# The Role of School Factors in School Violence in Taiwan

## Abstract

To date, very few national studies have been conducted in Asia on school violence issues. In addition, few studies explored how school dynamics, family factors, personal traits work together to contribute to perpetration of school violence. Using a nationally representative sample of 14,042 Taiwanese students from elementary schools (grades 4 to 6), junior high schools (grades 7 to 9), academic high schools and vocational high schools (grades 10 to 12), the authors had conducted a series of studies examining the perpetration of school violence in Taiwan. The authors examined a theoretical model of how school engagement, school risky peers, and student-teacher relationships mediate the effects of personal traits and family factors on school violence committed by students against other students and teachers in different three studies (i.e., elementary, junior high, academic high and vocational high schools). Structural equation modeling was used to examine the theoretical model. The findings across all three structural equation model studies suggest that the theoretical model was a good fit for each type of school samples. Moreover, the theoretical models explained larger amounts of the explained variance for violence against student and teachers. The overall findings suggested that school factors such as school engagement, school risky peers, and student-teacher relationships mediate family and personal factors. However, each school variable plays a different role in mediating the relationship for each school type and across development. Implications for theory, policy and practice, and recommendation for future research are discussed.

Using a nationally representative sample in Taiwan, this study examines how students' personal, family, and school factors influence school violence in Asian cultures. In contrast to earlier psychological theories which stress the single risk factor contributions of prior victimization, family factors, and psychological characteristics to perpetration, this study proposes a theoretical model hypothesizing that low levels of school engagement, exposure to risky peers, and poor student-teacher relationships mediate the effects of students' negative personal traits, parental monitoring, and prior victimization to student violence against students and teachers. This model is highly influenced by Benbenishty and Astor's (2005) social-ecological model, which stressed that when looking at "school violence", the school itself, as a social context, should be the center of the theoretical model.

The data for the empirical studies are drawn from a comprehensive, nationally representative (N=14,044) study of school violence in Taiwan (Project of Prevention and Control of School Violence in Taiwan; Wu, Lee, Yin, & Hu, 2000). In this project, students were given a structured questionnaire which included over 150 items in eight domains regarding students' basic demographic background and other information in their personal, family, and school experience. This study was supported by Taiwan's National Science Council (NSC).

In general, the results of studies suggested that within-school variables (school engagement, school at-risk peers, and student-teacher relationships) mediate the relation between external-school variables (negative personal traits, parental monitoring, and prior victimization) and school violence committed by student against other students and teachers. That is, as students' negative personal and family experiences increase, they have lower levels of school engagement and poorer social interaction with students and teachers on school grounds. In turn, their likelihood of involving in school violence will increase. These

findings support Benbenishty and Astor's (2005) theoretical model, which states that school violence is influenced by a combination of numerous within- and external-school variables, and within-school variables can mediate contributions from external contexts. In contrast with earlier psychological theories which stress single risk factor contributions of prior victimization, family function, and psychological characteristics to perpetration, this finding provides strong ecological evidence that school environment is a unique developmental setting, contributing to school violence both directly and indirectly (Astor et al., 2002; Benbenishty et al., 2002).

## Implications

The findings indicate school environment as a unique developmental setting to school violence compared with other normative environments such as home (Astor et al., 2002; Benbenishty, Astor, Zeira & Vinokur, 2002). It implies that improving student school experience could show a strong effective response to violence. Most importantly, interventions focusing on decreasing students' involvement in at-risk peers may lead to a greater reduction of student violence against students and teachers, because the results show that the variable of risky peers is the most powerful factor influencing student violence against students and teachers. However, this does not mean that interventions should solely focus on school level. To maximize effectiveness of school violence intervention programs, interventions must integrate personal, family, and school level approaches (Ahmed & Braithwaite, 2004), because the results of this study show that the influence of the personal, family and school variables in this model account for a relatively large amount of the explained variance for student violence against students and student violence against teachers.

This finding suggests that the prevalence of violence may vary from setting to setting

but the influences of personal, family, and school factors on violence against students and teachers tend to be similar between genders and across school types and cultures. This implies school violence intervention incorporated at a national level could be affective across genders and different types of schools. In addition, the findings support school policy makers or practitioners in developing new international-based school violence prevention and intervention.

*Limitation and Future Studies*

The data in this study is only based on student self-reporting, and school violence was measured in terms of behavior occurring during the prior twelve months. This may lead students to under- or over- report violent behavior because some of these events are so common that students might not recall the entire year's events (Benbenishty & Astor, 2005). Future studies should collect information from multiple sources, such as teachers' reports, parents, or peer nomination. Hierarchical Linear Model (HLM) may be used to examine how nested contexts influence perpetration of school violence.

This study examined how within-school variables mediate school violence based on these within-school dynamics across all schools in Taiwan. However, schools across an entire country are likely to vary in levels school dynamics and school climate. Future research need to explore the variation between schools on prevalence of school violence and on how school variable mediate school violence. This would require different methods of sampling such as a random sample of schools rather than a random sample of students (e.g., Benbenishty & Astor, 2005). Such future studies could then examine if school cultures vary widely or are similar with the variables explored in this study.

This study shows that the age-related trends of the results of the model in this study were based on cross-sectional data. This data may not be used to establish developmental

progressions and cause-effect among variables. In order to understand more important information on developmental progression of violent behavior in school and the casual relationships between variables in this model, longitudinal design should be conducted in the future. In addition, we may use a nested design and longitudinal studies of students and parents over time to examine the effects of the interaction between students, family functions and school characteristics as well as the effects of changes in the school and family overtime (Benbenishity & Astor, 2005).

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