The assessment of bystander intervention in bullying: Examining measurement invariance across gender

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ABSTRACT

Research on bystander intervention in bullying has indicated that prosocial helping behavior is not consistent across gender, with girls engaging in more bystander intervention; however, a search of the literature does not reveal any studies that have examined the validity of bystander intervention measurement across subpopulations. The purpose of the current study was to investigate measurement invariance across gender in both the elementary and middle school versions of the Bystander Intervention Model in Bullying measure among a sample of 682 fourth to eighth grade students (46% girls, 47% low income, 87% White). Results suggest evidence of measurement equivalence of the five-step bystander intervention model across gender in the elementary and middle school samples. Given this, there is evidence that the measure can be used for research and practical purposes in these grade levels and that comparisons between boys and girls are appropriate.

1. Introduction

Bullying is defined as unwanted aggressive behavior by youth(s) involving an observed or perceived power imbalance that is repeated or is highly likely to be repeated, which may inflict physical, psychological, social, or educational distress (Gladden, Vivolo-Kantor, Hamburger, & Lumpkin, 2014; Olweus, 1993). Victims of bullying have more internalizing problems (e.g., anxiety, depression, suicidal ideation and attempts; Klomek, Marrocco, Kleinman, Schonfeld, & Gould, 2007; Nickerson & Slater, 2009; Ttofi, Farrington, Losel, & Loeber, 2011) and social difficulties (e.g., rejection, lack of acceptance, and lower social status) than their peers (Ivarsson, Broberg, Arvidsson, & Gillberg, 2005; Salmivalli, Lagerspetz, Björkqvist, Österman, & Kaukiainen, 1996). Perpetrators of bullying engage in more risky behaviors, such as weapon carrying (Dukes, Stein, & Zane, 2010) and substance abuse (Carlyle & Steinman, 2007; Kim, Catalano, Haggerty, & Abbott, 2011), and also experience increased depression and suicidal ideation compared to their peers (Espelage & Holt, 2013; Klomek et al., 2007; Nickerson & Slater, 2009). A social-ecological framework is useful for conceptualizing and examining bullying (Hong & Espelage, 2012; Rose, Nickerson, & Stormont, 2015). Within the social-ecological framework, research has examined the effects of bullying on bystanders, finding that they report increased anxiety, depression, and trauma symptomatology (Hutchinson, 2012; Nishina & Juvonen, 2005; Rivers, Poteat, Noret, & Ashurst, 2009).

From a social-ecological perspective and in consideration of the importance of bystanders in bullying, it is particularly salient to involve peers in prevention and intervention efforts. The social-ecological theory of bullying highlights the role and characteristics of

individuals, peers, classrooms, teachers, schools, and families in the promotion or inhibition of bullying (Swearer & Espelage, 2011). Viewing bullying as a social ecology, rather than a social interaction between a victim-bully dyad, allows educators and researchers to think about prevention and intervention efforts that incorporate all individuals in a school, rather than focusing on how to reduce aggression in bullies and support or counsel victims.

Research has shown that peers witness > 80% of peer victimization episodes, but intervene < 20% of the time (Atlas & Pepler, 1998; Hawkins, Pepler, & Craig, 2001). This is concerning because when peers do intervene, the bullying stops > 50% of the time (Craig, Pepler, & Atlas, 2000; O'Connell, Pepler, & Craig, 1999). Research on the effectiveness of bullying prevention programs has revealed that many bullying prevention programs do not make a significant difference, but preliminary findings are more promising for programs that increase bystander intervention (Polanin, Espelage, & Pigott, 2012). The KiVa program, which has a large emphasis on bystander intervention, has been found to decrease victimization for elementary and middle school students (Garandeau, Poskiparta, & Salmivalli, 2014; Kärnä et al., 2011; Williford et al., 2012). Many relationship violence prevention programs have shifted to focus on the bystander because of their ubiquitous presence, the difficulty in changing perpetrator motivation and behavior, and the promise of viewing school and community members as allies and potential active interveners (Banyard, 2015; Burn, 2009; Jouriles, Rosenfield, Yule, Sargent, & McDonald, 2016). Unfortunately, despite the promise of engaging peers to reduce bullying and victimization, schools often do not systematically include peers in bullying prevention efforts (Sherer & Nickerson, 2010; Ttofi & Farrington, 2011). Though involving peers can cast a wider net of prevention, it is also a resource-intensive task to train and supervise peers which could be a barrier to involving peers. Moreover, a recent meta-analysis found that implementing some types of peer intervention (but not all forms of peer interventions) like peer mediation actually increases peer victimization (Ttofi & Farrington, 2011) which could make schools shy away from including peers in bullying prevention programs.

