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To cite this article: Hsi-Sheng Wei, Heng-Hao Chang & Ji-Kang Chen (2015): Bullying and Victimization among Taiwanese Students in Special Schools, International Journal of Disability, Development and Education, DOI: [10.1080/1034912X.2015.1092505](https://doi.org/10.1080/1034912X.2015.1092505)

To link to this article: <http://dx.doi.org/10.1080/1034912X.2015.1092505>



Published online: 05 Nov 2015.



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Bullying and Victimization among Taiwanese Students in Special Schools

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This study examined the prevalence of bullying and victimisation among students in special schools in Taiwan. The sample included 140 students with various disabilities, aged 12–18, from 10 special schools throughout Taiwan. Trained interviewers conducted face-to-face surveys using structured questionnaires. Results show that 31.8% of students in special schools experienced peer victimisation within the past year, while 26.5% of students had bullied others during that period. While the findings did not yield gender differences, students in junior high grades tended to report more victimisation experiences than did their senior high counterparts. Severity of disability was positively associated with both bullying and being bullied; however, no difference was found regarding types of disability. Delinquency was positively associated with student bullying and victimisation. Students who suffered victimisation also reported a higher number of suicide attempts. Implications for policy and practice are discussed.

Keywords: adolescents; bullying; disability; peer victimisation; school violence; special school; students; Taiwan

Introduction

Bullying in schools is a common problem worldwide that has received great attention in recent years (McGuckin, Lewis, & Cummins, 2010; Wang, Iannotti, & Nansel, 2009). Previous investigations have established the prevalence of bullying among youth, with a considerable proportion of students being involved as bullies and victims (Craig et al., 2009). Research suggests that the risk of victimisation is distributed unequally among adolescents, and students with disabilities are at particularly high risk of being maltreated by peers (Farmer et al., 2012; Sentenac et al., 2011; Swearer, Wang, Maag, Siebecker, & Frerichs, 2012).

One United States study revealed that the victimisation rate of students with disabilities was 24.5% in elementary school and 34.1% in middle school, which was one to one and a half times the national average for students without disabilities (Blake, Lund, Zhou, Kwok, & Benz, 2012). These findings reveal a disturbing educational issue that needs to be taken seriously, especially in regions where little relevant data exists. In response to this knowledge gap, the first objective of this study was to assess the prevalence of bullying among students with disabilities in Taiwanese special schools.

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Although a number of studies have explored bullying and peer victimisation in the general youth population and have identified major risk factors in multiple domains, researchers have placed less focus specifically on students with disabilities. Existing evidence suggests vulnerability among this student group to peer maltreatment such as being rejected, humiliated, and harassed (Jawaid et al., 2012).

Research on students with intellectual disabilities, visual impairments, attention-deficit/hyperactivity disorder, cerebral palsy, and many other special needs has similarly highlighted their risk of being bullied (Christensen, Fraynt, Neece, & Baker, 2012; Lindsay & McPherson, 2012; Pinquart & Pfeiffer, 2011; Timmermanis & Wiener, 2011). Furthermore, schools specifically designed to serve students with disabilities are not immune to peer victimisation (Norwich & Kelly, 2004). Given the seriousness of the problem, researchers have urged that more attention should be paid to identify the individual characteristics and environmental factors associated with bullying among these adolescents in educational settings (Weiner & Miller, 2006). Therefore, the second objective of this study was to examine the risk factors of bullying and victimisation among students in Taiwanese special schools.

Studies show that peer victimisation in the general population of children and youth is associated with a variety of psychoemotional maladjustments including depression, suicidal ideation, lack of hope, and low life satisfaction (Pranjić & Bajraktarević, 2010; You et al., 2008). While no official statistics exist on this issue, scarce evidence highlights the prevalence of peer maltreatment in local special schools. However, the effect of being bullied among students in special schools remains underexamined, which constitutes the third research objective of this study.

Adolescents with disabilities have the right to feel safe in school, which is necessary for their learning and development (Mephram, 2010). The present study is the first to explore bullying and victimisation empirically among Taiwanese students in special schools. The results are expected to contribute substantially to the current understanding of this issue.

Factors and Outcomes Associated with Bullying

Demographics

Researchers have identified a variety of factors in the individual, family, and peer domains relevant to bullying and victimisation within the general student population. For example, international literature indicates that the prevalence of bullying increases from elementary school, peaks during the junior high school years, and then decreases with increasing grade levels (Chen & Astor, 2009b; Espelage & Swearer, 2003; Pepler et al., 2006). Similarly, considerable evidence from Taiwan and other countries has shown that male students are more likely to be involved in school bullying than are female students (Benbenishty & Astor, 2005; Chen & Astor, 2009a). One study of 400 Australian children found significant gender differences in bullying (Rigby, 2005), in which boys were more likely to report bullying others than were girls ($F = 26.98, p < .01$). However, a Canadian study of 3165 adult men and women with intellectual disabilities from rehabilitation agencies found few gender differences with respect to aggression (Crocker et al., 2006). The applicability of the above demographic effects to Taiwanese adolescents with disabilities awaits empirical examination.

