THE EVALUATION OF UNDERCOVER ANTI-BULLYING TEAMS

Authors:
Associate Professor Ian Lambie, Chris Murray, Ariana Krynen, Mnthali Price,
Emma Johnston

Prepared for:
Grant Malins
Regional Manager – Positive Behaviour for Learning.
Ministry of Education
Private Bag 92644
Auckland, New Zealand

Prepared by:
Ian Lambie, PhD
Associate Professor
Psychology Department
University of Auckland
Private Bag 92019
Auckland, New Zealand
i.lambie@auckland.ac.nz

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Abstract

Bullying is a significant societal problem in schools, having serious implications for both victims and perpetrators. While there have been many interventions developed to try and combat bullying in schools, many of these interventions are not formally evaluated. The current study evaluated an anti-bullying intervention that adopts a restorative approach that uses peer-led Undercover Anti-bullying Teams (UABTs) to combat bullying in the classroom. To evaluate this approach, the current study implemented the use of a pre-test/post-test experimental design in additional to qualitative interview data. The results suggest that following the intervention, there was a significant reduction in victimisation and a significant increase in students’ perceptions of personal support from other students in the class. Additionally, a number of themes emerged to suggest feelings of “inclusion” and “social support” were helpful to reduce distress for victims, and to help them feel more confident in the classroom. Additionally, the central elements of “autonomy” and “teamwork” that are inherent in the UABT intervention were helpful for team members in supporting the bullying victim and reducing bullying in the classroom.
# Table of Contents

ABSTRACT ......................................................................................................................... I

LIST OF TABLES .................................................................................................................. IV

ACKNOWLEDGEMENTS ...................................................................................................... V

INTRODUCTION ................................................................................................................... 1

  A DEFINITION OF SCHOOL BULLYING ....................................................................... 2
  BULLIES, VICTIMS AND BULLY/VICTIMS ................................................................. 3
  THE BYSTANDER ............................................................................................................ 5
  PREVALENCE .................................................................................................................. 6
  GENDER ............................................................................................................................ 7
  PSYCHOSOCIAL ADJUSTMENT OF VICTIMS AND PERPETRATORS OF SCHOOL BULLYING .......... 9
  ANTI-BULLYING INTERVENTIONS ................................................................................. 12
  THE PRESENT STUDY ...................................................................................................... 14

METHOD ................................................................................................................................ 15

  PARTICIPANTS .................................................................................................................. 15
  UNDERCOVER ANTI-BULLYING TEAMS (UABT) ............................................................ 15
  MEASURES ....................................................................................................................... 16
  PROCEDURE ..................................................................................................................... 18
  DATA ANALYSIS ............................................................................................................. 18

RESULTS ............................................................................................................................... 20

  ANALYSIS OF SCALES ................................................................................................. 20
  ANALYSIS OF INDIVIDUAL QUESTIONS ..................................................................... 21
  INTERVIEW DATA ............................................................................................................ 22

DISCUSSION .......................................................................................................................... 26

  QUANTITATIVE ANALYSES ......................................................................................... 26
  QUALITATIVE ANALYSES .............................................................................................. 28
  LIMITATIONS AND FUTURE RECOMMENDATIONS ..................................................... 31

APPENDIX A ......................................................................................................................... 33

APPENDIX B ......................................................................................................................... 38

REFERENCES ......................................................................................................................... 39
List of Tables

TABLE 1: MEANS AND STANDARD DEVIATIONS (SD) FOR THE SCALES FOR EACH CLASSROOM PRE- AND POST-INTERVENTION ................................................................. 20

TABLE 2: MEANS AND STANDARD DEVIATIONS (SD) FOR THE SCALES PRE- AND POST-
INTERVENTION FOR ALL CLASSROOM INTERVENTIONS ........................................... 21

TABLE 3: MEANS AND STANDARD DEVIATIONS (SD) FOR EACH QUESTION PRE- AND POST-
INTERVENTION FOR ALL CLASSROOMS ..................................................................... 22

TABLE 4: THE FOUR THEMES DERIVED FROM INTERVIEWS WITH VICTIMS OF BULLYING ............... 23

TABLE 5: THE SIX THEMES DERIVED FROM INTERVIEWS WITH MEMBERS OF UNDERCOVER ANTI-
BULLYING TEAMS ....................................................................................................... 24

TABLE 6: THE FOUR THEMES DERIVED FROM INTERVIEWS WITH TEACHERS. ............................... 25

TABLE 7: PERCENTAGES OF VICTIMS, UABT MEMBERS, AND TEACHERS, WHO INCLUDED THE
DIFFERENT THEMES IN THEIR ANSWERS TO INTERVIEW QUESTIONS. .............................. 25
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Introduction

Although a relatively old phenomenon, it was not until the late 1960s and 1970s that Scandinavian researchers (e.g., Heinemann, 1969, 1972; Olweus, 1973, 1978) began to systematically examine bullying in schools. In particular, early pioneering work by Dan Olweus paved the way for research in this area, following the suicide of three Norwegian adolescent boys due to severe bullying by peers, (Olweus & Limber, 2010b). Since then, there has been considerable international interest in the nature of aggression and victimisation within the school setting. In particular, the last few decades has seen an exponential rise of research in this area, investigating not only causal factors but also negative and long-lasting consequences of bullying extending into adulthood. While students who are bullied suffer immediate harm and distress, research suggests victims of bullying are also at risk of long-term adjustment difficulties, such as negative mental (Arseneault, Bowes & Shakoor, 2010), social (Nansel et al., 2001) and physical (Landstedt & Gådin, 2011) health outcomes. Additionally, bullying others is associated with negative mental health outcomes (Kaltiala-Heino, Rimpela, Rantanen & Rimpela, 2000), as well as a greater risk of delinquent behaviour (van der Wal, de Wit & Hirasing, 2003), increased alcohol use (Hemphill et al., 2011), substance use (Kaltiala-Heino et al., 2000) and violence (Farrington & Ttofi, 2011a). This increased interest is heightened by a number of recent highly publicised school shootings in the United States, most notably Columbine High School in 1999, which have been linked to bullying (Anderson et al., 2001; Olweus & Limber, 2010a). As such, bullying is now widely recognised as a significant societal problem, having serious implications for both perpetrators and victims.

Given the negative short-term and long-term consequences, researchers have attempted to address bullying within schools with the development of anti-bullying
interventions. The first anti-bullying intervention was the Olweus Bullying Prevention Program (OBPP) developed in the early 1980s by Olweus in Norway (Olweus & Limber, 2010b). The OBPP adopts a whole-school approach, addressing bullying at individual, classroom, school and community levels by endorsing appropriate consequences for bullying behaviour and the encouragement of positive pro-social behaviours. The OBPP has served as a prototype for many anti-bullying interventions that have followed it, and continues to have an influence on the current development of school bullying prevention programs (Merrell, Gueldner, Ross & Isava, 2008). However, while anti-bullying interventions continue to be developed and implemented around the world, many of these interventions have not been formally evaluated (Smokowski & Kopasz, 2005). In developing strategies to reduce bullying in schools, it would seem important to draw on effective evidence-based methods. While research on the effectiveness of bullying prevention strategies is sparse, studies have slowly begun to accumulate. The current study evaluates an anti-bullying intervention that uses peer-led undercover teams to combat bullying.

A definition of school bullying

Bullying refers to when a student is ‘exposed, repeatedly over time, to negative actions on the part of one or more other students’ (Olweus, 1993, p. 9). These negative actions can include physical or verbal abuse, gestures or exclusion from a group (i.e., relational aggression) (Olweus & Limber, 2010a). Bullying is a subset of aggressive behaviour; however, not all aggressive behaviours are characterised as bullying behaviour (Farrington & Ttofi, 2009). Specifically, bullying refers to aggressive behaviour that occurs in the context of an imbalance of power between the victim and the perpetrator, such that the victim has difficulty defending him- or herself. The power imbalance may occur because the victim belongs to a minority group, or is physically, psychologically or socially weaker than
the perpetrator (Carrera, DePalma & Lameiras, 2011). This separates bullying from other forms of interpersonal conflict between students where there may be a symmetrical balance of power. Furthermore, bullying can occur between students face to face, through other peers (i.e., spreading rumours), or through other interactive mediums including mobile phones and the internet (i.e., cyberbullying) (Raskauskas, Gregory, Harvey, Rifshana & Evans, 2010). Thus, the repeated use of either visible or concealed aggressive behaviour, where there is an asymmetric power relationship, differentiates bullying from other types of aggression (Swearer, Espelage & Napolitano, 2009).

