   South Australian KidsMatter Primary Schools

KidsMatter Primary was implemented as a pilot Australia wide in 101 primary schools in two stages (Round 1 and Round 2) across 2007 and 2008. Thirteen schools in South Australia participated in the KidsMatter Primary pilot. They include 11 Government schools, one Catholic and one independent school. Six schools participated in Round 1 implementation and seven schools in Round 2. Round 1 schools commenced KidsMatter Primary in 2007 and sustained implementation of KidsMatter Primary over two years. Round 2 schools commenced KidsMatter Primary in 2008 with a start-up phase over one year. Table 2 shows the representativeness of these South Australian schools across multiple dimensions.

Table 2.	Comparative profile of Round 1 and Round 2 South Australian schools involved in KidsMatter Primary																			
South Aust.		Sector			Location			Type		Grade		SES		School size			High		per cent of	Implementation	
		Government	Catholic	Independent	Metro	Remote	Rural	Co-Education	Girls	Primary	R - 12	Low	High	Small	Average	Large	ATSI	ESL	Special needs	Low	Medium	High
Round 1	6	5	1		4	1	1	5	1	4	2	3	3	2	2	2	3	4	2	5	1	
Round 2	7	6		1	5	1	1	6	1	4	3	5	2	2	3	2	2		2	4	2	1
Total	13	11	1	1	9	2	2	11	2	8	5	8	5	4	5	4	5	4	4	9	3	1

Note: ATSI = Aboriginal or Torres Strait Islander background
          ESL   = English as a second language background

The distribution of characteristics shown in Table 2 suggests there is little difference between Round 1 and Round 2 schools. Further analysis of the data indicated that differences in implementation and engagement were the result of a delayed start for Round 2 schools (i.e. one year later). Nevertheless, by the end of the KidsMatter Primary pilot (December 2008), Round 2 schools had caught up and, in some cases, had overtaken Round 1 schools due to the improved efficiency and effectiveness of the project officers and their delivery of support and professional development. By the end of the pilot, both groups of schools achieved similar levels of implementation quality, meaning Round 2 schools caught up quickly. Accordingly, for the purposes of this report, the results for students with a disability from Round 1 and Round 2 schools were not examined separately.

3.2   South Australian Students with a disability

The parents and teachers of 555 South Australian primary school students participated in the KidsMatter Evaluation. Table 3 presents background characteristics of the student cohort at the beginning of the evaluation and also provides an overview of the sub-group of students with an identified disability.

Table 3.	Background characteristics of the South Australian students involved in KidsMatter Primary		
Time 1 Student Cohort		Male	Female
Gender	N=555	232	323
Age (SD)		8.9 (1.7)	9.0 (1.7)
ATSI	not ATSI	211	241
	ATSI	7	14
Language Background	English	180	220
	ESL	27	24
Identified Disability	Communication	21	18
	Communication & Hearing	1	
	Communication & Intellectual	1	1
	Communication & Physical	2	
	Global Development Delay	1	
	Global Development Delay & Speech	1	
	Hearing	1	1
	Hearing & Vision		1
	Intellectual		2
	Physical	1	1
	Physical & Intellectual	1	
	Speech	2	4
	Speech & Vision	1	
	Total 61	33	28

Note: ATSI   = Aboriginal or Torres Strait Islander background
ESL   = English as a second language background

A total of 61 students with an identified disability participated in the KidsMatter initiative, approximating 11 per cent of the total sample of 555 South Australian students. No students with a Social and Emotional disability participated, and no students classified under the Autistic Disorder/Asperger's Disorder category from either of the three education sectors participated. The reason for no participants with Autistic Disorder/Asperger's Disorder relates to a change in categories for verification of disability as explained above in Chapter 2, Section 1: *Students with a disability in South Australian schools*. No Students participating in KidsMatter Primary from the Catholic Education sector had an identified disability, according to the verification criteria.

Fifty-two of the sample of 61 students with a disability had received verification of one disability and nine students had received verification of two disabilities (see Table 3). Of the total South Australian student sample, 494 did not have an identified disability.

The majority of students with a disability participating in the KidsMatter Primary initiative had a Communication disability (n = 39; 64 per cent). It is highly likely that students with Autism Spectrum Disorder participating in the KidsMatter Primary initiative had been identified previously as having a 'Communication' disability.

3.3   Response rate

The KidsMatter Evaluation team received an overall response rate of 70 per cent on the first occasion of data collection (Time 1) in 2007, with 69 per cent of that group still participating by Time 4 at the end of 2008.

In relation to the South Australian cohort of students with a disability, 75 per cent of parents and teachers responded at Time 1 (n= 46), with 40 per cent still participating by Time 4. These data suggest higher attrition for the group concerned with students with a disability from South Australia than that of the Australia-wide group. It is not possible, based on the data collected from South Australia alone, to assess the reasons why this would be the case or that the higher rate of attrition may in fact be a nation-wide phenomenon.

Chapter 4. Findings and Discussion

4.1 Is there a correlation between students with an identified disability and mental health problems?

Central to this investigation was the question of whether students with a disability were more likely to experience mental health problems than their peers without a disability. In the investigation, students were classified as within the range for 'normal', 'borderline' or 'abnormal' mental health based on the composite assessment of mental health, which took into consideration multiple view-points from the parents and the teachers, as well as multiple dimensions of mental health, in terms of strengths and difficulties (World Health Organisation, 2004).

Analysis of the data at Time 1 revealed that 55 per cent of all South Australian students were identified within the normal range, 29 per cent were within the borderline range, and 16 per cent were within the abnormal range of mental health. Further analysis of students' mental health—based on disability status—separated the group into those with none, one or two identified disabilities. Figure 1 presents the percentage distribution of students in each of the mental health ranges against their disability status. This breakdown suggests that co-morbidity is present and that a child with a disability is more likely to also have mental health problems. For the South Australian student cohort at the start of KidsMatter Primary (Time 1), the results suggest that students without a disability had 1 in 8 chance of having mental health difficulties (i.e. being in the abnormal range), students with one identified disability had a 1 in 3 chance, while students with multiple disabilities had a 1 in 2 chance.

Figure 1. Assessment of the comorbidity of student mental health and disability at Time 1
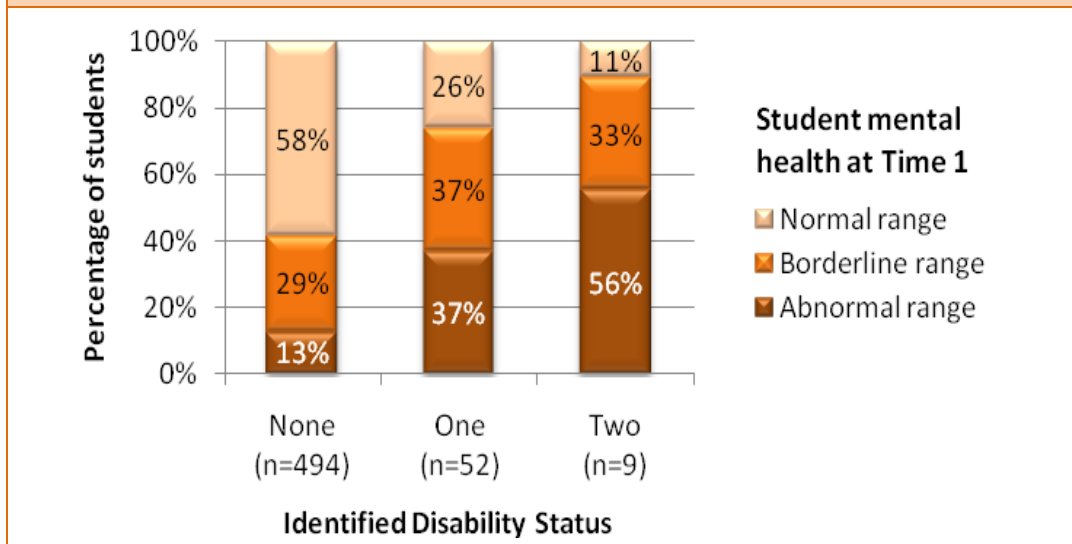
In order to determine the strength of relationship between mental health and disability, canonical correlation analysis was undertaken in AMOS[6] using asymptotic distribution free (ADF) methods due to the extreme skewness of the SDQ data. This technique considers more completely the complexity of relationships than does a simple correlation or regression analysis (Tabichnick and Fidell, 2007).

Figure 2 suggests that there is a significant moderate standardised correlation of 0.32 between students with an identified disability and mental health problems based on averaged parent and teacher ratings on the SDQ at the start of KidsMatter (Time 1). An adequate model fit was indicated by the Root mean square error of approximation (RMSEA), the Comparative fit index (CFI) and the Chi-squared statistic (χ^2/DF). These indices were selected as they performed better than other indices under non-parametric conditions and were less sensitive to sample size (Marsh et al., 1988; Fan, et al., 1999; Schumacker and Lomax, 2004; Lei and Lomax, 2005).

These findings suggest there was co-morbidity of mental health problems amongst children with an identified disability.

