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Bullying, mental health and friendship in Australian primary school children

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Background: Frequent bullying predicts adolescent mental health problems, particularly depression. This population-based study with young Australian primary school children aimed to determine the frequency and mental health correlates of bullying, and if friendship could be protective. **Method:** Participants were a population-based sample of 1,221 children aged 8-9 years attending 43 primary schools in metropolitan Melbourne, Australia. Children were taking part in the Childhood to Adolescence Transition Study. Children completed online questionnaires at school to measure peer relations and emotional wellbeing. Parents reported on their child's mental health in questionnaires sent to the home. **Results:** One in three children (29.2%) reported experiencing frequent bullying, defined as at least once a week. This included physical bullying alone (13.8%), verbal bullying alone (22.7%), and the combination (7.4%). Children who reported being frequently bullied self-reported higher internalising symptoms compared with children who did not report frequent bullying (M (SD) 1.6 (0.9) vs. 1.1 (0.8), $p < .001$). This difference was confirmed by parents' reports of their child's internalising symptoms (M (SD) 2.4 (2.3) vs. 2.1 (2.0), $p = .026$, respectively). Amongst children who reported frequent bullying, those with a group of friends had better emotional wellbeing. **Conclusions:** A substantial proportion of children report experiencing bullying on a weekly basis early in primary school. Given the prevalence of bullying in primary school and its relationship to children's mental health, we recommend effective school-wide anti-bullying programs. Further research can explore if intervention to foster a group of friends around bullied children can improve their emotional wellbeing.

Key Practitioner Message

- A large body of cross-national research in adolescence has established prevalence rates for frequent bullying and negative associations with mental health. For younger children, less knowledge has accumulated in the field.

- This population study in Australia highlighted that early in primary school almost one in three children report experiencing bullying on a weekly or daily basis. These frequently bullied young children have higher symptoms of internalising problems by self-report, confirmed by parent reports. A group of friends (rather than a best friend) might potentially help to protect emotional wellbeing in the face of bullying.
- Mental health practitioners can promote implementation of evidence-based anti-bullying programs in primary schools.

Key words: bullying; mental health; internalising problems; friendship.

In today's society, bullying is a serious problem amongst youth (Rigby, 2000). Whilst most young people experience some teasing during their school years, this can turn into bullying when it occurs over an extended period. Bullying occurs when an individual is repeatedly harassed, teased, or made to feel inadequate by one or more individuals with an imbalance of power or strength (Olweus, 1978, 2013). Young people can face different forms of bullying. Physical bullying includes hitting, kicking, or pushing a person. Verbal bullying includes teasing, name-calling, or ridiculing. Indirect forms of bullying also exist such as social exclusion, rumour spreading and cyber bullying (Olweus, 1993; Rigby & Slee, 1991; Wolfer et al., 2014).

A sizable body of research has established prevalence rates for bullying in adolescence. Craig and colleagues (2009) published a cross-national study spanning 40 countries with data from 202,056 adolescents (age 11-15 years). They implemented the World Health Organisation (WHO) Health Behaviour in School-aged Children survey and defined frequent bullying at least once per week. While the prevalence of bullying ranged widely across countries, on average 13% of adolescents experienced frequent bullying. Craig et al.'s study did not include Australia. However, research in Australia also indicates that bullying in adolescence is a real concern (Bond et al., 2001; Cross et al., 2009; Forerro et al., 1999; Hemphill et al., 2011; Rigby & Johnson, 2016; Thomas et al., 2017). To illustrate, Forero and colleagues (1999) asked 3,918 adolescents (age 12-16 years) in New South Wales schools if they had been bullied that term and reported a prevalence of 13%. Recently across six Australian states, Rigby and

Johnson's (2016) study with 1,688 students from grades 5-10 found that about 15% experienced bullying. Thomas and colleagues (2017) similarly reported a 12-month prevalence for bullying victimisation of 13% in the Second Australian Child and Adolescent Survey of Mental Health ($N=2,967$ age 11-17 years).

Frequent bullying in adolescence is well known to predict mental health problems (Bond et al., 2001; Due et al., 2005; Ford et al., 2017; Hodges et al., 1999; Klomek et al., 2007; Lien et al., 2009; Thomas et al., 2017; Ttofi et al., 2011; Undheim & Sund, 2010). Due and colleagues (2005) explored this relationship in a cross-national study across 28 countries. They included adolescents at age 11, 13, or 15 years from nationally representative samples of schools that implemented the WHO Health Behaviour in School-age Children survey ($N=123\ 227$). In every country, there was an association between the experience of frequent bullying and poorer mental health. Ttofi and colleagues' (2011) meta-analysis of 29 longitudinal studies reported a reliable relationship between experiencing bullying in adolescence and later depressive symptoms (for some cases after 36 years).