**Bullies, victims and bully/victims**

Research suggests adolescents that are characterised as bullies are generally more aggressive, hostile and domineering towards peers (Boulton & Smith, 1994; Camodeca & Goossens, 2005; Olweus, 1978, 1995). Bullies also tend to be manipulative and exploitative (Andreou, 2004; Sutton & Keogh, 2000), have deficits in politeness and social rule following (Hussein, 2012), and exhibit low levels of empathy (Endresen & Olweus, 2001; Gini, Albiero, Benelli & Altoe, 2007; Menesini et al., 1997). There is some evidence to suggest that bullies tend to exhibit low self-esteem, anxiety and depression (e.g., O’Moore & Kirkham, 2001; Swearer, Song, Cary, Eagle & Mickelson, 2001), while other studies have suggested bullies exhibit higher self-esteem than controls (Duncan, 1999; Johnson & Lewis, 1999; Rigby & Slee, 1993). Bullies (especially males) tend to be physically tougher and stronger than their peers (Lagerspetz, Bjorkvist, Berts & King, 1982; Stephenson & Smith, 1989; Unnever & Cornell, 2003). Furthermore, evidence suggests that bullies often come from troubled households (Baldry, 2003; Bowes et al., 2009) where parents support the use of physical discipline (Curtner-Smith, 2000; Olweus, 1978) and are sometimes hostile, rejecting or indifferent toward their children (Demaray & Malecki, 2003).
Evidence suggests that, given the power dynamic involved in bullying, victims of bullying tend to be weak (physically and psychologically), insecure, quiet, shy, exhibit high levels of anxiety (Farrington, 1993), and have a greater tendency to hide their emotions and feel ashamed when their peers recognize they are unhappy (Hussein, 2012). Victims tend to be loners with few friends and often rejected by peers (Nansel et al., 2004). Additionally, victims tend to be introverted and exhibit low levels of self-esteem (O’Moore & Kirkham, 2001), hold negative views of themselves (Campart & Lindström, 1997) and usually have poorer peer social networks (Nansel et al., 2004). Furthermore, the parents of victims tend to be overprotective and shelter their children (Olweus, 1993), possibly leading to the child’s inability to successfully manage conflict (McNamara & McNamara, 1997).

While early research tended to dichotomise children involved in bullying into mutually exclusive categories of victim or perpetrator, contemporary views include another category termed the ‘bully/victim’ (Haynie et al., 2001; Veenstra et al., 2005). The bully/victim is characterised by children who have both bullied and been bullied. Bully/victims are often not socially accepted or liked by peers (Andreou, 2001; Schwartz, 2000), as they tend to exhibit low levels of pro-social behaviour (Veenstra et al., 2005) and high levels of aggression (Olweus, 1995). Additionally, bully/victims tend to exhibit high levels of depression and anxiety, and low levels of self-esteem (Olweus, 1995; Veenstra et al., 2005). This may explain some divergent findings in the literature regarding bullies and self-esteem, as a large proportion of bullies report also being victims of bullying (Felipe, García, Babarro & Arias, 2011). Furthermore, bully/victims tend to have parents that exhibit an inconsistent parental pattern of overprotective, neglectful and abusive behaviours (Bowers, Smith & Binney, 1994). Evidence suggests that both victims and bully/victims tend to have deficiencies in differentiating emotions and correctly identifying the causes of their emotions.
Additionally, both victims and bully-victims were reported as having less likeability than bullies or uninvolved children (Hussein, 2012).

The bystander

Another dimension in the context of bullying is the contribution of others and their level of involvement in the bullying behaviour. While early work on bullying has generally focused on the dyadic relationship between the perpetrator and the victim, theorists have recently highlighted the role of the ‘bystander’ (Atlas & Pepler, 1998; Salmivalli, Lagerspetz, Björkqvist, Österman & Kaukiainen, 1996; Twemlow, Fonagy & Sacco, 2010). As mentioned, bullying involves a power relationship between the perpetrator and the victim, which is most likely set within the hierarchy of the larger school community, such that the bullying process occurs with the bystander as an audience. Twemlow and colleagues (2010) argue that the bystander represented either as an individual or as a group, reflects the social architecture that facilitates victimisation. Specifically, when bullying occurs, victims become disassociated from the school community by the bully and, symbolically, on behalf of the by standing community.

The bystander indirectly participates in the bullying process, playing a range of roles that can either facilitate or ameliorate victimisation. For example, some students enjoy witnessing violence and can reinforce the bully’s behaviour by laughing or cheering at the bullying behaviour (Smith, Twemlow & Hoover, 1999). Alternatively, some students can be ‘outsiders’ or ‘passive bystanders’ by silently witnessing the bullying behaviour, in effect reinforcing the bullying process even though they are not directly involved (Salmivalli et al., 1996). Other students can take a more active role in defending the victim by intervening in the bullying behaviour directly or notifying an adult (Gini, Pozoli, Borghi & Franzoni, 2008). There is emerging evidence to suggest that the bystander’s role has an effect on the frequency
of bullying. For example, Salmivalli and colleagues (2011) found that defending the victim was negatively associated with the frequency of bullying in the classroom, while reinforcement of the bullying behaviour had a strong positive association with bullying in the classroom. Twemlow and colleagues (2010) suggest that this conceptualisation of the bystander as an active participant in bullying can have implications on anti-bullying strategies, by shifting the perspectives of others from a passive to a more active role in support of victims, thereby directly helping to curb bullying behaviour. Thus, current anti-bullying interventions could be even more successful if they also have a specific focus on the role of others in relation to school bullying.

Research has investigated why some children intervene with a bullying episode and others do not. For example, Cappadocia and colleagues (2012) found that motivations for young people intervening with a bullying episode included a sense of social justice, while reasons for not intervening included, feeling that it was not their place to do so as the bullying did not directly involve them, or because the bullying was not severe enough to intervene. Recent evidence suggests that bullies and those who assist or reinforce bullying behaviour (e.g., bystanders) frequently engage in moral disengagement mechanisms to minimize their guilt and justify their behaviour (Pozzoli, Gini & Vieno, 2012). These moral disengagement mechanisms include cognitive restructuring, minimizing one’s agentive role, distorting consequences, and blaming/dehumanizing the victim (Pozzoli, Gini & Vieno, 2012).

Prevalence

As mentioned, bullying is an international problem; however, prevalence rates vary quite dramatically. For example, in a comparative study of bullying in seven different countries, Eslea and colleagues (2003) found that bullying perpetration ranged from 2% (China) to 17% (Spain), while the percentage of bullying victims ranged from 5% (Ireland) to
26% (Italy). In a more recent comparative meta-analysis of 82 bullying prevalence studies across 22 different countries, Cook and colleagues (2010) found combined prevalence rates ranging from 5% (Sweden) to 44% (New Zealand) for bullies, 7% (Switzerland) to 43% (Italy) for victims, and 2% (Sweden) to 32% (New Zealand) for bully/victims. Cook and colleagues (2010) also found that bullying perpetration prevalence rises considerably from childhood to early adolescence and remains quite high during late adolescence, while victim and bully/victim prevalence have the same initial progression but decrease slightly in late adolescence. New Zealand (44% bullies, 43% victims, 32% bully/victims) and Italy (43% bullies, 43% victims, and 7% bully/victims) had the highest prevalence rates of bullying, while Sweden (5% bullies, 2% bully victims) and Norway (6% bullies, 11% victims, and 7% bully/victims) had the lowest. Overall, combined prevalence rates suggest that, on average, 53% of students are involved in bullying, with the greatest proportion of students involved as victims, followed by bullies, and then bully/victims. The authors mention that this prevalence estimate is much higher than the 30% prevalence rate that is commonly discussed in relation to bullying amongst children and adolescence (e.g., Nansel et al., 2001). However, heterogeneity in the conceptualisation and the measurement of bullying internationally may be problematic for cross-national comparisons; thus, caution is advised when interpreting these results.

**Gender**

In general, research suggests that boys are more likely to bully (Espelage, Bosworth & Simon, 2000; Farrington & Baldry, 2010; Nansel et al., 2001) and be bullied (Olweus, 1993) than girls. For example, in the aforementioned meta-analysis by Cook and colleagues (2010), 15 of 16 countries who had separated out prevalence rates of bullies by gender reported higher prevalence of male than female bullies. For prevalence rates of victims, 15
countries had separate estimates by gender, 11 of which reported higher prevalence of male than female victims. Odds ratios of all these studies that separated data by gender suggest that males are 2.5 times more likely to be involved in bullying (i.e., perpetrators or victims) than females (Cook et al., 2010). These findings reflect evidence which suggests that boys are generally more aggressive than girls (Coie & Dodge, 1998). However, this gender difference is generally found in more direct forms of bullying (i.e., physical violence or threats) (Varjas, Henrich & Meyers, 2009). Research suggests this gender difference is significantly reduced when taking into consideration more indirect forms of bullying (i.e., relational aggression), such as spreading rumours or social isolation (Olweus, 2005). Indeed, there is some evidence to suggest that girls are proportionally more likely to use relational aggression than boys (Osterman et al., 1998). Other studies, however, have reported little to no gender difference in relational aggression (e.g., Goldstein, Young & Boyd, 2008; Swearer, 2008), suggesting it is not exclusive to girls.

