# CYBERBULLYING EXPERIENCES AMONG COLLEGE STUDENTS

by

Lisa Wooldridge Carr

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Thesis Committee:

Aimee R. Holt, Ph.D., Chair

James O. Rust, Ph.D.

Seth Marshall, Ph.D.

## DEDICATION

This thesis is dedicated to my late father, Jesse William “Bill” Wooldridge and mother, Carolyn Powell Wooldridge. My parents believed in in the importance of education and dedicated their careers to teaching and loving generations of children. They taught by word and example not just academics, but how to live as generous, kind human beings.

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## ABSTRACT

The current study examined prevalence of seven forms of cyberbullying attacks among college students through different types of medium. Support was found for hypothesis 1; with exclusion/ignoring being the most frequently reported attack (90%), followed closely by flaming (82.7%) and denigration (81.3%). Support also was found for hypothesis 2; with social media sites being the most frequently reported type of medium used for cyberbullying, with 94.7% of participants reporting cyberbullying attack via social media sites. Additionally, text messaging was a frequently reported cyberbullying medium, with 81.3% reporting incidents of cyberbullying attack via text message. Hypothesis 3 was supported, with women reporting more cyberbullying attacks than men overall. By type of attack, women reported significantly more cyberstalking attacks than did men, and while not statistically significant, men reported more incidences of flaming.

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# CHAPTER I

# INTRODUCTION

## Definition of Cyberbullying

Current research reveals that there is still debate on how cyberbullying is defined and how it is similar but different from traditional bullying (Thomas et al., 2014). Like traditional bullying, there is general agreement that cyberbullying has characteristics that are: (a) aggressive; (b) intentional acts; (c) carried out repeatedly and over time; (d) using electronic forms of communication; and (e) perpetrated by groups or individuals (e.g., Francisco, et al., 2015; Thomas et al., 2014). Unlike traditional bulling, cyberbullying is not restricted to an environment in which the perpetrator and victim are in proximity, but rather can affect the victim in multiple environments (i.e., school, home, and public domains) (e.g., Asher et al., 2017; Dorlen et al., 2011). It also can occur through multiple types of cyber-attacks (i.e., flaming, harassment, cyberstalking, denigration, impersonation, exclusion, and outing (e.g., Beran & Li, 2007; Estes, 2013; Holt & Gevins, 2014; Li, 2010; Nuccitelli, 2012).

## Cyberbullying vs. Traditional Bullying

Bullying has been defined as aggressive acts that are unwanted and harmful, repeated over time and occur in relationships where a power differential exists (Asher et al., 2017). Traditional bullying can include both verbal and/or physical acts and requires physical proximity between the perpetrator and the victim (Asher et al., 2017). Whittaker and Kowalski (2014) note that one of the defining characteristics of traditional bullying is the power imbalance between the bully and the victim which might be due to differences

in physical strength or social status. Cyberbullying is differentiated from traditional bullying. Physical proximity is not necessarily due to the use of different forms of electronic mediums. The lack of physical proximity and use of different electronic mediums allows for anonymity in many instances of cyberbullying (e.g., Asher et al., 2017; Sobba et al., 2017). Asher and colleagues (2017) note that extension of bullying into environments that were previously considered *safe*, may result in increased levels of harm to the victim. Patchin and Hinduja (2015) note that harm is not only physical, but may also include social, emotional, psychological, or behavioral harm. Many cyberbullying victims know and consider the cyberbully a friend, or someone they have a personal relationship with (Whittaker & Kowalski, 2014). Cyberbullies may be individuals who would not engage in traditional bullying due the ability to remain anonymous when using electronic mediums or forums (Sobba et al., 2017). Cyberbullying also can involve large audiences. For example, it can be posted and shared in multiple public forums among people who do not know or have a relationship with the victim (Thomas et al., 2014). As a result, of the widespread dissemination of a single posting, a single act of electronic bullying can be viewed as causing repeated harm (e.g., Asher et al., 2017; Thomas et al., 2014). The defining characteristic of cyberbullying according to Asher and colleagues (2017) is the mediums in which the bullying occurs.

