A preliminary evaluation of KiVa after one-year of implementation in New Zealand

by

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It has been well established that bullying is a worldwide phenomenon that affects a significant percentage of school aged children (Jimerson, Swearer, & Espelage, 2010). Bullying behaviour can take many forms ranging from physical violence and verbal abuse to threatening looks and social exclusion (Olweus, 1993). There is a significant amount of evidence to suggest that each of these forms of bullying behaviour can result in a range of psychological, social, and mental health problems for both the target of bullying and the bully (Vaillancourt, Brittain, McDougall, & Duku, 2013).

In line with international data, bullying appears to be relatively common in New Zealand schools. In a recent national survey of over 1,200 teachers and principals, for example, Green, Harcourt, Mattioni, and Prior (2013) found that 94% of the respondents said that bullying was a problem in their school. Furthermore, according to the latest Trends in International Mathematics and Science Study (TIMMS; 2014/2015), New Zealand students experienced bullying behaviours at school more frequently than students in the majority of other participating countries.

Although a number of anti-bullying programmes are available, these do not seem to be widely used in New Zealand. There has been little progress made in recent decades with regard to reducing the prevalence of bullying (Smith et al., 2016). Recently an evidence-based anti-bullying programme known as KiVa, which was developed in Finland, has been introduced to New Zealand. The first schools began using KiVa in 2015 and since then a further 14 schools have implemented KiVa for at least a year.

KiVa, (which means kindness in Finnish), is a whole school programme that has both an intervention and prevention focus. In particular, schools are provided with detailed lesson plans that are dynamic and experiential, along with interactive online games to reinforce the concepts. Participating schools are also provided with a step-by-step guide on how to deal with bullying issues as they arise. The programme has a strong evidence base including randomized control trials. The evaluations have revealed that when implemented appropriately, it is a highly successful programme which results in significant decreases in bullying and victimization (e.g., Kärnä, Voeten, Little, Poskiparta, Kalijonen, & Salmivalli, 2011).

Despite KiVa being implemented in 14 schools for at least a year, there are currently limited data regarding the suitability of this programme to the New Zealand context. Thus, the aim of this report is to provide some preliminary data on the impact KiVa has had on rates of bullying and victimization on the children in participating schools.
Method

Ethical approval
Ethical approval, in accordance with New Zealand law, was obtained for this project from the Victoria University of Wellington Human Ethics Committee (# 23658). In particular, participating schools (those who had implemented KiVa) were provided with information about the proposed project and given an opportunity to choose whether or not they would like to participate. In giving consent they were allowing the researchers to access and aggregate the historical data that had been collected as part of their involvement in the KiVa programme. Consent to use the data was given by all participating schools.

Participants
The participants in this study included 5,288 school-aged children from Years 2-10. The children were from 14 different primary and secondary schools in New Zealand. These schools were a mix of co-educational and single-sex schools from high, medium, and low deciles.

Measures
An online anonymous survey, developed in Finland to evaluate KiVa and translated into English, was used in the current study. The survey includes 23 questions that have ordinal or categorical response options. For the current report six questions related to children’s experiences of bullying and the implementation of KiVa are presented. In particular, the questions were:

1) How often have you been bullied at school during the past few months?
2) Have you been bullied through the internet during the past few months?
3) How often have you bullied another student at school during the past few months?
4) To what extent do you agree or disagree with the following statement ‘I feel safe at school’?
5) How much has your teacher done to decrease bullying this year?
6) Has your school been having KiVa lessons this year?

Procedure
Once schools had registered they were given password access to the standardized survey. This baseline data was collected before any information about KiVa had been presented to the children and students were not advised about the survey beforehand. The staff were given a step-by-step guide on how to collect the data to reduce any influence on the outcomes. During the survey the teachers ensured student confidentiality. For students in Years 2-6 the teachers guided them through the survey by reading aloud the definition of bullying and reading through the questions and response alternatives. The survey was undertaken in November and completed before schools received their KiVa training (Time 1) so that the reports could be used as part of the training. After 1 year of KiVa implementation the children completed the same survey again (Time 2). This typically occurred during the month of November and included questions about the KiVa programme.
Results

The school level data was aggregated to look for any changes in overall perceptions and experiences of the children from baseline to after 1 year of KiVa for questions 1 to 5. The remaining question related to the experience of KiVa and so only the data for after 1 year of KiVa is relevant. Given that the data was anonymous and had been de-identified, it was not possible to determine whether each child responded in one or more years and therefore we could not follow individual children longitudinally.

The first question concerned the frequency of bullying. The chi-square test of independence revealed a significant association between the time point (i.e., baseline and after 1 year of KiVa) and the frequency of bullying, $X^2(4, N = 5288) = 51.79, p < .001$. In particular, as can be seen from Figure 1, just under half the students had NOT been bullied at baseline (47.8%) and the number of students who had NOT been bullied increased to 58.3% after one year of KiVa implementation (an increase of 10.5 percentage points). In addition, there was a 5.5 percentage point decrease in having experienced bullying once or twice in the previous few months, going from 29.9% at baseline to 24.4% after one year of KiVa. Similar drops in bullying also occurred for those experiencing it 2-3 times a week and once a week.