Olweus (2010) has criticised the argument that girls are as aggressive as boys in the context of bullying behaviour but only diverge on the type of bullying behaviour. Specifically, many of the studies that have generated this finding (e.g., Björkqvist, Lagerspetz & Kaukiainen, 1992; Osterman et al., 1998) use peer estimations of aggressive behaviour in hypothetical terms. As such, Olweus suggests these findings are likely to reflect typical expressions of anger for girls (i.e., indirect aggression) and boys (i.e., direct aggression), rather than actual prevalence rates for these different types of aggressive behaviours. Accordingly, studies using self-report measures such as the Bully/Victim Questionnaire (Olweus, 1991) have found that more boys than girls tend to report bullying others, regardless of bullying form, even though girls that bully are more likely to employ indirect than direct aggressive behaviours (Olweus, 2005; Scheithauer, Hayer, Petermann & Jugert, 2006).
Psychosocial adjustment of victims and perpetrators of school bullying

As previously mentioned, bullying has been linked to various areas of maladjustment. For example, as a consequence of bullying, victims may eventually see themselves as outsiders or failures (Smokowski & Kopasz, 2005). Several studies have found an association between bullying victimisation and internalising disorders such as anxiety and depression (Brockenbrough, Cornell & Loper, 2002; Kaltiala-Heino et al., 2000). This association between bullying victimisation and internalising disorders is particularly strong for females, and researchers suggest it may be further associated with the development of eating disorders (Bond, Carlin, Thomas, Rubin & Patton, 2001). Bullying often occurs within the school environment, and research suggests that many bully victims avoid school settings, which results in absenteeism, school disengagement, social isolation and poor academic achievement (Beale, 2001; Hutzell & Payne, 2012; Townsend, Flisher, Chikobvu, Lombard & King, 2008). Bully victimisation is also associated with psychosomatic symptoms such as headaches, stomach-aches and dizziness (Due et al., 2005). Consequently, these factors may contribute to an association of bullying victimisation to suicidal ideation and suicidal/self-harming behaviours (Klomek et al., 2009; Winsper, Lereya, Zanarini & Wolke, 2012).

Victims of bullying also experience negative long-term effects as a result of victimisation. For example, Olweus (1993) found that males at age 23 who had been victims of bullying in their adolescence were significantly more likely to express depressive tendencies and exhibit low self-esteem as adults. Similarly, Allison and colleagues (2009) found that adults who had been victims of bullying experienced not only significantly poorer mental health, but also poorer physical health compared to those that had not been bullied. Research suggests that victims of bullying report having significant social difficulties as adults, including trust and intimacy issues, and poorer quality of interpersonal relationships (Gilmartin, 1987; Jantzer, Hoover & Narloch, 2006). Additionally, although the effect size
was small, Farrington and colleagues (2012) found that victims of school bullying were significantly more likely to be involved in criminal offending as adults than those who had been bullied.

Bullying behaviours have also been linked with several areas of maladjustment for perpetrators. For example, research has found an association between bullying perpetration and mental health problems such as attention-deficit disorder, depression and oppositional-conduct disorder (Farrington et al., 2012; Kaltiala-Heino et al., 2000; Kumpulainen, Rasanen & Puura, 2001). In addition, bullying perpetration in school has been associated with externalising behaviours such as hyperactivity (Kumpulainen & Rasanen, 2000), aggression (Andreou, 2001) and other antisocial behaviours (Kaltiala-Heino et al., 2000; Olweus, 1994; Ttofi, Farrington, Lösel & Loeber, 2011). Furthermore, Kaltiala-Heino and colleagues (2000) found that bullying perpetration was significantly associated with excessive alcohol and substance use.

Research suggests that the aforementioned areas of maladjustment among bullying perpetrators often continue into adulthood. For example, one study found that 60% of boys characterised as bullies as adolescents had at least one criminal conviction by the age of 24, compared with 10% of the control group (Glew, Rivara & Feudtner, 2000). Similarly, Farrington and colleagues (2012) found that bullying perpetration at school was a significant predictor of offending up to six years later. In addition, adults that had bullied others in their adolescence were more likely to exhibit aggression towards their spouses and children (Roberts, 2000). Furthermore, research suggests that adults who were adolescent bullies tend to have children that become bullies, implicating a possible intergenerational effect on the development of bullying behaviour as a specific strategy for interpersonal relations (Carney & Merrel, 2001).
Although several areas of maladjustment have been found to correlate with school experiences of bullying (i.e., either perpetration or victimisation), it is difficult to determine the direction of this correlation. For example, in the context of bullying perpetration, it is difficult to say whether adult offending is the product of a persistent underlying violent tendency that may be established with bullying perpetration or whether both school bullying perpetration and adult offending are underpinned by a more general underlying antisocial tendency (Ttofi, Farrington & Lösel, 2012). Accordingly, criminology researchers have established two theoretical positions to explain the correlation between early and late offending; namely state dependence and population heterogeneity (Nagin & Paternoster, 2000). State dependence suggests that because of the negative effects of bullying perpetration on interpersonal skills and relations, this behaviour creates and perpetuates further antisocial behaviour in adulthood. In contrast, population heterogeneity suggests that the stability of antisocial behaviour over time (i.e., school bullying & adult offending) can be attributed to an underlying antisocial characteristic that is established early in life. The same could be said of victimisation, where, for example, it may be difficult to determine whether internalising disorders predispose individuals to being victims of bullying or whether being victimised leads to the development of internalising disorders. It is possible that either one or a combination of these theoretical perspectives occur within bully populations; however, research to date is yet to provide an answer to the question of causal direction. This question is difficult to answer because of the marked shared variance of risk factors predicting maladaptive behaviours in adulthood (Ttofi et al., 2012). For example, research has shown that aggression, delinquency, conduct disorder and numerous other problem behaviours are intercorrelated (Loeber, Farrington, Stouthamer-Loeber & van Kammen, 1998), making it difficult to identify a direct causal link. Either way, anti-bullying interventions are important,
as they can address bullying behaviour early on, whether it is attributed to underlying characteristics or not.

**Anti-bullying interventions**

Due to the negative outcomes associated with school bullying, there have been many attempts to develop anti-bullying strategies to reduce both the short- and long-term harm that may occur to those involved. Early meta-analytic studies investigating the effectiveness of anti-bullying interventions have found that the effects of these programs on bullying were minimal (e.g., Rigby & Slee, 2008; Smith, Schneider, Smith & Ananiadou, 2004). Smith and colleagues (2004) suggest that this may be due to the lack of systematic monitoring of bullying interventions. In fact, many interventions have been based on common sense ideas about what may reduce bullying rather than incorporating components based on empirical evidence (Farrington & Ttofi, 2009). As such, more rigorous evaluation processes are needed to help provide effective strategies to combat school bullying.

Recently, there have been some attempts to synthesise the growing body of knowledge regarding the effectiveness of interventions. For example, a recent meta-analysis by Farrington and Ttofi (2011b) found that across 53 evaluations of anti-bullying interventions, bullying decreased on average by 20–23% and victimisation by 17–20%. The authors also found a ‘dose-response’, where more intensive interventions that involved prevention strategies applied to various domains (i.e., a ‘whole-school’ approach) were significantly more effective than interventions that focused on one domain. Additionally, interventions that included parent meetings, firm disciplinary methods, and increased playground supervision were found to be the most effective.

As outlined previously, some research has found an association between students defending the victim of bullying and a decrease in bullying frequency (e.g., Salmivalli et al.,
suggesting the role of bystanders could be another potential focus for bullying interventions. Interestingly, Farrington and Ttofi (2011b) found that ‘work with peers’ as an anti-bullying strategy (i.e., peer meditation, peer mentoring and encouraging bystander intervention to prevent bullying) was significantly associated with an increase in victimisation, and further suggested that work with peers should not be used in anti-bullying interventions. In addition, some authors have noted that it is important to avoid the poor implementation of peer-driven interventions as this can lead to peers intervening in bullying behaviour in inappropriate ways that may promote a cycle of violence (Ttofi & Farrington, 2012). For example, Hawkins and colleagues (2001) found that instead of intervening in bullying behaviour in an assertive manner, 47% of the bullying episodes recorded involved peers intervening in a verbally or physically aggressive way, thus only adding to the problem of violence and aggression within the school. In addition with attitudes that it is not the young person's place to intervene when someone is being bullied or that the bullying is not severe enough to do so (Cappadocia et al., 2012) as discussed previously, research also suggests that students' resistance to associating with a victim of bullying due to fear of being victims themselves may act as a barrier to the implementation of peer-driven interventions (Boulton, 2013).