Figure 2.   Significance of disability status and mental health problems at Time 1

Note: RMSEA=0.06; χ^2/DF =3.05; CFI=0.97 - adequate model fit
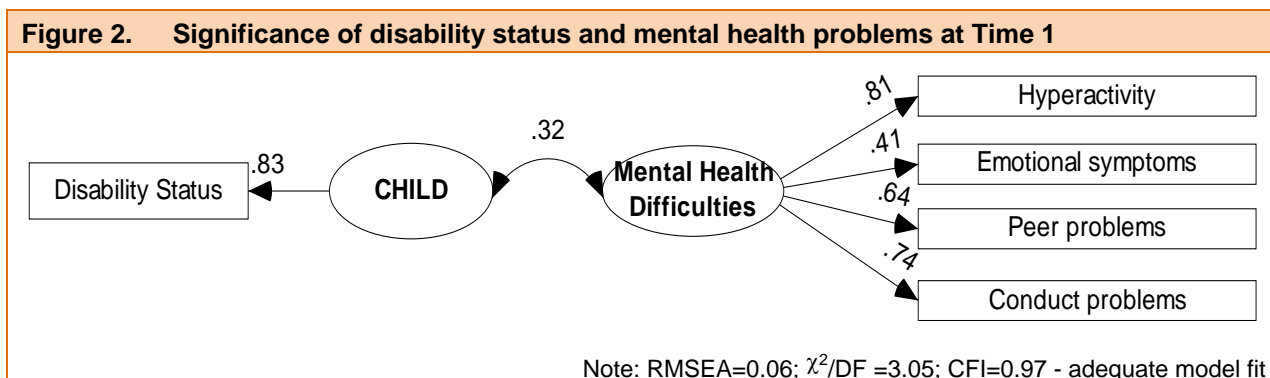
The results show there is a significant and moderate positive correlation between children with an identified disability and mental health problems. Moreover, almost three-quarters (72 per cent) of those children with a disability were identified with a 'Communication' disability and this was reflected in the stronger associations with hyperactivity (0.81) and conduct problems (0.74), and weaker association with emotional symptoms (0.41).

4.2   Were aspects of implementation and engagement different for parents and teachers of students with a disability?

4.2.1   Parent perspectives of KidsMatter implementation

Three items in the questionnaire addressed parents' perceptions of the general level of implementation of KidsMatter Primary. Parents rated the extent to which they agreed with the three items listed in Table 4. These are broad items, with greater agreement from parents taken as evidence of successful KidsMatter Primary implementation in the school. These items were phrased in this broad way because it was not expected that parents would be aware of the individual KidsMatter Primary components or the 7-Step

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[6] AMOS is a program to assist with structural equation models. The acronym stands for Analysis of Moment Structures.

implementation process. At Time 4, 54 per cent of parents of students with a disability, compared to 48 per cent of parents of students without a disability, strongly agreed about the successful implementation of KidsMatter Primary. This suggests that at Time 4 about half the parents had relatively good awareness of KidsMatter Primary and felt engaged with it. The outcomes were similar for both groups of parents with the final result showing a 19 per cent increase in parental awareness and engagement with KidsMatter Primary for parents of students with a disability and 14 per cent for parents of students without a disability by the end of the two years.

Table 4.	KidsMatter Primary implementation items for parents			
From your own experience, rate the extent to which you disagree or agree with the following statements:				
a) I have heard about KidsMatter				
b) I feel positively about KidsMatter				
c) I am encouraged to participate in the KidsMatter Initiative				
Average parent responses	*Students without a disability*		*Students with a disability*	
'Strongly Agree' (scored 6 or 7)	*Time 1 = 35%*	*Time 4 = 48%*	*Time 1 = 35%*	*Time 4 = 54%*

Figure 3 shows the pattern of change in parent ratings about implementation, which examines the trajectories using multilevel hierarchical linear modelling (HLM). The results for change over time are presented as the raw means (bars), as well as the regression line of best fit (LBF) based on the HLM analysis, together with a summary of the statistical results – the steeper the slope of the line, the greater the change.

Figure 3. **Average parent responses to school implementation of KidsMatter Primary**

Notes: Time 2 data was not collected; LBF= Line of best fit

	Time 1 Mean	*Time 4 Mean*	*Significance p*	*r*	*Effect Size*
Without a disability	*4.60*	*5.21*	***	*0.28*	*medium*
With a disability	*4.75*	*5.20*	*ns*	*0.21*	*small*
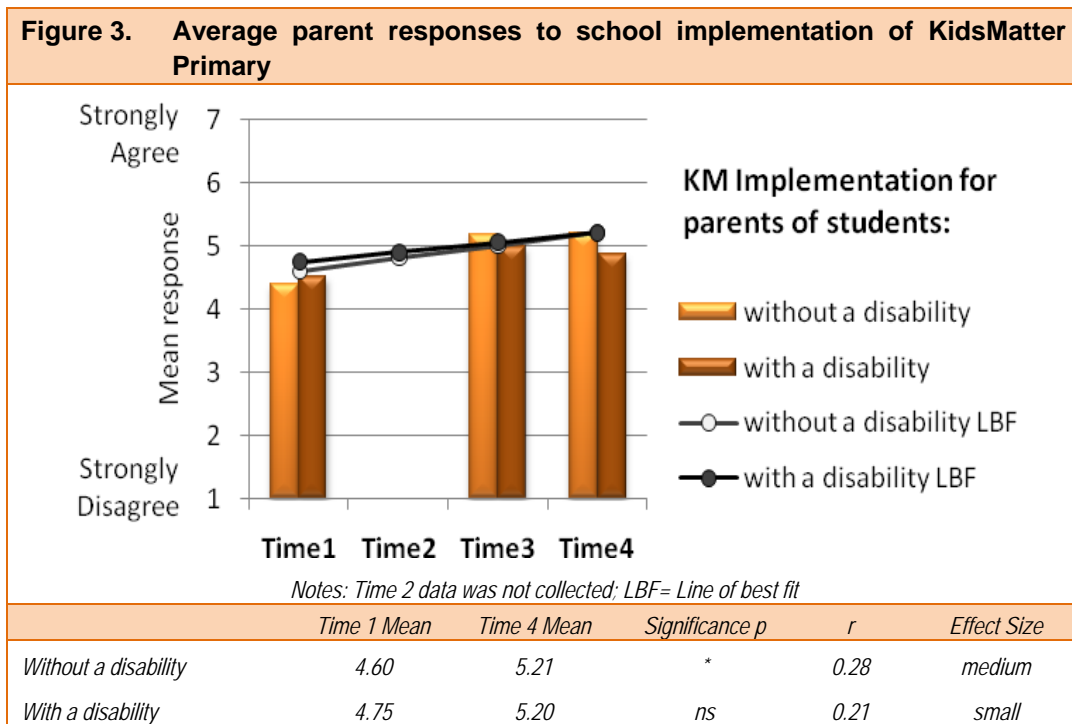
The results presented here and in the following chapters provide information generated from analyses using HLM, and the mean levels of teacher and parent responses on the various measures (scales) used in the evaluation. In addition to reporting HLM means at Time 1 and Time 4, the statistical significance, p, is also reported at three levels, where *** is equivalent to $p < .001$, ** is given for $p < .01$, * is presented as $p < .05$, and not significant (ns) is $p > .05$.

In addition to determining statistical significance p, practical significance, or effect size[7], was calculated using the part-correlation coefficient r. In statistics, correlation simply means the strength and direction of a linear relationship. Correlations of 0.10, 0.24, and 0.37 as indicative of small, medium and large effects, respectively (Kirk, 1996). The effect sizes for change from Time 1 to Time 4 for the group of KidsMatter Primary implementation items was medium for parents of students without a disability and small for parents of students with a disability, indicating that parents were increasingly aware of and involved with KidsMatter Primary over the two years. Overall, the differences between the two groups of parents were not statistically significant.

4.2.2   General engagement with students' mental health and wellbeing

In recognition that schools would already be substantially involved with activities related to students' mental health when they began KidsMatter Primary, questionnaire items were designed to gather information about the activities that KidsMatter Primary schools were already undertaking. In particular, the evaluation team recognised that at the time of the introduction of KidsMatter Primary, schools may already have been delivering social, emotional and behavioural intervention programs, focusing on the quality of the school community, working with parents and undertaking efforts to intervene with students experiencing mental health difficulties. The longitudinal data collection design enabled the evaluation team to investigate whether these activities changed during the KidsMatter Primary implementation period.

The parent and teacher questionnaires about schools' engagement with mental health initiative in general included eight and ten items respectively. The items are given in Table 5. The items were grouped to form scales of school engagement with students' mental health and wellbeing. Note that following extensive discussions and advice from KidsMatter Primary partners in designing these items, the evaluation team deliberately chose to use the words "emotional or social or behaviour difficulties" rather than referring to "students' mental health" in order to avoid stigma and to assist the understanding of parents.

At Time 4, on average, 34 per cent of South Australian parents of students without a disability, compared to 29 per cent of parents of students with a disability, strongly agreed to items about their schools' engagement with students' mental health and wellbeing. While these differences are not significant, parents' initial responses suggest that parents of students with a disability held stronger views at Time 1 (44 per cent strongly agreed), which declined over the two year period to the extent of a small effect size, as presented in Figure 4. In comparison, the opinions of parents of students without a disability were more stable. Overall, the differences between the two groups of parents were not statistically significant. Moreover, the results of multilevel modelling (HLM) of change over time in schools' general engagement with student mental health and wellbeing suggests that parents on average rated schools positively—above the neutral point (four) on the seven-point Likert scale.