## Types of Cyberbullying

### *Types of Mediums*

Cyberbullying occurs across a variety of electronic mediums that include email, text message, chat rooms, during role play games, social media, and blogs (Whittaker & Kowalski,2014). As noted by Whittaker and Kowalski (2014), the electronic mediums change and evolve rapidly, with the popularity of these mediums also changing and evolving rapidly as well. According to recent research by Heron et al. (2019), 99.5% of college students in their study reported owning a smartphone and 95%% -indicated they use some form of social media app on their mobile device. Most (97%) reported using their mobile devise daily for texting and 92% reported emailing from their mobile devise at least once a day. Research has shown the most common methods of cyberbullying by college students involves the use of instant messaging, social networking, text messaging, chat rooms, email, and blogging. (e.g., Asher et al., 2017; Na et al., 2015; Whittaker & Kowalski,2014). Anonymity of the perpetrator of cyberbullying has been found to be a component of cyberbullying that is more prevalent in email messages (Barlett, 2015).

### *Types of Cyber-Attacks*

According to Baren and Li (2007), there are primarily six types of cyber-attacks: (a) flaming; (b) harassment and cyber stalking; (c) denigration/spreading information; (d) impersonation; (e) exclusion; and (f) exposing, outing and/or trickery.

**Flaming.** Flaming is defined as sending angry, rude, or vulgar messages, directed to a person or group of people either privately or in an online group (Li, 2010). Beran and Li (2007) note that flaming can occur across multiple mediums, including e-mail or text

messaging. Nuccitelli (2012) adds that while flaming may have the features of normal messages, its intent is to assert power or dominance, typically in the mediums of discussion boards or groups, chatrooms, and newsgroups.

**Harassment and Cyberstalking.** Harassment is defined as repeatedly sending a person offensive messages (e.g., Beran & Li, 2007). Cyberstalking is defined as harassment that can include threats of harm or intimidating messages (e.g., Beran & Li, 2007; Li, 2010). Cyberstalking can involve a threat that is, or is perceived by the victim as, real offline stalking (Nuccitelli, 2012). Harassment and cyberstalking have been reported to be a particular concern, and reported as more distressing, by college aged students due to reports of unwanted sexual contact (Bauman & Baldasare, 2015). Perpetrators of harassment and cyberstalking were reported to be acquaintances of the victims in over half of cases, with strangers and intimate partners or ex-partners reported to be the perpetrators in other cases (Begotti & Maran, 2019). Women reported higher rates of cyberstalking, with men more often reported as the perpetrator, with the exception of cyber harassment threatening physical harm reported by more male respondents (Begotti & Maran, 2019).

**Denigration/Information Spreading.** Denigration or put-downs include sending or posting harmful, untrue, or cruel statements about a person (e.g., Beran & Li 2007; Li, 2010). Denigration also includes spreading gossip and/or rumors, whether false or not, that can be intended to make fun of a person, harm their reputation, or interfere with their relationships with other people (e.g., Beran & Li, 2007; Nuccitelli, 2012). Denigration

can also include the sending or posting of pictures or video that are intended to make fun or harm the reputation of a person (Langos,2014).

**Impersonation.** Impersonation, also referred to in the literature as *masquerading*, is defined as pretending to be someone else by posting or sending statements/ material that makes them look bad or puts that person in a potentially dangerous position. (e.g., Baren & Li 2007; Li 2010). Langos (2014) notes that since this form of cyberbullying can sometimes involve gaining access to the victims' personal online email or social media accounts, the access can result in both invasion of privacy and humiliation.