Smith and colleagues (2012) argue that the conclusion by Ttofi and Farrington that peers should not be used in anti-bullying interventions is a potentially erroneous assertion, as peer-driven schemes have been found to contribute positively to victims’ perceptions of school safety and school climate (Cowie and Oztug, 2008; Cowie et al., 2008). In addition, a recent meta-analysis of bystander interventions revealed the interventions significantly and practically increased peer bystander intervention in incidents of school bullying, with larger treatment effect sizes for high school-based programmes than those that were implemented among participants from kindergarten through to eighth grade (Polanin, Espelage & Pigott,
Furthermore, Merrell and colleagues (2008) found significant positive treatment effects for anti-bullying programmes that increased bystander intervention.

A valuable feature of peer-support methods is that they teach students to take responsibility for their actions and provide positive interpersonal, social and conflict resolution skills (Smith, Salmivalli & Cowie, 2012). In addition, many peer-support methods are designed to support victims after bullying occurs rather than to prevent bullying perpetration (Cowie & Smith, 2010). The aforementioned literature suggests that programmes which increase bystander intervention (i.e., peer-support methods) have potential for improving outcomes for victims. However, such results may be mediated by how the anti-bullying programme is implemented, what approach bystanders take when intervening (e.g., Hawkins et al., 2001; Ttofi & Farrington, 2012), and possibly how well these programmes target underlying motivations that prevent bystander intervention (e.g., fear of being victims themselves).

The present study

The purpose of the present study was to assess the effectiveness of a unique anti-bullying intervention using an undercover, peer-driven support team (detailed below). To evaluate this intervention, bullying prevalence was assessed using a short version of the Peer Relations Questionnaire (PRQ; Rigby, 1997; Rigby & Slee, 1993), and student perception of class environment was evaluated using the Classroom Life Instrument (CLI; Johnson, 1974; Johnson, Johnson & Anderson, 1983). Both of these measures were used to capture positive effects of the intervention on classroom bullying and classroom climate.
Method

Participants

Two classrooms from Edgewater College and 6 classrooms from Waiuku College participated in the current study. Both colleges are located in Auckland, New Zealand. One class from Waiuku College was dropped as a result of the victim leaving the school and the intervention being aborted. Due to absences, student attrition and other small changes in classes (i.e., students moved to other classrooms), there were some minor differences between student samples at pre- and post-intervention phases. The total sample pre-intervention consisted of 160 students, ranging between 12 and 16 years of age ($M = 13.68; SD = 0.82$). Approximately 52.0% of the pre-intervention sample were NZ-European, 21.3% NZ-Maori, 11.9% Pacific, 6.4% Asian, and 8.4% other ethnicities. The total sample post-intervention consisted of 149 students, ranging between 12 and 15 years of age ($M = 13.69; SD = 0.79$). Approximately 56.9% of the post-intervention sample were NZ-European, 19.9% NZ-Maori, 8.3% Pacific, 6.6% Asian, and 8.3% other ethnicities.

Undercover Anti-Bullying Teams (UABT)

The use of Undercover Anti-bullying Teams (UABT), developed by Williams and Winslade (Williams, 2010; Williams & Winslade, 2008), has been adopted by a small number of schools in the Auckland area to deal with selected cases of bullying in schools. The UABT approach is similar to the Support Group Method (formally named the “No Blame approach”) developed Robinson and Maines (2008). The UABTs are comprised of a group of peers selected jointly by the counsellor, the person being bullied, and classroom teachers. After telling the story of the bullying and deconstructing its effects, the victim is invited to co-construct a support team that includes the two students who are responsible for the worst bullying, as well as four others who don't bully, have never been bullied
themselves, and are ones who would be considered to have power and influence in the class. When the Team's composition has been finalised, the counsellor calls the students to their first meeting. The story of the bullying is read to the team members by the counsellor. The students are invited to be 'undercover' secret agents in an exclusive group whose mission is to seek out bullying and to banish it. The students are asked to discuss together the strategies that the team can adopt to help the victim of bullying. The identity of the bullies is never formally discussed. This draws on a “no blame” approach focusing on the bullying rather than the bully. Additionally, the reason for including the students who may be doing the bullying is because students who often bully can learn how to be supportive and encouraging towards other students through working in a UABT. The team aspect of the UABT intervention acknowledges that victims, bullies and bystanders all have a role in the incidence of bullying.

**Measures**

The Peer Relations Questionnaire (PRQ; Rigby, 1997; Rigby & Slee, 1993) is a measure of the prevalence and nature of bullying in schools. The questionnaire contains three subscales: Victimisation, Bullying, and Pro-social scales. The victimisation subscale has 5-items (e.g., 'I get called names by others'), the Bullying subscale has 6-items (e.g., 'I like to make others scared of me'), and the Pro-social subscale has 4-items (e.g., 'I enjoy helping others'). Responses to each item are provided on a 4-point Likert scale ranging from 1 (never) to 4 (very often). The PRQ has been found to have good internal consistency and a strong factorial structure with students in Australia and New Zealand, suggesting it is both a valid and reliable measure of bullying prevalence (Raskauskas, Gregory, Harvey, Rifshana & Evans, 2010; Rigby & Slee, 1993). For example, Raskauskas and colleagues (2010) found the three factors of PRQ (i.e., Bullying, Victimisation, and Pro-social) to account for 58% of
the variance among a sample of New Zealand students. Loadings of all items on their principle factor exceeded 0.60, and did not exceed 0.30 on other factors. Furthermore, Cronbach \( \alpha \) coefficients for each factor (i.e., Bullying, Victimisation, and Prosocial) were 0.82, 0.86 and 0.62 respectively, suggesting acceptable internal consistency.

The Classroom Life Instrument (CLI; Johnson, 1974; Johnson, Johnson & Anderson, 1983) is a self-report scale measuring students' feelings in the educational climate, particularly in their classroom. The original CLI instrument is a 90-item scale comprising of 17 factors. Given the current study's intervention was student-focused, only the Student Academic Support and Student Personal Support factors (i.e., scales) were administered to examine whether the UABT intervention had any effect on student perception of the classroom climate. Four items make up each of the Student Academic Support (e.g., 'The kids in my class want me to do my best school work') and Student Personal Support (e.g., 'In this class, other students really care about me') scales. Responses to each item are provided on a 4-point Likert scale ranging from 1 (never) to 4 (very often). The CLI has been found to be a reliable and valid measure of classroom climate, particularly with regards to peer support (Rowe et al., 2010). In particular, the Student Academic Support and Student Personal Support scales have been found to have the internal consistency reliabilities of .78 and .72 (Rowe et al., 2010).

To evaluate the positive effects of the UABT intervention on bullying and classroom climate, the five scales from the PRI and CLI (i.e., the Victimisation, Bullying, Prosocial, Student Academic Support and Student Personal Support scales) were combined to form the student questionnaire used in the current study (see Appendix A). The Victimisation scale was made up of questions 3, 8, 12, 18 and 19; the Bullying scale - questions 4, 9, 11, 14, 16 and 17; the Pro-social scale - questions 5, 10, 15 and 20; the Student Academic Support scale - questions 21 to 24; and Student Personal Support scale - questions 25 to 28.
Procedure

All students from each classroom completed the questionnaire within class on Survey Monkey both prior to the establishment of the UABT and following the cessation of the UABT, which was approximately four to six weeks after its establishment. The survey took approximately 10-15 minutes to complete. Additionally, students involved in the UABT interventions, bullying victims and teachers, participated in short semi-structured interviews following an intervention (see Appendix B for a list of the interview questions). A total of 44 students were interviewed, including 7 bullying victims and 37 undercover anti-bullying taskforce members for the 7 interventions evaluated. In addition, 8 teachers were interviewed about their perspectives on classroom environment before and after an intervention. The interviews took approximately 10-15 minutes long, and were held in a private room on school premises with two researchers present.

Data analysis

For each classroom, responses on the questionnaire using the four-point Likert scale were summed. The Pro-social, Academic Support, and Personal Support scales were reverse coded so that lower scores represented positive responses. For each classroom, mean scores for each question and the five scales was calculated. All quantitative analyses were conducted in SPSS for Windows, version 20. Because of the small sample size and use of Likert scales, nonparametric tests were conducted to analyse scores pre- and post-intervention. The Wilcoxon signed rank test was used to compare pre- and post-intervention questionnaire responses. A nominal $p$-value $<0.05$ was used for statistical significance.

For the interview data, a qualitative approach was adopted to gain further understanding of the impact of the undercover teams on bullying in the classroom. Interviewee responses were transcribed verbatim within the interview sessions and
anonymised. Interview data were analysed following a thematic approach, where transcripts were coded and grouped into keywords, categories and finally themes as suggested by Braun and Clarke (2006).
Results

Analysis of scales

The means for each scale (i.e., Victimisation, Bullying, Prosocial, Academic Support, and Personal Support) for the classrooms pre- and post-intervention are presented in Table 1.

