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Do these violent delights have violent ends? Social Norms, Alcohol, & Sexual Cyberbullying

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DO THESE VIOLENT DELIGHTS HAVE VIOLENT ENDS?

SOCIAL NORMS, ALCOHOL, & SEXUAL CYBERBULLYING

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Abstract

Sexually aggressive behavior is well-documented among college students. However, little is known about the role technology may play in facilitating this behavior. Given that social norms have been established as a useful framework for understanding problematic and risky behavior in college students, the current authors sought to determine whether this theory might also provide insight into the use of technology to facilitate sexually aggressive behavior. Thus, this work sought to determine whether sexually aggressive behavior which occurs through the use of technology and social media, henceforth known as sexual cyberbullying, mediated the relationship between perceived social norms of sexually aggressive behavior and face to face sexual aggression and coercion. Moreover, given the role of alcohol use in other problematic behaviors in this population, we examined whether alcohol use moderated the aforementioned relationship. Additionally, the present study sought to determine whether engagement in sexual cyberbullying as either a victim or a perpetrator was associated with negative psychosocial outcomes including depression, anxiety, stress, loneliness, and face-to-face sexual victimization. Participants were college students (N=641) at a midsized university in the south-eastern United States. Participants were recruited via the online system, SONA, as well as through flyers, campus wide list-serve emails, and bulletin boards. Participants who selected to complete the study via SONA were redirected via a link to Qualtrics; those who were recruited in other ways were provided with a link directly to Qualtrics. Following informed consent, participants completed the following measures in order: perceived social norms of sexually aggressive strategies (SSS- Social Norms), sexual strategies scale for personal behavior (SSS- Self),

Alcohol use Disorders Identification Test (AUDIT), the Cyberbullying Experiences Scale (CES),

Sexual Experiences Scale (SES), the Depression Anxiety and Stress Scale (DASS-21), the

UCLA Loneliness scale (UCLAL-8), and the Marlowe-Crowne Social Desirability scale. Thirty

percent of participants reported engaging in some form of sexually aggressive behavior offline

and only 15.6% endorsed engaging in sexual cyberbullying. However, 100% of participants

endorsed the belief that their peers were engaging in some form of sexually aggressive behavior.

Slightly less than half of participants reported being a victim of sexual cyberbullying (40.7%),

and being a victim of sexual cyberbullying significantly predicted being a victim of face to face

sexual aggression (R^2= .210, F(15,25)=3.995, p<.001). Individuals who were victims of

sexual cyberbullying were significantly different from non-victims in their reports of depression,

anxiety, stress, and loneliness (F(15,16)=1.779, p<.01, η_p^2=.044), with victims having higher

scores than non-victims across measures of these symptoms (all p's < .05). Similarly individuals

who reported being perpetrators of sexual cyberbullying were significantly different than non-

perpetrators on measures of anxiety and stress ((F(10,11)=1.999, p<.05, , η_p^2=.033), with

perpetrators reporting higher scores on measures of these symptoms. Conditional process

modelling revealed a significant indirect effect of perceived social norms of sexually aggressive

behavior on face to face sexual aggression via sexual cyberbullying (b=.0015, p<.001, 95% CI

[.0030, .0110]), indicating mediation. However, alcohol use did not demonstrate a moderating

effect on this relationship. Additional findings and implications are discussed.

Dedication:

For my parents, who make everything possible.

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CHAPTER 1: BACKGROUND

Technology is increasingly playing a role in our interactions with one another.

Unfortunately, as with our face-to-face interactions, our interactions with one another via

technology are not always positive. One such negative online behavior is cyberbullying.

Cyberbullying is typically defined as an intentional act of aggression carried out repeatedly by

one individual against another through the use of electronic media (Calvete et al, 2010; Hinduja

& Patchin, 2007; Smith et al., 2008). This aggressive behavior can include the following:

posting hurtful comments about an individual on a website or social media, excluding someone

from an online group intentionally, sending derogatory or threatening messages (via email, text

or another online messenger), distributing embarrassing or sexually explicit photos or other

information via text message, cell phone applications or online, and spreading rumors, secrets or

otherwise attempting to socially undermine peers (Calvete et al., 2010; Hinduja & Patchin, 2007;

Kokkinos et al., 2014; Pelfrey & Weber, 2013; Pettalia et al., 2013; Smith et al., 2008).

Cyberbullying is prevalent among adolescents as well as among college students (Kokkinos,

Antiniadou, & Markos, 2014; Kowalski et al., 2014; Junoven & Gross, 2008; Kowalski &

Limber, 2013; Tokunaga, 2010; Twyman et al., 2010; Fransico et. al., 2015) and is associated

with a variety of negative psychological, interpersonal, academic and forensic outcomes for

perpetrators and victims (Kowalski & Limber, 2013; Tokunga et al., 2010; Patchin & Hinduja,

2006; Pelfrey &Weber, 2013; Schenk, Fremouw & Keelan, 2013; Goshe, 2016).

One area where cyberbullying needs to be explored more thoroughly is the domain of

romantic interactions and relationships. In particular, this should be done in order to better

understand the specific sub behavior of sexual cyberbullying. For instance, among college

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students, Lyndon et al., (2011) found that 67% of participants surveyed endorsed engaging in at least one harassing behavior towards an ex-partner via Facebook. Sadly, youth and college students are not the only ones engaging in this sexual cyberbullying behavior. An Australian survey of 3,000 adults found that 37% of women reported experiencing some form of online sexual harassment, with 25% experiencing "repeated and/or unwanted sexual requests" (Powell and Henry, 2012). This online behavior appears to have negative consequences. Thompson and Morrison (2013) found that among college aged males, engaging in technology-based coercive behaviors (e.g. asking someone online for sexual information about themselves when that person did not want to disclose this information, posting a sexually suggestive message or picture to someone's online profile, sharing a sexually suggestive message or picture with someone other than who it was originally meant for, etc.) was related to hostility towards women, rape supportive beliefs, and peer approval of forced sex, as well as a number of other variables traditionally linked to victim blaming and sexual assault.