The small difference between the two groups of parents was supported by comments from interviews, which suggested that parents often did not take much interest in school-based mental health initiatives if they felt that such initiatives were not relevant to their own child. Accordingly, those parents of students with a disability may have been more sensitive and critical of information about supporting student mental health.

South Australian teachers' reports on a similar set of items about general engagement with students' mental health and wellbeing revealed that it seemed to make little difference whether they taught a students with a disability or not. At Time 4,

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[7] The effect sizes were calculated using a simple formula that relates the part-correlation coefficient, r, and the slope of a regression line, b, expressed in deviation-score form (Ferguson, 1971, p.113).
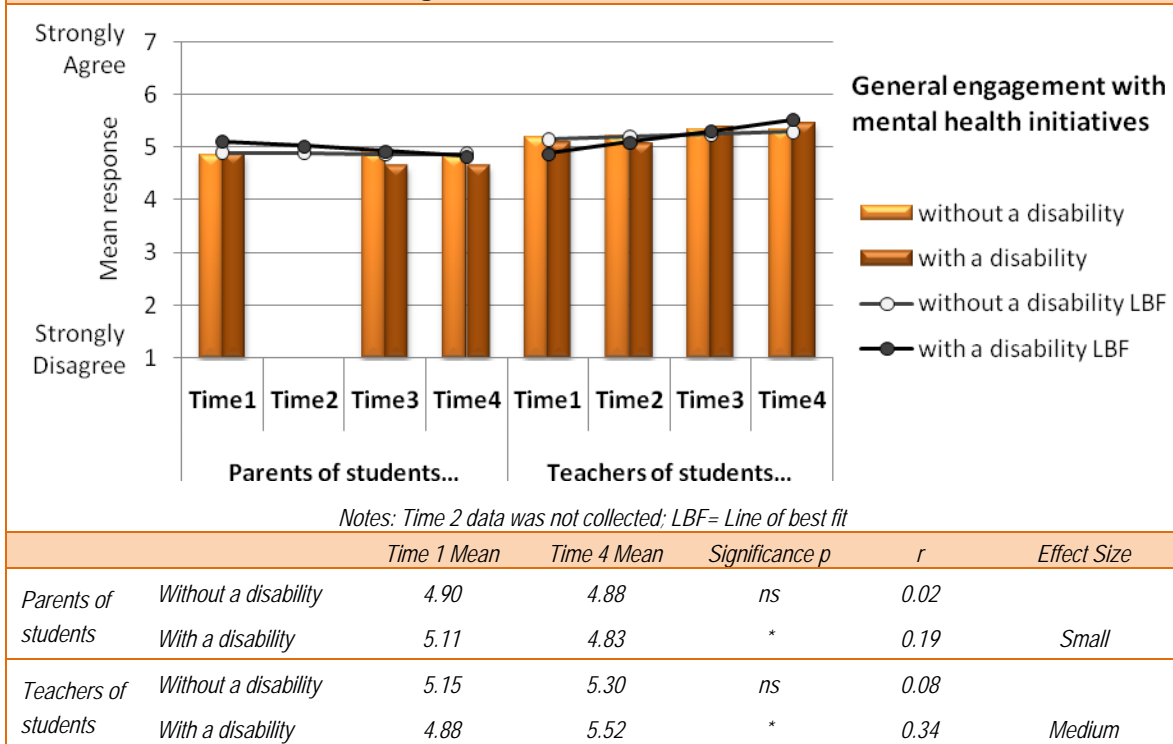
approximately half the teachers strongly agreed about the general engagement of their school. However, the results of change over time suggest that the reports from teachers of students with a disability did significantly differ from those teachers who did not teach students with a disability. Figure 4 indicates a medium positive effect size change in teachers of students with a disability, compared to no significant change in teachers of students without a disability.

Table 5.	Reports of school engagement with students' mental health and wellbeing			
PARENT: From your own experience, rate the extent to which you disagree or agree with the following statements:				
• Staff at the school are concerned for children with emotional or social or behaviour difficulties • The school encourages parents to discuss their children's emotional or social or behaviour difficulties with staff. • 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) • Parents/caregivers are involved when staff make decisions about their child's emotional or social or behaviour difficulties • The school is doing a good job in helping students who have emotional or social or behaviour difficulties • 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 • I find it easy to discuss my child's social and emotional skills with school staff • My child talks about ways to solve his/her emotional or social or behaviour difficulties				
Average parent responses 'Strongly Agree' (scored 6 or 7)	Students without a disability		Students with a disability	
	Time 1 = 38%	Time 4 = 34%	Time 1 = 44%	Time 4 = 29%
TEACHERS: From your own experience, rate the extent to which you disagree or agree with the following statements:				
• The school leadership team actively supports the implementation of programs to develop students' social and emotional skills • All teaching staff support the teaching of social and emotional skills to students • Parents/caregivers actively support the school's program for teaching social and emotional skills • Teachers attend professional development about supporting students with emotional or social or behaviour difficulties • Teachers discuss students' emotional or social or behaviour difficulties with the appropriate staff • Teachers discuss individual student's emotional or social or behaviour difficulties with the student's parents/caregivers • 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 • Staff consult parents/caregivers about emotional or social or behaviour interventions for their children • Our teaching about social and emotional skills engages students' interest • Parents/caregivers are positive about teaching social and emotional skills to students at school				
Average teacher responses 'Strongly Agree' (scored 6 or 7)	Students without a disability		Students with a disability	
	Time 1 = 46%	Time 4 = 51%	Time 1 = 43%	Time 4 = 52%

The results for schools' engagement with students' mental health and wellbeing confirmed that, in general, schools did focus on those aspects concerning the welfare of their students and this view did not appear to greatly differ from parent to parent. The analysis of teacher reports shows a statistically significant change in this engagement across time for teachers of students with a disability, associated with a medium effect size. The initial high level of the ratings from teachers and parents, together with the broad and general nature of the items, could have been factors in the limited evidence of change over time for engagement with students' mental health and wellbeing.

Analysis suggests that South Australian schools have maintained a moderate level of attention to and engagement with students' general mental health and wellbeing across the trial period. The findings suggest that teachers of students with a disability benefitted from the initiative over time, but there may be opportunity for KidsMatter Primary to better engage parents of students with a disability.

Figure 4. **Parent and teacher ratings of school engagement with students' mental health and wellbeing**

Notes: Time 2 data was not collected; LBF= Line of best fit

		Time 1 Mean	Time 4 Mean	Significance p	r	Effect Size
Parents of students	*Without a disability*	4.90	4.88	ns	0.02	
	With a disability	5.11	4.83	*	0.19	Small
Teachers of students	*Without a disability*	5.15	5.30	ns	0.08	
	With a disability	4.88	5.52	*	0.34	Medium

4.3 How effective was KidsMatter in supporting the parents of students with a disability?

Seven items in the questionnaire asked South Australian parents to rate the extent to which KidsMatter Primary had helped their learning about their children's social and emotional needs. The items covered parenting in general, identifying the child's difficulties, and assisting with their child's social and emotional learning and difficulties. These items are given in Table 6, where it can be seen that by Time 4, 14 per cent of parents of students without a disability and only 8 per cent of parents of students with a disability strongly agreed that KidsMatter Primary had helped them to learn about these issues. The level of these responses indicates that parents did not feel that KidsMatter Primary had had a strong impact on their capacities to help their children with social and emotional issues, particularly for parents of students with a disability.

This general finding of a low rating over the period of KidsMatter Primary is explained by the results of the multilevel modelling (HLM) analysis of changes in the mean scores (see Figure 5). The responses of parents of students without a disability indicated that KidsMatter Primary was associated with a practically significant medium increase in their learning, albeit from a rather low level at Time 1. However, for parents of students with a disability the trend was reversed, resulting in a decline in their ratings about how KidsMatter Primary had helped them, equivalent to a small effect size. The difference between the two parent cohorts was statistically significant.