Table 1: Means and Standard Deviations (SD) for the Scales for Each Classroom Pre- and Post-Intervention

<table>
<thead>
<tr>
<th>Class</th>
<th>Pre- Victimisation</th>
<th>Post- Victimisation</th>
<th>Pre- Bullying</th>
<th>Post- Bullying</th>
<th>Pre- Pro-social</th>
<th>Post- Pro-social</th>
<th>Pre- Academic Support</th>
<th>Post- Academic Support</th>
<th>Pre- Personal Support</th>
<th>Post- Personal Support</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Mean 1.59</td>
<td>Mean 1.59</td>
<td>Mean 1.23</td>
<td>Mean 1.18</td>
<td>Mean 1.85</td>
<td>Mean 1.7</td>
<td>Mean 2.13</td>
<td>Mean 1.25</td>
<td>Mean 1.94</td>
<td>Mean 1.49</td>
</tr>
<tr>
<td></td>
<td>SD (0.79)</td>
<td>SD (0.84)</td>
<td>SD (0.56)</td>
<td>SD (0.58)</td>
<td>SD (0.85)</td>
<td>SD (1.1)</td>
<td>SD (0.95)</td>
<td>SD (0.94)</td>
<td>SD (0.89)</td>
<td>SD (0.92)</td>
</tr>
<tr>
<td>2</td>
<td>Mean 1.62</td>
<td>Mean 1.27</td>
<td>Mean 1.17</td>
<td>Mean 0.94</td>
<td>Mean 1.79</td>
<td>Mean 1.93</td>
<td>Mean 2.47</td>
<td>Mean 2.29</td>
<td>Mean 1.93</td>
<td>Mean 2.36</td>
</tr>
<tr>
<td></td>
<td>SD (0.66)</td>
<td>SD (0.63)</td>
<td>SD (0.43)</td>
<td>SD (0.28)</td>
<td>SD (0.83)</td>
<td>SD (0.78)</td>
<td>SD (0.89)</td>
<td>SD (1.0)</td>
<td>SD (1.0)</td>
<td>SD (0.98)</td>
</tr>
<tr>
<td>3</td>
<td>Mean 1.87</td>
<td>Mean 1.68</td>
<td>Mean 1.26</td>
<td>Mean 1.31</td>
<td>Mean 1.98</td>
<td>Mean 2.02</td>
<td>Mean 2.68</td>
<td>Mean 2.65</td>
<td>Mean 2.59</td>
<td>Mean 2.52</td>
</tr>
<tr>
<td></td>
<td>SD (0.85)</td>
<td>SD (0.70)</td>
<td>SD (0.51)</td>
<td>SD (0.56)</td>
<td>SD (0.82)</td>
<td>SD (0.79)</td>
<td>SD (0.85)</td>
<td>SD (0.80)</td>
<td>SD (0.80)</td>
<td>SD (0.78)</td>
</tr>
<tr>
<td>4</td>
<td>Mean 1.63</td>
<td>Mean 1.48</td>
<td>Mean 1.4</td>
<td>Mean 1.23</td>
<td>Mean 2.49</td>
<td>Mean 2.39</td>
<td>Mean 2.83</td>
<td>Mean 2.75</td>
<td>Mean 2.99</td>
<td>Mean 2.28</td>
</tr>
<tr>
<td></td>
<td>SD (0.71)</td>
<td>SD (0.72)</td>
<td>SD (0.86)</td>
<td>SD (0.56)</td>
<td>SD (0.82)</td>
<td>SD (0.85)</td>
<td>SD (0.72)</td>
<td>SD (0.64)</td>
<td>SD (0.86)</td>
<td>SD (0.83)</td>
</tr>
<tr>
<td>5</td>
<td>Mean 1.89</td>
<td>Mean 1.79</td>
<td>Mean 1.31</td>
<td>Mean 1.21</td>
<td>Mean 2.1</td>
<td>Mean 2.09</td>
<td>Mean 3.26</td>
<td>Mean 3.25</td>
<td>Mean 2.93</td>
<td>Mean 3.11</td>
</tr>
<tr>
<td></td>
<td>SD (0.80)</td>
<td>SD (0.84)</td>
<td>SD (0.55)</td>
<td>SD (0.43)</td>
<td>SD (0.79)</td>
<td>SD (0.88)</td>
<td>SD (0.89)</td>
<td>SD (0.82)</td>
<td>SD (0.82)</td>
<td>SD (0.94)</td>
</tr>
<tr>
<td>6</td>
<td>Mean 1.66</td>
<td>Mean 1.43</td>
<td>Mean 1.38</td>
<td>Mean 1.25</td>
<td>Mean 1.99</td>
<td>Mean 2.38</td>
<td>Mean 3.22</td>
<td>Mean 3.2</td>
<td>Mean 3.02</td>
<td>Mean 2.86</td>
</tr>
<tr>
<td></td>
<td>SD (0.74)</td>
<td>SD (0.60)</td>
<td>SD (0.67)</td>
<td>SD (0.53)</td>
<td>SD (0.80)</td>
<td>SD (0.93)</td>
<td>SD (0.64)</td>
<td>SD (0.67)</td>
<td>SD (0.78)</td>
<td>SD (0.92)</td>
</tr>
<tr>
<td>7</td>
<td>Mean 1.69</td>
<td>Mean 1.48</td>
<td>Mean 1.13</td>
<td>Mean 1.23</td>
<td>Mean 2.25</td>
<td>Mean 2.03</td>
<td>Mean 2.9</td>
<td>Mean 2.59</td>
<td>Mean 2.56</td>
<td>Mean 2.31</td>
</tr>
<tr>
<td></td>
<td>SD (0.88)</td>
<td>SD (0.72)</td>
<td>SD (0.47)</td>
<td>SD (0.65)</td>
<td>SD (0.90)</td>
<td>SD (0.80)</td>
<td>SD (1.0)</td>
<td>SD (0.90)</td>
<td>SD (1.1)</td>
<td>SD (0.81)</td>
</tr>
</tbody>
</table>

The means and standard deviations (SD) for the scales (i.e., Victimisation, Bullying, Pro-social, Academic Support, and Personal Support) across the seven classrooms (N = 7) pre- and post-intervention are reported in Table 2. The Pro-social, Academic Support and Personal Support sub-scales were reverse-coded for the survey, and then recoded for the analysis. This was done to give a consistent reflection of the mean scores across the scales, such that a reduction in the mean reflected a positive effect of the intervention. Wilcoxon
signed-rank tests revealed post-intervention mean scores for the Victimisation ($z = -2.37, p < 0.05$) and Personal Support ($z = -2.20, p < 0.05$) scales were significantly lower than the pre-intervention scores. No significant difference was found between pre- and post-intervention mean scores for the Bullying, Pro-social, and Personal Support scales ($ps > 0.05$).

**Table 2: Means and Standard Deviations (SD) for the Scales Pre- and Post-Intervention for all Classroom interventions**

<table>
<thead>
<tr>
<th>Scale</th>
<th>Mean</th>
<th>SD</th>
<th>$p$-value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Victimisation</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pre-Intervention</td>
<td>1.71</td>
<td>.12</td>
<td>0.016*</td>
</tr>
<tr>
<td>Post-Intervention</td>
<td>1.54</td>
<td>.14</td>
<td></td>
</tr>
<tr>
<td><strong>Bullying</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pre-Intervention</td>
<td>1.27</td>
<td>.10</td>
<td>0.109</td>
</tr>
<tr>
<td>Post-Intervention</td>
<td>1.21</td>
<td>.08</td>
<td></td>
</tr>
<tr>
<td><strong>Prosocial</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pre-Intervention</td>
<td>2.10</td>
<td>.24</td>
<td>1.000</td>
</tr>
<tr>
<td>Post-Intervention</td>
<td>2.09</td>
<td>.22</td>
<td></td>
</tr>
<tr>
<td><strong>Academic Support</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pre-Intervention</td>
<td>2.76</td>
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<tr>
<td>Post-Intervention</td>
<td>2.64</td>
<td>.46</td>
<td></td>
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<td><strong>Personal Support</strong></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Pre-Intervention</td>
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<td>.37</td>
<td>0.031*</td>
</tr>
<tr>
<td>Post-Intervention</td>
<td>2.44</td>
<td>.35</td>
<td></td>
</tr>
</tbody>
</table>

*Note. * significant $<0.05$

**Analysis of individual questions**

The means and standard deviations (SD) for each survey question across the seven classrooms ($N = 7$) pre- and post- intervention are reported in Table 3. Wilcoxon signed-rank tests revealed post-intervention mean scores were significantly lower than pre-intervention scores for questions 3 ($z = -2.37, p < .05$), 4 ($z = -2.03, p < .05$), 8 ($z = -2.20, p < .05$), 23 ($z = -2.37, p < .05$), 25 ($z = -2.03, p < .05$), and 28 ($z = -2.20, p < .05$).
Table 3: Means and Standard Deviations (SD) for Each Question Pre- and Post-Intervention for all Classrooms