Social norms theory may prove to be a useful framework for understanding sexual cyberbullying behavior among college students. Social norms theory has been used previously to understand the tendency of college students to engage in dangerous behaviors (Baer et al., 1991; Borsari and Carey, 2003; Larimer et al., 2004; Lewis and Neighbors, 2004; Neighbors et al., 2007; DeJong et al., 2006; Lewis and Neighbors, 2006; Neighbors et al., 2004; Perkins and Berkowitz, 1986; Schultz et al., 200; Werch et al., 2000; Weschler et al., 2003), as well as to understand attitudes about sexual assault and violence towards women (Dardis et al., 2015; Fabiano et al., 2003). In particular, the perceived social norms of sexually coercive behavior, both offline and online, will be examined.

The purpose of this work is to examine sexual cyberbullying behavior using a social norms framework. The specific epidemiology of cyberbullying will be examined, as well as that of sexual cyberbullying. The impact of this behavior on both the perpetrator and the victim will also be discussed. Additionally, parallels will be drawn between this online behavior and offline sexual coercion and harassment. Social norms theory will be broadly discussed, with emphasis placed on the current perceived and actual norms specific to romantic and sexual behavior among college students. Contextual factors such as the role of alcohol use will also be examined.

Cyberbullying

Though it is a relatively new area of study, cyberbullying has gained increasing attention from researchers and the public alike. Cyberbullying covers a wide variety of behaviors from online social exclusion to explicit threats delivered via social media apps, text messages, or other electronic media (Calvete et al., 2010; Hinduja & Patchin, 2007; Kokkinos et al., 2014; Pelfrey & Weber, 2013; Pettalia et al., 2013; Smith et al., 2008). Cyberbullying has been documented in individuals as young as eleven (Bastiaensens et al., 2014; Junoven & Gross, 2008; Mishna et al., 2012; Twyman et al., 2010) and as old as college age (Baldasare et al., 2012; Franscisco et al., 2015; Kokkinos et al., 2014; Kowalski et al., 2012; Rafferty and Ven, 2014). In addition to occurring across various mediums and being perpetrated by a wide variety of individuals, cyberbullying can be difficult to monitor due to the often anonymous nature of the internet which can be manipulated by aggressors, either intentionally or unintentionally, to escape identification. As such, prevalence rates for cyberbullying have been difficult to obtain, with studies reporting victimization rates ranging between 11 and 40%, and some studies indicating that victimization

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may be as high as 72% (Kowalski et al., 2014; Junoven & Gross, 2008; Kowalski & Limber, 2013; Tokunaga, 2010; Twyman et al., 2010; Selkie, Kota, & Moreno, 2016).

Cyberbullying reporting by college aged individuals may be particularly suspect, as research has demonstrated that these individuals do not often see their behavior as "cyberbullying", due to the fact that these individuals deny having negative or aggressive intentions towards their victims (Baldasare et al., 2012). These individuals often report that this behavior is actually a form of "joking" and is intended to be "funny". In fact, in their survey of 561 college students, Fransico et al. (2015) found that 36.4% of individuals reported engaging in cyberbullying "just for fun". Given these discrepancies in their reporting of cyberbullying behavior generally, additional study is likely warranted to examine rates of other forms of cyber aggression (Ehman, Lair & Gross, 2018).

Regardless of the perceived or actual motivations of those involved, cyberbullying has been demonstrated to have a serious negative impact. Cyberbullying involvement as a victim has been associated with lower self-esteem, poorer academic performance, increased hostility and detachment, increased general and social anxiety, increased aggressive and risky behavior, increased reporting of depressive symptoms, psychosocial problems, decreased ability to concentrate, negative mood, and increased reporting of suicidal ideation (Hinduja and Patchin, 2007; Junoven and Gross, 2008; Kowalski and Limber, 2013; Mitchell, Ybarra & Finkelhor, 2007; Schenk and Fremouw, 2011; Tokunga, 2010; Kritsotakis et. al., 2017; Peled, 2018; Selkie et. al., 2015). Furthermore, many of these symptoms are reported even when controlling for traditional forms of bullying and abuse (Campbell et al., 2015; Mitchell, Ybarra & Finkelhor, 2007). Though these symptoms vary across studies depending on frequency, length, and severity of cyberbullying occurring, they are present in research examining both youth and college

students (Hinduja and Patchin, 2007; Kowalski and Limber, 2013; Mitchell, Ybarra & Finkelhor, 2007; Schenk, Fremouw & Keelan, 2013).

Sexual Cyberbullying

To date, there does not exist a specific name for the subset of cyberbullying behaviors which are sexual in nature. These behaviors include but are not limited to: harassment, stalking, attempted solicitation, coercion, and outright extortion (Chaki and Shazly 2013; Citron and Franks 2014; Jones, Mitchell & Finkelhor, 2012; Lyndon et al., 2011; Mitchell and Ybarra, 2007; Powell and Henry, 2012; Henry and Powell, 2018). A study conducted by Mitchell and Ybarra (2007) found that 15% of youth surveyed reported being the victim of unwanted online sexual solicitation in the past year, with 3% of those surveyed indicating that these unwanted online sexual solicitations occurred monthly or more often. Furthermore, according to Jones, Mitchell and Finkelhor (2012) the online sexual harassment of youth has been on the rise. A survey of 1,500 youth (aged 10-17) found that 11% of individuals surveyed had experienced online sexual harassment (Jones, Mitchell & Finkelhor, 2012). These findings represent a 6% increase from rates in 2000 and a 9% increase from similarly calculated rates in 2005 (Jones, Mitchell & Finkelhor, 2012).