Delinquency

Research indicates a strong association between deviance and school bullying (e.g. Sigfusdottir, Gudjonsson, & Sigurdsson, 2010). Bullies tend to engage in other types of delinquent behaviour such as drinking, running away, and truancy (Farrington, 1993). In one large-scale prospective study (Sourander et al., 2007), children with frequent bully status at 8 years old had higher risk of violent (OR, 2.9; 95% CI, 1.7–4.9) and property offenses (OR, 1.9; 95% CI, 1.1–3.1) at ages 16–20 years. Similarly, researchers have found an association between school bullying and delinquency, substance use, and involvement with risky peers among Taiwanese youth (Chen & Astor, 2010; Wei, Williams, Chen, & Chang, 2010).

Family Characteristics

Family socioeconomic status (SES) and family structures are influential in student behavioural problems at school (Conger & Donnellan, 2007; Davis, Sawyer, Lo, Priest, & Wake, 2010). A recent study of Greek adolescents found that father's unemployment was significantly associated with more bullying, while mother's employment status was associated with being a victim-bully (Magklara et al., 2012).

Jansen et al. (2012) examined 6379 Dutch children and found that the indicators of low family SES, including parental unemployment (OR, 1.15; 95% CI, .89–1.49) and single parenthood (OR, 1.52; 95% CI, 1.14–1.80), were predictive of being a bully. In addition, parental divorce and single parenthood are associated with a higher risk of behavioural problems, including bullying and victimisation (Hoffmann, 2006; Jablonska & Lindberg, 2007).

Peer Relations

Western research indicates that peer rejection is a strong predictor of school bullying and victimisation. One US study with a nationally representative sample ($N = 11,033$) of youth found poor classmate relations were predictive of bully status (Spriggs, Iannotti, Nansel, & Haynie, 2007), and the relative risk ratios and 95% confidence intervals for White, Black, and Hispanic students were 1.71 (1.26–2.30), 1.84 (1.05–3.23), and 2.04 (1.28–3.24), respectively. Previous investigations in Taiwan have similarly showed a strong association between peer rejection and school violence (Chen & Astor, 2010; Wei & Chen, 2008). Thus, rejection is likely to be a major vulnerability for Taiwanese students with special needs, as they often experience greater levels of social adjustment problems with school peers (e.g. Tseng, Kawabata, & Gau, 2011).

Psychoemotional Maladjustment

In addition to the above risk factors associated with bullying and victimisation, the literature indicates that frequent involvement in or exposure to school bullying can negatively affect the psychological well-being of youth (e.g. Graham & Bellmore, 2007). Empirical studies in Western and Asian countries have found depression and suicidal ideation as two negative outcomes associated with bullying involvement (e.g. Chen & Wei, 2011; Kim, Koh, & Leventhal, 2005; Winsper, Lereya, Zanarini, & Wolke, 2012). Research has also suggested that students who bully or who are bullied

experience reduced life satisfaction (Flaspohler, Elfstrom, Vanderzee, Sink, & Birchmeier, 2009).

Bullying among Students with Disabilities in Taiwan

Compared to many other countries, little is known about bullying and victimisation among Taiwanese youth with disabilities. However, in several major school bullying incidents reported by the local media, victims are identified as students with disabilities (Lin, 2013). A recent study showed that, in mainstream classrooms, 33% of students with special needs experienced bullying, while only 5% of their regular peers were bullied (Lo & Lu, 2013). The most common forms of maltreatment reported are verbal and relational bullying. Moreover, Duh and Hsin (2009) found that junior high school students with intellectual disabilities were more likely to be sexually harassed, mostly by acquaintances, than were their peers. Based on interviews with local students and teachers, Lo (2011) concluded that, in regular schools, students with disabilities could easily become the victims of bullying because of poor school performance, unusual behaviours, poor social skills, class disturbances, and failure to comply with group norms.

Children and youth with disabilities are not victimised in mainstream education settings only. Compared to their peers in regular schools and inclusive classrooms, students in special schools and special education programmes may be at a higher risk of peer victimisation, which is a serious issue that must be addressed. Virtually no bullying research to date has been conducted on Taiwanese special schools; however, evidence from other countries suggests the potential gravity of this problem (Norwich & Kelly, 2004; Rose, Espelage, & Monda-Amaya, 2009).

Taiwan currently has 28 special schools (27 public, 1 private) with 687 classes and 6755 students. The majority of students are in the senior high grades. In recent years, the policy of inclusion has been promoted actively, and the number of enrollments in special schools has declined considerably. As a result, students in special schools are usually the most vulnerable and most in need of intensive care.

As institutions designed specifically to serve students with disabilities, special schools are supposed to be places for these children to grow and learn safely (Chang, 2007). Sadly, recently exposed scandals involving special schools in Taiwan have revealed the existence of peer abuse within these well-intended settings (Liu, 2011). A closer look into the class structures and social contexts of special schools sheds light on the potential risk of peer victimisation.

Students with disabilities spend most of their school time with a fixed group of peers in self-contained classrooms. Usually, these students are grouped by disability status and educational level. This grouping structure often means a mix of students of different ages. Further, these children not only have frequent interaction with each other at school but also stay together after class because many special schools also provide residential services. The shortage of school personnel and the proximity between students make many unsupervised spaces on campus easy hot spots for peer victimisation.

