

**Young Adult Internet Usage and Aggression: In-vivo Aggression in the Era of
Cyberbullies**

By

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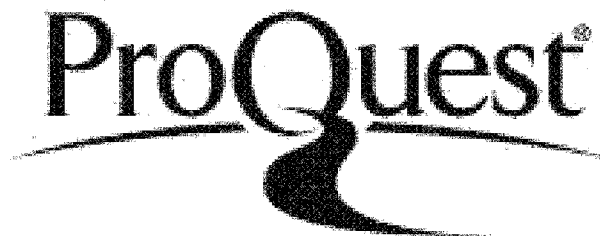


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PREVIEW

ABSTRACT

As communication becomes more technology based with less emphasis on in-vivo communication, it is important to understand the effects of prolonged technology use (specifically Internet usage) on interpersonal interactions. Online communications and prolonged Internet usage have been found to impact how people express and understand social cues. Previous studies have shown that Internet usage and certain online communications can negatively effect in-vivo social interactions in adolescents. This study examined the effects of Internet usage on in-vivo aggression in young adults, ages 18-24; as well as the moderating effect of cyberbully status on this relationship. Participants were given questionnaires to assess their Internet usage, online aggression, online victimization, and in-vivo aggression. Findings indicated that there was a significant relationship between Internet usage and in-vivo aggression; such that as Internet usage increased, in-vivo aggression increased. Cyberbully status was found to be a moderator for this relationship. For cyberbullies, cyberbully/victim, and abstainers in-vivo aggression increased as Internet usage Increased. However, those participants who reported being victims of cyberbullying displayed a decrease in in-vivo aggression as Internet usage increased. No differences were found between cyberbullies, cyberbully/victims, and abstainers in their moderating effect on the relationship between Internet usage and in-vivo aggression. Future research and implications are discussed.

CHAPTER I

Introduction

As communication becomes more technology based with less emphasis on in-vivo communication, it is important to understand the effects of prolonged technology use (specifically Internet usage) on interpersonal interactions. Online communications and prolonged Internet usage have been found to impact how people express and understand social cues. While previous studies have shown that Internet usage and certain online communications can negatively effect in-vivo social interactions there is still much to learn about how Internet usage impacts in-vivo social interactions in young adults. For example, persons under age 10 (herein referred to as *children*), between the ages of 10 and 13 (herein referred to as *preadolescents*) and between the ages of 14 and 17 (herein referred to as *adolescents*) who display aggression over the Internet (e.g. cyberbullying) are more likely than their peers to engage in in-vivo aggressive behaviors (i.e. “traditional” bully behavior) (Smith et al., 2008; Williams & Guerra, 2007). In addition, preadolescents and adolescents who are victims of cyberbullying are also likely to be victims of in-vivo bullying (Perren, Dooley, Shaw & Cross, 2010). The impact of such bullying can be severe: In the past three years there has been a great deal of highly publicized teen and young adult suicides as a result of cyberbullying. Adolescent victims of bullying are 2 to 9 times more likely to consider suicide than non-victims, and suicide is the third leading cause of death among young people (Bullying Statistics, 2009). While there has been emerging research on the Internet and social media on adolescents, few

studies have been done with adults to determine how Internet usage and cyberbullying effect in-vivo aggression.

This study will look at young adults, particularly college students, to examine the changing social environment of this cohort. Since the majority of college students are required to use the Internet daily, and approximately 90% of undergraduates use social media sites (College Board and Art & Science Group, 2009), this population will be ideal in examining how Internet usage effects cyber and in-vivo aggression. Previous studies on adolescents have suggested that increased time spent on the Internet has negative effects on interpersonal interactions such as increased Internet aggression, increased negative in vivo interpersonal interactions and negative peer reviews (Ybarra & Mitchell, 2004; Schoffstall & Cohen, 2011; Gradinger, Strohmeir, & Spiel, 2009). This study seeks to discover if adults experience higher rates of cyberbullying and in-vivo aggression when correlated with higher amounts of Internet usage. In addition, as previous studies have indicated those adolescents who are cyberbullies are more likely to be traditional bullies (Smith et al., 2008; Williams & Guerra, 2007), this study will attempt to explore whether bully status moderates the relationship between Internet usage and aggression. The goal of this study is to further understand how Internet usage effects aggression, and whether this effect occurs solely in adolescents or continues into young adulthood.