This use of technology to engage in sexual cyberbullying is not limited to younger individuals. For instance numerous recent headlines have also been made, though almost no research conducted, on the issue of online "sextortion". Sextortion is a novel crime where individuals, primarily adults, are threatened or extorted with a nude photo of themselves. Typically, individuals are informed that if they do not share additional content (photos, videos, etc.) with the aggressor this image will be shared with others online without their consent (Chaki and Shazly 2013).

A related issue is that of 'revenge porn'; this term is typically used to refer to the act of an individual (typically a former boyfriend or lover) who shares nude photos of a former partner with others online without his or her consent (Citron and Franks 2014). This is done in order to get revenge on the former partner for the breakup or for some perceived slight (Citron and Franks 2014). Sometimes photos shared as 'revenge porn' also contain the victim's personal contact information, which can lead to further victimization and harassment by new perpetrators (Citron and Franks 2014). Few data have been collected to determine the prevalence rates of these behaviors, either for victimization or perpetration. However, an Australian survey of 3,000 adults found that 37% of women reported experiencing some form of online sexual harassment, with 25% experiencing "repeated and/or unwanted sexual requests" (Powell and Henry, 2012).

Among college students specifically, Lyndon et al. (2011) found that 67% of participants surveyed endorsed engaging in at least one harassing behavior towards an ex-partner via Facebook. Furthermore 50% of participants reported engaging in two or more of these behaviors. Behaviors included writing a post on the ex's wall to taunt him/her, creating a fake Facebook profile of the ex-partner to cause them problems, and posting nasty or spiteful comments on a photo of an ex-partner. Individuals who engaged in this online harassment were more likely to obsessively pursue partners (i.e. repeatedly attempt to establish a romantic relationship or demand intimacy from another individual even when they were aware the other person did not wish to be involved) both offline and online. This form of obsessive pursuit is often regarded as a precursor to stalking types of behaviors (Lyndon et al., 2011). Another small study using a series of focus groups (Melander, 2010) determined that specifically among college students, chief issues concerning cyberbullying and intimate relationships were partners' ability to exert "control" and to engage in "quick and easy violence" through the use of social media.

Furthermore, college students were concerned that information or situations that previously would've remained private within a relationship could be easily made public using technology.

A study by Reed et al. (2016) demonstrates that college student concerns about the use of technology and intimate partner aggression appear well founded. In a survey of 356 undergraduate students, 62.6% of students in relationships (n=321) reported using digital media to engage in some form of intimate partner aggression or harassment. These behaviors included, but were not limited to: monitoring a partner's information on a cell phone or computer without their consent, using technology to monitor a partner's whereabouts, sharing an embarrassing photo or video of their partner without their permission, pressuring a partner to take a sexually suggestive or nude photo or video, and threatening to distribute private or embarrassing information about their partner without their permission (Reed et al., 2016). Additionally, individuals who were victims of this sort of technological intimate partner harassment were more likely to also be victims of physical, psychological, and sexual abuse (Reed et al., 2016). Halligan and colleagues (2013) reported similar findings in their survey of 259 undergraduate students (Halligan, Knox & Brinkley 2013). Furthermore, they found that students who were in abusive relationships identified technology use as being a barrier to ending contact with their abuser (Halligan, Knox & Brinkley 2013).

Thompson and Morrison (2013) surveyed 800 college males and found that 21.9% of the young men surveyed reported engaging in at least one form of "technologically based coercion". These behaviors were exclusively sexual in nature and included the following: attempting to get someone else to talk about sex online when they did not want to, asking for sexual information that another person did not want to reveal, posting a sexually suggestive message or picture to someone's social media profile, and sharing a sexually suggestive photo or message with

someone other than the originally intended recipient (Thompson and Morrison, 2013). These

online behaviors demonstrated potential for "real world" consequences, as individuals who

engaged more in this technological sexual coercion were also more likely to hold rape supportive

beliefs, and endorse peer approval of forced sex.

As with "real world" sexual harassment, online victimization has been associated with

negative psychological and psychosocial outcomes. As part of the "National Survey of

Children's Exposure to Violence", Jones et al. (2011) conducted extensive telephone interviews

over the course of five months with 2,051 youth ages 10-17. Data from this nationally

representative sample revealed that being a victim of online sexual harassment in the past year

was related to higher scores on measures of trauma and delinquency. Additionally, being a

victim of online harassment was associated with offline sexual harassment, rape, being flashed,

and psychological and emotional abuse (Mitchell et al., 2011).

A similarly large national cross-sectional survey, known as the "Growing Up with

Media" survey, was completed by 1,588 adolescents aged 10-15 who had used the internet at

least once in the previous six months. As part of this online survey, Ybarra et al. (2007) found

that anywhere between 23.8-76.5% of youth victims of online sexual harassment are also victims

of offline relational harassment. Moreover, 100% of youth who were classified as both

perpetrators and victims of online sexual harassment and solicitation reported being offline

perpetrators of physical and relational aggression (Ybarra et al., 2007). 75.2% of these

individuals also reported being perpetrators of offline sexual aggression (Ybarra et al., 2007).

These individuals also reported greater illicit substance use (Ybarra et al., 2007).

This trend in sexual cyberbullying appears into extend in the college years. For example,

McGinley and colleagues (2016) surveyed 2855 college students across five points during their

college career. Across all waves, 4-11% of participants reported experiencing sexual coercion and 20-42% reported experiencing some form of unwanted sexual attention or harassment. Additionally, 3-12% of participants reported receiving some form of sexual harassment via technology. Technological forms of harassment included offensive and sexual texts, emails, and hurtful or offensive comments on social media that were sexual in nature. Through growth modeling, students were categorized as either chronically or infrequently harassed across all modalities. Those students who were chronically victimized experienced increased depression, anxiety, marijuana use, and binge drinking. As one would expect, women were at increased risk for being chronic victims when compared to men, as were sexual minority students when compared to majority members.

In short, sexual cyberbullying appears to be a growing phenomenon meriting further exploration. Though data on this topic are limited, preliminary research suggests that this online behavior can have a serious negative psychological and social impact for victims.