These findings suggest that KidsMatter Primary was less effective in teaching parents of students with a disability, compared to those without a child with a disability, about how to help their child with social and emotional issues. The results also indicate that schools were less effective in supporting parents of students with a disability in the area of parent learning. Analysis suggests that there may be opportunity for KidsMatter Primary to better support parents of students with a disability in South Australia.
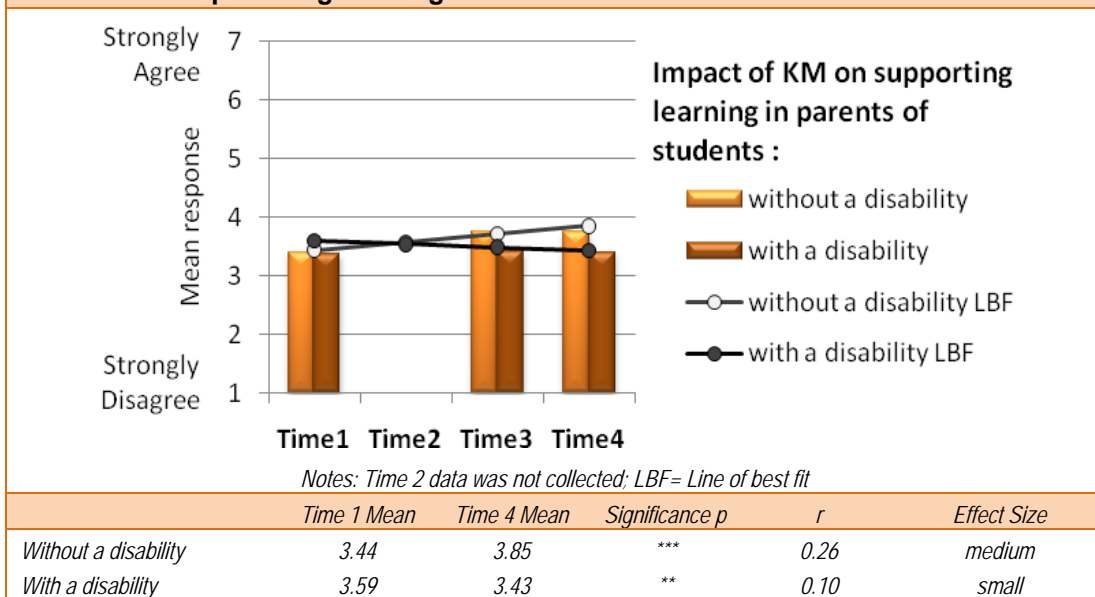
Table 6.	Parent ratings of learning from KidsMatter Primary			
From your own experience, rate the extent to which you disagree or agree with the following statements. KidsMatter has helped me to learn:				
a) good ideas for parenting				
b) how to identify if my child is showing emotional or social or behaviour difficulties				
c) how my child develops relationships with other children				
d) how to help my child deal with his/her feelings				
e) how to help my child to understand the feelings of other people				
f) how to help my child to make responsible decisions				
g) how to help my child to deal with emotional or social or behaviour difficulties				
Average parent responses	*Students without a disability*		*Students with a disability*	
'Strongly Agree' (scored 6 or 7)	*Time 1 =10%*	*Time 4 = 14%*	*Time 1 = 6%*	*Time 4 = 8%*

Figure 5.   Change in parent perceptions about the impact of KidsMatter Primary on parenting learning

Notes: Time 2 data was not collected; LBF= Line of best fit

	Time 1 Mean	*Time 4 Mean*	*Significance p*	*r*	*Effect Size*
Without a disability	*3.44*	*3.85*	*****	*0.26*	*medium*
With a disability	*3.59*	*3.43*	****	*0.10*	*small*

4.4 Does having a student with a disability influence parent and teacher perceptions of the four components of the initiative?

4.4.1 Component 1: Positive School Community

The first component of the KidsMatter Primary initiative, *Positive School Community*, focussed on building a sense of belonging and connectedness for all members of school communities. A school that is welcoming and that encourages teachers, students and families to belong, provides a necessary condition for the success of initiatives to promote mental health (Graetz et al., 2008).

In order to measure the positive community dimension of schools, the evaluation questionnaire contained 11 parallel items for teachers and parents, presented in Table 7. The items were designed to cover two target areas and objectives associated with Component 1. The two target areas were: belonging and inclusion within the school community, and a welcoming and friendly school environment. The questionnaire results were examined to determine the degree to which schools displayed a positive
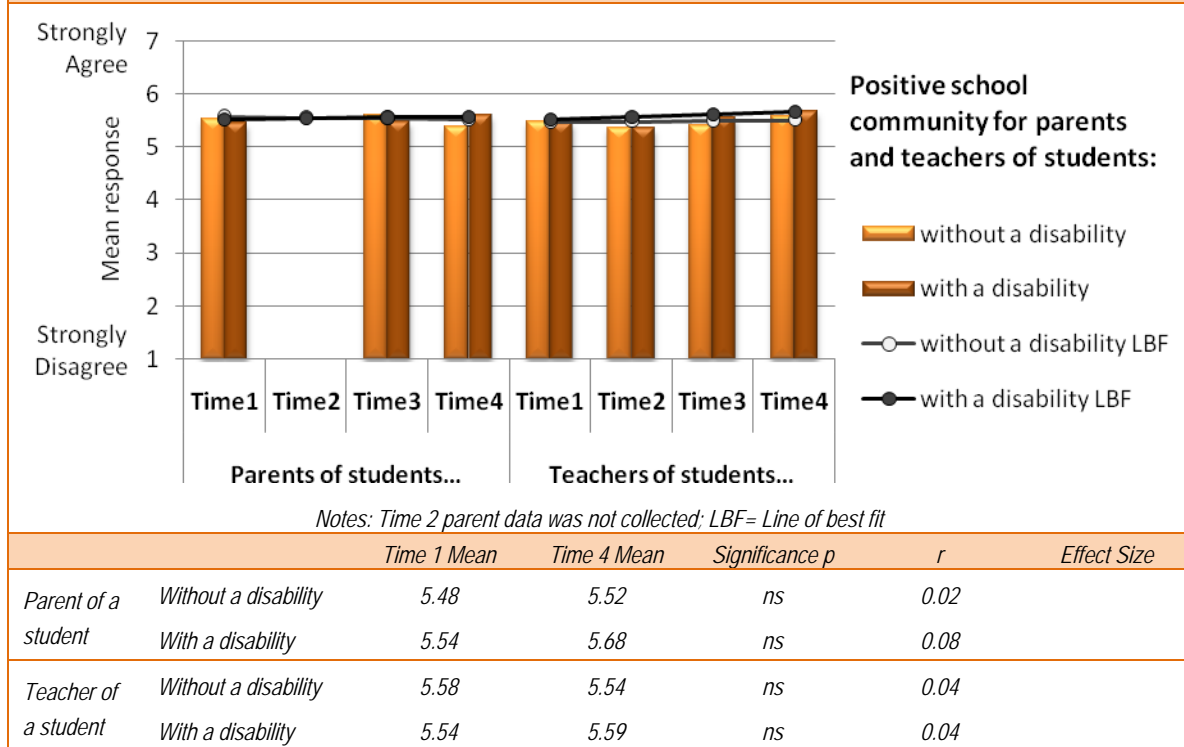
school community at the start of KidsMatter Primary, and the extent to which these indicators changed over the time of the KidsMatter Primary trial.

Table 7 shows that in the South Australian schools average responses for both parents and teachers at the end of KidsMatter Primary indicate that schools were indeed functioning as positive communities. At Time 4, on average, approximately 60 per cent of teachers and over 55 per cent of parents strongly agreed to items about positive school community. Although there was an increase in the percentage of teachers and some decline in the percentage of parents strongly agreeing over the two year period, these differences were statistically not significant. It suggests that parents and teachers, irrespective of whether they had a student with a disability, maintained positive views of the school community during KidsMatter Primary.

This stability is more clearly shown in Figure 6, which examines the trajectories using multilevel modelling (HLM) presented along with raw mean parent and teacher responses. Figure 6 shows that the mean ratings by both teachers and parents for positive school community were relatively high throughout the period of KidsMatter Primary and showed very little change. Overall, the differences between the two groups of parents and between the two groups of teachers were not statistically significant.

Table 7.	Parent and Teacher items about Component 1: Positive school community		
PARENTS: These first questions ask you to reflect on your school community. • My child feels a sense of belonging at school • I feel accepted by staff at the school • I feel accepted by other parents/caregivers at the school • The school is welcoming to students • The school is welcoming to families • The school encourages caring relationships between staff and families • The school encourages caring relationships between students and staff • The school publicly recognizes the contributions families make to the school • The school encourages students to have a say about school matters • The school encourages parents/caregivers to have a say about school matters • The school has good links with the local community			
Average parent responses 'Strongly Agree' (scored 6 or 7)	Parents of students without a disability Time 1 = 60% Time 4 = 55%		Parents of students with a disability Time 1 = 57% Time 4 = 59%
TEACHERS: These first questions ask you to reflect on your school community. • Students feel a sense of belonging at this school • Staff feel a sense of belonging at this school • The school is welcoming to students • The school is welcoming to families • The school encourages caring relationships between staff and families • The school encourages caring relationships between students and staff • The school publicly recognises the contributions families make to the school • Students have a say in decisions affecting them • Staff participate in shared decision making • The school encourages parents/caregivers to have a say about how the school operates • The school has policies and practices that help all members of the school community to feel included			
Average teacher responses 'Strongly Agree' (scored 6 or 7)	Teachers of students without a disability Time 1 = 55% Time 4 =59%		Teachers of students with a disability Time 1 =55% Time 4 = 60%

