Cyber-bullying: An investigation of the psychological profile of university student participants

Constantinos M. Kokkinos *, Nafsika Antoniadou, Angelos Markos

Department of Primary Education, Democritus University of Thrace, Greece

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ABSTRACT

The present study investigated the psychological profile of 430 Greek university students who reported cyber-bullying/victimization experiences. Participants completed a self-report questionnaire, measuring cyber-bullying, cyber-victimization, Internet frequency and use, personality characteristics, and psychological symptoms. Results indicated that 58.4% of the sample had participated in a cyber-bullying incident assuming any role. Cyber bully/victims, the most common participant role, endorsed more psychological symptoms, more psychopathic traits, and were high sensation seekers, compared to the rest of the groups, whereas cyber-victims scored higher on empathy. Cyber-bullying was predicted by callous/unemotional and impulsive/irresponsible traits, depression, Internet use, as well as lack of social skills. The latter four variables also predicted cyber-victimization along with gender. Findings are discussed in terms of prevention and intervention strategies.
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Cyber-bullying (CB) is an aggressive, intentional act carried out by a group or an individual using electronic forms of contact, repeatedly and over time, against a victim who cannot easily defend him/herself (Hinduja & Patchin, 2009). It can vary from straightforward assaults, to more subtle damage of the victims' social relations, while, similarly to traditional bullying, participants can assume the roles of bullies, victims and bully/victims (Fegenbush & Olivier, 2009). To date, there is no clear consensus regarding the forms and types of CB, although various categorizations have been proposed, according, for example, to the nature of the action (e.g., flaming; Willard, 2004) or the used means (e.g., cell phone; Smith, Mahdavi, Carvalho, & Tippett, 2006). However, irrespective of the type, CB can be both direct (e.g., name-calling, threats and insults) and indirect (e.g., exclusion from online social networks, identity theft and impersonation; Riebel, Jager, & Fischer, 2009). Research on CB has primarily focused on adolescents, while there are only a few recent studies with college and university students (e.g., Schenk, Fremouw, & Keelan, 2013). It is assumed that CB incidents decrease during the transition from high school to college, but recent evidence suggests that the percentage of CB participation in college students varies between 10 and 35%, while in some cases this percentage can be even higher compared to adolescents (Annenberg Public Policy Center, as cited in Lawler & Molluzzo, 2011). Furthermore, Kraft and Wang (2010) found that being a victim of CB in high school was a significant risk factor for continuing to be cyber-bullied in college.

Irrespective of the age of the participants, this new form of aggression can have a significant impact on students' academic commitment, psychosocial functioning and interpersonal relationships.

Research has indicated that young adults are at risk of exhibiting Internet related problems, since they make the heaviest, and the most unsupervised, use of Information and Communication Technologies (ICT). They tend to display their lives in public, whereas the fact that some of the most popular social network websites have started off as local campus websites, is indicative of their need for sharing and communicating. Moreover, according to Jones and Scott (2012), because college and university students form tight social cliques, they can become highly competitive and political, and therefore are more likely to get involved in bullying incidents. The population of college students is mostly composed of young adults aged between 20 and 40 years old. Although, as an age group, freshmen students are close to adolescents, they qualitatively differ from them since the latter are at the wake of identity formation, whereas young adults are more likely to pursue new experiences, social and sexual autonomy and fusion of their identity with others (Erikson, 1975). Successful experiences in terms of identity formation and self-esteem can be fulfilling, while unsuccessful ones may lead to a sense of isolation.

Research on CB has been conducted largely in the absence of theoretical foundations, while the existing empirical endeavors are mainly guided by traditional bullying research theory. Thus, since the process of CB remains unclear to a large extent, the application of existing theoretical formulations used in predicting human behavior would be a good starting point. In this paper, CB is viewed through the lens of individual differences which are psychological traits or chronic tendencies

* Corresponding author at: Department of Primary Education, Democritus University of Thrace, N. Hili, GR 68100, Alexandroupolis, Greece.
E-mail address: kkokkino@eled.duth.gr (C.M. Kokkinos).

that "convey a sense of consistency, internal causality and personal distinctiveness" (Carver & Scheier, 2000, p. 5). Although the role of environmental factors has been acknowledged as critical, individual differences are considered to have a fundamental role in how people generally react across the situations they encounter.

Cyber-aggression can be also conceptualized through the sociocultural theoretical framework which views learning as a social process that is communicated through mediated interaction (Mayer, 2008; Vygotsky, 1978). Computer-mediated communication (CMC) refers to any form of interpersonal communication facilitated through the use of a computer which requires the interaction of two individuals. It provides the users with the option of remaining anonymous, and thus, interaction in chat rooms, over emails and even social media can occur without full disclosure of one's identity. In this context, CB behaviors are considered as a product of the minimal social cues, or anonymity, available on the online media through which the behavior occurs. Furthermore, in the case of CB, the use of the ICT may augment or substitute the characteristics an individual lacks in order to act aggressively.