![Figure 1. Experiences of bullying at baseline and after 1 year of KiVa](image-url)
The second question concerned bullying via the internet. The chi-square analysis showed a significant association between time point and bullying over the internet, $X^2 (4, N = 4714) = 23.15, p < .001$. As shown in Figure 2, there was an increase in the number of students indicating that they had NOT been bullied over the internet; with 77.9% at baseline and 83.3% after 1 year of KiVa (a 5.4 percentage point increase). As with traditional bullying, the number of students who had been bullied via the internet once or twice in the last few months decreased by 4.8 percentage points, with 16.9% indicating they had been bullied over the internet at baseline and then 12.1% after 1 year of KiVa.

![Figure 2. Experiences of bullying through the internet at baseline and after 1 year of KiVa](image)

The next question investigated the extent to which students had engaged in bullying behaviour themselves. There was a significant association between time point and the frequency that students engaged in bullying behaviour, $X^2 (4, N = 5288) = 62.21, p < .001$. As shown in Figure 3, although the majority of students did NOT engage in bullying behaviour at baseline (74.6%) the number of students NOT engaging in bullying increased significantly after 1 year of KiVa implementation to 84.3% (an increase of 9.7 percentage points). Accompanying this, there was a 7.6 percentage point reduction in the number of students engaging in bullying behaviour once or
twice during the past few months; dropping from 19.5% to 11.9% after 1 year of KiVa.

Figure 3. Experiences of bullying others at baseline and 1 year after KiVa

The students were then asked to indicate the extent to which they agreed or disagreed with the statement ‘I feel safe at school’. The chi-square analysis revealed a significant association between time point and students’ feeling safe at school, $X^2 (4, N = 5288) = 17.63, p < .01$. As shown in Figure 4, there was a larger number of children completely agreeing with this statement after 1 year of KiVa implementation compared to baseline (i.e., 49.9% to 54.9%; an increase of 5 percentage points).
The next question asked the students about the actions of their classroom teacher with regard to addressing bullying. There was a significant association between time point and the perceived amount of work teachers have done to address bullying, $X^2 (2, N = 4714) = 60.17$, $p < .001$. In particular, the number of teachers who reportedly had done ‘very little work’ in this area at baseline dropped from 26.6% at baseline to 20.1% after 1 year of KiVa implementation (decreasing 6.5 percentage points). Similarly, those who reportedly had done ‘some work’ in this area dropped from 35% at baseline to 29.7% (decreasing 6.5 percentage points). However, the biggest change occurred for those who were reportedly doing ‘a lot of work’ in this area. This percentage increased significantly from 38.3% at baseline to 50.1% after 1 year of KiVa implementation (increasing 11.8 percentage points). Finally, in order establish whether or not students were aware of the KiVa programme, they were asked if their school had been implementing KiVa lessons in the previous year. The vast majority indicated ‘yes’ (87%).

To summarise, the implementation of KiVa over one year is associated with an increase in the percentage of students not bullied at school (increasing 10.5 percentage points to 58.3%) and the percentage of students not bullied over the internet (increasing 5.4 percentage points to 83.3%). In addition, fewer students are
engaging in bullying behaviour, with the number of people not bullying increasing by 9.7 percentage points to 84.3%. There has also been a 5-point increase in the percentage of students feeling completely safe at school, with 54.9% of students feeling safe after one year of KiVa.

Discussion

The findings from this preliminary evaluation of KiVa suggest that after one year of implementation there was a significant perceived decrease in the frequency of bullying, the frequency of victimization (both traditionally and via the internet) and an increase in students’ feelings of safety within their school environment. The findings from the present small-scale evaluation are encouraging as they are comparable to those found in Finland, where after only one year of implementation there was perceived to be a significant drop in bullying and victimization and this trend continued over the ensuing years (Herkama, & Salmivalli, 2014). In the present study, there was also a significant change from baseline to after 1 year of KiVa with regard to what teachers were perceived to be doing to decrease bullying. This suggests that there has been a good level of buy-in by the teachers in the participating schools. Similarly, as the majority of students indicated that they had participated in KiVa lessons in the previous year and approximately half stated that they really enjoyed them, this suggests that the programme appears to have good initial fidelity and appeal. However, at this point we do not have any indication with regard to the number of KiVa lessons that were presented in any given year. This preliminary report is limited in that we were not able to track individual children. In addition, as it is based on a relatively small sample we have not allowed for any covariates such as school decile or year at school. Despite these limitations this preliminary evaluation has demonstrated that KiVa appears to be working by reducing levels of victimization and bullying in those schools who have chosen to implement KiVa.

References