<table>
<thead>
<tr>
<th>Question</th>
<th>Pre-intervention</th>
<th>Post-intervention</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>SD</td>
<td>Mean</td>
</tr>
<tr>
<td>1</td>
<td>3.22</td>
<td>.21</td>
<td>3.26</td>
</tr>
<tr>
<td>2</td>
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<tr>
<td>4</td>
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<td>1.84</td>
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<td>1.84</td>
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<td>6</td>
<td>1.99</td>
<td>.19</td>
<td>1.90</td>
</tr>
<tr>
<td>7</td>
<td>2.28</td>
<td>.20</td>
<td>2.15</td>
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<tr>
<td>8</td>
<td>1.75</td>
<td>.16</td>
<td>1.53</td>
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<td>9</td>
<td>1.29</td>
<td>.09</td>
<td>1.25</td>
</tr>
<tr>
<td>10</td>
<td>2.36</td>
<td>.32</td>
<td>2.32</td>
</tr>
<tr>
<td>11</td>
<td>1.31</td>
<td>.19</td>
<td>1.29</td>
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<tr>
<td>12</td>
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<td>.20</td>
<td>1.60</td>
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<td>1.27</td>
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<td>1.32</td>
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<td>1.14</td>
<td>.14</td>
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<td>18</td>
<td>1.75</td>
<td>.24</td>
<td>1.65</td>
</tr>
<tr>
<td>19</td>
<td>1.34</td>
<td>.09</td>
<td>1.24</td>
</tr>
<tr>
<td>20</td>
<td>2.05</td>
<td>.37</td>
<td>2.07</td>
</tr>
<tr>
<td>21</td>
<td>2.61</td>
<td>.47</td>
<td>2.57</td>
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<tr>
<td>22</td>
<td>2.79</td>
<td>.38</td>
<td>2.70</td>
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<td>23</td>
<td>3.09</td>
<td>.45</td>
<td>2.85</td>
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<td>2.55</td>
<td>.38</td>
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<td>25</td>
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<td>27</td>
<td>2.47</td>
<td>.45</td>
<td>2.49</td>
</tr>
<tr>
<td>28</td>
<td>2.63</td>
<td>.34</td>
<td>2.44</td>
</tr>
</tbody>
</table>

Note. * significant <.05

Interview data

A key objective of the current study was to explore victims’, UABT members’ and teachers’ experiences of the UABT intervention, and experiences of classroom environment following an intervention. An overwhelming majority of the interview sample, including victims, UABT members and teachers, experienced positive outcomes as a result of the intervention. The majority of victims and many UABT members reported that after the
Intervention, bullying had completely stopped and that class was now enjoyable. A number of major themes were also identified by victims (see Table 4), UABT members (see Table 5) and teachers (see Table 6). The frequencies of these themes are outlined in Table 7. There was some degree of overlap between the themes identified in victims’ experiences, UABT members’ and teachers’ experiences of the intervention. Namely, many participants observed (or were involved in) social and/or academic support for victims of bullying, and inclusion of the victim in activities within and outside the classroom. Many participants noticed that victims became more confident following an intervention. Furthermore, many participants observed a positive effect of the UABT intervention on the classroom. There were a number of additional themes identified by UABT members which were not mentioned by victims or teachers. Namely, themes of “autonomy” and “teamwork”.

Table 4: The four themes derived from interviews with victims of bullying.

<table>
<thead>
<tr>
<th>Theme</th>
<th>Explanation of theme</th>
<th>Illustrative quotations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct support from students</td>
<td>Victim received support from other students in terms of dealing with the bully and/or bullying; in terms of encouraging the victim; or in terms of academic help for the victim.</td>
<td>“If someone said something, they [UABT members] would stick up for me; say to the bully to stop and make him feel like it wasn’t cool to do.” – Victim (Class 5)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>“They were really nice people and helped me quite a bit.” – Victim (Class 6)</td>
</tr>
<tr>
<td>Social inclusion</td>
<td>The victim felt a sense of inclusion by other students in the class.</td>
<td>“They chose me in groups in P.E; invite me to games at lunch; talk to me during class” – Victim (Class 2)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>“The main thing was sitting in the guidance counselor’s room and seeing the posters on her wall that said “you are not alone” – I held on to that” – Victim (Class 4)</td>
</tr>
<tr>
<td>Confidence</td>
<td>The UABT helped the victim become more confident in the classroom.</td>
<td>“They made me more confident and talkative and happy” – Victim (Class 3)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>“Basically helping me build my confidence” – Victim (Class 6)</td>
</tr>
<tr>
<td>Continuing beyond the</td>
<td>The effects of the intervention on the victim’s classroom experience and/or the flow on effects of the intervention have been positive.</td>
<td>“The bully has stopped bullying others as well” – Victim (Class 3)</td>
</tr>
<tr>
<td>intervention</td>
<td></td>
<td>“Nothing is said anymore; I am just hanging out with my friends. I feel I have more friends. Our class is really non-bully now!” – Victim (Class 5)</td>
</tr>
</tbody>
</table>
Table 5: The six themes derived from interviews with members of undercover anti-bullying teams.

<table>
<thead>
<tr>
<th>Theme</th>
<th>Explanation of theme</th>
<th>Illustrative quotations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct support from students</td>
<td>UABT members supported victims in terms of dealing with the bully and/or bullying; in terms of encouraging the victim; or in terms of academic help for the victim.</td>
<td>“Talked to him; support him. One thing is to encourage him.” – UABT member 1 (Class 1)[5pt] “When he was stuck with his work, we would help him. When people were bullying him, we would tell them to stop.” – UABT member 4 (Class 1)</td>
</tr>
<tr>
<td>Social Inclusion</td>
<td>UABT members included victims in groups within and outside the classroom.</td>
<td>“Some of the boys sat with him [victim] in health. We made conversations with him and see how he is doing. People hung out with him at lunch. The team became friends.” – UABT member 5 (Class 1)[5pt] “We would be like ‘come in our group’, so he [victim] wouldn’t be left out.” – UABT member 5 (Class 3)</td>
</tr>
<tr>
<td>Confidence</td>
<td>UABT members noticed that the victim became more confident after the intervention.</td>
<td>“He [victim] is more confident; talks more in class; he has more friends in class.” – UABT member 1 (Class 4)[5pt] “She [victim] is quite open now; she laughs and sings now.” – UABT member 4 (Class 7)</td>
</tr>
<tr>
<td>Autonomy</td>
<td>The UABT members came up with strategies themselves around how to help the victim and how to tackle bullying in the classroom.</td>
<td>“We discussed the bullying and tried to solve it.” – UABT member 1 (Class 1)[5pt] “We came up with good ideas as a group; walking to class with him [victim]; hanging out with him in class; make him feel more welcome; join him in P.E.” – UABT member 1 (Class 4)</td>
</tr>
<tr>
<td>Teamwork</td>
<td>Working as a team to help with bullying in the classroom was an important aspect of the UABT intervention.</td>
<td>“I feel more confident to stand up to people...when in a team.” – UABT member 3 (Class 4)[5pt] “With the group, it wasn’t just me standing up for her; it was a few of us and this helps. We all worked together and never had a disagreement.” – UABT member 2 (Class 7)</td>
</tr>
<tr>
<td>Continuing beyond the intervention</td>
<td>The effects of the intervention on the victim’s classroom experience and/or the flow on effects of the intervention have been positive.</td>
<td>“The team came closer together, and helped not only the victim but others who have been bullied in the class.” – UABT member 3 (Class 3)[5pt] “It helped the bully. He has gotten better and two days ago, he said thank you to the group for him get over his issue.” – UABT member 5 (Class 3)</td>
</tr>
</tbody>
</table>
Table 6: The four themes derived from interviews with teachers.