Sexual Aggression in College Students

While there is limited data on use of technology to facilitate sexual aggression among college students, there is a wide body of research on interpersonal sexual aggression in this population. This research, which covers a broad spectrum of behaviors, may serve as a useful foundation for understanding the types of sexual aggression occurring in college environments, as well as its potential impact on bullies and victims.

Sexual aggression is unfortunately all too common on college campuses. According to their survey of 370 college students, Palmer and colleagues (2010) found that in the past year, 31% of men and 34% of women had experienced unwanted sexual contact. Unwanted contact

included everything from engaging in sexual activity due to implicit pressure (e.g. partner's arousal), explicit verbal coercion (e.g. arguments), physical force, and coercion or force through the use of alcohol or drugs (Palmer et al., 2010). 13% of men reported engaging in sexually coercive behavior, as did 6% of women. AnalyzeAnalyzes indicated that men reported engaging in significantly more coercive behavior ($p<.05$) than women (Palmer et al., 2010). Experience of unwanted sexual contact did not significantly differ by gender.

In their survey of college freshmen (N=780), Fossoss et al. (2011) found that 19% of women and 16.11% of men reported experiencing some form of sexual coercion. Similar findings on sexual coercion in college were reported by Fair and Vanyur (2011). In this study, 31.7% of the undergraduates surveyed (N=142) reported having been victims of sexual coercion in the past year. 21% reported being perpetrators of sexual coercion of some type towards their partner. Female participants were more likely to be coerced by their partner (30.6%) than to coerce them (17.1%), whereas males were equally likely to coerce as to be coerced (35.5%) (Fair and Vanyur, 2011). Additionally, condom use was negatively correlated with having a verbally coercive partner.

Hines (2007) examined the presence of sexual aggression and coercion among college students in romantic relationships. These sexual coercion data were collected as part of the International Dating Violence study. This multi-site study involved a consortium of universities across the globe, with data from this particular study consisting of 2084 male and 5583 female college students who had been involved in heterosexual romantic relationships in the past year. Across sites, 24.5% of women reported their partner had used verbally coercive tactics to obtain oral, vaginal or anal sex, and 2.3% reported experiencing a partner using physical force to obtain sex (Hines, 2007). Men reported victimization as well, with 22.0% of men indicating their

partner used verbal tactics to coerce sex, and 2.8% of men reporting that their partner had used physical force to obtain sex (Hines, 2007). At a site-wide level, gender hostility towards either men or women predicted reporting of both verbal coercion and forced sexual intercourse for that group. Thus, the more hostile individuals were at a site towards women, the more likely women were to report a partner using verbally coercive tactics or physical force tactics to obtain sex, with the same being true for hostility towards men (Hines, 2007). For both men and women, having a history of childhood sexual abuse, the more likely an individual was to report being a victim of verbally coerced or physically coerced sex.

Given the ubiquity of sexual aggression among college students, and the negative impact this may cause, it is essential to gain a better understanding of this behavior. Furthermore, given the prevalence of technology usage in other areas of life, it is likely that technology is used to facilitate acts of sexual aggression. This new sexual cyberbullying may also be contribute to negative psychological outcomes above and beyond its status as a precursor to face to face sexual aggression. Due to the novelty of sexual cyberbullying we propose using the framework of social norms theory to better understand this behavior, as social norms theory has previously been used to understand interpersonal sexual aggression and other deviant behaviors in college populations.

Contextual Factors

In order to understand sexual cyberbullying in college students it's imperative to consider certain contextual features which may shape their behavior with regards to intimate relationships. Of particular interest is alcohol use.

Alcohol

Alcohol consumption, particularly excessive alcohol consumption, among college students has been a topic of concern for some time (Baer, Stacey & Larimer, 1991; Neighbors et al., 2007; Borsari and Carey, 2003; Wechsler et al., 2003). Furthermore, given the disinhibitory effects of alcohol, it is imperative that we consider how its use might affect otherwise inhibited behavior such as aggression, sexual intimacy, and casual "hookups" in particular.

In a survey of college students' hookup behaviors, defined as a wide range of sexual behaviors engaged in by individuals not in a committed relationship without the expectation of further romantic involvement, (N=828), LaBrie and colleagues (2014) found that students who reported engaging in hookup behaviors within the past year were significantly more likely to have been consuming alcohol at the time when they met their hookup partners. Among those students who indicated consuming alcohol prior to their most recent hookup, 27.9% of males and 30.7% of females indicated that they would likely not have hooked up with their partners had they not been drinking at the time. Furthermore, the more alcohol individuals consumed prior to initiating a hookup, the more physically intimate they were likely to be (e.g. engaging in oral sex or vaginal intercourse as opposed to kissing or fondling). Interestingly, 34.4% of females and 27.9% of males reported that had alcohol not been involved in their hookup experience, they likely would not have "gone as far" physically as they had, even if they did report a desire to engage in a hookup (LaBrie et al., 2014).

Similar associations between alcohol consumption and hooking up have been found in other studies (Olmstead, Pasley & Fincham 2013). In their survey of college males (N=412), Olmstead, Pasley and Fincham (2013) found that greater consumption of alcohol was associated with an increased likelihood of engaging in hookup behaviors. Moreover, a later study of college males (N=158) conducted by Olmstead and colleagues (Olmstead et al., 2014) found that

men who reported greater binge drinking behavior prior to attending college had more hookup partners during their first semester of college than those men who reported little or no precollege binge consumption of alcohol. Furthermore, when drinking during their first semester in college these same men were more likely to engage in unprotected sexual intercourse.