The Present Study

The above discussion highlights the prevalence of school bullying and the psychoemotional influence and various factors associated with it. Rose, Monda-Amaya, and Espelage (2011) proposed that distinctive predictive factors, such as type and severity

of disability, are relevant to bullying and victimisation in special education. Past research has shown that bullying and victimisation exist in special schools and their presence may seriously affect the development and adjustment of students with disabilities. As such, bullying is beyond an educational issue and should be regarded a human rights concern. The present study is among the first empirical attempts to analyse these issues in Taiwan. Specifically, the study aimed to assess the prevalence of bullying and victimisation among Taiwanese students in special education schools and examine the effects of factors that are potentially relevant to bullying and victimisation among students with special needs. In addition, this study explored the psychoemotional maladjustment associated with bullying and victimisation among Taiwanese students with disabilities.

Methods

Data and Participants

This study used data from the 2010 Taiwan Children and Youth Life Condition Survey (Wei, Sun, Liu, & Chen, 2011), which is conducted every 4 years by the central government to gather information on the living circumstances and well-being of Taiwanese children and youth. Data are accessible to the public and can be requested from the Children's Bureau. The youth sample of the survey was drawn primarily from mainstream schools islandwide using a random sampling procedure. Students in special schools were recruited with a different sampling frame as a supplementary part of the survey.

The researchers employed a two-stage sampling process in which 10 special schools were first randomly selected from the 28 special schools across Taiwan. Most special schools contained both junior high and senior high grades, and the majority of students were in the senior high grades. In every participating school, about 10 students were drawn from those who were capable of answering the survey. The procedure resulted in 140 respondents, which constituted the sample of this study. Among respondents, 60.4% were boys and 39.6% were girls. The average age was 16, which corresponded to the fact that the student bodies of Taiwanese special schools were largely senior high grades.

Procedure

The researchers mailed a formal letter from the Children's Bureau to each of the 10 special schools to explain the purpose of the survey and ask for administrative assistance with respondent recruitment. Each school was instructed to select about 10 students from its student body. The research team sent interviewers to the schools to conduct face-to-face surveys with participating students. The interviewers had completed intensive training and had over 300 h of experience in survey administration. Assistance from school staff was requested when necessary, including explaining questions to students and evaluating their capabilities of answering the survey. The researchers obtained written consent from participants. The review board of the Children's Bureau approved the survey project, and the study was conducted in accordance with its ethical guidelines. Confidentiality was ensured; the interviewers collected questionnaires immediately upon completion and returned them to the lab for processing.

Measures

Bullying

Two items were used to measure student engagement in physical and verbal bullying during the past year, “Hit, kick, or hurt other students with tools” and “Cursed or insulted other students”. A 5-point Likert scale was provided (never, 1–2 times, 3–4 times, 5–6 times, 7 times or more). These items assessed the behavioural dimensions of bullying, and the interviewers provided oral clarification to help students understand these items.

Victimisation

Two items were used to assess students’ experiences of physical and verbal victimisation during the past year, “Being hit, kicked, or hurt by other students with tools” and “Being cursed or insulted by other students”. A 5-point Likert scale was provided (never, 1–2 times, 3–4 times, 5–6 times, 7 times or more).

Demographics

The first section of the questionnaire requested respondent’s personal information, including sex (male or female) and school grade (Grades 7–12).

Disability Status

The students’ disability types and severity were documented in the survey. The Physically and Mentally Disabled Citizens Protection Act (PMDCPA) of Taiwan recognises 16 types of disability such as vision disability, hearing mechanism disability, limbs disability, autism, etc. Because of the limited number of respondents in many disability categories, the 16 types of disability were clustered based on their features. Students were classified into the following three major groups: Group 1 ($N = 51$), voice mechanism disability or vision or hearing mechanism disability; Group 2 ($N = 54$), mental retardation or autism; and Group 3 ($N = 35$), other disabilities (limbs disability, balance disorders, multiple disabilities, etc.). The PMDCPA also recognises four levels of severity for each disability (minor, moderate, severe, and critical disabled). Specialised physicians assessed both type and severity of disability during official disability certifications.

Family Characteristics

One part of the survey asked about each student’s family, including employment status of father and mother, parents’ marital status, and student’s living situation (e.g. with both parents). The researchers dichotomized responses to the above questions for further analysis (employed/unemployed, married/unmarried, and living with both parents/not living with both parents).

Delinquent Behaviour

Students were also asked whether they had engaged in any of the five common delinquent behaviours (i.e. drinking, smoking, theft, running away, and cheating on an exam)

during the last year. Every item was answered dichotomously (1 = yes, 0 = no). The researchers added the scores of the five items to create a composite measure of delinquency.

Peer Relation Problem

Students were asked whether they had experienced problems with peer relationships in their daily lives during the past year. Participants answered this item dichotomously (1 = yes, 0 = no).

Life Satisfaction

Three items were used to assess student life satisfaction. Items asked students about their attitudes toward themselves, others, and the future: “I believe that people are trustworthy”, “I feel optimistic about my future”, and “I regard myself as a happy person”. A 5-point Likert scale was provided (5 = strongly agree to 1 = strongly disagree). The Cronbach’s alpha was .75.

Attempted Suicide

Students were asked whether they attempted to commit suicide during the last year. Participants answered this item dichotomously (1 = yes, 0 = no).