<table>
<thead>
<tr>
<th>Theme</th>
<th>Explanation of theme</th>
<th>Illustrative quotations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct support from students</td>
<td>The teacher noticed peers supporting the victim in terms of dealing with the bully and/or bullying; in terms of encouraging the victim; or in terms of academic help for the victim.</td>
<td>“The victim has a limited amount of English so he was isolated; so he was frustrated and angry. Now he has a group to go to.” – Teacher (Class 1)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>“He sits with a group of girls now who support him and say to the bullies to stop or they come and get me and I come over and deal with it.” – Teacher (Class 5)</td>
</tr>
<tr>
<td>Social Inclusion</td>
<td>The teacher noticed that the victim was included more in the class by other students.</td>
<td>“The victim was sitting with others; he had a smile on his face; not his head down; and the whole class was intermingling more. There was no separation.” – Teacher (Class 1)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>“[The victim has a] more positive outlook...came out of his shell a bit...communicating more with others and working collaboratively...more inclusive in the classroom setting” – Teacher (Class 4)</td>
</tr>
<tr>
<td>Confidence</td>
<td>The teacher noticed the victim was more confident after the intervention.</td>
<td>“He [victim] is a lot more self-assured...we had speeches today and he was not apprehensive at all about doing it” – Teacher (Class 4)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>“He [victim] was present in class and talking and actively a part of the class. He was talking and this was a noticeable change from the silence” – Teacher (Class 6)</td>
</tr>
<tr>
<td>Continuing beyond the</td>
<td>The effects of the intervention on the victim’s classroom experience and/or the flow on effects of the intervention have been positive.</td>
<td>“The victim has obviously learnt strategies” – Teacher (Class 1)</td>
</tr>
<tr>
<td>intervention</td>
<td></td>
<td>“I feel it [the UABT intervention] has had a positive flow on effect for some of the others in the class. They feel more empowered!” – Teacher (Class 4)</td>
</tr>
</tbody>
</table>

Table 7: Percentages of victims, UABT members, and teachers, who included the different themes in their answers to interview questions.

<table>
<thead>
<tr>
<th>Theme</th>
<th>Victims (n = 7) (%)</th>
<th>UABT members (n = 37) (%)</th>
<th>Teachers (n = 8) (%)</th>
<th>Total (n = 52) (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct support from students</td>
<td>71</td>
<td>54</td>
<td>25</td>
<td>51</td>
</tr>
<tr>
<td>Social inclusion</td>
<td>86</td>
<td>51</td>
<td>38</td>
<td>54</td>
</tr>
<tr>
<td>Confidence</td>
<td>29</td>
<td>41</td>
<td>50</td>
<td>40</td>
</tr>
<tr>
<td>Autonomy</td>
<td>0</td>
<td>11</td>
<td>0</td>
<td>8</td>
</tr>
<tr>
<td>Teamwork</td>
<td>0</td>
<td>22</td>
<td>0</td>
<td>15</td>
</tr>
<tr>
<td>Lack of awareness</td>
<td>0</td>
<td>30</td>
<td>0</td>
<td>21</td>
</tr>
<tr>
<td>Continuing beyond the</td>
<td>86</td>
<td>38</td>
<td>38</td>
<td>44</td>
</tr>
<tr>
<td>intervention</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Discussion

Quantitative analyses

The aim of this study was to evaluate the effects on classroom environment of an anti-bullying intervention which adopts the use of “undercover”, peer-led teams (i.e., UABT) to combat bullying, using an experimental pre-test/post-test design. Overall, this evaluation suggests that the UABT does have a small effect in reducing bullying within the classroom. However, data analyses suggest that the majority of pre-intervention/post-intervention changes were not statistically significant. On inspection of the sub-scales used in this evaluation, Victimisation and the Personal Support sub-scales were significantly affected following the UABT intervention at post-test, suggesting that the establishment of undercover teams were followed by a reduction in feelings of victimisation in the classroom and an increase in students’ perceptions of personal support from other students in the classroom. There was also a reduction bullying behaviour, and increases in pro-social behaviour and students’ perceptions of academic support from other students in the classroom following the UABT intervention, however changes in these subscales were not statistically significant.

These specific effects of UABT on different aspects of a bullying event may be explained by the unique nature of the intervention evaluated in the current study. UABT uses a restorative framework to address bullying rather than a punitive approach, whereby the focus is on the relationships between individuals rather than the offending behaviour. There is a strong emphasis placed on the particular experiences of the victim, using a “no-blame” approach (Robinson & Maines, 1977; Winslade & Williams, 2012). While there are similar restorative approaches to help reduce school bullying, such as the Method of shared concern (Pikas, 2002), the UABT intervention is unique in that it is specifically a victim-focussed intervention. Undercover teams involved in each intervention discuss approaches and devise
strategies on how to help and support the victim through the bullying. An intervention of this nature is likely to have a greater effect on reducing victimisation for the victim involved in the intervention above all else, rather than influencing the general bullying attitudes and behaviours of other students in the class. Although students attitudes towards bullying others and bullying behaviours may change through the influence of the UABT both on the members involved and on the rest of the students in the classroom, the impetus is on supporting the victim, and potentially other students being victimised in the classroom. This is likely to reflect the significant reduction in victimisation across all interventions for all students in comparison to the other sub-scales analysed. On closer inspection of individual questions which make up the Victimisation Sub-scale of the PRQ, it appears the significant reduction in victimisation was driven particularly by a significant reduction in students getting called names by others (Q3; see Table 3) and a significant reduction in getting picked on by others (Q8; see Table 3).

The nature of the UABT intervention is also likely to explain the significant change on the Student Personal Support sub-scale, suggesting that students felt more socially supported by other students in the class following the intervention. Namely, the development of specific behavioural strategies by UABT members aimed at supporting the bullying victim is likely to account for this finding. On inspection of the individual questions which make up the Student Personal Support Sub-scale, it appears that increases in personal support were driven particularly by students’ perception that other students think it is important to be their friend (Q25; see Table 3) and students’ perception that other students really care about them (Q28; see Table 3). An increase in personal support is likely to have not only been experienced by victims of bullying, but also for UABT members as they support each other as part of the team. Additionally, as will be discussed later, there are potential positive flow-effects of the UABT intervention, such that other instances of bullying in the classroom are
challenged by current UABT members, or other students in the class, with social support for
the victims.

While there was no significant change in the Student Academic Support Sub-scale at
the post-intervention phase, on inspection of the individual questions which make up the
Student Academic Support Sub-scale, students’ perceptions that other students care about
how much they learn did increase from pre-intervention to post-intervention (Q23; see Table
3). As reflected in the interview data, this may reflect some UABT strategies focussing on
academic support for victims to help increase their levels of comfort in the classroom.
Additionally, while there was no significant change in the Bullying Sub-scale at the post-
intervention phase, on inspection of the individual questions which make up the Bullying
Sub-scale, there was a significant reduction in students’ attitudes towards favouring giving
soft kids a hard time (Q4; see Table 3). This may have resulted from either direct or indirect
exchanges with the UABTs. Lastly, given the significant increase in social support, it was
surprising that there was also not a significant increase of pro-social behaviour, as indexed by
the Pro-social Sub-scale, following the UABT intervention.

**Qualitative analyses**

The qualitative data provide rich detail for the success of UABTs in eradicating
bullying. In addition to eradicating the bullying for victims, many participants also reported
that they noticed changes occurring for victims. Specifically, that victims became more
confident and outgoing following their involvement with UABTs, and this led to victims
becoming more involved in activities and social interaction both within and outside the
classroom. This was observed by victims themselves, UABT members and teachers. Two
central themes which emerged from the interview data, and that are likely to explain the
success of the UABT intervention, are “social support” and “inclusion”. These two themes
were consistently found across each of the interventions, and appear to be commonly endorsed as strategies for UABT members to help victims of bullying in the classroom. In terms of social support, many UABT members would back victims up when they were being bullied and stick up for them. These experiences of support appeared to not only stop or reduce instances of bullying, but also help victims feel supported and encouraged. Additionally, there were some instances of academic help by UABT members for victims, suggesting another element of support that UABT members were providing.

Social inclusion both within and outside the classroom also appeared to be a consistent strategy for UABT members in helping reduce distress for victims. Both victims and UABT members reported that before the intervention, many of the victims involved in interventions were in some sense excluded or not a part of any group. For example, one UABT member commented that:

“He [victim] used to be a bit of a shadow, but now he is more part of the group.”
(Student 3 – Class 4)

Including victims in activities and groups is likely have made victims feel accepted by other students in the class and consequently more confident in the classroom.

Many victims reported that there had been a positive flow-on effect after the UABT intervention had been completed. For example one victim commented that:

“There was a girl in class who has come back from overseas, she was sitting on her own for a couple of days and I asked if she was ok and she was having friend troubles so I started hanging out with her. I don’t like people feeling how I felt…it’s not nice”
(Victim – Class 5)

Members of undercover teams also noticed the positive flow-on effect of the UABT intervention. Specifically, UABT members mentioned that being part of the UABT
intervention made them feel that they could stand up for others, and that they would do this again. As mentioned, the impact of the bystander is of importance to bullying behaviours and victimisation (Tremlow et al., 2010). When bystanders get involved by defending victims of bullying, bullying is reduced (Salmivalli et al., 2011) because the bully’s attempt to establish hierarchical dominance is met with condemnation by other in the group. The effect of the bystander is also highlighted by another emerging theme that is directly related to the UABT intervention; namely the theme of “teamwork”. UABT members reported feeling comfortable to get involved and support victims of bullying because they were part of a team with a common goal. It appeared that UABT members felt supported in their roles by other members of the team and this enabled them to feel confident in stepping in when bullying occurred. For example, one student commented that:

Members of undercover teams also noticed positive flow-on effects of the UABT intervention on the classroom at large. One student commented that:

“Other people who were not part of the team came on board and did the same stuff as us; like half the class.” (Student 5 – Class 4)

This finding is likely a result of the peer-driven nature of the UABT intervention. In particular, an underlying philosophy of the UABTs is the understanding of the classroom as a social-ecological system that involves the interplay of hierarchical relations. The re-authoring of students’ interpersonal relationships by UABT members is modelled to other students in the class.