Focusing earlier than adolescence is important since mental health problems frequently emerge prior to puberty and can have lasting negative outcomes into adulthood (Kessler et al., 2005). For younger children, less knowledge has accumulated on bullying and mental health (Fleming & Jacobson, 2010; Sourander et al., 2011). There are a few international studies published on bullying prevalence that focus earlier than 11 years. Wolke and colleagues (2001) reported that 24% of English children (2,377 6-8-year-olds) and 8% of German children (1,538 8-year-olds) experienced frequent bullying (weekly). Fekkes, Pijpers and Verloove-Vanhorick (2004) found 10% of Dutch children (2,766, mean age 10 years) experienced frequent bullying (at least weekly). In Finland, Ronning and colleagues (2009) reported that 7% of children (2,713, 8-year-old boys) experienced frequent bullying (almost every day). Studies in Australia have not tended to focus below 11 years (Rigby & Slee, 1991; Bond et al., 2001; Forero et al., 1999; Hemphill et al., 2011; Rigby, 2008). Cross and colleagues' (2009, 2011) work in Western Australia is an exception. In their 2011 survey of 1,968 8-9-year-olds, 16% experienced frequent bullying (at least every three weeks). However, their 2009 survey indicated a higher rate of 32% in middle primary school.

Some international research suggests that experiencing bullying at primary school impacts negatively on children's mental health (Hawker & Boulton, 2000; Reijntjes et al., 2010). To illustrate, in Fekkes' (2004) study the victims of bullying had higher concurrent anxiety, psychosomatic symptoms and depression. Ronning's (2009) study found an association between experiencing bullying and concurrent psychopathology. Williams and colleagues' (1996) research with 2,962 English 7-9-year-olds found that experiencing bullying related to sadness and somatic health symptoms. Arseneault and colleagues' (2006) study with 2,232 English 5-7-year-old twins found those bullied had heightened internalising and externalising symptoms after taking into account pre-existing adjustment. For young Australian children the prevalence of bullying and its impact on mental health are not yet well known. Such data is vital to plan bullying policy and interventions in primary schools to support children's mental health (Scott et al., 2014).

Primary age development is marked by the importance of forming peer friendships (Rubin, 2002). All children have the potential to be a victim of bullying, which is not directly caused by external deviants (such as weight, hair colour, race) (Olweus, 1993; Rubin, 2002). Research indicates that children who face frequent bullying can have social and friendship difficulties (Fox & Boulton, 2005; Olweus, 1993; Rubin, 2002; Woods, Done & Kalsi, 2009). Having a friend may help to protect children from bullying (Hodges et al., 1999) and friendships may protect children's mental health (Laursen et al., 2007). In adolescence, some studies suggest that friendship helps to buffer negative impact of bullying on mental health (Rigby, 2000; Skrzypiec et al., 2012; Van Harmelen et al., 2016). It is unknown if younger children's friendships could protect their mental health when faced with frequent bullying.

The present population-based study of Australian children in early primary school aimed to explore prevalence of frequent bullying and associated mental health concerns. Overseas studies link bullying to mental health this early (Arseneault et al., 2006; Williams et al., 1996), which predicts psychiatric problems over a decade later (Ronning et al., 2009). A focus on this young age in Australia is therefore important. In early primary school, children are more amenable to intervention for bullying than older students, which could reduce the typical acceleration of bullying that occurs around mid-primary in Australian schools (Cross et al., 2011; Smith, 2004). Early intervention

could reduce cumulative negative impacts of bullying on children's psychological and academic development (Cross et al., 2011). Consistent with prior Western Australian findings we anticipated around 16% at this age would experience frequent bullying. We anticipated that children experiencing frequent bullying would have poorer concurrent mental health, on emotional wellbeing in particular. We also explored if children's friendships could potentially protect their mental health when frequently bullied.

METHODS

Setting and participants

Children were recruited into the Childhood to Adolescence Transition Study (CATS). The CATS study design and methodology are briefly outlined here, as they are detailed in a protocol publication (Mundy et al., 2013). Children were recruited via primary schools in Melbourne, Australia. Schools were first randomly selected from a stratified sample (Catholic, Independent, Government) across metropolitan Melbourne. In total, 101 schools were approached to participate and 43 consented (43% uptake). In the CATS study all grade three students at participating primary schools (2,289) received a recruitment package with an information statement and written consent form to take home to their parents/guardians. A total of 1,239 students and their parents/guardians were recruited to participate in the CATS study (54%).