**Exclusion.** Exclusion includes actions that intentionally exclude a person from an online group or online group activities (Li, 2010). Exclusion can include intentionally leaving victims out of instant message groups, friend sites on social media and other online group activities. Research that looked at cyberbullying on the social media platform Facebook, noted that 48% of respondents reported being defriended or deliberately blocked from a social networking site (Dredge et al., 2014). College students who are members of fraternities and sororities have reported higher levels of distress with this form of cyberbullying, potentially due to social group memberships in these organizations, when compared to college students who are not members of these organizations (Bauman & Baldasare, 2015).

**Exposing, Outing and Trickery.** Exposing, outing and trickery are defined as engaging with someone online and tricking them into revealing embarrassing or private information then forwarding and posting that information publicly (Li, 2010). Spread of

private pictures and/or video clips has been reported to be distressful for cyberbullying victims (Langos, 2014).

## Prevalence

Most current research on the prevalence of cyberbullying has looked at middle school and high school demographics; college age prevalence rates are scarcer. Technology use among college students has proliferated in the past few years, with current research showing that 99.5% of college students own a smart phone and 88% to 90% of those college students are on some type of social media platform (e.g., Heron et al., 2019; Pew Research Center, 2019). Research by Whittaker and Kowalski (2014) found that 99.6% of participants texted often or frequently and 98.4% frequently used email. According to research, college students are proficient with online use and spend substantial amounts of time in online activities and communications (Asher et al., 2017). Whittaker and Kowalski (2014) found that participants reported internet use of between 1 and 6 hours a day.

### *Overall Prevalence Rates*

Overall self-reports of experiencing cyberbullying among college students is about 20% (e.g., Alquahtani et al., 2018; MacDonald & Roberts-Pittman, 2010; Whittaker & Kowalski, 2014)). Some of the difficulties with reporting prevalence of cyberbullying lie in the varied ways cyberbullying has been researched and reported in previous studies, including the time ranges of reporting (e.g., have they reported victimization in the past month, in the past 6 months, past year, or ever experienced victimization, Kowalski et al., 2019). Comparing prevalence rates is further complicated

by the scarcity of data on cyberbullying among college age demographics (Kowalski et al., 2019).

### *Prevalence by Medium*

Prevalence varies when examining the different mediums used during cyberbullying (e.g., Alqahtani et al., 2018; Bauman & Baldasare, 2015; Li, 2010; Mishna et al., 2018). Research by Bauman and Baldasare (2015) noted that social media was the most frequently reported medium for cyberbullying in their study, (i.e., Facebook); text messaging and email were also frequency used. Recent research by Alqahtai et al., (2018) found that combined methods of cyberbullying were used in 75% of cyberbullying instances reported by college students. These authors also noted that when only one medium was used, Facebook was the most frequent medium (i.e., reported by 9% of students who were cyberbullied); text messaging was close behind (i.e., reported by 8% of students who were cyberbullied). When looking at those who reported experiencing cyberbullying during the past year, social media (83%) and texting (62%) were reported to be used in at least one incident by Holt and Givens (2014). Older research reports have indicated that text messaging was the most commonly used medium used for cyberbullying (Li, 2010). Research with college students by MacDonald and Roberts-Pittman (2010) found that of the 21.9% of students that reported being cyberbullied, (a) 25% reported they were cyberbullied via a social network site, (b) 21.2% reported they were cyberbullied by text messages, (c) 16.1% reported being cyberbullied by email messages, (d) 13.2% had been harassed or threatened by instant messages, (e) 9.9% reported someone had posted denigrating or embarrassing information about them in chat

rooms, and (f) 6.8% reported someone had posted denigrating information or images of them on a website.