Data Analysis

This study was a secondary analysis using data from an existing governmental survey on Taiwanese adolescents. The survey covered a range of questions; however, the researchers measured most constructs with only one or two items, which made it difficult to apply advanced statistical techniques. Given that respondents were special school students with various disabilities and types of measurement varied, a series of basic inferential statistics (i.e. ANOVA, Chi-square test, and simple regression) were used as the major analytic strategies. The researchers combined or dichotomised certain variables during the analysis to compare group differences under a limited sample size. The results of analysis are summarised to provide a clear presentation.

Results

Overall, 9.1% of students reported hitting, kicking, or hurting other students with tools during the past year, and 25.6% of students had cursed or insulted others during that period. Taken together, 26.5% of students had ever engaged in physical or verbal bullying. Similarly, 22.7% of students reported being physically bullied, and 27.8% reported being verbally harassed by other students. In total, 31.8% of students had ever suffered physical or verbal victimisation by peers during the past year.

Because of the skewness of the distribution, the researchers combined and dichotomised the physical and verbal bullying scores to create a composite measure (ever bullied = 1/never bullied = 0). A series of statistical analyses were performed to examine potential group differences in bullying. No gender differences in bullying were found, $\chi^2(1, N = 131) = 1.13, p = .29$. Students were dichotomised according to their school grade, junior high ($N = 24$) and senior high ($N = 115$). The analysis revealed no

significant difference in bullying between the two age groups, $\chi^2(1, N = 131) = 3.33$, $p = .07$. Regarding types of disability, the three major student groups included Group 1 ($N = 51$), voice mechanism disability, vision, or hearing mechanism disability; Group 2 ($N = 54$), mental retardation or autism; and Group 3 ($N = 35$), other disabilities. The ANOVA showed no differences in bullying across the three disability groups, $F(2, 129) = 2.14$, $p = .12$). However, the analysis yielded a significant association between the severity of the disability and bullying, $r(122) = .20$, $p = .03$.

The researchers combined and dichotomized (ever victimised = 1/never victimised = 0) students' physical and verbal victimisation scores for further analysis. The analysis yielded no gender difference in victimisation, $\chi^2(1, N = 131) = .02$, $p = .89$. A Chi-square test revealed that students in junior grades had a higher risk of being victimised, $\chi^2(1, N = 131) = 4.74$, $p = .03$, and ANOVA indicated no difference in victimisation across the three disability groups, $F(2, 129) = 1.82$, $p = .17$. However, a significant association existed between the severity of disability and victimisation, $r(122) = .18$, $p = .04$.

Concerning bullying and victimisation, no significant association existed for employment status of fathers, $\chi^2(1, N = 114) = .41$, $p = .52$; $\chi^2(1, N = 114) = 1.40$, $p = .24$, and mothers, $\chi^2(1, N = 122) = .24$, $p = .62$; $\chi^2(1, N = 122) = .01$, $p = .91$, respectively. Additionally, students whose parents were married were no different from other students (Bullying: $\chi^2[1, N = 131] = .71$, $p = .40$ and Victimization: $\chi^2[1, N = 131] = .38$, $p = .50$). Students who lived with both parents were also no different from those who did not (Bullying: $\chi^2(1, N = 128) = .88$, $p = .35$ and Victimization: $\chi^2[1, N = 128] = .01$, $p = .94$).

A positive and significant association existed between delinquency (i.e. drinking, smoking, theft, running away, and cheating on an exam) and bullying, $r(129) = .23$, $p = .01$, and victimisation, $r(129) = .18$, $p = .04$. Self-reported peer relationship problems were not significantly associated with bullying, $r(127) = -.09$, $p = .31$, or victimisation, $r(127) = .06$, $p = .48$.

Life satisfaction was not significantly associated with bullying, $r(124) = .07$, $p = .47$, or victimisation, $r(124) = -.02$, $p = .79$. No differences in attempted suicide were found between students with and without experience of bullying others, $F(1, 130) = .18$, $p = .68$. However, students with victimisation experiences were at significantly higher risk of attempted suicide, $F(1, 130) = 3.93$, $p = .05$.

Discussion

This study provides possibly the first large-scale assessment of student bullying and victimisation within special schools in Taiwan. The researchers selected the sample from 10 special schools islandwide, which accounted for more than one-third of the special schools in Taiwan. The results revealed the prevalence of multiple forms of bullying and victimisation among students in these special schools, with 31.8% having experienced peer victimisation in the past year and about 26.5% having bullied others during the same period.

Past research has shown that students with disabilities are at a higher risk of being ridiculed and victimized by other students in mainstream educational settings (Carter & Spencer, 2006). However, because the student bodies of special schools are exclusively children and youth with special needs, the results of the present study suggest that general students are not the sole bullies. In fact, students with disabilities can be bullied physically and verbally by other students with disabilities. In other words, students with

disabilities may not only be victims but may also be bullies in special schools. Thus, the educators and professionals in the field of special education should recognise and address these issues. The gravity of this problem is especially heavy in Taiwan because students in local special schools are usually the most vulnerable. Given that many of these adolescents have impaired communication and body movement capabilities, it may be more difficult for them to escape from the scene or seek help from others. Thus, special school personnel need to develop a sensitivity to peer victimisation among students with disabilities and intervene in time (Maag & Katsiyannis, 2012).