Two parent surveys were used to assess family socio-demographic details and children's mental health. The first short questionnaire was included with the information and consent form package. The second longer questionnaire was emailed or posted to parents after the child's data collection session. The child-report measures in the present study utilised an Apple iPad application administered at schools during pre-allocated class time. The children's online questionnaire was completed in a group setting under the supervision of trained research assistants. The research assistants read aloud items for clarity with the help of a standardised explanatory script and then responded to any queries of individual children to ensure all were able to comprehend the items. Amongst items in the child online survey were questions about peer relationships as well as socio-emotional wellbeing.

Of the recruited CATS participants, 1,221 (99%) families provided data at child age 8-9 years, forming the sample for the present study. The sample of children was

broadly population representative (Australian Bureau of Statistics, 2013). Children ranged in age from 8 years, 1.6 months to 9 years, 11.9 months ($M = 8$ years, 11.7 months, $SD = 4.3$ months). The recruited sample contained a slightly smaller proportion of boys (45.9%) than girls (54.1%) compared with census data for 8-9 year old children enrolled in grade 3 across the state (51% males, 49% females, $p=0.028$). Children were in the main born in Australia (85.3%, $n = 1,042$), and also in the United Kingdom (2.0%, $n = 24$), New Zealand (1.1%, $n = 14$) and 'other' countries (8.1%, $n = 99$). This Melbourne sample scored slightly higher on a measure of socio-economic status compared with the entire Australian population ($M (SD)$ 1012.3 (66.3) vs. 1000 (100), $p<0.001$); Australian Bureau of Statistics, 2013). Also, a higher percentage of the sample was indigenous compared with all grade 3 children in Victoria (4.7% vs. 1%, $p<0.001$)).

Measures

Frequent bullying. Bullying was measured via child self-report with key items from the Gatehouse Bullying Scale (Bond et al., 2007). An item assessed physical bullying (Have you been hit, kicked or pushed by another student?). An item assessed verbal bullying (Has anyone teased or called you names?). Both items specified a timeframe for bullying experiences 'in the past month'. Children responding *yes* were then asked how often they had each experience (response options *less than once a week, about once a week, most days*). In line with prior field research, children were classified as frequently bullied if they reported facing physical or verbal bullying about once a week or on most days.

Mental health. Children's emotional wellbeing (internalising symptoms) was measured by parent report, as well as child self-report. Children's behavioural functioning (externalising symptoms) was only measured by parent-report. Parent report on children's mental health utilised the Strengths and Difficulties Questionnaire (SDQ) for ages 4-11 years (Australian version) (Goodman, 1997; Mellor, 2005). The SDQ has 25 items covering five subscales: emotional symptoms, conduct problems, peer relationships, hyperactivity/inattention and prosocial. The SDQ has high reliability (Cronbach's $\alpha = .73$), test-retest stability and external validity predicting clinical diagnosis (Hawes & Dadds, 2004; Mellor, 2005). The present study focused on the

emotional subscale for child internalising symptoms (e.g., ‘Many worries or often seems worried’), and the conduct problems subscale for externalising symptoms (e.g., ‘My child often loses their temper’). Subscales are comprised of five items with response options of 1 (*not true*), 2 (*somewhat true*), or 3 (*certainly true*), with scores totalled for subscales. Australian norms (7-11 years) for the emotional symptoms subscale are $M=2.3$ ($SD=2.0$) (Mellor, 2005). Clinical significance bands are 0-3 (not significant), 4 (slightly raised risk) and 5-10 (high risk). Australian norms for the conduct subscale are $M=1.3$ ($SD=1.5$), with clinical significance bands 0-2 (not significant), 3 (slightly raised risk) and 4-10 (high risk).

To tap children’s self-reported emotional wellbeing, four key internalising symptom items were selected from validated and widely used psychometric measures by child anxiety and depression experts. The wider CATS project spans a broad range of health and developmental measures and the child questionnaire was only 20 minutes of class time. Therefore, a small number of emotional wellbeing items was necessary (Mundy et al., 2013). Two key items were selected from the Spence Children’s Anxiety Scale (SCAS: Spence, Barrett & Turner, 2003), namely ‘I worry about things’ and ‘I feel afraid’. Two key items were selected from the Short Mood and Feelings Questionnaire (SMFQ: Angold et al., 1995), namely ‘I felt miserable and unhappy’ and ‘I didn’t enjoy anything at all’. The internalising symptom items were scored on a 5-point Likert scale, ranging from 0 (*never*), to 4 (*almost always*). Internal consistency was reasonable for the four items (Cronbach’s $\alpha = .70$). Children’s self-report internalising score was the average of these items.

