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Deciding whether to look after them, to like it, or leave it: A multidimensional analysis of predictors of positive and negative bystander behavior in cyberbullying among adolescents

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ABSTRACT

Background: Positive bystander behavior in cyberbullying among adolescents may effectively mitigate cyberbullying and its harm for the victim. Limited, scattered, and sometimes only qualitative research is available on predictors of positive (e.g. defending, comforting or reporting) and negative (e.g. passive bystanding, joining, reinforcing) bystander behavior in cyberbullying. A multidimensional model and multilevel analysis were therefore applied in this study.
Methods: A sample of 1979 adolescents in 7th -9th grade, in 16 schools and 158 classes participated in the study. Analyses were performed in MLwiN 2.32.
Results: Analyses confirmed the multifaceted nature of bystander behavior and behavioral intention. No school level effects, and only limited class effects were found. Strongest individual predictors of positive bystander behavior were a positive intention, and friendship with the victim. Intention for positive bystander behavior was most predicted by positive outcome expectations of their actions for the victim. Negative bystander behavior was most predicted by intentions for negative behavior, and moral disengagement attitudes. Intentions to act as a negative bystander were most predicted by positive attitudes towards passive bystanding and a lack of skills (social, empathic, coping). Moral disengagement at classroom level also predicted positive behavior and behavioral intentions, and negative behavioral intentions, but not negative behavior. Information days for pupils on cyberbullying was a significant school-level predictor of the intention to act as a positive bystander.
Conclusions: Future research and interventions should take the multidimensional nature of cyberbullying bystander behavior into account. Implications for research and practice are discussed.

1. Introduction

Cyberbullying is generally defined as bullying performed via electronic or digital media. It is an intentional act to hurt, socially isolate or cause distress to a victim, which may occur repeatedly, or result in repeated harm by continued exposure (Kiriakidis &

Kavoura, 2010; Tokunaga, 2010). Prevalence rates were summarized in a meta-analysis across 80 studies to 15% for cyberbullying victimization and 16% for cyberbullying perpetration (Modecki, Minchin, Harbaugh, Guerra, & Runions, 2014). Rates may, however, be even higher as cyberbullying is often underreported by victims, for fear of losing Internet privileges, shame or perceived lack of self-reliance (Hinduja & Patchin, 2012; Price & Dalgleish, 2010). Most prevalence studies on cyberbullying have been conducted among teenagers, overall showing a peak in prevalence among 12–15 year olds (Tokunaga, 2010).

Cyberbullying's prevalence is lower than that of traditional, offline, bullying, but its psychosocial impact appears to be higher (Campbell, Spears, Slee, Butler, & Kift, 2012; Schneider, O'Donnell, Stueve, & Coulter, 2012; Sourander, 2010). Cyberbullying

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perpetration and victimization are related to diverse psychosocial, physical and mental health problems, such as stress, suicidal ideation, depression, anxiety, loneliness, substance abuse, reduced life satisfaction, reduced self-esteem, somatic problems and lower academic achievement (Kowalski, Giumetti, Schroeder, & Lattaner, 2014).

In traditional bullying intervention programs, it is advocated to view bullying as a group process, in which bystanders or witnesses play a key role (Pozzoli & Gini, 2013; Salmivalli, 2010). Bystanders can provide negative or positive reinforcement to the bully, and thus respectively end or sustain the bullying cycle. Reporting to adults, defending or comforting the victim, challenges the bully's power and results in negative reinforcement for the bully's actions (Salmivalli, 2010). This is considered positive bystander behavior. These actions also strengthen the victim's mental resilience (Sainio, Veenstra, Huitsing, & Salmivalli, 2011). Joining and assisting (e.g. forwarding, adding nasty comments), and reinforcing (e.g. laughing) can provide positive feedback to the bully, and encouragement to continue (Salmivalli, 2010). Also passive bystanding provides positive feedback to the bully, since the bully and victim may consider this as a silent form of approval of the bullying (Kowalski et al., 2014). These are considered negative forms of bystander behavior, since they sustain or aggravate the bullying (Salmivalli, 2010; Salmivalli, Voeten, & Poskiparta, 2011).

In cyberbullying, research on bystander behavior is still limited. Bystander interventions in cyberbullying, may, nevertheless, be important. First, bystanders are present in the majority of cyberbullying cases (Wegge, Pabian, & Vandebosch, 2012). Second, perpetrators of cyberbullying are driven by interpersonal motives and peer feedback on their social status (Festl & Quandt, 2013; Sticca, Ruggieri, Alsaker, & Perren, 2013; Vanden Abeele & De Cock, 2013; Wegge, Vandebosch, Eggermont, & Pabian, 2014). In sum, as in traditional bullying, targeting bystanders may be a successful approach to end cyberbullying and its harm. Certain programs that used bystander or peer support were, indeed, effective in reducing victimization from cyberbullying (Menesini, Nocentini, & Palladino, 2012; Palladino, Nocentini, & Menesini, 2012; Salmivalli, Kärnä, & Poskiparta, 2011).