The second objective of this study was to examine the applicability of risk factors for bullying and victimisation drawn from the literature. As mentioned, most of the relevant studies are based on students in general education, and relatively little investigation has been done on students in special schools. The findings of the present study revealed certain similarities to previous studies that tend to confirm these findings. For example, students in junior high grades reported higher rates of victimisation than did their senior high counterparts, which is a result found repeatedly among Taiwanese adolescents (e.g. Chen & Astor, 2009a). Therefore, special school students in this age range should be regarded as the primary targets of bullying prevention and intervention measures.

Another common finding is the positive association between delinquency and bullying and victimisation. The delinquent behaviours surveyed included drinking, smoking, theft, running away, and cheating on an exam; many of these behaviour have been found to have a negative influence on adolescents' psychological well-being and educational achievement, which can lead to negative developmental outcomes in the long-run. In fact, adolescents with disabilities are often at a disproportionately higher risk of involvement in the juvenile justice system (Mallett, Stoddard-Dare, & Workman-Crewnshaw, 2011), and their prospects may worsen because of the system's failure to identify and serve their special needs. Therefore, it is recommended that special school students' involvement in bullying and victimisation be closely assessed and monitored as a potential indicator of other types of antisocial behaviours and delinquency.

The findings indicated no significant association between some of those previously identified factors, such as sex, family characteristics, and self-reported peer relationships, with bullying and victimisation among special school students. Few bullying studies are available for comparison that have focused specifically on special school students; however, certain relevant investigations have found similar results. For example, a study found no differences in bullying or victimisation between genders among special education students (Swearer et al., 2012). Parent marital status is also not associated with aggression among children and adolescents with autism spectrum disorders (Kanne & Mazurek, 2011).

The lack of a significant association between self-reported peer relationships and bullying or victimisation is noteworthy. However, because self-evaluation is often a biased measure for those with low peer acceptance, peer reports or social matrices may provide data that is preferable in determining the magnitude of relevance. Taken together, the findings of this study highlight a number of potential differences in bullying between general education students and those in special schools. Future research is needed to clarify this heterogeneity and identify the specific mechanisms involved.

The analysis in this study revealed no difference between types of disability; however, severity of disability was positively associated with both bullying and being bullied. In their recent review, Rose et al. (2011) noted that the type and severity of disability were both significant predictive factors of bullying and victimisation in special education.

The present study partly echoes these conclusions. Harassment and maltreatment of the more disadvantaged and vulnerable seems to occur not only between students with and without disabilities, but also among students with disabilities. Whole-school anti-bullying approaches are advised to create a caring community for teachers and students (Flynt & Morton, 2004).

Finally, self-reported victimisation was associated with suicide attempts, which suggests that these experiences can have profound influences and negative psychological consequences for victims. Researchers suggest that the bullying behaviours of students with disabilities may be reactions to constant victimisation by peers (Rose, Espelage, Aragon, & Elliott, 2011), which could constitute a vicious cycle and result in the co-occurrence of bullying and victimisation among these adolescents. Although often overlooked as harmless playful acts between students, such incidents are important warning signs that require the serious attention of educators and helping professionals in special schools.

The above discussion sheds light on a dilemma that has long existed in the policy debate between self-contained and regular class placement. Although inclusion in a regular class has considerable benefits for students with disabilities (Doré, Dion, Wagner, & Brunet, 2002), research clearly shows that students with special needs are at a higher risk of being rejected and victimized in these classrooms. From a peer social network perspective, they may experience lower centrality, acceptance, companionship, and reciprocity within the peer network of regular classrooms (Chamberlain, Kasari, & Rotheram-Fuller, 2007).

On the other hand, students in self-contained classrooms are often similar regarding their disability statuses and capability levels, which can facilitate peer support and emotional bonds. However, these similarities may also limit students' social development and elicit reciprocal responses from each other that maintain or escalate their problem behaviours (Farmer, Pearl, & Van Acker, 1996). The relatively high prevalence of both bullying and victimisation among students in special schools may be a result of mutual reinforcement. School staff and teachers may even tolerate student aggression and facilitate a repressive school culture that stops victims from seeking help (Liu, 2011). The close examination of peer dynamics, school characteristics, and interactions of staff and teachers was beyond the scope of the present study; however, qualitative research into these factors is crucial for effective intervention and prevention design (Torrance, 2000).

Limitations

One major limitation of the present study concerns the difficulty of accurately assessing respondents' bullying and victimisation experiences in special schools. Although a national random sample was collected, many students in special schools have impaired vision, hearing, and expressive or receptive communication capabilities. Therefore, it is sometimes challenging for these students to read, comprehend, and answer surveys adequately. Assistance from trained interviewers and schoolteachers in face-to-face interviews was provided; however, such arrangements also threatened the validity of responses because of social desirability issues.

The results of this study are better regarded as an underestimation of bullying and peer victimisation in local special schools. Still, they showed a high victimisation rate with 22.7% of special school students being physically bullied. Using identical measures, a national survey on general education students within the same age range

yielded a physical victimisation rate of 11.2% (Wei et al., 2011). However, differences in sampling methods prevent a direct comparison to the current findings, which is another limitation of this study.

The current survey was cross-sectional in nature and inadequate to evaluate the direction of causality between variables. More longitudinal research is needed to determine the causal relationships and potential mediating mechanisms involved. Finally, the survey measures used in this study only assessed the behavioural dimensions of bullying and victimisation and overlooked the power imbalance and peer dynamics of these acts. Other types of abusive peer relationships in special schools were not examined. Qualitative approaches, such as in-depth interviews, focus groups, and ethnographic fieldwork are called upon to address the issues raised in the present study.