### *Prevalence by Type*

**Flaming.** Flaming is one of the more common forms of cyberbullying (e.g., Beran & Li, 2007; Estes, 2013; Francisco et al., 2015; Holt & Givens, 2014). Among college students that reported experiencing cyberbullying, between 28% and 79% reported one or more acts of flaming (e.g., Estes, 2013; Francisco et al., 2015; Holt & Givens, 2014; Mishna et al., 2018). Mishna and colleagues (2018) found that 28% of the college student in their sample that had experienced at least one act of flaming in the past 6 months. For other researchers who provide a longer timeframe (i.e., during the past year) the rates were higher (e.g., Estes, 2013; Holt & Givens, 2014). While flaming can occur across multiple mediums, Estes (2013) found that it occurred most frequently via text messaging among her college sample.

**Harassment and Cyberstalking.** Reports of experiencing cyber-harassment have been found to range from 49% to 60% (Estes 2013; Holt & Givens 2014), while the prevalence of experiencing cyberstalking range between 39% to 54% among college samples (e.g., Begotti & Maran, 2019; Estes, 2013; Holt & Givens, 2014). Begotti and Maran (2019) found that among the 49% of the participants in their study who reported experiencing cyberstalking, rates were higher for women (73.4%) than men. According to Begotti and Maran (2019), the perpetrators of this cyberstalking was reported most often to be a friend or acquaintances (54%), followed by a stranger (26%), and then an intimate partners or ex-partners (20%). Estes (2013) found that cyber stalking most frequently

occurred via social media and cyber-harassment occurred most frequently via text messaging.

**Denigration and Information Spreading.** Prevalence rates vary widely (from 21% to 70%) regarding experiencing cyberbullying via denigration and information spreading among college students (e.g., Estes, 2013; Holt & Givens, 2014; Mishna et al., 2018). Mishna et al. (2018) found that of the 21% of their college sample that reported this type of experience during the past 6 months, 8% reported having hurtful comments posted publicly either by test message or online one or more times. Additionally, 13% of respondents reported having false rumors spread about them by text message or online at least once. Holt and Givens (2014) reported 61% and Estes (2013) 70% of the college students in their studies who reported experiencing cyberbullying indicated that they had experienced denigration and information spreading during the past year. Estes (2013) found that this type of cyberbullying occurred most frequently via text messaging followed by social media sites.

**Impersonation.** Prevalence rates of cyberbullying through impersonation also vary widely (7% to 50%) among college samples (e.g., Dredge et al., 2014; Estes, 2013; Holt & Givens, 2014; Mishna et al., 2018). Dredge et al. (2014) reported 7% of respondents said someone had set up a social networking site page posing as them during the past 6 months. Additionally, 11.6% had reported their social networking page had been hacked into after someone obtained login details and 37% had someone hack into their social networking page when they did not log out. Similarly, Mishna et al., (2018), found that 7% of their sample reported that they had been impersonated by text message

or online in the past 6 months. Among college students who reported experiencing any form of cyberbullying during the past year, impersonation was reported by 39% by Estes (2013) and 50% by Holt and Givens (2014). In both of these studies, the time period during which cyberbullying experiences could have occurred were longer and they also explored a wider variety of mediums. Estes (2013) found that impersonation occurred most frequently during online gaming.

**Exclusion.** College students want to feel included and part of community. Exclusion, particularly on social media sites, chat rooms and role-playing games is an often-reported type of cyberbullying (e g., Dredge et al., 2014; Mishna et al., 2018; Smith et al., 2017). Prevalence rates for experiencing cyberbullying through exclusion range from 19% to 84% (e.g., Dredge et al., 2014; Estes, 2013; Holt & Givens, 2014; Mishna et al., 2018). When Mishna and colleagues (2018) asked the college students in their sample if they had been excluded by text message or online during the past 6 months, 19% indicated that they had experienced this form of cyberbullying at least once. Dredge et al. (2014) found that 48% their sample reported having been deliberately block or unfriended by someone from a social networking site during the past 6 months. Additionally, 13% of reported that someone had set up a social networking site page and excluded them from the page during the past 6 months. Among college students who reported experiencing cyberbullying during the past year, 74% in Estes (2013) while 84% in Holt and Givens (2014) experienced at least one incidence of exclusion. Estes (2013) found that the most common medium for this form of cyberbullying was text messaging followed by social media sites.

