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Stability of cyberbullying victimization among adolescents: Prevalence and association with bully–victim status and psychosocial adjustment

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ABSTRACT

The aims of this study were as follows: (a) to examine the possible presence of an identifiable group of stable victims of cyberbullying; (b) to analyze whether the stability of cybervictimization is associated with the perpetration of cyberbullying and bully–victim status (i.e., being only a bully, only a victim, or being both a bully and a victim); and (c) to test whether stable victims report a greater number of psychosocial problems compared to non-stable victims and uninvolved peers. A sample of 680 Spanish adolescents (410 girls) completed self-report measures on cyberbullying perpetration and victimization, depressive symptoms, and problematic alcohol use at two time points that were separated by one year. The results of cluster analyses suggested the existence of four distinct victimization profiles: "Stable-Victims," who reported victimization at both Time 1 and Time 2 (5.8% of the sample), "Time 1-Victims," and "Time 2-Victims," who presented victimization only at one time (14.5% and 17.6%, respectively), and "Non-Victims," who presented minimal victimization at both times (61.9% of the sample). Stable victims were more likely to fall into the "bully–victim" category and presented more cyberbullying perpetration than the rest of the groups. Overall, the Stable Victims group displayed higher scores of depressive symptoms and problematic alcohol use over time than the other groups, whereas the Non-Victims displayed the lowest of these scores. These findings have major implications for prevention and intervention efforts aimed at reducing cyberbullying and its consequences.

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1. Introduction

Bullying can be defined as any unwanted aggressive behavior by another peer or group of peers, which involves an imbalance of power and is repeated or is highly likely to be repeated (Gladden, Vivolo-Kantor, Hamburger, & Lumpkin, 2014). Bullying may inflict harm or distress on a victim through physical, verbal, or social aggression. Similarly, cyberbullying refers to repetitive aggression carried out via electronic media (i.e., cell phones, Internet). More specifically, cyberbullying victimization includes, among a wide range of experiences, receiving threatening or insulting messages, e-mails or images, uploading images or disseminating rumors that are cruel or harmful to a victim's reputation, the infiltration of someone's online account in order to send messages that cause trouble for or endanger the victim, and "happy slapping," in which recorded images of a person who is attacked or humiliated are disseminated (Smith, 2012; Smith, Mahdavi, Carvalho, & Tippett, 2006). Although traditional bullying and cyberbullying share several features in common, the latter differs in its anonymity, possibility of occurrence at any time of the day, and potentially larger audience (e.g., Kowalski, Morgan, & Limber, 2012).

Recent research has shown that cyberbullying has deleterious consequences for its victims, such as depression, anxiety, drug and alcohol abuse, and suicide ideation and attempts (Gini & Espelage, 2014; Gámez-Guadix, Orue, Smith, & Calvete, 2013; Vieno, Gini, & Santinello, 2011; Vieno et al., 2014; for a recent review and meta-analysis, see Kowalski, Giumetti, Schroeder, & Lattanner, 2014). For example, a recent cross-sectional study of data from approximately 24,000 young adolescent participants in the International Health Behavior in School-aged Children Survey (Vieno et al., 2014) utilized multilevel models of logistic regression (controlling for traditional bullying victimization, computer use, and demographics) to investigate the association between cybervictimization and psychological and somatic symptoms. The main results of the study showed that students who reported

themselves as victims of cyberbullying were nearly twice as likely to experience psychological and somatic symptoms compared to their non-victimized peers, with this effect increasing substantially from occasional to frequent bullying. Such findings, based on a large representative sample of adolescents, have confirmed that cybervictimization is a significant risk factor for students who are frequently harassed online. However, this study was limited by its cross-sectional nature, which prevents establishing temporal relationships between variables.

Although research on cyberbullying and cybervictimization has gained pace quite rapidly in recent years, to date, little is known about the specific victimization parameters and characteristics that impact victim outcomes. A key gap in the literature on cyberbullying is its current lack of studies on the stability of cybervictimization over time and the consequences that "stable" victimization can have for adolescents (Rueger, Malecki, & Demaray, 2011; Underwood & Card, 2012). Stability here refers to the repetition and consistency of incidents of victimization for a victim over a given period of time (e.g., one year) (Nylund, Bellmore, Nishina, & Graham, 2007; Rueger et al., 2011). The stability of victimization may be closely associated with the perpetration of cyberbullying and bully–victim status. Bully–victim status refers to the categorization of adolescents as pure bullies (not victims), pure victims (not bullies), or bully–victims, that is, being simultaneously a bully and a victim (Haynie et al., 2001; Olweus, 1993). Research has indeed found that being a perpetrator of cyberbullying significantly increases the likelihood of becoming a victim of cyberbullying (Kowalski et al., 2014). To begin filling the gap in the current lack of knowledge on the stability of cybervictimization and its relation to cyberbullying perpetration, the current study aims to analyze the stability of cybervictimization in a sample of adolescents over a period of one year. Moreover, we tested the association of cybervictimization with different bully–victim roles, as well as with negative outcomes, such as depression and problematic alcohol use.