Conclusion

With a national random sample of special education students, this study provided the first large-scale empirical assessment of bullying and victimisation in special schools in Taiwan. The results clearly reveal the prevalence of bullying and victimisation among adolescents with disabilities as well as their similarities to and differences from school bullying among general education students. Moreover, special school students who are bullied by peers have a higher rate of suicide attempts; this finding calls for immediate policy and service response. Under the current regulations, students with special needs are regularly assessed to design their Individualized Education Plans (IEP). However, the risk and experiences of peer victimisation are almost never examined in this review process. In fact, IEP can be used as a helpful tool in bullying prevention and intervention for these students. Furthermore, the responsibility of special school personnel to protect students from bullying and harassment should be clearly stated in the related legislations because a safe environment is necessary for upholding the educational rights of students with disabilities.

Although this study had certain limitations, it raised an important issue that has long been neglected by the field. In Taiwan, several school bullying incidents in the 2 years prior to this study have attracted wide media attention, and the government has passed legislation for prevention and intervention in a very short time (ROC Ministry of Education, 2012). The Ministry of Education has issued major policies and numerous materials accordingly; however, they almost exclusively focus on general education schools. To date, few programs and strategies have been designed specifically for special school students that consider their characteristics and needs. This study contributes to a localised knowledge base regarding bullying in special schools and may raise public awareness as well as help increase efforts to prevent this problem. It is hoped that by conducting this study, we can promote the safety and well-being of students with special needs in Taiwan.

Disclosure statement

No potential conflict of interest was reported by the authors.

References

- Benbenishty, R., & Astor, R. A. (2005). *School violence in context*. New York, NY: Oxford University Press.

- Blake, J. J., Lund, E. M., Zhou, Q., Kwok, O., & Benz, M. R. (2012). National prevalence rates of bully victimization among students with disabilities in the United States. *School Psychology Quarterly*, 27, 210–222. doi:10.1037/spq0000008
- Carter, B. B., & Spencer, V. G. (2006). The fear factor: Bullying and students with disabilities. *International Journal of Special Education*, 21, 11–23.
- Chamberlain, B., Kasari, C., & Rotheram-Fuller, E. (2007). Involvement or isolation? The social networks of children with autism in regular classrooms. *Journal of Autism and Developmental Disorders*, 37, 230–242. doi:10.1007/s10803-006-0164-4
- Chang, H. H. (2007). Social change and the disability rights movement in Taiwan: 1980–2002. *The Review of Disability Studies: An International Journal*, 3, 3–19.
- Chen, J. K., & Astor, R. A. (2009a). The perpetration of school violence in Taiwan: An analysis of gender, grade level and school type. *School Psychology International*, 30, 568–584.
- Chen, J. K., & Astor, R. A. (2009b). Students' reports of violence against teachers in Taiwanese schools. *Journal of School Violence*, 8, 2–17.
- Chen, J. K., & Astor, R. A. (2010). School violence in Taiwan: Examining how western risk factors predict school violence in an Asian culture. *Journal of Interpersonal Violence*, 25, 1388–1410.
- Chen, J. K., & Wei, H. S. (2011). The impact of school violence on self-esteem and depression among Taiwanese junior high school students. *Social Indicators Research*, 100, 479–498.
- Christensen, L. L., Fraynt, R. J., Neece, C. L., & Baker, B. L. (2012). Bullying adolescents with intellectual disability. *Journal of Mental Health Research in Intellectual Disabilities*, 5, 49–65. doi:10.1080/19315864.2011.637660
- Conger, R. D., & Donnellan, M. (2007). An interactionist perspective on the socioeconomic context of human development. *Annual Review of Psychology*, 58, 175–199.
- Craig, W. M., Currie, C., Grinvoald, H., Dostal, S., Harel, Y., Hetland, J., ... Pickett, W. (2009). A cross-national profile of bullying and victimization among adolescents in 40 countries. *International Journal of Public Health*, 54, 216–224. doi:10.1007/s00038-009-5413-9
- Crocker, A. G., Mercier, C. C., Lachapelle, Y. Y., Brunet, A. A., Morin, D. D., & Roy, M. E. (2006). Prevalence and types of aggressive behaviour among adults with intellectual disabilities. *Journal of Intellectual Disability Research*, 50, 652–661. doi:10.1111/j.1365-2788.2006.00815.x
- Davis, E., Sawyer, M. G., Lo, S. K., Priest, N., & Wake, M. (2010). Socioeconomic risk factors for mental health problems in 4–5-year-old children: Australian population study. *Academic Pediatrics*, 10, 41–47.
- Doré, R., Dion, É., Wagner, S., & Brunet, J. (2002). High school inclusion of adolescents with mental retardation: A multiple case study. *Education & Training in Mental Retardation & Developmental Disabilities*, 37, 253–261.
- Duh, J. J., & Hsin, Y. W. (2009). Sexual harassment experiences of junior high school students with intellectual disability: Is there difference before 15 years ago? *Gender Equity Education Quarterly*, 48, 29–35.
- Espelage, D. L., & Swearer, S. M. (2003). Research on school bullying and victimization: What have we learned and where do we go from here. *School Psychology Review*, 32, 365–383.
- Farmer, T. W., Pearl, R., & Van Acker, R. M. (1996). Expanding the social skills deficit framework: A developmental synthesis perspective, classroom social networks, and implications for the social growth of students with disabilities. *The Journal of Special Education*, 30, 232–256. doi:10.1177/002246699603000302
- Farmer, T. W., Petrin, R., Brooks, D., Hamm, J. V., Lambert, K., & Gravelle, M. (2012). Bullying involvement and the school adjustment of rural students with and without disabilities. *Journal of Emotional and Behavioral Disorders*, 20, 19–37. doi:10.1177/1063426610392039
- Farrington, D. P. (1993). Understanding and preventing bullying. *Crime and Justice*, 17, 381–458.
- Flaspohler, P. D., Elfstrom, J. L., Vanderzee, K. L., Sink, H. E., & Birchmeier, Z. (2009). Stand by me: The effects of peer and teacher support in mitigating the impact of bullying on quality of life. *Psychology in the Schools*, 46, 636–649. doi:10.1002/pits.20404
- Flynt, S. W., & Morton, R. C. (2004). Bullying and children with disabilities. *Journal of Instructional Psychology*, 31, 330–333.