Figure 6.   Teacher and parent reports of positive school community

Notes: Time 2 parent data was not collected; LBF= Line of best fit

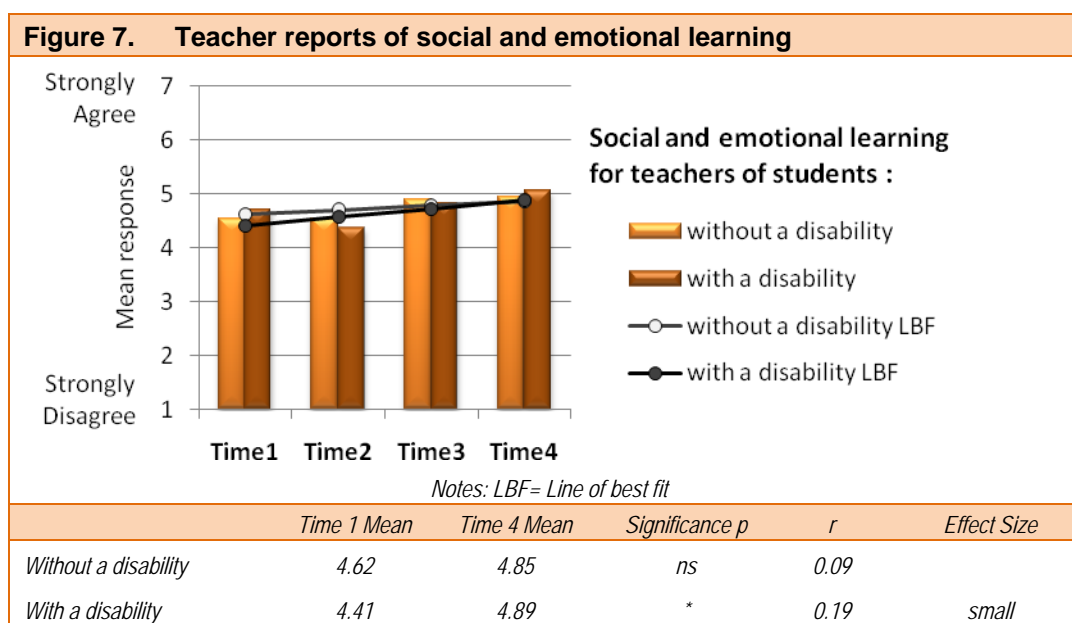|		Time 1 Mean	Time 4 Mean	Significance p	r	Effect Size
Parent of a student	Without a disability	5.48	5.52	ns	0.02	
	With a disability	5.54	5.68	ns	0.08	
Teacher of a student	Without a disability	5.58	5.54	ns	0.04	
	With a disability	5.54	5.59	ns	0.04	

4.4.2   Component 2: Social and Emotional Learning

The second component, *Social and Emotional Learning* (SEL), focussed on building students' social and emotional competencies through the provision of a structured SEL curriculum. It was assumed in KidsMatter Primary that students' social and emotional competencies contribute directly to better student mental health and wellbeing. The evaluation included a number of strategies to indicate whether and how schools were providing a SEL curriculum. To measure schools' performance in relation to SEL, the evaluation questionnaire contained 10 items for teachers listed in Table 8. The questions were designed around the two KidsMatter Primary targets and objectives associated with Component 2, which focused on the provision of a SEL curriculum and opportunities provided to students to practise their SEL skills.

It can be seen in Table 8 that by Time 4, 42 per cent of South Australian teachers of students without a disability and 34 per cent of teachers of students with a disability strongly agreed (scored 6 or 7) about the implementation of their SEL programs for students. This response demonstrates that during the two year period, 10 per cent more teachers of students without a disability strongly agreed that teaching *Social and Emotional Learning* had developed in their school, while there appeared to be no change in the number of teachers of students with a disability in relation to this curriculum area.

The impact of KidsMatter Primary on the provision of SEL was also examined in the multilevel modelling analysis (HLM), using the teacher items combined into a single scale. The emphasis here was on both the performance of schools at the start of KidsMatter Primary and the question of whether this performance changed over the period of KidsMatter Primary. The results for change over time are summarised in Figure 7, which shows the raw means as well as the line-plot of the fitted HLM results, together with a summary of the statistical results.

Table 8.	Teacher items about Component 2: Social and emotional learning

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:

- *The school teaches social and emotional skills to students in formally structured sessions that adhere to a program manual*
- *The school teaches social and emotional skills regularly to all students (at least once per week)*
- *The school supports professional development about student emotional, social and behaviour difficulties*
- *The school supports professional development about teaching social and emotional skills*
- *The school curriculum allocates appropriate time to teach students social and emotional skills*
- *The school regularly evaluates its curriculum for teaching social and emotional skills*
- *The school's resources for teaching social and emotional skills meet the needs of our students*
- *The school is well equipped to meet the needs of students with emotional, social or behaviour difficulties*
- *The school teaches about social and emotional skills in a coordinated and supported way throughout the school*
- *Developing staff knowledge about emotional, social and behaviour difficulties is a high priority in our school*

Average teacher responses	*Teachers of students without a disability*		*Teachers of students with a disability*	
'Strongly Agree' (scored 6 or 7)	*Time 1 = 32%*	*Time 4 = 42%*	*Time 1 = 34%*	*Time 4 = 34%*

While South Australian teacher ratings of provisions for *Social and Emotional Learning* showed positive change across the period of KidsMatter Primary (see Figure 7), the effect size for this change was of small practical significance for teachers of students with a disability.

Figure 7.	Teacher reports of social and emotional learning

Notes: LBF= Line of best fit

	Time 1 Mean	Time 4 Mean	Significance p	r	Effect Size
Without a disability	*4.62*	*4.85*	*ns*	*0.09*	
With a disability	*4.41*	*4.89*	***	*0.19*	*small*

4.4.3   Component 3: Parenting Support and Education

The third component of KidsMatter Primary, *Parenting Support and Education*, focussed on the school as an access point for families to learn about parenting, child development and children's mental health. This was to be achieved through more collaborative working relationships between teachers and parents, providing parents with information and programs about effective parenting and child mental health, as well as assisting parents to form support networks.

The evaluation questionnaire contained up to seven parallel items for teachers and parents about parenting support and education to measure schools' performance in relation to the provision of parenting support and education (see Table 9). Component

3 placed an emphasis on support and education provided at the school and at the teacher level. The items covered the three target areas and objectives associated with Component 3. The three target areas were: parent-teacher relationships, parenting information, and support networks for parents and families.

Table 9.	Parent and teacher items about Component 3: Parenting support and education

These questions are about the information and support provided for parents/caregivers. From your own experience, rate the extent to which you disagree or agree with the following statements:
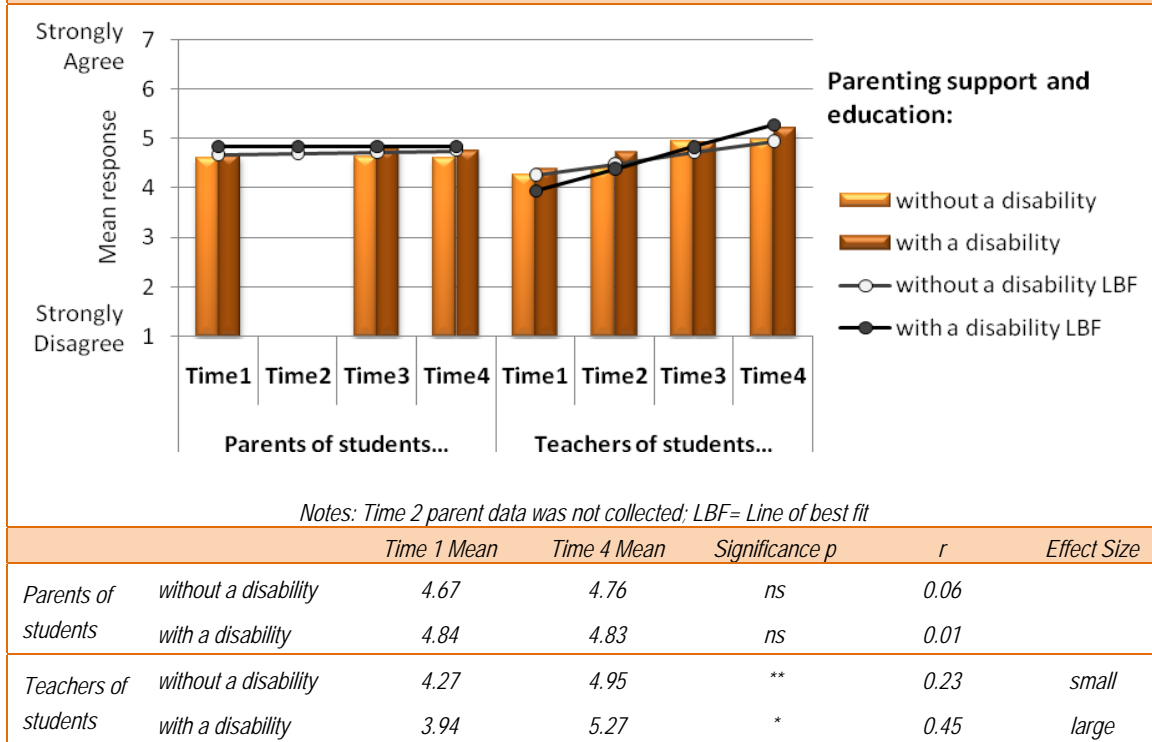
- *The school provides parents with opportunities to meet with other families/caregivers to develop support networks*
- *Information about parenting practices is available at school*
- *Information about child development is available at school*
- *The school identifies and promotes parenting resources to parents/caregivers*
- *The school provides parents/caregivers with help to access parenting courses/programs*
- *Information about parenting education courses and programs is available at school (Parents questionnaire only)*
- *Information is available at the school on how to help children with emotional, social or behaviour difficulties*