In addition to the potential ramifications for physical health suggested by these findings, research also indicates that there may be the potential for negative psychological outcomes due to consuming alcohol in conjunction with hooking up. Palmer et al. (2010) found that individuals who were victims of unwanted sexual contact reported greater consumption of alcohol and fewer protective behavioral strategies (e.g. having a designated driver who was reliable, having a friend watch out for them when they were drinking, etc.) relative to their peers who did not report victimization. These individuals also reported higher alcohol expectancies on the "liquid courage" subscale of the Comprehensive Effects of Alcohol Scale (CEOA). Individuals who reported engaging in sexually coercive behaviors as aggressors had significantly higher alcohol expectancies on the "sexuality" subscale of this measure (Palmer et al., 2010).

Fossoss et al. (2011) produced similar results in their survey of college freshmen (N=780). In this study, being a victim of sexual coercion was marginally significantly associated with alcohol consumption, and was significantly associated with negative alcohol related consequences and with utilizing alcohol consumption as a coping mechanism (Fossoss et al., 2011). The connection between alcohol use and sexual coercion among college students was also demonstrated in a study conducted by Fair and Vanyur (2011). Individuals who reported drinking before or during a sexual encounter were significantly more likely to report using sexually coercive tactics (Fair and Vanyur, 2011).

Alcohol consumption has also been demonstrated to be associated with unwanted sexual intercourse, from regretted sexual intimacy to coercion, and assault (Flack et al., 2007). In a survey of one hundred and seventy-eight college students Flack and colleagues found that 62.2% of participants who reported engaging in unwanted sexual intercourse (n= 30) did so because their judgment was impaired by drugs or alcohol, while 37.8% of these individuals reported that unwanted sexual intercourse occurred when they were taken advantage of due to being "wasted" or otherwise impaired. An additional 24.3% reported that the incident of unwanted sexual intercourse occurred because their partner verbally pressured them. It should be noted that students who reported experiencing unwanted sexual behavior also reported significantly more frequent alcohol consumption (Flack et al., 2007).

Given the significant impact alcohol appears to have on sexual intimacy in college students, both with regards to hook-up behaviors, as well as experience and perpetration of sexual aggression, it is important to take it into consideration when conducting research on sexual intimacy in college students.

Social norms theory

Social norms theory posits that human behavior is often motivated or guided by what individuals believe is typical behavior for others in their social group (Scholly et al., 2005). This theory also proposes that our beliefs about others' attitudes and behavior are often incorrect. Ultimately this can lead to continued engagement in extreme or dangerous behavior, such as binge drinking, because the individual assumes the behavior is "normal". Social norms are typically parsed into two distinct categories: descriptive norms and injunctive norms. Descriptive norms describe what we believe others are doing, or the frequency with which they are engaging in a behavior (Schultz et al., 2007). In contrast, injunctive norms are our

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perceptions of what others think and believe to be "normal" or acceptable. Preliminary research has focused on the use of descriptive norms to understand problematic behavior of college students, such as binge drinking and risky sexual behavior (Baer et al., 1991; Neighbors et al., 2007; Perkins, 2002; Scholly et al., 2005). Though some preliminary work has also examined the role injunctive norms may play in shaping behavior (Borsari and Carey, 2003; Larimer et al., 2004; Schultz et al., 2007).

Studies of this nature typically provide participants with a series of questionnaires assessing participant's typical engagement in the behavior of interest (e.g. alcohol consumption, risky sexual behavior, etc.), as well as his or her assumptions on how much individuals in a specific reference group (e.g. members of his/her fraternity/sorority, other students at his/her school, college students in general, etc.) engage in this behavior (Borsari and Carey, 2003; Larimer et al., 2004; Neighbors et al., 2007; Scholly et al., 2005). Studies which examine injunctive norms will additionally question participants about how acceptable they believe their engagement in the target behavior to be, as well as how acceptable they believe individuals in a specific reference group view that behavior (Larimer et al., 2004; Neighbors et al., 2007). Researchers then typically compare differences between perceived and actual descriptive and injunctive norms, as well as asses how differing levels of normative belief are related to specific outcome behaviors.

In their review of empirical research examining the role of social norms in alcohol consumption among college students, Perkins (2002) found that student's perceptions of the normative behavior of their peers was most influential in directing students' own drinking behavior. Perceptions of both peer attitudes towards alcohol and actual drinking behavior are widely overestimated. Moreover this overestimation occurs even in environments where alcohol

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consumption is actually high. These misperceived norms ultimately contribute to the promotion of problematic drinking in addition to intensifying existing problems. In contrast, normative perceptions of parents and faculty make only a slight effect on students' drinking behavior (Perkins, 2002).

Similar results were demonstrated by Borsari and Carey (2003) in their meta-analysis of twenty-three studies examining the influence of norms and other predictors on collegiate drinking. Across these studies, it was found that students typically overestimate the amount of alcohol consumed by their peers, as well as how positively their peers regard drinking. Furthermore, most students believe themselves to be less approving of alcohol and to consume it less than their peers. Borsari and Carey (2003) determined that the magnitude of this difference between self and other tended to be larger for women than for men, larger for more distal reference groups (e.g. all college students vs. a member of your friend group), larger for injunctive than descriptive norms, larger for smaller campuses as opposed to larger ones, and larger for more general questions than for more specific ones. As such, it appears that while norms may play an important role in encouraging unhealthy drinking patterns among college students, the degree to which they do so may be affected by a number of factors.

While many factors may shape students perceptions of normative behavior, evidence suggests that these incorrect normative perceptions do in fact contribute to problematic behavior behaviors. Larimer and colleagues (2004) surveyed five hundred and eighty-two college students as they entered their "pledge class" or first year of involvement in a fraternity or sorority. These individuals completed a series of questionnaires regarding perceived drinking norms for pledge class members, as well as perceived injunctive and disjunctive norms of alcohol consumption in their fraternity or sorority and possible consequences of drinking

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experienced (Larimer et al., 2004). At baseline participants own drinking rates were also assessed. One year later, researchers followed up with participants and again assessed their typical alcohol consumption for both quantity and frequency. At this follow-up participants also completed measures of normative rates of alcohol related consequences, alcohol related consequences they themselves had experienced, and symptoms of alcohol dependence. After controlling for baseline drinking, students' perceptions of injunctive norms significantly predicted their own alcohol consumption, as well as alcohol related consequences and symptoms of dependence at follow-up. There was an interaction with gender where the relationship between gender and baseline drinking more strongly predicted alcohol related consequences for female students. Additionally, the interaction between gender and descriptive "pledge class" norms significantly predicted symptoms of physical dependence at follow-up, with this relationship being stronger for male students (Larimer et al., 2004).