- Graham, S., & Bellmore, A. D. (2007). Peer victimization and mental health during early adolescence. *Theory into Practice, 46*, 138–146.
- Hoffmann, J. P. (2006). Family structure, community context, and adolescent problem behaviors. *Journal of Youth and Adolescence, 35*, 867–880.
- Jablonska, B., & Lindberg, L. (2007). Risk behaviours, victimisation and mental distress among adolescents in different family structures. *Social Psychiatry and Psychiatric Epidemiology, 42*, 656–663. doi:10.1007/s00127-007-0210-3
- Jansen, P. W., Verlinden, M., Berkel, A., Mieloo, C., van der Ende, J., Veenstra, R., ... Tiemeier, H. (2012). Prevalence of bullying and victimization among children in early elementary school: Do family and school neighbourhood socioeconomic status matter? *BMC Public Health, 12*, 494. doi:10.1186/1471-2458-12-494
- Jawaid, A. A., Riby, D. M., Owens, J. J., White, S. W., Tarar, T. T., & Schulz, P. E. (2012). 'Too withdrawn' or 'too friendly': Considering social vulnerability in two neuro-developmental disorders. *Journal of Intellectual Disability Research, 56*, 335–350. doi:10.1111/j.1365-2788.2011.01452.x
- Kanne, S. M., & Mazurek, M. O. (2011). Aggression in children and adolescents with ASD: Prevalence and risk factors. *Journal of Autism and Developmental Disorders, 41*, 926–937. doi:10.1007/s10803-010-1118-4
- Kim, Y. S., Koh, Y. J., & Leventhal, B. (2005). School bullying and suicidal risk in Korean middle school students. *Pediatrics, 115*, 357–363.
- Lin, Y. S. (2013). The characteristics of disable students and school bullying. *The Journal of Chiayi Special Education, 17*, 53–61.
- Lindsay, S., & McPherson, A. C. (2012). Experiences of social exclusion and bullying at school among children and youth with cerebral palsy. *Disability and Rehabilitation, 34*, 101–109. doi:10.3109/09638288.2011.587086
- Liu, M. T. (2011, October). Sexual harassment ruining schools. *Taipei Times*. Retrieved from <http://www.taipetimes.com/News/editorials/archives/2011/10/02/2003514699>
- Lo, F. L. (2011). A study of bullying victimization of disable students in Taiwan middle school: From a view of "special education teachers in inclusive classes". *Special Educators Quarterly, 27*, 13–23.
- Lo, F. L., & Lu, T. H. (2013). A survey study of the current status for students with disabilities bullied by peers in inclusive classes. *Bulletin of Special Education and Rehabilitation, 29*, 73–102.
- Maag, J. W., & Katsiyannis, A. (2012). Bullying and students with disabilities: Legal and practice considerations. *Behavioral Disorders, 37*, 78–86.
- Magklara, K., Skapinakis, P., Gkatsa, T., Bellos, S., Araya, R., Stylianidis, S., & Mavreas, V. (2012). Bullying behaviour in schools, socioeconomic position and psychiatric morbidity: A cross-sectional study in late adolescents in Greece. *Child and Adolescent Psychiatry and Mental Health, 6*, 8. doi:10.1186/1753-2000-6-8
- Mallett, C. A., Stoddard-Dare, P., & Workman-Crewnshaw, L. (2011). Special education disabilities and juvenile delinquency: A unique challenge for school social work. *School Social Work Journal, 36*, 26–40.
- McGuckin, C., Lewis, C., & Cummins, P. K. (2010). Experiences of school bullying, psychological well-being and stress in Northern Ireland: Data from the 2004 Young Life and Times Survey. *The Irish Journal of Psychology, 31*, 53–61.
- Mephram, S. (2010). Disabled children: The right to feel safe. *Child Care in Practice, 16*, 19–34. doi:10.1080/13575270903368667
- Norwich, B., & Kelly, N. (2004). Pupils' views on inclusion: Moderate learning difficulties and bullying in mainstream and special schools. *British Educational Research Journal, 30*, 43–65. doi:10.1080/01411920310001629965
- Pepler, D. J., Craig, W. M., Connolly, J. A., Yuile, A., McMaster, L., & Jiang, D. (2006). A developmental perspective on bullying. *Aggressive Behavior, 32*, 376–384.
- Pinquart, M., & Pfeiffer, J. P. (2011). Bullying in German adolescents: Attending special school for students with visual impairment. *British Journal of Visual Impairment, 29*, 163–176. doi:10.1177/0264619611415332
- Pranjić, N., & Bajraktarević, A. (2010). Depression and suicide ideation among secondary school adolescents involved in school bullying. *Primary Health Care Research and Development, 11*, 349–362. doi:10.1017/S1463423610000307