Average parent responses *'Strongly Agree' (scored 6 or 7)*	*Parents of students without a disability*		*Parents of students with a disability*	
	Time 1 = 29%	*Time 4 =28%*	*Time 1 =31%*	*Time 4 = 23%*
Average teacher responses *'Strongly Agree' (scored 6 or 7)*	*Teachers of students without a disability*		*Teachers of students with a disability*	
	Time 1 = 17%	*Time 4 =39%*	*Time 1 =20%*	*Time 4 = 34%*

The questionnaire results were examined to determine, firstly, the degree to which South Australian staff provided parenting support and education at the start of KidsMatter Primary, and then to consider the extent to which this changed over the time of KidsMatter Primary. The question of the impact of KidsMatter Primary on parenting support and education was examined in the multilevel modelling analysis (HLM) using the parent and teacher items combined into their respective scales. The results for change over time are summarised in Figure 8, which gives the raw means as well as the plot of the fitted HLM results, together with a summary of the statistical results. Figure 8 shows that teacher ratings of parenting support and education provided by the school were around five on the seven-point scale, indicating a neutral response. There was no significant change in parent responses and little difference between those of parents of students with a disability compared to those of parents of students without a disability across the two years of the KidsMatter Primary trial in South Australia. However, according to teacher reports, 22 per cent more teachers of students without a disability, compared to 15 per cent of teachers of students with a disability (equivalent to a medium to large effect size) strongly agreed that the school provided P*arenting Support and Education.*

Overall, these findings show a positive impact across the trial on the level of *Parenting Support and Education* provided by the school. Findings suggest that both teachers and parents were aware of efforts being made at the whole school level to provide education and support to parents. However, teachers seemed more aware of the provision of *Parenting Support and Education*, particularly if they taught a student with a disability.

Figure 8.	Parent and teacher reports of parenting support and education from the staff

Notes: Time 2 parent data was not collected; LBF= Line of best fit

		Time 1 Mean	Time 4 Mean	Significance p	r	Effect Size
Parents of students	without a disability	4.67	4.76	ns	0.06	
	with a disability	4.84	4.83	ns	0.01	
Teachers of students	without a disability	4.27	4.95	**	0.23	small
	with a disability	3.94	5.27	*	0.45	large

4.4.4 Component 4: Early intervention for students experiencing mental health difficulties

The fourth component of KidsMatter Primary, *Early Intervention for Students Experiencing Mental Health Difficulties*, was directed to a more select group of students, but was still incorporated into a whole-school approach. Component 4 had three main target areas: (a) the promotion of early intervention for students experiencing mental health difficulties; (b) attitudes towards mental health and mental health difficulties; and (c) the provision of support for students experiencing mental health difficulties.

As with the other three components, it was expected that participation in KidsMatter Primary would increase the degree to which schools undertook early intervention strategies. The evaluation questionnaire contained 12 items for teachers and 14 items for parents to measure the provisions that schools were making for early intervention and support for students experiencing mental health difficulties. The items are given in Table 10.

The items in this section were recognised as being sensitive and were developed with the aim of referring to student mental health issues in school contexts in non-stigmatising ways. Accordingly, rather than referring to "mental health difficulties", the items were worded to refer to "emotional or social or behaviour difficulties", as it was determined that teachers and parents would better understand the latter wording and that this wording would be less likely to cause concern. The items mainly emphasised the target areas of identification and support for students experiencing mental health difficulties. The questionnaire results were examined to determine firstly the degree to which schools had provisions for early intervention at the start of KidsMatter Primary, and the extent to which this improved over the time of KidsMatter Primary.

Table 10.	Parent (P) and teacher (T) items about Component 4: Early intervention			

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:*

- *The school acts quickly if a child has emotional or social or behaviour difficulties*
- *The external school support services (such as psychologists and social workers) act quickly if a child has emotional or social or behaviour difficulties (T only)*
- *The school has strategies to identify whether students are having emotional or social or behaviour difficulties*
- *The school has policies to support students with emotional or social or behaviour difficulties*
- *The school has referral procedures for students experiencing emotional or social or behaviour difficulties*
- *The school assists students having emotional or social or behaviour difficulties (P only)*
- *The school helps families to get professional advice if their child is:*
  - *having trouble with his or her schoolwork (P only)*
  - *overactive or easily distracted*
  - *having emotional problems*
  - *having social problems*
  - *having behaviour difficulties*
- *The school regularly monitors students who are having emotional or social or behaviour difficulties*
- *The school provides information that helps parents/caregivers to know if their child is having emotional or social or behaviour difficulties (P only)*
- *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 (P only)*
- *Staff promote the importance of early intervention for students with emotional or social or behaviour difficulties (T only)*
- *School staff are respectful and sensitive towards people experiencing emotional or social or behaviour difficulties*

Average parent responses *'Strongly Agree' (scored 6 or 7)*	*Parents of students without a disability*		*Parents of students with a disability*	
	Time 1 = 30%	*Time 4 =26%*	*Time 1 =36%*	*Time 4 = 27%*
Average teacher responses *'Strongly Agree' (scored 6 or 7)*	*Teachers of students without a disability*		*Teachers of students with a disability*	
	Time 1 = 34%	*Time 4 =41%*	*Time 1 =33%*	*Time 4 = 34%*

It can be seen in Table 10 that the responses on the individual items at Time 4 tended to be more positive for teachers than for parents. The most positive responses were about teachers promoting early intervention, and about teachers' respect for people experiencing emotional, social or behaviour difficulties. By Time 4, around 26 per cent of parents of students with or without a disability strongly agreed (scored 6 or 7) to items relating to early intervention for students experiencing mental health difficulties. However, this resulted from a decline in beliefs from Time 1, with 4 per cent fewer parents of students without a disability, and 9 per cent fewer parents of students with a disability, strongly agreeing about aspects of early intervention. This decline is further reflected in Figure 9, which suggests that parents' beliefs about early intervention, overall, were generally neutral (a score of 4), but for parents of students with a disability, a decline in attitude equivalent to a small effect size indicated the need for greater support.

In contrast, Table 10 also presents the averaged responses from teachers which shows a trend of improvement for teachers of students without a disability. While both groups of teachers similarly agreed at Time 1 (34 per cent), there was little change for teachers of students with a disability by Time 4, compared to 7 per cent more teachers of students without a disability (equivalent to a small positive effect), strongly agreeing that early intervention for students experiencing mental health difficulties had been provided.

Figure 9.   Parent and teacher reports of school provision of early intervention
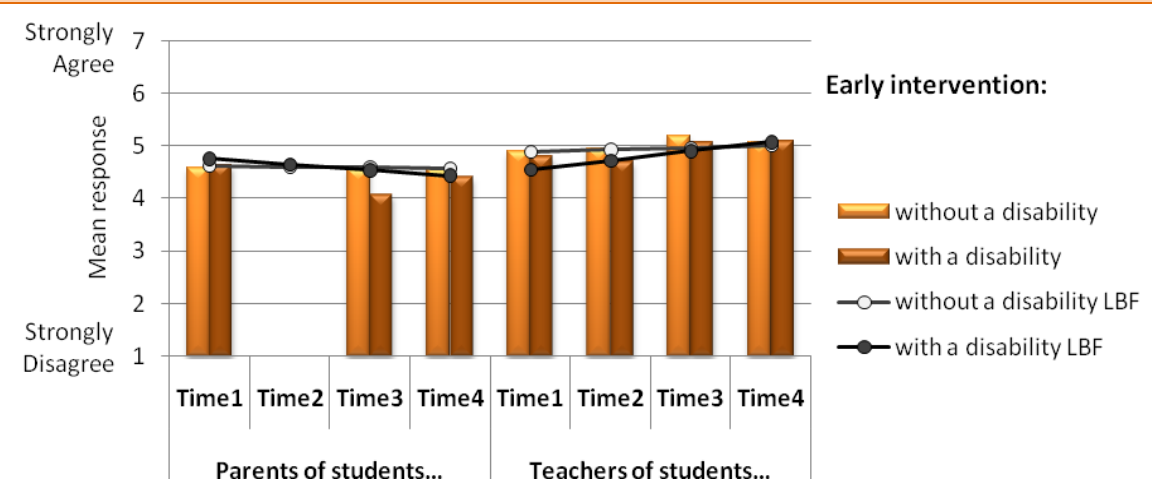
Notes: Time 2 parent data was not collected; LBF= Line of best fit

		Time 1 Mean	Time 4 Mean	Significance p	r	Effect Size
Parents of students	*without a disability*	*4.63*	*4.58*	*ns*	*0.03*	
	with a disability	*4.76*	*4.44*	***	*0.19*	*small*
Teachers of students	*without a disability*	*4.89*	*5.02*	*ns*	*0.05*	
	with a disability	*4.55*	*5.08*	***	*0.21*	*small*

In summary, having a student with a disability appeared to influence parent and teacher perceptions regarding three of the four components of KidsMatter Primary. For Component 1: *Positive School Community*, the mean ratings by both teachers and parents were relatively high throughout the period of KidsMatter Primary and showed very little change. For Component 2: *Social and Emotional Learning*, there was an improvement across the period of KidsMatter Primary for teachers of students with a disability equivalent to a small effect size. For the last two components, which were generally not as extensively implemented as the first two components, the results suggest that parents—particularly those of students with a disability—need further assistance regarding parenting support and education and in the provision of early intervention. On the other hand, teachers seemed more aware of the provision of parenting support and education and of early intervention for students with difficulties, particularly if they had a student with a disability in their class. As far as teachers were concerned, the four components appeared responsive to the mental health needs of students with a disability.