Statement of Purpose

This study aims to examine the effects of Internet usage on in-vivo aggression in young adults, age 18-24. Until now, research has mostly focused on the impact of Internet usage upon adolescents and preadolescents, yielding the following main results:

prolonged Internet usage is positively correlated with in-vivo aggression (aka traditional bullying) (Bayraktar & Gun, 2007; Chih-Hung et al., 2009; Katzer, Fetchenhauer & Belschak, 2009); prolonged Internet usage predicted cyberbullying (Suler, 2004; Ybarra & Mitchell, 2004; Lacey, 2004); and those who were identified as cyberbully/victims were correlated with having the highest levels of cyberbullying and traditional bullying behaviors when exposed to the Internet for greater periods of time, as compared with just cyberbullies and cybervictims (Ybarra & Mitchell, 2004; Schultze-Krumbholtz & Scheithauer, 2009). Research has begun to address whether similar findings exist in young adulthood. So far, the research reveals that cyberbullying does continue into adulthood (Walker, Sockman & Koehn, 2011; Kraft & Wang, 2010) and that increased Internet usage has negative effects on the interpersonal relationships of young adults, including jealousy, cyber aggression and in-vivo aggression (Muise, Christofides & Desmerais, 2009; Kandell, 1998; Niemz, Griffiths & Banyard, 2005). These studies have not identified cyberbully status as a possible moderator between the relationship of increased Internet usage and negative effects on interpersonal relationships, which in this study is defined as increased in-vivo aggression in young adults. Given that cyberbully status has been found to moderate the relationship between Internet usage and in-vivo aggression in adolescents, this study aims to examine the moderating effect that cyberbully status has on the relationship between Internet use and real world aggression in young adults.

Hypotheses

Hypothesis 1: It is hypothesized that as Internet usage increases, aggression will also increase across all subscales of the Aggression Questionnaire. As cited above,

adolescents who report the highest amount of Internet usage are more likely than their peers to be bullies, particularly for those reporting Internet usage six or more days a week (Bayraktar & Gun, 2007; Ybarra & Mitchell, 2004). Young adults have previously been found to be experiencing similar developmental challenges as adolescents, such as difficulty establishing identity (Subrahmanyam, et al., 2006, Erikson, 1968), navigating peer relationships (Kandell, 1998), and a desire to form intimate relationships (Schnurr et al., 2009; Erikson, 1968). In addition, young adults have been found to exhibit similar levels of Internet usage (College Board of Art & Sciences, 2009) and cyberbullying (Walker, Sockman & Koehn, 2011; Kraft & Wang, 2010) as adolescents. Given the similarity in developmental stage and Internet habits between young adults and adolescents, it is expected that young adults' Internet usage will also predict in-vivo aggression.

Hypothesis 2: It is hypothesized that cyberbully status will moderate the relationship between Internet usage and in-vivo aggression, such that those who report being bully/victims will report the greatest amounts of in-vivo aggression out of the four statuses, followed by bullies only, victims only, and abstainers, respectively. This study draws upon Schultze-Krumbholz & Scheithauer's (2009) study of the moderating impact of these categories upon in-vivo aggression in adolescents, which suggest that adolescent cyberbully/victims have lower amounts of empathy for their victims and higher rates of aggression both online and offline than individuals who are cyberbullies only, cyberbullies only, or abstainers. Those who are identified as cyberbullies only are expected to have the second highest amount of in-vivo aggression, followed by victims and abstainers, with the latter demonstrating the lowest amounts of in-vivo aggression.

These results were also demonstrated in the Schultze-Krumbholz & Scheithauer's (2009) article. The same relationship is expected to exist for young adults.

PREVIEW

CHAPTER II

Literature Review

Cyberbullying

History and Prevalence. The term “bully” can be traced back as far as the 1530s.