Unfortunately, this relationship between normative assumptions and problematic behavior of college students is not confined solely to alcohol consumption. Scholly et al., (2005) surveyed undergraduate students across four college campuses (N=855) regarding sexual health behaviors and perceptions of similar behaviors in peers. Across campuses, students overestimated the frequency with which their peers engaged in sexual activity, as well as their number of sexual partners. A significant percentage of students, approximately 40% across campuses, reported not having used a condom during sexual activity during the previous thirty days. However, across campuses students underestimated this use, assuming that between 42-51% of their peers had not used a condom during their last sexual intercourse during that time period (Scholly et al., 2005). Thus, it appears that social norms may also play a role in the

decisions college students make regarding sexual behavior, and that these decisions may in turn have the potential to negatively impact their health.

Social norms have also provided a useful framework for understanding sexually aggressive behavior. For instance, a study by Thompson and colleagues (2015) of male college students (N=572) found that, in addition to other factors, perceptions of peer approval of forced sex predicted increased engagement in sexual aggression from their first year to their fourth year in college. Similar findings were reported by Dardis et al., (2016). In their survey of undergraduate males (N=100), Dardis and colleagues found that men's own beliefs and attitudes about women and rape correlated with their normative perceptions of their friends beliefs, but not with friends actual reported beliefs. Moreover, this study found that perpetrators of sexual assault were significantly more likely to overestimate the normative nature of sexually aggressive behavior than non-perpetrators (Dardis et al., 2016).

CHAPTER 2: SUMMARY AND PRESENT STUDY

Sexual cyberbullying has received little scholarly scrutiny, though it appears to be fairly common among college students. In spite of that limited study, it appears likely that experience with sexual cyberbullying as a victim or perpetrator may be associated with negative psychosocial and interpersonal outcomes. Given previous research, it also appears likely that both alcohol use and normative perceptions of sexually coercive behavior, both offline and online, may contribute to prevalence of sexual cyberbullying. Present research, however, lacks a cohesive exploration of the interaction of these variables, and has yet to examine the behavior of sexual cyberbullying within a clearly defined theoretical framework.

The purpose of this study was to determine whether acceptance of certain social norms is related to increased experience of or engagement in sexual cyberbullying. This study also aimed to determine if experience of and/or engagement in sexual cyberbullying is related to negative psychological outcomes. Finally, we sought to determine if individuals' experience of or engagement in sexual cyberbullying is related to "real world" sexual aggression perpetration and victimization. Participants were asked to complete measures of demographic information, sexual cyberbullying, alcohol use, sexual aggression victimization and perpetration, sexual coercion, perceived social norms of online and face to face sexually aggressive or coercive behavior, loneliness, depression, anxiety, and stress. It is predicted that perpetration of sexual cyberbullying will be positively associated with face-to-face sexual aggression and coercion. Similarly, we predicted that being a victim of sexual cyberbullying will be associated with being

a victim of face-to-face sexual violence and coercion. We expected that increased perception of social norms regarding sexually coercive behavior will predict sexual cyberbullying as well as face-to-face sexual aggression and coercion. Moreover, we predicted that the aforementioned relationship will be moderated by alcohol use. It was also expected that sexual cyberbullying perpetration and victimization will both be associated with negative psychosocial outcomes. Finally, it was expected that gender would have an interactive role in each of these aforementioned relationships.

CHAPTER 3: METHOD

Participants

Participants were 641 undergraduate students at the University of Mississippi ($n\_Male=$ 169, $n_Female =$470, $n_Transmale=$2) with a mean age of 19. Participants' ethnic makeup was as follows: 78.8% White, 14.4 Black or African, 2.0 Hispanic/Latino, 1.9% Asian, 1.1% Other, 1.1% Mixed Race or Biracial, .2% Middle Eastern, .2% Indian, and .2% Native American. The vast majority of participants identified as heterosexual (91.4%) with the remainder of participants identifying as follows: Gay/Lesbian (1.7%), Bisexual (4.7%), Pansexual (.5%), Asexual (.9%), Questioning (.2%), Other (.2%), and Prefer not to say (.5%). Of the participants 59.1% described their relationship status as Single, 12.8% reported they were Dating Casually, 27.2% reported they were Dating in a committed relationship, and .9% reported they were Engaged or Married. Participants' year in college was as follows: 69.7% Freshman, 16.6% Sophomore, 7.5% Junior, 5.5% Senior, and .8% Other (students who selected this option identified as those who were taking classes "post-baccalaureate" and those whose number of years in college did not in some way match their technical "year" in credits). Finally, slightly over half of participants (59.1%) reported that they were a member of a fraternity or sorority. All descriptive data outlined above is presented in Table 1.

Measures

The Sexual Strategies Scale (SSS; Strang, Peterson, Hill, & Heiman, 2013)

The Sexual Strategies Scale is a twenty-three-item measure designed to assess the extent to which an individual reports engaging in sexually coercive behavioral strategies. This questionnaire asks individuals to indicate whether or not they have used twenty-two specific behavioral strategies (e.g. getting a partner drunk, harming a partner physically, questioning a partner's sexuality, etc.) to convince a partner to engage in manual, oral, anal, or vaginal intercourse after the partner initially said no; participants are asked to check all of the strategies they have used. The 23rd item of the measure consists of the statement that the individual has not engaged in any of the above strategies and can be used as an attention check. The measure can then be summed (excluding this last item) such that higher scores indicate greater use of sexually coercive strategies. This measure has been found to be strongly correlated with the SES, and in fact may result in more accurate responses than the SES perpetration scale (Strang et. al., 2013). However, prior internal reliability data are not present for the measure. Moreover, given that the present scale may fail to capture the potential variability of this behavior due to being dichotomous, for the purposes of this study, this measure was modified to allow for continuous answering, by asking participants what percentage of the time they engage in the aforementioned behaviors (e.g.,*0 = <10% of the time, 1 = 11-20% of the time*, etc.). Reliability for this face to face scale of the SSS for the present study was (α= .973).