Recent studies on traditional aggression have found that both reactive (impulsive response to provocation) and proactive (unprovoked, instrumental and planned) aggressive behaviors have been associated with emotion regulation problems, impulsivity, sensation seeking, and higher rates of bullying (Sontag, Clemans, Graber, & Lyndon, 2011). Several studies have investigated the profiles of perpetrators and victims of traditional bullying, searching for individual antecedent conditions or risk factors of involvement. Since there is no systematic research on CB intra- and interpersonal correlates, the following review will also refer to the existing evidence from traditional bullying, in an attempt to examine the degree of generalizability of the findings to CB. The limited research evidence does not provide a clear understanding regarding the correlates of CB participation. Although suggestions have been made that CB bears the same characteristics (and therefore risk factors) with traditional bullying, a more thorough investigation is needed in order to explore whether, for example, the unique characteristics of ICT (e.g., anonymity) contribute to the participation of a more diverse group of students in cyber-aggression. Therefore, the understanding of the participants' profiles through the identification of those critical intrapersonal variables is considered of major importance. Obtaining a clearer insight on the participants' profile could additionally clarify whether CB is related to the same risk factors as traditional bullying. Finally, the identification of the antecedents of CB is a necessary step for the progress of research, and has important implications for prevention and intervention.

Cyber-bullying Correlates

Personality characteristics

A great amount of research has focused on the personality characteristics which make individuals more vulnerable to CB and has documented that those involved show less empathy compared to those not involved. Empathy is a relatively stable attribute in a person's life, affecting different types of social behaviors. It consists of two rather distinct components: a cognitive, reflecting an individual's ability to identify and cognitively process another person's emotional states, and an affective that facilitates emotional understanding and communication (Shamay-Tsoory, Aharon-Peretz, & Perry, 2009). Research with adolescents has shown that CB is associated with low affective empathy (Ang & Goh, 2010), which may also be a result of the restricted non verbal cues that the Internet provides. However, more recent research with adolescents (Lazuras, Barkoukis, Ourda, & Tsorbatzoudis, 2013), showed that the effect of empathy on CB intentions becomes non-significant when normative beliefs and self-efficacy are taken into account.

High cognitive and low affective empathy may also characterize individuals with antisocial behavior who are less inhibited and more impulsive (Jolliffe & Farrington, 2006). These "psychopathic-like"

personality traits have been studied in relation to aggression and are grouped into three dimensions, *interpersonal* (e.g., grandiosity, egocentricity), *affective* (e.g., remorselessness, callousness), and *behavioral* (e.g., impulsiveness, irresponsibility). Research has shown that they may characterize a subgroup of conduct disordered youth (Andershed, Kerr, Stattin, & Levander, 2002) who may find the Internet as an ideal setting for the manifestation of these traits. The capacity for anonymity, invisibility, and asynchronous communication that the Internet provides may encourage individuals to act aggressively with more ease (Kerig & Stellwagen, 2010), given that it fosters online disinhibition, which is any behavior characterized by a lowering in the users' inhibitions, prompting them to undertake both negative and pro-social acts that would never dare in real life (Suler, 2004).

Among the psychopathic attributes, grandiose/manipulative behavior, a core characteristic of narcissism, has been particularly implicated in Internet use. Social/ personality psychology conceptualizes narcissism as a normative personality trait, including both adaptive and maladaptive aspects (Miller & Campbell, 2010), with most of the research in this area focusing on the grandiose aspects of the construct. Narcissism predicts a number of damaging forms of functioning, such as aggression proneness, authoritarian interpersonal problems, resistance to negative feedback, and manipulativeness (e.g., Bushman & Baumeister, 1998; Locke, 2009), but it is also positively associated with psychological health, and well-being (e.g., Brown, Budzek, & Tamborski, 2009). Individuals with narcissistic traits, who, when offline, manipulate their social environment to maintain their inflated and unfounded self-concept positivity, are attracted to the Internet, since it provides them with the ability for instant display to a large crowd. Specifically, the frequent use of Social Network Sites (SNS) has been related to narcissism and it has been argued that due to their characteristics they foster a generation with extreme digital narcissism which anticipates constant feedback and validation (Keen, 2007).

Finally, sensation seeking, a biologically-based personality trait that motivates individuals to seek novel and intense experiences (Zuckerman, 1979), has been frequently linked to problematic Internet use, and is assumed to be associated with CB (Kim & Davis, 2009). High sensation seekers often take physical, social, legal, and even financial risks simply for the sake of the experience. College and university students who are frequently intrigued by danger and risk taking are attracted to Internet activities which provide this excitement, while they may create provocative Internet identities as a way of attracting others (Lyng, 2005 as cited in Kim & Davis, 2009).

Psychological symptoms

Although ICT have great social and cognitive benefits, heavy Internet use has been associated with various mental health problems such as loneliness, depression, and anxiety. However, apart from the negative consequences, the Internet may serve well for shy, withdrawn, and socially anxious individuals who venture socialization through cyberspace, as well as for users who have been victimized in their real lives by providing them with a secure environment in which their self-presentation is under their control. Socially anxious individuals experience an unrelenting fear and discomfort of one or more social and/or performance situations, often related to concerns of interpersonal judgment (APA, 2000), and typically have fewer offline relationships (McKenna & Bargh, 1999). It has been also shown that socially rejected individuals are more likely to spend extended time on the Internet and use it in dangerous and problematic ways, behaviors which have been previously associated with CB/V experiences (Kim & Davis, 2009). In addition, for those students who have been victimized but do not ordinarily participate in bullying incidents, cyber-settings (Campbell, 2007) may be a suitable context to act out and surpass the limits of their physical selves.