Salmivalli et al. (1996) were among the first to formally discuss the multiple roles that youth play in bullying. They identified six different participant roles: victim, bully, reinforcer of the bully, assistant of the bully, defender of the victim, and outsider. The reinforcer, assistant, defender, and outsider roles included directly or indirectly involved in bullying by helping the bullying (assistant and reinforcer), helping the victim (defender), or ignoring bullying (outsider). Since Salmivalli and colleagues' seminal work, research has expanded to better understand the correlates of the defender role in bullying, such as empathy (Barchia & Bussey, 2011; Nickerson, Aloe, & Werth, 2015), self-efficacy, social and moral development, and cooperation (Gini, Albiero, Benelli, & Altoè, 2008; Gini, Hauser, & Pozzoli, 2011; Jenkins, Demaray, Fredrick, & Summers, 2014).

1.1. Bystander intervention model

Although the research on participant roles in bullying has burgeoned, few studies are theoretically grounded in the bystander intervention model (Meter & Card, 2015). Decades of research has confirmed the bystander effect, or the social psychological phenomenon whereby individuals are less likely to help a victim in the presence of other people, largely due to ambiguity and diffusion of responsibility (Darley & Latané, 1968; Dovidio, Piliavin, Schroeder, & Penner, 2006). Based on this research, Latané and Darley (1970) developed a five-step bystander intervention model detailing the steps one must take in order to intervene. The first step is to notice the event, as focusing attention to the problem is a prerequisite to helping. Next, the event must be interpreted as an emergency, or serious enough to require help. Third, the person must accept personal responsibility for intervening. In order to intervene, the next step is that the individual must know how to help. The last step of the model is to implement the intervention decision, or act to help the victim. This bystander intervention model has been applied to helping behavior in multiple contexts (e.g., sexual assault prevention; Burn, 2009), including bullying (Jenkins & Nickerson, 2016, 2017; Nickerson, Aloe, Livingston, & Feeley, 2014).

1.2. Gender differences in bystander intervention

In the search to understand bystander behavior, researchers often examine gender differences, as this is imperative to inform bystander intervention for boys and girls. Researchers have generally found that boys and girls do not intervene to the same degree, and there are changes in the frequency and type of intervention as students' progress in school; although some studies do not find gender differences in bystander interventions. For example, in their influential article, Salmivalli et al. (1996) noted that among 12–13 year olds, girls are more likely to defend victims of bullying than boys, and boys are more likely than girls to reinforce bullying behavior. In 1998, Salmivalli, Kaukiainen, and Lagerspetz also reported that in an elementary-age sample, girls were more likely to be classified as defenders than boys (28.4% of girls versus 4.6% of boys). Trach, Hymel, Waterhouse, and Neale (2010) examined grade and gender differences for 9300 4th to 11th grade students in 12 self-reported bystander intervention responses reflecting passive (e.g., walk away, do nothing), aggressive (e.g., "get back" at the bully), and direct, positive bystander actions (e.g., telling bully to stop, helping the victim, talking to an adult). At each grade level, girls were more likely than boys to report that they stood up to bullies.

There are other studies supporting the idea that girls defend more than boys (Ma, 2002; Nickerson, Mele, & Princiotta, 2008), but some studies do not find a gender difference between boys and girls in bystander intervention (O'Connell et al., 1999; Rigby & Johnson, 2006), and one study found that boys defend more (Nickerson & Mele-Taylor, 2014). Rigby and Johnson (2006) asked 400 students to view a video of a bullying episode while bystanders stood nearby then asked students how likely they were to intervene. Overall, 43% of students indicated that they would likely help the victim, and there was not a significant difference in reported helping between boys and girls. In addition, they asked students if they had actually helped a victim in the past year and the majority indicated "yes," and there was not a gender difference in these self-reports.