In its traditional sense it involves two people: the bully, or one who performs an aggressive act; and a victim, the target of the aggression (Donegan, 2012). Nowadays, bullying can happen through physical means, verbally (indirectly or directly), and in cyberspace. The Internet and social media outlets are phenomena that have developed, and exploded in use, over the last 10 years. Due to these rapid changes in communication based technology, access to the Internet has become much more widespread and has made access to peer-to-peer aggression more widespread. Cyberbullying is defined as the intentional and overt act of aggression toward another person online, and has been extended to include other forms of technology such as text messaging and pictures/video sent via cell phone (Ybarra & Mitchell, 2004; David-Ferdon & Hertz, 2009). While cyberbullying as a term did not exist before 2004, since that time cyberbullying has become a focus of research, school policy and adolescent practice.

Cyberbullying is difficult to target and track in a technological field that is rapidly changing. Over the last seven years, Facebook has evolved from a private college-based social communication to an international sensation and a common way of communicating for adolescents and adults. In the last seven years, smartphones have become commonplace with technology that rivals most computers. Talking to someone in

China via a video conference is no longer science fiction thanks to the ease of Skype and Google Chat. A 2009 survey of over 800 adolescents found that 93% of teens in the United States use the Internet. By the age of thirteen, 73% of teens in the United States have their own mobile phone, and 31% have smartphones with access to the Internet (Lenhart, Purcell, Smith & Zickhur, 2010). All of these changes make access to Internet based peer-to-peer aggression much more widespread, and therefore, much more difficult to control.

Cybervictimization is estimated to occur 5.7% to 21.9%, with cybervictims reporting at least one form of cyberbullying behavior that was perpetrated against them within the past three months, and 9.1% to 29.7% reported being a perpetrator of cyberbullying. (Wade & Beran, 2011; Wang, Iannotti, & Nansel, 2009; Hinduja & Patchin, 2010; Walker, Sockman & Koehn, 2011). One study of 493 Midwestern university students examined prevalence over a two month period, and results showed stability in cyberbullying and cyber victimization over the two months (Bartlett & Gentile, 2012). Although the longitudinal period was just two months, it did demonstrate a continued effect of cyberbullying.

In a critical review of research on cyberbully victimization, Tokunaga (2010) found that about 20–40% of all 12-17 year olds have experienced cyberbullying at least once in their life. Although cyberbullying can occur at any age, the majority of research is aimed towards children and teens. Studies focused on cyberbullying in adults suggest that cyberbullying does occur. One study of 2,215 Czech Republicans aged 12-88 found that the highest portion of online aggressive behavior occurred in older adolescents, ages 16-19, suggesting that cyberbullying can and does continue into adulthood

(Sevcikova & Smahel, 2009). Aggressors and targets of aggression were identified through the following questions, respectively, “Have you ever used the Internet to humiliate or harass someone?” and “Have you ever been mocked, humiliated, or hurt on the Internet?” This same study found that young adults (20-26 years) were more often targets of aggressive online behavior than were older respondents.

A related study on cyberbullying and age found that 10-15% of the 339 college students surveyed reported having experienced online harassment either from strangers, an acquaintance or a significant other. A majority of students (58.7%) received unwanted pornography. (Finn, 2004)

Research on gender differences in cyberbullying have conflicting outcomes, with the majority of research finding that gender is unrelated to being a victim of cyberbullying and a minority of studies finding that females are disproportionately represented among victims (Tokunaga, 2010). However, a study of 529 Canadian adolescents found that girls were more likely than boys to be the targets of cyberbullying and were also more likely to have been solicited sexually online (Wade & Beran, 2011). In addition to also finding girls more likely to be cybervictims than boys, a related United States bullying study of 7,182 adolescents found that boys are more likely to be cyberbullies than girls (Wang, Iannotti, & Nansel, 2009). A study of 1023 adolescents had conflicting results and found that while females engaged in cyberbullying at a higher rate than males, males engaged in higher levels of nonphysical bullying (Low & Espelage, 2013).

The impact of race and ethnicity on cyberbullying has not been widely studied; however, in Low and Espelage’s (2013) study of 1023 students from Midwestern