- Rigby, K. (2005). Why do some children bully at school? The contributions of negative attitudes towards victims and the perceived expectations of friends, parents and teachers. *School Psychology International*, *26*, 147–161.
- ROC Ministry of Education. (2012). School bullying prevention website. Retrieved from <https://csrc.edu.tw/bullying/>
- Rose, C., Espelage, D., & Monda-Amaya, L. E. (2009). Bullying and victimisation rates among students in general and special education: A comparative analysis. *Educational Psychology*, *29*, 761–776. doi:10.1080/01443410903254864
- Rose, C. A., Espelage, D. L., Aragon, S. R., & Elliott, J. (2011). Bullying and victimization among students in special education and general education curricula. *Exceptionality Education International*, *21*, 2–14.
- Rose, C. A., Monda-Amaya, L. E., & Espelage, D. L. (2011). Bullying perpetration and victimization in special education: A review of the literature. *Remedial and Special Education*, *32*, 114–130. doi:10.1177/0741932510361247
- Sentenac, M., Gavin, A., Arnaud, C., Molcho, M., Godeau, E., & Gabhainn, S. (2011). Victims of bullying among students with a disability or chronic illness and their peers: A cross-national study between Ireland and France. *Journal of Adolescent Health*, *48*, 461–466. doi:10.1016/j.jadohealth.2010.07.031
- Sigfusdottir, I. D., Gudjonsson, G. H., & Sigurdsson, J. F. (2010). Bullying and delinquency: The mediating role of anger. *Personality and Individual Differences*, *48*, 391–396.
- Sourander, A., Jensen, P., Rönning, J. A., Elonheimo, H., Niemelä, S., Helenius, H., ... Almqvist, F. (2007). Childhood bullies and victims and their risk of criminality in late adolescence. *Archives of Pediatrics and Adolescent Medicine*, *161*, 546–552.
- Spriggs, A. L., Iannotti, R. J., Nansel, T. R., & Haynie, D. L. (2007). Adolescent bullying involvement and perceived family, peer and school relations: Commonalities and differences across race/ethnicity. *Journal of Adolescent Health*, *41*, 283–293.
- Swearer, S. M., Wang, C., Maag, J. W., Siebecker, A. B., & Frerichs, L. J. (2012). Understanding the bullying dynamic among students in special and general education. *Journal of School Psychology*, *50*, 503–520. doi:10.1016/j.jsp.2012.04.001
- Timmermanis, V., & Wiener, J. (2011). Social correlates of bullying in adolescents with attention-deficit/hyperactivity disorder. *Canadian Journal of School Psychology*, *26*, 301–318. doi:10.1177/0829573511423212
- Torrance, D. A. (2000). Qualitative studies into bullying within special schools. *British Journal of Special Education*, *27*, 16–21. doi:10.1111/1467-8527.t01-1-00151
- Tseng, W. L., Kawabata, Y., & Gau, S. S. F. (2011). Social adjustment among Taiwanese children with symptoms of ADHD, ODD, and ADHD comorbid with ODD. *Child Psychiatry & Human Development*, *42*, 134–151.
- Wang, J., Iannotti, R. J., & Nansel, T. R. (2009). School bullying among adolescents in the United States: Physical, verbal, relational, and cyber. *Journal of Adolescent Health*, *45*, 368–375. doi:10.1016/j.jadohealth.2009.03.021
- Wei, H. S., & Chen, J. K. (2008). Social withdrawal, peer rejection, and peer victimization in Taiwanese middle school students. *Journal of School Violence*, *8*, 18–28.
- Wei, H. S., Williams, J. H., Chen, J. K., & Chang, H. Y. (2010). The effects of individual characteristics, teacher practice, and school organizational factors on students' bullying: A multilevel analysis of public middle schools in Taiwan. *Children and Youth Services Review*, *32*, 137–143.
- Wei, H. S., Sun, S. W., Liu, S. F., & Chen, J. K. (2011). *2010 Taiwan children and youth life condition survey report*. Taichung: Children's Bureau.
- Weiner, M. T., & Miller, M. (2006). Deaf children and bullying: Directions for future research. *American Annals of the Deaf*, *151*, 61–70. doi:10.1353/aad.2006.0021
- Winsper, C., Lereya, T., Zanarini, M., & Wolke, D. (2012). Involvement in bullying and suicide-related behavior at 11 years: A prospective birth cohort study. *Journal of the American Academy of Child and Adolescent Psychiatry*, *51*, 271–282.
- You, S., Furlong, M. J., Felix, E., Sharkey, J. D., Tanigawa, D., & Green, J. (2008). Relations among school connectedness, hope, life satisfaction, and bully victimization. *Psychology in the Schools*, *45*, 446–460. doi:10.1002/pits.20308