Friendships. A variable was created to represent four possible combinations of children’s friendships: no friends, best friend only, group of friends only, or best friend + group of friends. Children’s friendships were measured via self-report. The first item asked children ‘Do you have a best friend?’ with response options *yes* or *no*. The second item asked, ‘Do you have a group of friends?’ with response options of *not many*, *some*, or *lots*. Children who responded ‘not many’ were considered not to have a group of friends. Children who responded ‘some’ or ‘lots’ were classified as having a group of friends.

Analyses

Frequencies were generated to estimate the prevalence of bullying (including subtypes) for the full sample and by sex. Independent samples *t*-tests then compared the group of children who experienced frequent bullying versus the remainder on mental health symptom scores. Chi-square was applied to compare friendship categories for the group of children experiencing frequent bullying versus the remainder. Analysis of variance (ANOVA) with the frequently bullied children compared their mental health symptoms across different friendship categories, with post-hoc Bonferroni tests exploring where the significant between-group differences lie. All analyses were conducted using Stata 13.1. This study was approved by Human Research Ethics committees at the Royal Children's Hospital Melbourne (31089) and La Trobe University (FHEC13-NR25). Permission was granted from the Victorian Department of Education and Early Childhood Development office and the Catholic Education Office Melbourne to recruit through their schools.

RESULTS

Children's mental health in the population-based sample of 8-9-year-olds was comparable to SDQ Australian norms (Hawes & Dadds, 2004; Mellor, 2005). The sample's score for the emotional symptoms subscale was $M = 2.2$ ($SD = 2.1$) with 14.1% ($n = 168$) scoring at 'high risk' of clinical significance. The sample's score for the conduct problems subscale was $M = 1.4$ ($SD = 1.5$) with 8.8% ($n = 104$) scoring at 'high risk' of clinical significance. On the child self-report measure the sample's internalising symptoms score was $M = 1.2$ ($SD = 0.8$).

The prevalence of frequent bullying reported by 8-9-year-old children was examined, for the whole sample and by sex (see Table 1). A third of children reported experiencing bullying on a weekly basis. The most common form of frequent bullying was verbal, reported by one in four children. One in seven children reported experience of physical frequent bullying. Up to 10% of children reported a combination of verbal and physical frequent bullying. The rate of verbal frequent bullying was similar for boys and girls, however boys reported slightly higher rates of physical and combined verbal/physical bullying.

(Insert Table 1 here)

Independent samples *t*-tests compared children reporting frequently bullying to the remainder of the sample on the mental health symptom scales (see Table 2). Children reporting frequent bullying had higher internalising and externalising symptoms on average. This pattern of difference was consistent across data sources. Children reporting frequent bullying had significantly higher internalising difficulties as measured by self- and parent-report, and externalising difficulties as measured by parent-report.

(Insert Table 2 here)

Association between friendship and reporting bullying was explored via chi-square (Table 3). Having a best friend was not related to reporting frequent bullying. Children who reported frequent bullying had a best friend as often as those who did not report frequent bullying (over 90% of 8-9-year-olds have a best friend). However, significantly fewer children who reported frequent bullying said that they had a group of friends. Amongst those reporting frequent bullying, ANOVA models explored the mental health of children with different types of friendships (Table 4). For children's externalising difficulties, no protective effect of friendships was apparent. However, children reporting frequent bullying who had friends had less internalising difficulties (by self-report and parent-report) compared with those without friends. Post-hoc Bonferroni tests indicated that having a group of friends rather than a best friend was potentially protective. On both self- and parent-report internalising symptoms, there were significant post-hoc differences between the group with a best friend only and the group with both a best friend and a group of friends ($p=.033$ and $p=.007$, respectively).

(Insert Tables 3 and 4 here)

DISCUSSION

In early primary school almost one in three Australian children in the population sample reported experiencing bullying on a weekly or daily basis. This frequent bullying commonly consisted of verbal (one in four children), physical (one in seven children), or the combination of both types (up to one in 10 children). Boys and girls both reported experiencing frequent bullying, which was associated with higher mental health symptoms of an emotional and behavioural nature. Children who reported frequent bullying were less likely to have a group of friends around them, and a group of friends

seemed potentially protective of these children's mental health. Having a best friend, in contrast, did not appear potentially to protect the mental health of children reporting bullying.