**Exposing, Outing and Trickery.** There is limited published research showing prevalence of exposing, outing and trickery. Francisco et al. (2015) found that 33% of college students in their study reported having data revealed about their private life exposed. Dredge et al. (2014) found that 11% of their participants reported that someone took information from their social media site and used it against them. Both Holt and Givens (2014) and Estes (2013) found that 51% of the college students in their sample who reported experiencing cyberbullying, reporting at least one incident involving exposure, outing or trickery. Estes (2014) found that this occurred most often via text messaging followed by social media sites and then through online gaming.

## Purpose of the Current Study

The purpose of the current study was to update previous research examining differences in cyberbullying among college students. Specifically, previous thesis research by Reed (2008) and Estes (2013) explored experienced with different forms of cyberbullying attacks through different types of medium. Given the quickly evolving use of mediums by college students noted by Heron et al., 2019 and the Pew Research Center, 2019, the current study built upon the methodologies utilized in the previous thesis studies while updating the types of mediums explored. Additionally, the current study explored other sociodemographic characteristics of the participants to examine current trends in cyberbullying.

### *Hypotheses*

**Hypothesis 1.** It was predicted that exclusion/ignoring would be the most common form of cyberbullying reported by participants. Flaming followed by denigration also would be commonly reported.

**Hypothesis 2.** It was predicted that social media cites would be the most commonly reported type of medium for cyberbullying to occur. Text messaging also would be commonly reported.

**Hypothesis 3.** It was predicted that women would report experiencing some types of cyberbullying attacks more than men. Specifically, women would be more likely to experience cyberstalking than men.

# CHAPTER II

# METHODS

## Participants

The participants were 75 undergraduate students from a midsized university in the southeast who indicated they had at least one experience with cyberbullying. The majority were women (69.7%) and 28.9 % were men. One participant indicated that they were transgender. Most of the current sample self-identified as Caucasian (55.3%) with 34.2 % reporting their race as African American and 10.5% as other ethnicities. The majority were between 18 and 19 years old (72.4%) with 25% reporting to be between 20 and 22 years old. Only 2.6% reported being over 22 years old. Most were Freshman (56.6%); 28.9% reported they were Sophomores and 14.5% were Juniors.

## Measures

### *Demographic Questions*

The survey began with five demographic questions. Participants were asked to self-report their gender. Participants were asked to self-report their gender. They were asked to indicate their ethnic background out of the following categories: (a) African American; (b) Caucasian; and (c) Other. Participants were asked to indicate their age group: (a) 18-19; (b) 20-22; and (c) over 22.Participants were asked their current year in college: (a) Freshman; (b) Sophomore; (c) Junior; or (d) Senior.

### *Cyberbullying Questions*

The second part of the survey, consisted of 49 questions that address seven types of cyber-attacks (i.e., flaming, harassment, cyberstalking, denigration, impersonation,

exclusion, and outing). The types of activities used for this survey were adapted from research conducted by Beran and Li (2007) and used in previous thesis research by Estes (2013). For each item, participants rated how frequently each experience occurred. Participants rated how often it occurred on a 5-point Likert scale (1 = *never*, 2 = *rarely*, 3 = *sometimes*, 4 = *often*, 5 = *very often*). The types of attacks are delineated by the seven types of electronic medium used in the attack (i.e., email, text message, instant message, chat room, during role playing games, social website, and blog).

**Procedure**

After obtaining IRB approval, participants were recruited through the MTSU Psychology Departments Research Pool. Participants first completed the informed consent. The participants then completed the survey. When finished, the participants were provided a debriefing statement that provided contact information for crisis and counseling resources.