1.1. The stability of cybervictimization and psychosocial problems

Research on traditional bullying has indicated that victimization stability exists and that the timing and duration of victimization play an important role in the psychological adjustment of victims. In particular, it has been proposed that chronic victimization can lead to more severe symptoms of maladjustment than transient victimization, that symptoms of maladjustment increase as adolescents move from non-victim status to victim status (the *onset hypothesis*; Kochenderfer-Ladd & Wardrop, 2001), and that symptoms of maladjustment dissipate concurrently with the cessation of victimization (the *cessation hypothesis*; Kochenderfer-Ladd & Wardrop, 2001; for a review, see Rueger et al., 2011). Unfortunately, however, few studies have examined the differential effects of chronic versus transient victimization, and the majority of these studies have focused solely on traditional bullying. For example, Menesini, Modena, and Tani (2009), utilizing a cross-sectional design, measured the stability of traditional bullying victimization by asking adolescents about their bullying experiences during the current academic year and previous academic years, respectively. Stable victims, that is, students who were currently victimized and who had also been victimized in the past, reported more internalizing symptoms (i.e., depression and anxiety) than those who had been victims only during the present school year. More recently, using a longitudinal design, Rueger et al. (2011) analyzed the stability of peer victimization among middle-school students at two time points during the same school year. It was found that approximately 13% of the participants who were victims experienced stable victimization (i.e., they were categorized as victims both at Times 1 and 2). In addition, stability of victimization was related to greater maladjustment, including

depression, low self-esteem, negative school attitude, and low grades and attendance.

Repetition and stability in cybervictimization are more multi-faceted than in traditional victimization (Dooley, Pyzalski, & Cross, 2009). For example, in cyberspace, a single attack from a cyberbully may be repeated over and over without the possibility of stopping it easily. Moreover, a cybervictim may be repeatedly reached at all times and places. Due to a dearth of longitudinal studies on cybervictimization, however, it is not known whether traditional victimization and cybervictimization are similarly stable over time (Gradinger, Strohmeier, Schiller, Stefanek, & Spiel, 2012). To date, very few studies have specifically analyzed the stability of cybervictimization among adolescents (Gradinger et al., 2012; Jose, Kljakovic, Scheib, & Notter, 2012). For example, Jose et al. (2012) reported a significant and moderate stability of cybervictimization over a period of one year (β = .28). They also found that cybervictimization was less stable over time than traditional victimization. Although this study shed some light on the stability of cybervictimization, it did not clarify the percentage of victims of cyberbullying who were stable victims of online aggression between different time points.

Furthermore, we lack knowledge about the harmful consequences of stable cybervictimization on psychological adjustment. Therefore, longitudinal studies are required to better understand how the stability of cybervictimization may be related to psychosocial adjustment (Underwood & Card, 2012). The focus on stability of cybervictimization in relation to its negative consequences is important for at least one reason. Whereas a lot is already known about the long-term consequences of cybervictimization, as we noted above, previous studies have not usually distinguished between occasional and stable cybervictims. Whereas both groups are likely to suffer negative consequences such as depression, our study aimed to test the hypothesis that this association was different (i.e., stronger) for stable victims.

Two of the most prevalent and pervasive indicators of adjustment problems during adolescence are the presence of depressive symptoms and excessive use of alcohol (e.g., Gámez-Guadix, Calvete, Orue, & Las Hayas, 2014; Hankin et al., 1998). It has been found that depressive symptoms peak between the ages of 15 and 18, with a prevalence of 18% of adolescents, suggesting this period to be a crucial time to intervene with regard to depression risk factors (Hankin et al., 1998). In addition, it is has been found that alcohol is used by 80% of Spanish adolescents between the ages of 14 and 18 years (Ministry of Health, 2015). According official statistics, 20% of adolescents reported binge drinking (i.e., consuming five or more drinks in roughly two hours) during the previous 30 days (Ministry of Health, 2015), which can have significant short- and long-term health consequences.

Whereas the link between cybervictimization and depression is more straightforward and better studied, we also wanted to test the association between stable victimization and a significant problem behavior during adolescence such as alcohol use. Indeed, a few cross-sectional studies have suggested that not only bullies but also youth who are bullied are more likely to use substances, including alcohol (e.g., Vieno et al., 2011). Because adolescents drink mainly for social reasons (e.g., to enjoy a party, to fit in, etc.; for a review, see Kuntsche, Knibbe, Gmel, & Engels, 2006), a possible explanation for the suggested association between bullying and cyberbullying experiences and substance use may be related to youths' desire to feel more accepted by the group of peers, gain social status, and be perceived as "cool" and attractive. During adolescence, drinking is indeed a behavior that contributes to the social image of the individual within the peer group (Ioannou, 2003) and may well be used for this purpose. In brief, at least some of the victimized adolescents might be led to approach alcohol as a means to become members of the group,