4.5   KidsMatter Primary for Students with a Disability

KidsMatter Primary is designed to improve student mental health and wellbeing and to reduce mental health difficulties. The KidsMatter Evaluation has provided evidence of ways in which KidsMatter Primary and the four components have had an impact on schools, teachers and parents participating in the KidsMatter Primary pilot (Slee et al., 2009). These positive changes are consistent with the purpose of KidsMatter Primary in its mental health promotion, prevention and early intervention strategies. An additional component of the KidsMatter Evaluation was to determine whether and how KidsMatter Primary has impacted on student mental health.
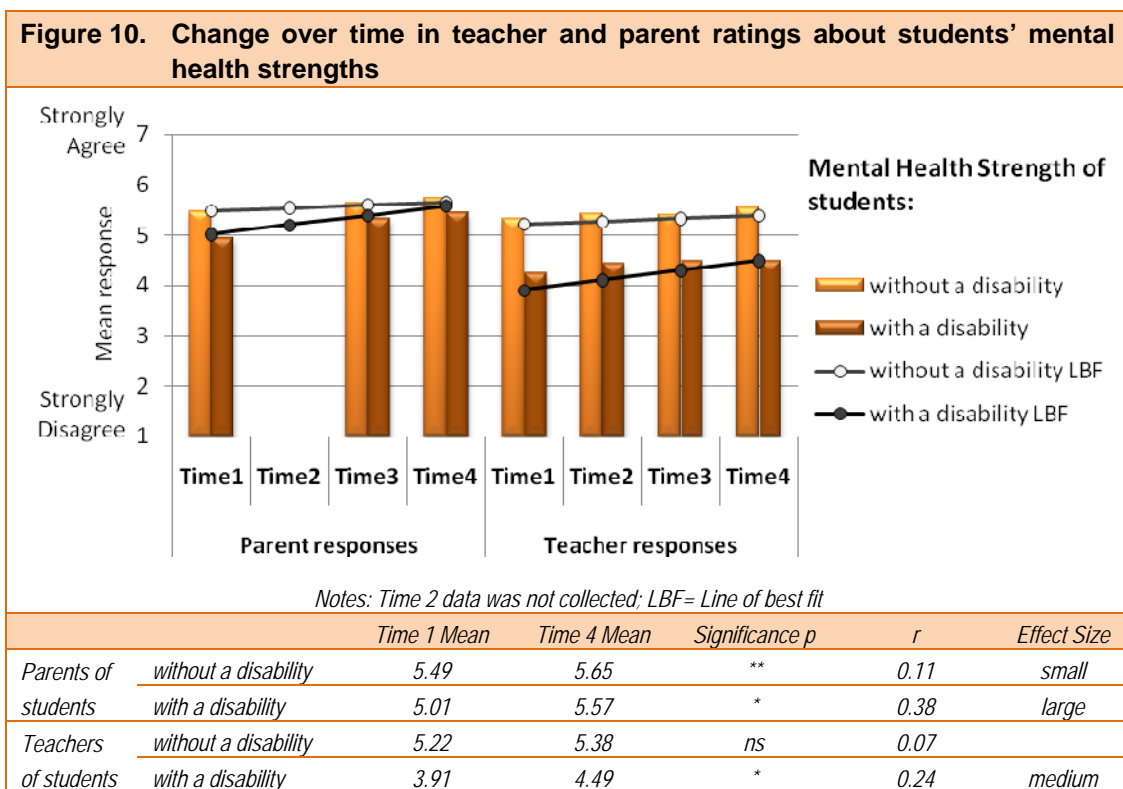
The KidsMatter Evaluation used three scales to measure student mental health. Each scale was based on teacher and parent reports about the targeted students. The three

scales were (a) Goodman's (2005) Strengths and Difficulties Questionnaire (SDQ), (b) the purpose-designed Mental Health Difficulties scale as an alternative measure of difficulties, and (c) the purpose-designed Mental Health Strengths scale. Presented below are the mental health outcomes for students with a disability compared to those students without a disability from the South Australian cohort. Improvement in mental health and wellbeing and reduced mental health problems, according to Total SDQ Difficulties, are discussed.

4.5.1   Improved mental health and wellbeing

The Mental Health Strengths scale consisted of three items about optimism and coping, which were responded to by parents and teachers on a seven-point Likert scale on four occasions. A high score on the seven-point scale represents a high level of mental health and wellbeing. Students who exhibited mental health strengths (scored 6 or 7) "*generally thought things were going to work out well, felt good about him or herself*" and "*were able to cope with life overall*".

Figure 10 presents the changes over time in ratings by parents and teachers on the Mental Health Strengths scale. Students without a disability were similarly rated by parents and teachers as being moderately high in terms of mental health strengths at Time 1. This allowed for only small improvement over the two years. However, the findings for students with a disability appear different.

Figure 10.   Change over time in teacher and parent ratings about students' mental health strengths

Notes: Time 2 data was not collected; LBF= Line of best fit

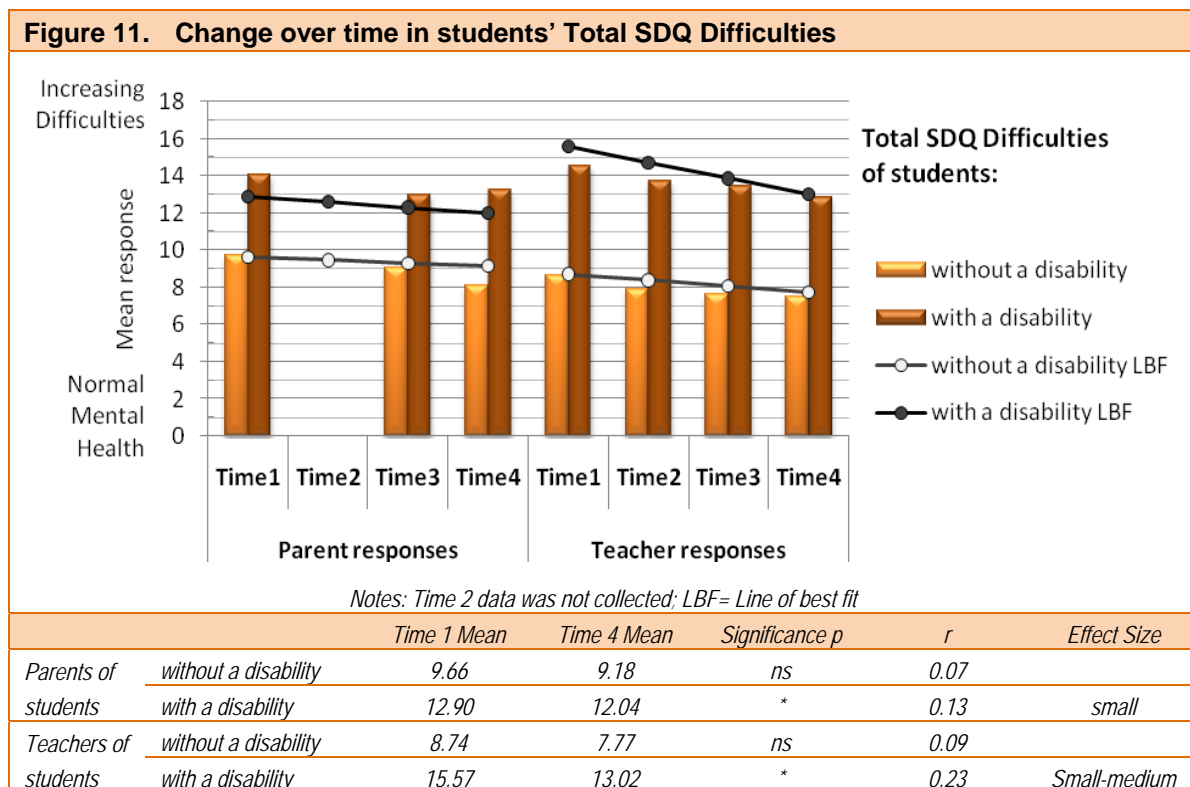|		Time 1 Mean	Time 4 Mean	Significance p	r	Effect Size
Parents of	*without a disability*	*5.49*	*5.65*	****	*0.11*	*small*
students	*with a disability*	*5.01*	*5.57*	***	*0.38*	*large*
Teachers	*without a disability*	*5.22*	*5.38*	*ns*	*0.07*	
of students	*with a disability*	*3.91*	*4.49*	***	*0.24*	*medium*

In the first instance, the differences between reports from parents and teachers suggests that parents were more likely to recognise positive attributes in their child with a disability, compared to teachers who were less able to recognise these attributes. These findings suggest that the school context provides a more challenging environment for students with a disability, (reflected by the significantly lower ratings from teachers). Nevertheless, over the two year period, both parents and teachers of students with a disability reported an increase in mentally healthy behaviours equivalent to a medium effect size for teachers and a large effect size for parents.