# CHAPTER III

# RESULTS

Univariate analyses were calculated using frequencies for categorical variables; means and standard deviations were used for continuous variables. Chi-square was the bivariate statistic used to assess significant gender differences in the different types of attacks. These analyses are commonly employed in assessing issues related to prevalence of cyberbullying (e.g., Alqahtani et al., 2018; Francisco et al., 2015; Mishna et al., 2018).

## Hypothesis 1

It was predicted that exclusion/ignoring would be the most common form of cyberbullying reported by participants. Flaming followed by denigration also would be commonly reported. As can be seen in Table 1, this hypothesis was supported. Specifically, approximately 90% of the participants that reported experiencing at least one incident of cyberbullying in the last year indicated they were excluded. Almost the same number of participants reported experiencing flaming (82.7%) as those who reported experiencing denigration (81.3%).

## Hypothesis 2

It was predicted that social media sites would be the most commonly reported type of medium for cyberbullying to occur. Text messaging also would be commonly reported. As can be seen in Table 2, support found for Hypothesis 2. Specifically, 94.7% of participants that reported experiencing at least one incident of cyberbullying, reported an attack via social websites. Additionally, 81.3% reported experiencing an incident of cyberbullying via text message.

Table 1.

*Prevalence by Type of Cyber-Attack*

| Type of Attack | Yes % (*n*) | No % (*n*) |
|---|---|---|
| Flaming | 82.7% (62) | 17.3% (13) |
| Harassment | 68.4% (52) | 31.6% (24) |
| Cyberstalking | 69.3% (52) | 30.7% (23) |
| Denigration | 81.3% (61) | 18.7% (14) |
| Impersonation | 62.7% (47) | 37.3% (28) |
| Exclusion | 90.8% (69) | 09.2% (07) |
| Outing | 75.0% (57) | 25.0% (19) |

Table 2.

*Prevalence by Type of Medium*

| Type of Medium | Yes % (*n*) | No % (*n*) |
|---|---|---|
| Email | 65.8% (50) | 34.2% (26) |
| Text Message | 81.3% (61) | 18.7% (14) |
| Instant Message | 60.0% (45) | 40.0% (30) |
| Chat Room | 40.8% (31) | 59.2% (45) |
| Gaming | 40.0% (30) | 60.0% (45) |
| Social Website | 94.7% (72) | 05.3% (04) |
| Blog | 24.0% (18) | 76.0% (57) |

**Hypothesis 3.**

It was predicted that women would report experiencing occurrences of cyberbullying attacks more than men. Specifically, it was predicted that women would be more likely to report experiencing cyberstalking than men. As can be seen in Table 3, among those who reported experiencing at least one incident of cyberbullying in the last year, a higher percentage of women than men reported experiencing cyberstalking. Additionally, women were more likely than men to report experiencing harassment as a form of cyberbullying. Interestingly, although not statistically significant, more men reported experiencing flaming as a type of cyberattack in the past year than did women.

Table 3.

*Prevalence of Type of Attack by Gender*

| Type of Attack | Female % (n) | Male % (n) | $\chi 2$ |
|---|---|---|---|
| Flaming | 79.2% (42) | 86.3 %(19) | 0.33 |
| Harassment | 75.5% (40) | 52.4% (11) | 4.64* |
| Cyberstalking | 79.2 (42) | 42.9% (09) | 9.29** |
| Denigration | 84.9% (45) | 71.4% (15) | 1.78 |
| Impersonation | 66.0% (35) | 52.3% (11) | 1.19 |
| Exclusion | 92.5% (49) | 86.4% (19) | 0.68 |
| Outing | 77.4% (41) | 68.2% (15) | 0.69 |