In order to obtain information on perpetration of sexual cyberbullying, the SSS was further edited to include a subscale of questions regarding use of technological methods of sexual coercion (e.g. sending unsolicited nude photos, threatening to distribute nude photos of a partner to others, making sexually explicit comments on a social media site, etc.). Cronbach's alpha for this scale of the SSS was (α= .970). Additional questions were added at the end of the scale asking participants whether these strategies were typically successful (i.e. resulted in them

having sexual interactions with a partner), and whether strategies they used were successful at their last attempt to obtain intercourse. These last two items were not included in the overall score, but rather were used for exploratory analyzes.

A version of the sexual cyberbullying scale of the SSS was also created to assess victimization, by asking what strategies a partner has attempted to use to coerce that individual to engage in sexual activities after being told no. Items were averaged such that higher scores were indicative of greater experiences as a victim of sexual coercion. At the conclusion of this victimization subscale, participants were also asked whether these coercive behaviors are typically successful (i.e. do they end up engaging in unwanted sexual interaction with a partner) and whether or not the strategies used at their most recent experience were successful. As with the perpetration scale, these last two items were not included in the overall score, but were used for exploratory analyzes. Cronbach's alpha for this scale was (α= .899).

Finally, in order to assess for social norms, participants were asked to complete the perpetration scales of the modified SSS with regards to whether they believe their peers have engaged in or experienced these sorts of behaviors. This transformation technique is similar to techniques used to create measures of perceived social norms in the alcohol consumption literature (Baer et. al., 1991; Larimer et. al., 2004). Cronbach's alpha for the face to face and cyber perpetration of these scales were as follows (α= .961, α= .956). Participants were asked about perceived behavior of others prior to being asked about their own behavior. The present study only used these descriptive norms (i.e. asking participants to indicate/describe the behaviors or their peers) and not injunctive norms (i.e. asking participants to indicate what they believed their peers considered acceptable).

The Alcohol Use Disorders Identification Test (AUDIT; Saunders, Aasland, Babor, De la Fuente, & Grant, 1993)

The Alcohol Use Disorders Identification Test is a 10-item questionnaire developed from a collaborative six-country WHO project designed to screen for harmful or dangerous alcohol consumption. Participants answer questions regarding the frequency of certain behaviors including alcohol consumption and consequences of alcohol use. These questions about specific behaviors are answered on a five-point Likert type scale ranging from 0=never, to 4= four or more times a week. Answers are summed so that higher scores are indicative of a greater burden of problems related to alcohol, where individuals who receive a score of eight or more being diagnosed as having a dangerous or hazardous pattern of alcohol consumption. This measure has demonstrated high reliability with values ranging from (α=.81 to α= .93). The AUDIT was additionally moderately correlated with self-reported daily alcohol consumption (r=.53) and diagnosis of an alcohol related problems provided by clinicians using a structured clinical interview (r=.51). Due to experimenter error, one item was left off this measure during data collection. However, research has found that two short forms of the AUDIT, the three item AUDIT-C or AUDIT-3 and the four item AUDIT-4 demonstrate adequate sensitivity and specificity, even when collected as part of the complete AUDIT (Gual et. al., 2002). For the present study, the Cronbach's alphas for the AUDIT-3 and AUDIT-4 were (α= .531, α= .488) respectively.

The Cyberbullying Experiences Survey (CES; Doane, Kelley, Chiang & Padilla, 2013).

The Cyberbullying Experiences Scale is a psychometrically sound 41 item measure of cyberbullying perpetration and victimization in young adults. The victimization sub-scale is 21 items and the perpetration scale is 20 items. Both subscales ask questions regarding specific

cyberbullying behaviors or experiences such as receiving hurtful electronic messages, cursing at someone electronically, sending a pornographic photo to someone electronically that they did not want, or pretending to be someone else while talking to someone electronically. Participants report whether they have engaged in or been victims of these and other similar behaviors in the past year on a six-point Likert type scale: *0= never, 1= less than a few times a year, 2= a few times a year, 3= once or twice a month, 4= once or twice a week, and 5= every day/nearly every day.* These behaviors are assessed across four sub-domains: public humiliation, malice, unwanted contact, and deception. This measure has been found to be significantly correlated to similar measures which have been used to examine cyberbullying in younger populations. Moreover this measure has demonstrated adequate internal consistency reliability ($\alpha= .70$). For the present study, Cronbach's alpha was ($\alpha= .864$) for the perpetration scale, and ($\alpha= .892$) for the victimization scale.

The Sexual Experiences Survey (SES; Koss and Oros, 1982)

The Sexual Experiences Survey is a psychometrically sound 13 item measure of an individual's experience with victimization of sexual aggression. The measure consists of thirteen yes or no questions regarding whether or not an individual has experienced everything from consensual sexual intercourse to sexual coercion, to fully committed rape. Items other than the first question about consensual sex are summed for each subscale with higher scores representing greater experience as a victim of sexual assault respectively. The SES is typically considered the gold standard for measuring sexual assault victimization with good internal consistency reliabilities reported to be ($\alpha = .74$). It should be noted however that this scale is typically only administered to women. In order to update the measure for the current populations, this scale was used for both males and females and gendered terms such as man or

woman were replaced with a gender neutral term such as "person". Cronbach's alpha for the

present study was (α= .833). It should be noted that there is a perpetration version of the SES,

however, some studies have shown that perpetrators underreport aggressive or coercive tactics

when questioned using this measure (Strang et. al., 2013) and as such, the Sexual Strategies

Scale was used to assess for sexual coercion and aggression instead.