4.5.2   Reduced mental health problems

Parent and teacher informant versions of the Goodman's Strengths and Difficulties Questionnaire (SDQ) were given to the parents and teachers on four occasions. The SDQ contains items about students' mental health strengths and difficulties. However, in accordance with Goodman's instructions about scoring the SDQ, only the items about difficulties were summed to give a *Total SDQ Difficulties* score. In other words, the *Total SDQ Difficulties* measure is the sum of scores on the subscales of *Emotional Symptoms*, *Conduct Problems*, *Peer Problems* and *Hyperactivity*, but excludes *Prosocial Behaviour*. A low total score on this 40-point scale indicates low mental health difficulties.

The results for mean changes in the Total SDQ Difficulties scores for all students indicated some significant changes with small effect sizes. These effect sizes are of practical significance. Following this broad evidence, it was important to separate the student group to examine how KidsMatter Primary impacted on those with a disability compared to those without a disability. It was expected that KidsMatter Primary would have different levels of impact depending on the extent of existing mental health difficulties. Accordingly, it was expected that KidsMatter Primary would have more impact on students with a disability because they were more likely to have higher initial levels of mental health difficulties—and therefore greater potential for intervention. The changes in mean scores were examined further to determine whether change was differentially evident from parents and teachers according to the students' disability criteria.

Figure 11 presents the analysis of changes over time in mental health difficulties. The results show there was a reduction in the *Total SDQ Difficulties* scores for all students, but particularly for students with a disability, with the reductions representing small practical effects.

Figure 11.   Change over time in students' Total SDQ Difficulties

Notes: Time 2 data was not collected; LBF= Line of best fit

		Time 1 Mean	Time 4 Mean	Significance p	r	Effect Size
Parents of	*without a disability*	9.66	9.18	ns	0.07	
students	*with a disability*	12.90	12.04	*	0.13	*small*
Teachers of	*without a disability*	8.74	7.77	ns	0.09	
students	*with a disability*	15.57	13.02	*	0.23	*Small-medium*

The most pronounced outcomes presented in Figure 11 were the differences in mental health difficulties, as reported by the parents and teachers of each group of students. These findings suggest that students with a disability were reported to have more difficulties, compared to the students without a disability, and reaffirm the earlier findings of comorbidity between mental health and disability. Students with a disability were statistically different from students without a disability in terms of the rate of improvement in mental health over time and in their level of mental health difficulties.

Moreover, the differences between parent and teacher reports are a further point of interest. Figure 11 suggest that in the school context students with a disability present with greater challenges for teachers, in contrast to students without a disability, who were reported by teachers to have fewer difficulties. However, in the home context these same groups of students were not as distinctly different, according to parents. It is known generally that teachers report fewer difficulties on the SDQ than parents; this is typified in Figure 11 in the differing levels between the parent and teacher reports of those students without a disability. However, the profile of parent and teacher reports for students with a disability is not typical, and clearly shows teachers at or above those levels reported by parents. One possible explanation is that students with a disability find the school environment more challenging and, in response, may exhibit different behaviours in the school context than in the home. In addition, teachers may find it more challenging to accommodate the particular needs of students with a disability in the context of their school.

The findings indicate, on average, an improvement in student wellbeing and a decrease in mental health difficulties over time, as a result of the implementation of KidsMatter Primary. These changes were evidenced by reduced SDQ (difficulties) scores and increases on the Mental Health Strengths scale. However, for students with a disability, the findings also suggest that the school context provides a challenging environment such that teachers were more likely to rate down students' mental health strengths and rate up students' mental health difficulties.

4.5.3 Greater support and assistance for students at risk of or experiencing mental health problems
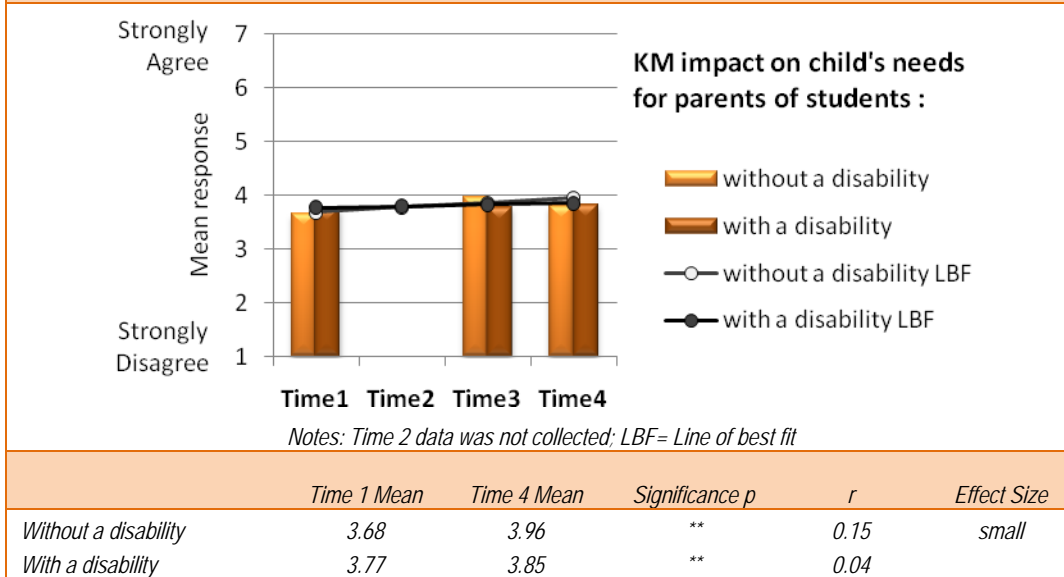
The items shown in Table 11 were included in the questionnaires to parents to determine whether they believed that KidsMatter Primary had improved the schools' ability to meet the social, emotional or behavioural needs of their child.

Table 11. KidsMatter Primary Impact on Child's Needs			
Rate the extent to which you disagree or agree with the following statements:			
• *KidsMatter has helped the school to focus on my child's emotional or social or behavioural needs*			
• *KidsMatter has helped the school to focus on my child's social and emotional development*			
• *KidsMatter enables the school to make more effective decisions about my child's emotional or social or behavioural needs*			
Average parent responses	*Students without a disability*		*Students with a disability*
'Strongly Agree' (scored 6 or 7)	*Time 1 = 6%*	*Time 4 = 18%*	*Time 1 = 1%*　*Time 4 = 14%*

The results in Table 11 and in Figure 12 suggest that, at the start of KidsMatter Primary the ratings were (as expected) at or below the mid-point on the seven-point scale, indicating that parents generally disagreed with statements about the impact of KidsMatter Primary on these issues. In fact, at Time 1 only six per cent of parents of students without a disability and one per cent of parents of students with a disability strongly agreed that KidsMatter Primary had helped the school to focus on their child's needs. By Time 4, the figures were 18 per cent for parents of students without a disability and 14 per cent for parents of students with a disability respectively. These

finding suggest that by Time 4 there were up to 13 per cent more parents strongly agreeing that KidsMatter Primary enabled the school to make more effective decisions about their child's emotional, social or behavioural needs, and that these outcomes were similar for both groups of parents. Moreover, the ratings showed a significant improvement over the period of KidsMatter Primary, with a small effect size for changes based on the ratings from parents of students without a disability.

Figure 12. Change in parent perceptions about the impact of KidsMatter Primary on the child's needs in school

Notes: Time 2 data was not collected; LBF= Line of best fit

	Time 1 Mean	Time 4 Mean	Significance p	r	Effect Size
Without a disability	3.68	3.96	**	0.15	small
With a disability	3.77	3.85	**	0.04	

Chapter 5. Conclusions and Recommendations

In conclusion, there were practically significant positive improvements in mental health and wellbeing for students with a disability and this is attributed to the impact of the KidsMatter Primary initiative. The findings also suggest that parents of students with a disability perceived schools to be significantly less effective in meeting the needs of their child with a disability. Over the two years, there was not a practically significant change for parents of students with a disability, yet there was a significant difference in the outcomes for parents of students without a disability compared to parents of students with a disability. These findings suggest parents of students with a disability may need further consideration when it comes to the impact of KidsMatter Primary in supporting the school's capacity to meet their children's social, emotional or behavioural needs. There may be opportunity for KidsMatter Primary to better provide for the needs of students with a disability.

Based on the findings of this evaluation it is recommended that KidsMatter Primary continue to be supported by the South Australian education sectors because it has been demonstrated that the initiative is effective in reducing mental health difficulties and enhancing mental health strengths of students with a disability. It is also recommended that KidsMatter Primary documentation be reviewed to ensure that the profile of students with a disability and their needs are explicitly represented and that schools adopting KidsMatter Primary engage parents of children and students with a disability purposefully in the initiative.

Given that the KidsMatter initiative has been extended to include early childhood, it is recommended that the effect of this initiative for young children with a disability be monitored when the pilot implementation of KidsMatter Early Childhood is evaluated during 2010 and 2011. It is also recommended that further research concerning the effect of KidsMatter Primary for students with a disability be conducted Australia-wide.

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Appendix

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