Due to the specific affordances of electronic media, such as connectivity, visibility, social feedback, persistence and accessibility (Fox & Moreland, 2015), the nature of bystander behavior in cyberbullying may, nevertheless, differ from that in traditional bullying. With a reduced online visibility of social cues, bystanders are not able to see the harm the victim experiences. Furthermore, bystanders in cyberbullying are not able to provide small non-verbal feedback to a bully as in traditional bullying, and a more determined action is needed to show positive bystander behavior. This could reduce the likelihood of positive bystander behavior in cyberbullying (Obermaier, Fawzi, & Koch, 2014). This physical distance may, on the other hand, precisely increase positive bystander behavior, since bystanders fear less physical retaliation (Obermaier et al., 2014).

Specific research on cyberbullying bystander behavior is therefore needed. The scarce existing research is, moreover, fragmented across studies each examining only a few predictors. Traditional bullying research, however, has indicated that a multidimensional model was needed to predict bystander behavior (Pozzoli & Gini, 2013). The present study aimed to examine bystander behavior in cyberbullying and its predictors, using a multidimensional model.

1.1. Theoretical model

A multidimensional model in traditional bullying bystander behavior (Pozzoli & Gini, 2013) was based on the Bystander

Intervention Model (Latane & Darley, 1970) and on elements from behavior change theories, such as attitudes, skills and self-efficacy. The Bystander Intervention Model states that a bystander experiences five phases in the decision-making process on whether or not to intervene as a bystander: 1) awareness of the incident; 2) interpretation of the incident as an emergency; 3) accepting the responsibility to intervene; 4) knowledge and belief in the ability to intervene; and 5) performing the intervention. The decision process can, moreover, be influenced by contextual factors, often labeled as the bystander effect, which are described in four mechanisms: self-awareness (e.g. who else is present), social cues (e.g. what others are doing), blocking (e.g. others' actions making their actions impossible) and diffusion of responsibility (e.g. their actions are dependent on the size of bystander population) (Wong-Lo & Bullock, 2014).

The Bystander Intervention Model can be considered as a process model, that represents stages of change towards the adoption of positive bystander behavior. Stage models, however, do not explain why a person progresses from one stage to the next. When aiming to design interventions to promote positive bystander behavior, insight is needed in how adolescents can progress through these stages towards the desired behavior. Behavior change theories have been applied to understand the underlying reasons for stage change: determinants such as e.g. attitudes, self-efficacy, skills and subjective norms can effectively predict a change to a next stage (see e.g. Courneya & Bobick, 2000; Godin, Lambert, Owen, Nolin, & Prud'homme, 2004). These determinants can predict change at each stage, but the contribution of each determinant may vary per stage (Courneya & Bobick, 2000). In bystander behavior, some determinants were hypothesized to relate stronger to certain stages (Obermaier et al., 2014; Pozzoli & Gini, 2013), as represented by the location of circles in Fig. 1.

Behavior change theories do not only explain what influences behavior and predicts stage change, but also provide levers for changing behavior, for example by proposing change methods (e.g. modeling, advance organizers, guided practice) appropriate for specific determinants. This is especially valuable when aiming to design interventions to change bystander behavior. Behavior change programs founded on behavior change theories recognizing both individual and environmental determinants, were indeed more effective than those not applying these theories (Glanz & Bishop, 2010).

To encompass a wider representation from behavior change theories to these stage changes, we extended this multidimensional process model from traditional bullying (Pozzoli & Gini, 2013), and applied both the Reasoned Action Approach (TRA[2]) (Fishbein & Ajzen, 2010) and Social Cognitive Theory (SCT) (Bandura, 2007), two behavioral theories, to the steps in the Bystander Intervention Model. Combining theories is encouraged in health promotion to grasp the complexity of behavior change (Bartholomew, Parcel, Kok, Gottlieb, & Fernàndez, 2011; Lustria, Cortese, Noar, & Glueckauf, 2009). Reasoned Action Approach (TRA[2]) merges the former Theory of Reasoned Action (TRA) (Fishbein & Ajzen, 1975) and Theory of Planned Behavior (TPB) (Ajzen, 1991) and states that behavior is determined by behavioral intention, on the condition that there is a facilitating environmental context, and that sufficient personal skills are available to translate this intention into behavior. Intention is in its turn influenced by attitudes, perceived norms and self-efficacy to perform the behavior (Fishbein & Ajzen, 2010) (see Fig. 1). TRA[2] also recognizes the importance of background variables, which may not be changeable, but can influence beliefs and can provide information for a targeted approach to at-risk groups (Bartholomew et al., 2011). SCT shares most determinants with TRA[2] but also provides methods for change, useful in intervention development. Furthermore, SCT has been applied to study moral