One last theme emerging from the interviews with UABT members was that of autonomy. UABT members are given the opportunity to discuss what the best options may be to try and support the victim of bullying. This allows UABT members to become the authors of their own positive interactions in class. As bullies are included in these teams, involvement
in the UABT also allows them to be involved in developing pro-social strategies and positive interpersonal relations in the classroom. Taken together, the UABTs give students an opportunity to develop their own interpersonal skills for experiencing positive relationships with other students.

**Limitations and future recommendations**

Given the specific nature of the UABT intervention, there were some limitations in the current study that are worth discussing in some detail. The majority of evaluations of anti-bullying interventions employ the use of validated measures comprised of likert-scale items much like the PRQ and CLI used in the current study. Scales such as these can be helpful ways to evaluate anti-bullying interventions that are extended class-wide or school-wide. However, as mentioned, the UABT intervention is unique in the sense that the strategies to combat bullying in the classroom are victim-focused, and undercover teams work collaboratively to support and advocate for the victim involved. One potential limitation of evaluating the UABT with the scales used in the current study is that there is a flattening out of experimental effects, due to the responses becoming smoothed out amongst the rest of the student sample. However, classroom climate measures were used in the current study to investigate the impact of UABT intervention on the wider classroom. The results suggest that there was a significant impact of the undercover teams on students’ experiences of victimisation and personal support, which is encouraging given the victim-focus of the UABT intervention. To address, the current study adopted student interviews to expand on victims’ experiences of the UABT intervention, along with interviews with UABT members and teachers.

Another potential limitation in the current study was the post-intervention follow-up period. The post-intervention phase in the current study was immediately after the completion
of the UABT intervention. This occurred when the intervention effects were still fresh. Future research on the UABT intervention will be benefited by having a second follow-up phase to examine the long-term effects of the intervention on victimisation and bullying behaviour.
Appendix A

Classroom Environment Survey

The following is a survey on how you feel about your classroom environment.

It will take no longer than 15 minutes.

This survey is not required for your class. If you choose not to complete this survey, your grade in the class will not be affected in any way.

Although we would really appreciate your help with this survey, do not complete it if that is your wish.

Your responses in this survey will be kept strictly confidential and anonymous, meaning your name will not be matched to your answers on the survey.

Please read the questions carefully and tick the box or circle the answer that best describes your answer.
Classroom Environment Survey

1. How old are you? ______

2. What Year are you at school? (Tick one)
   Year 9  □
   Year 10 □
   Year 11 □
   Year 12 □
   Year 13 □

3. What is your gender? (Tick one)
   Male □
   Female □

4. What ethnicity are you? (Tick as many as necessary)
   NZ European □
   Maori □
   Pacific Islander □
   Asian □
   Other (please state) ____________________________
Classroom Environment

Children sometimes bully weaker children at school by deliberately and repeatedly hurting or upsetting them in some way, for example by hitting or pushing them around, teasing them or leaving them out of things on purpose. It is not bullying when two people of about the same strength have the odd fight or quarrel. Show how often the following statements are true of you. To do this circle one of the answers underneath each statement.

<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I like playing sport</td>
<td>Never</td>
<td>Once in a while</td>
<td>Pretty Often</td>
</tr>
<tr>
<td>2. I get good marks in class</td>
<td>Never</td>
<td>Once in a while</td>
<td>Pretty Often</td>
</tr>
<tr>
<td>3. I get called names by others</td>
<td>Never</td>
<td>Once in a while</td>
<td>Pretty Often</td>
</tr>
<tr>
<td>4. I give soft kids a hard time</td>
<td>Never</td>
<td>Once in a while</td>
<td>Pretty Often</td>
</tr>
<tr>
<td>5. I like to make friends</td>
<td>Never</td>
<td>Once in a while</td>
<td>Pretty Often</td>
</tr>
<tr>
<td>6. I play up in class</td>
<td>Never</td>
<td>Once in a while</td>
<td>Pretty Often</td>
</tr>
<tr>
<td>7. I feel I can’t trust others</td>
<td>Never</td>
<td>Once in a while</td>
<td>Pretty Often</td>
</tr>
<tr>
<td>8. I get picked on by others</td>
<td>Never</td>
<td>Once in a while</td>
<td>Pretty Often</td>
</tr>
<tr>
<td>9. I am part of a group that goes round teasing others</td>
<td>Never</td>
<td>Once in a while</td>
<td>Pretty Often</td>
</tr>
<tr>
<td>10. I like to help people who are being harassed</td>
<td>Never</td>
<td>Once in a while</td>
<td>Pretty Often</td>
</tr>
</tbody>
</table>
11. I like to make others scared of me
   Never  Once in a while  Pretty Often  Very Often

12. Others leave me out of things on purpose
   Never  Once in a while  Pretty Often  Very Often

13. I get into fights at school
   Never  Once in a while  Pretty Often  Very Often

14. I like to show others that I'm the boss
   Never  Once in a while  Pretty Often  Very Often

15. I share things with others
   Never  Once in a while  Pretty Often  Very Often

16. I enjoy upsetting wimps
   Never  Once in a while  Pretty Often  Very Often

17. I like to get into a fight with someone I can easily beat
   Never  Once in a while  Pretty Often  Very Often

18. Others make fun of me
   Never  Once in a while  Pretty Often  Very Often

19. I get hit and pushed around by others
   Never  Once in a while  Pretty Often  Very Often

20. I enjoy helping others
   Never  Once in a while  Pretty Often  Very Often

21. The kids in my class want me to do my best school work
   Never  Once in a while  Pretty Often  Very Often

22. The kids in my class like to help me learn
   Never  Once in a while  Pretty Often  Very Often
23. The kids in my class care about how much I learn

<table>
<thead>
<tr>
<th>Never</th>
<th>Once in a while</th>
<th>Pretty Often</th>
<th>Very Often</th>
</tr>
</thead>
</table>

24. The kids in my class want me to come to class everyday

<table>
<thead>
<tr>
<th>Never</th>
<th>Once in a while</th>
<th>Pretty Often</th>
<th>Very Often</th>
</tr>
</thead>
</table>

25. In this class, other students think it is important to be my friend

<table>
<thead>
<tr>
<th>Never</th>
<th>Once in a while</th>
<th>Pretty Often</th>
<th>Very Often</th>
</tr>
</thead>
</table>

26. In this class, other students like me the way I am

<table>
<thead>
<tr>
<th>Never</th>
<th>Once in a while</th>
<th>Pretty Often</th>
<th>Very Often</th>
</tr>
</thead>
</table>

27. In this class, other students care about my feelings

<table>
<thead>
<tr>
<th>Never</th>
<th>Once in a while</th>
<th>Pretty Often</th>
<th>Very Often</th>
</tr>
</thead>
</table>

28. In this class, other students really care about me

<table>
<thead>
<tr>
<th>Never</th>
<th>Once in a while</th>
<th>Pretty Often</th>
<th>Very Often</th>
</tr>
</thead>
</table>
Appendix B

UABT Semi-Structured Interview Questions

**UABT members**

1. What is your experience of the bullying incident? What is your understanding of what happened?
2. What has been your experience of participating in the Undercover Anti-Bullying Team?
3. What do you think were the good things about the Undercover Anti-Bullying Team?
4. What do you think were the less good or hard things about the Undercover Anti-Bullying Team?
5. If you were to change anything about the Undercover Anti-Bullying Team, what would this be?
6. Would you participate in an undercover anti-bullying team again?
7. What have you taken from this experience?

**Victim**

1. What is your experience of the bullying incident? What is your understanding of what happened?
2. Has the UABT helped you in any way over the last few weeks? If so, then in what ways?
3. What do you think were the good things about the Undercover Anti-Bullying Team?
4. What do you think were the less good or hard things about the Undercover Anti-Bullying Team?
5. If you were to change anything about the Undercover Anti-Bullying Team, what would this be?

**Teacher**

1. What was the classroom environment like before the implementation of the undercover teams?
2. Has the classroom environment changed in the last few weeks since the implementation of the undercover team? If so, in what ways?
References


(Eds.), Constructive and destructive behaviour: Implications for family school and society (pp. 147–165). Washington, DC: American Psychological Association.