These findings with young Australian primary children align with the large body of international findings in adolescence. In both primary school and senior school many young people face frequent bullying, males and females experience verbal bullying, and males are more likely to experience physical bullying (Craig et al., 2009; Olweus, 1978; Rigby, 2000). As in adolescence, the experience of frequent bullying in childhood relates to poorer mental health. Prior studies with youth (11+ years) have shown that frequent bullying is associated with mental health problems (Bond et al., 2001; Due et al., 2005; Ford et al., 2017; Hodges et al., 1999; Klomek et al., 2007; Lien et al., 2009; Thomas et al., 2017; Ttofi et al., 2011; Ulheim & Sund, 2010). The current results with younger children corroborate this concern.

Findings of the present study also had interesting divergence from existing knowledge in the field. With older youth, international and Australian research has described a rate of bullying of around 13% (Craig et al., 2009; Forero et al., 1999; Rigby & Johnson, 2016; Thomas et al., 2017). With younger children, in the present study the rate of frequent bullying was much higher at 29%. This population-based sample was large and representative (including SDQ norms) and therefore confidence can be placed in these findings. The higher rate of bullying aligned with Cross and colleagues' initial finding for mid-primary children in Western Australia (32%, 2009), more than their later paper (16%, 2011). Cross describes the initial study as a more reliable estimate based on a larger and more representative sample (D. Cross, personal communication, July 26, 2017). The Australian findings align with Williams and colleagues' (1996) study of 6-8-year-old English children in which 24% were frequently bullied. Prior literature generally describes higher rates of bullying among younger students with the frequency of bullying declining in adolescence (Cross et al., 2011).

The present study had the following strengths in design. First was a large representative sample of children that allows for generalisation of the findings. Second was the inclusion of a child self-report measure of internalising symptoms in addition to parent report. It is known that parents tend to under-report children's internal emotional distress (Kolko & Kazdin, 2006; Van de Looij-Jansen et al., 2011). A third strength was

the inclusion of a widely used and well-validated parent questionnaire for children's mental health (SDQ; Goodman, 1997). The present study also faced two key design limitations. First, the design of the much larger omnibus CATS project necessitated that there were only a small number of items tapping bullying and emotional wellbeing (Mundy et al., 2013). Children were not given a definition of bullying and we relied on a brief measure tapping physical and verbal subtypes. It could be that younger children define bullying differently to older children, and the inclusion of indirect or relational bullying might show a stronger relationship with friendships. Second, the cross-sectional design means that we cannot directly infer causality between bullying and mental health, and it is likely that effects are bi-directional (Reijntjes et al., 2010). Having no friends may be an indicator of poor mental health that facilitates bullying and worsens the effects. The experience of bullying and mental health difficulties may also lead to children having fewer friendships.

With these caveats in mind, the study has practical implications for primary schools in Australia. National anti-bullying campaigns overseas have reduced bullying amongst children by 20% (Ttofi & Farrington, 2011). In Norway, to illustrate, Olweus (1993) designed a 20-month intervention that included several key elements. School conferences provided a mandatory standard for teachers to implement the intervention. There was intensive teacher training on recognising bullying in the classroom and during breaks. Teachers increased supervision at recess and lunchtime to decrease opportunities for bullying behaviour. Teachers consistently enforced firm non-physical penalties for bullying (i.e., a serious talk with the school principal and parents). Initial evaluation with 2,500 Norwegian students in grades four to nine showed a reduction in bullying of around 50%. Several more large-scale evaluations in Norwegian schools have provided compelling evidence of effectiveness since the initial study. In other countries (Belgium, Canada, Germany, United Kingdom, United States) programs inspired by Olweus' have been implemented, but with mixed results. Many lacked fidelity as they deviated considerably in program components and model of implementation (Olweus & Limber, 2010). Ttofi and Farrington's (2011) meta-analysis identified 53 different anti-bullying school campaigns, highlighting that intervention duration greater than a year and intensive teacher training conferencing are important for effectiveness. Australian primary schools could implement evidence-based anti-

bullying interventions to reduce the frequent bullying identified (Cross et al., 2009, 2011; Scott et al., 2014). Cross and colleagues (2011) published the first Australian empirical trial of a whole-school intervention to reduce bullying in primary schools starting at age 8-9 years. Their findings were promising with intervention students less likely to be bullied than controls one and three years later. It will be important for future intervention research to determine if improvements in children's mental health accompany reductions in bullying, and if direct interventions to address children's internalising problems are required.