*Note*: *$p \leq 0.05$; ** $p \leq 0.01$

# CHAPTER IV

# DISCUSSION

As predicted in hypothesis 1, exclusion/ignoring was found to be the most common form of cyberbullying, followed closely by flaming and denigration. Exclusion, particularly on social media sites, chat rooms and role-playing games is an often-reported type of cyberbullying (e g., Dredge et al., 2014; Mishna et al., 2018; Smith et al., 2017). With the popularity of social media sites, the findings in this study are consistent with previous research by Dredge et al., (2014) which found 48% of respondents in their study reported being defriended or deliberately blocked from a social media site. Additionally, flaming is a common form of cyberbullying (e.g., Beran & Li, 2007; Estes, 2013; Francisco et al., 2015; Holt & Givens, 2014). Flaming was reported by many (83%) of the participants in the current study. While Estes (2013) found flaming to be the most common form of bullying in her study, exclusion/ignoring was the second most common form of cyber-attack reported.

As predicted in hypothesis 2, social media sites were found to be the most reported medium for cyberbullying, followed by text messaging. Differences from previous research are likely due to rapidly evolving technology, with the popularity of mediums also changing and evolving (Whittaker & Kowalski, 2014). Results of this study were consistent with research indicating increased social media use by college students by Heron et al., (2019) that found 95% of respondents reporting they use some form of social media app on their mobile devices. Previous research had reported more frequent use of text messaging followed by social media in college student populations

(e.g., Alqahti et al., 2018; Bauman & Baldasare, 2015; Estes, 2013). Instant messaging rates have increased from previous research (Estes, 2013), and instant messaging platforms have increased (i.e., Snap Chat) in recent years.

As predicted in hypothesis 3, women overall reported experiencing more cyberbullying attacks than men. In the current study, women reported statistically significant higher rates of experiencing cyberstalking (79%) compared to men (43%). As noted previously, Begotti and Maran (2019) found that among those who reported experiencing cyberstalking in their study, rates were higher for women (73.4%) than men. In the current study, women also reported statistically significant higher rates of cyber-harassment compared to men. Although not statistically significant, more men in the current study reported flaming as a type of cyber-attack than women.

**Limitations and Future Directions**

Several limitations can be found with this study. The first limitation was that the sample was not a randomized sample. Students self-selected to participate in this study, limiting the generalizability of the findings. Due to self-selection for participation, there is a gender imbalance with the sample with more women participating than men. As noted in previous research by Dredge et al. (2014), imbalanced, self-selection bias has the potential for limiting generalizability.

A second limitation of this study, small number of participants were from only one midsized university, limiting the generalizability based on university size and geographic culture. While the sample size is similar to Estes (2013), it is small compared to other research on the topic. For example, Alqahtani et el. (2018) sample from a single

university was 165 while Bauman and Baldasare (2015) had a larger sample (1, 078) from multiple colleges within a university. Future directions for study would include larger sample sizes, recruited from multiple university sites in order to increase generalizability.

A third limitation of this study is related to the self-report nature of cyberbullying reports. One issues with self-reports of experiences with cyberbullying is that participants may misinterpret or misunderstand questions. For example, participants could define the types of attaches or even the types of medium used differently. Future directions of study could include the monitoring of study participants technology interactions to obtain objective data (Brewer & Kerslake, 2015).

Little research has looked at the psychological correlates of cyberbullying by type of attack and the perceived feelings associated with the attack based on demographics (Bauman & Baldasare, 2015). Understanding the psychological correlates of cyberbullying can aid in development of interventions in academic settings to both prevent cyberbullying from occurring and assist victims of cyberbullying. As noted by Baron & Li (2005), feelings associated with cyberbullying can impact academic achievement. For example, prior research has reported that college students who are members of fraternities and sororities reporting higher levels of distress when excluded or ignored, potentially due to social group memberships in these organizations, compared to college students who are not members of these organizations (Bauman & Baldasare, 2015). Future research into the psychological correlates by demographic could aid in identifying vulnerable populations of college students. The research that has been

published has had conflicting results and did not in some cases include the LGBTQ population as part of the demographic (Francisco et al., 2015).

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