There is a tentative suggestion that a group of friends (rather than a best friend) might potentially help to protect frequently bullied children's mental health. However, direct causal impact is unknown and could be explored in future interventions. Groups of friends are particularly important at primary school age (whereas intimate individual friendships are particularly important in adolescence; Rubin 2002). When teachers identify frequently bullied primary school children they could actively foster a supportive group of friends around them. This might include tasks and activities during class time encouraging children to form strong group friendships (in contrast to individual or pair activities). It could involve setting up activities and games at recess and lunchtime that foster supportive group friendships. Parents of frequently bullied children could likewise foster time with a group of supportive friends outside school (group play dates, team activities, sports) rather than with a best friend only.

CONCLUSION

One in three Australian children reports experiencing frequent bullying early in primary school. Young children who report frequent bullying have poorer mental health and wellbeing. We therefore recommend implementing evidence-based anti-bullying programs with fidelity in Australian primary schools. This includes training to recognise bullying, increased supervision during breaks, and firm disciplinary action for bullying. Intervention research can also explore if fostering a group of friends around a bullied child directly protects their mental health. Sourander and colleagues (2011, p. 1218) remind us that "frequent bullying is not just part of growing up; it should be considered serious interpersonal violence that requires constant vigilance".

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Table 1

Rates and Types of Frequent Bullying Experienced by 8-9-year-old Children (% (n))

	Full sample <i>n</i> = 1221	Boys <i>n</i> = 661	Girls <i>n</i> = 560	Chi-square p-value
Bullied at least once a week	29.2 (356)	32.1 (180)	26.6 (176)	.017
Verbal	22.7 (277)	24.1 (135)	21.5 (142)	.214
Physical	13.8 (169)	17.5 (98)	10.7 (71)	<.001
Physical + verbal	7.4 (90)	9.5 (53)	5.6 (37)	.007
Not frequently bullied	66.4 (811)	62.3 (349)	69.9 (462)	.017

Note. All percentages are valid per cents

Table 2

Frequent Bullying and 8-9-year-old Children's Mental Health

Mental Health	Bullying	<i>n</i>	<i>M</i>	<i>SD</i>	<i>p-value</i>
Internalising difficulties					
Child self-report	Frequent	356	1.6	0.9	<0.001
	Not frequent	808	1.1	0.8	
Parent-report	Frequent	347	2.4	2.3	0.026
	Not frequent	790	2.1	2.0	
Externalising difficulties					
Parent-report	Frequent	348	1.6	1.6	<0.001
	Not frequent	790	1.3	1.4	

Note. Frequent bullying (at least once a week), not frequent (not bullied, or less than once a week)

Table 3

The Relationship between Experiencing Bullying and Friendship

Friendship	Frequently bullied		Not frequently bullied		p-value
	<i>n</i> =811		<i>n</i> =356		
	%	<i>n</i>	%	<i>n</i>	
Best friend	93.5	331	92.4	749	.488
No best friend	6.5	23	7.6	62	
Group of friends	84.8	301	95.1	769	<.001
No group of friends	15.2	54	4.9	40	

Note. All percentages are valid per cents

Table 4

Potential for Friendship to Buffer Frequently Bullied Children's Mental Health

Mental Health	Friendship	<i>n</i>	<i>M</i>	<i>SD</i>	<i>F</i>	<i>df</i>	<i>p</i>
Internalising difficulties							
Child self-report	No friends	7	2.0	1.1	3.9	3, 349	0.009
	Best friend (only)	47	1.9	1.0			
	Group of friends + best friend	284	1.5	0.8			
	Group of friends (only)	15	1.3	0.8			
Parent-report	No friends	7	3.1	2.4	3.9	3, 340	0.009
	Best friend (only)	46	3.4	2.8			
	Group of friends + best friend	277	2.2	2.2			
	Group of friends (only)	14	2.0	1.9			
Externalising difficulties							
Parent-report	No friends	7	1.7	1.0	0.9	3, 341	0.412
	Best friend (only)	46	1.7	1.6			
	Group of friends + best friend	276	1.6	1.5			
	Group of friends (only)	15	2.3	2.4			

Note. Sample for analysis is frequently bullied children (n=356). Higher mean scores represent poorer mental health.

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