The Depression Anxiety and Stress Scale (DASS-21; Antony, Bieling, Cox, et. al., 1998)

The Depression Anxiety and Stress scale is a psychometrically sound twenty-one item

self-report measure designed to assess individuals' levels of anxiety, depression, and stress.

Participants answer a series of questions regarding symptoms they may have experienced in the

past week on a zero to three scale (0= Never, 1=Sometimes, 2=Often 3=Almost Always). Scores

are summed for each of the subscales: depression, anxiety, and stress and then these sum scores

are multiplied by two. These scores can then be ranked depending upon the subscale in one of

the following categories: normal, mild, moderate, severe, and extremely severe. While this

measure is not intended to be used for diagnosis it can provide information regarding an

individuals' self-reported distress. Each of these subscales has demonstrated acceptable to very

good reliability with the Cronbach's alpha for the depression, anxiety, and stress subscales being

as follows: (α=.94), (α=.87), and (α=.91). These subscales correlate with other established

measures of similar constructs. For instance the depression subscale of the DASS-21 was found

to be moderately correlated with the Beck Depression inventory (r= .79) and the anxiety subscale

has been found to be moderately correlated with the State-Trait Anxiety Inventory (r=.55) and

the Beck Anxiety inventory (r=.85). Cronbach's alpha for the depression, anxiety, and stress

subscales for the present study were as follows: (α=.971), (α=.824), and (α=.838).

The UCLA Loneliness Scale Short Form (ULS-8; Hays and DiMatteo, 1987)

The UCLA Loneliness Scale Short Form is an eight item self-report measure of loneliness. This measure is a shortened version of a twenty-item scale by the same name, but has demonstrated good reliability as a short form measure (α=.84). Individuals answer questions on specific aspects of loneliness (e.g. I feel left out, I lack friends, etc.). They answer these questions on a four point Likert-type scale ranging from (0=Never) to (3=Always). Items are then summed with higher scores indicating greater self-reported loneliness. As would be expected, this measure has been found to be positively correlated with measures of social anxiety (r=.51). While measures of reliability have not been calculated for this scale to date, for the current study it demonstrated adequate reliability (α= .798).

Demographics

Participants were asked to provide basic demographic information (age, gender, race/ethnicity, etc.), as well as information regarding their sexual histories including the following: sexual orientation, relationship status, number of sexual partners (both lifetime and in the past year), age of sexual debut, and information on condom use (both typical frequency of condom use and condom use at last intercourse). Participants were also asked about fraternity and sorority membership.

Marlowe-Crowne Social Desirability Scale- Short Form (Marlowe-Crowne- SF; Marlow & Crowne, 1960)

The Marlowe-Crowne Social Desirability Scale Short Form is a thirteen item measure (Reynolds, 1982) abbreviated from the original thirty-three item measure designed to assess the extent to which an individual tends to present themselves in an overly positive or socially desirable light (e.g., *No matter who I'm talking to, I'm always a good listener; I'm always*

willing to admit it when I make a mistake, I have never deliberately said something that hurt someone else's feelings, etc.). Each question is answered true or false (with several of the false items being reverse scored), and the number of true items are summed together, with higher scores indicating greater levels of socially desirable responding.   In previous research, this measure has demonstrated adequate reliability (α= .76). However, for the present study, reliability was somewhat lower (α= .583).

Procedure

Participants were students at the University of Mississippi. They were recruited through the University of Mississippi's online system, SONA, as well as through flyers, campus wide list-serve emails, and bulletin boards. Students who selected to complete the study via SONA were redirected via a link to Qualtrics; students who were recruited in other ways were provided with a link directly to Qualtrics. On Qualtrics, participants were presented with a consent form describing the study and detailing the voluntary and anonymous nature of their participation. Participants were asked to click a box, thereby agreeing that they are at least eighteen years of age, and indicating their consent to participate in the study. Once they provided consent, participants completed the measures in the following order: SSS (social norms version), SSS (self-perpetration version), AUDIT, SES (victimization scale), SSS (victimization scale), CES (victimization and perpetration scales), DASS-21, ULS-8, Marlowe-Crowne Short Form, and Demographics. Measures were completed in this order to preserve the causality and integrity of the model. Upon completion of the survey, all participants were debriefed on the nature of the study and asked again to indicate their reconsent. Following this, participants recruited through SONA were re-routed through a link to another survey where they indicated their name and

email address in order to permit them to receive SONA credit while preserving the anonymity of their responses. Participants not recruited through SONA were redirected through a similar link to another survey where they indicated their name and email address if they desire to be entered into a drawing to win an Amazon gift card.

Proposed Analyses

In order to assess the first proposed hypothesis, it was decided that conditional process analysis would be used to examine both the direct and indirect effects in the assessment of the role of sexual cyberbullying on the relationship between perceived social norms of sexual aggression or coercion and face to face sexual aggression. This analysis would follow methods outlined by Hayes (2018). It was hypothesized that individuals who report greater perceived social norms of sexual aggression and coercion will be more likely to engage in face to face sexual aggression. It was also predicted that this relationship would be mediated by one's involvement in sexual cyberbullying. Finally it was predicted that this mediation would be moderated by alcohol use, with individuals who are higher in alcohol use being more likely to engage in both sexual cyberbullying and traditional face to face sexual aggression and coercion. It was also expected that gender would serve as a possible covariate and thus would need to be controlled for in the analysis. Given that the scales for the mediator and outcome were initially dichotomous and were being transformed into continuous items for the purposes of this project, it was also deemed appropriate to conduct a moderated mediation in Mplus with a truly dichotomous mediator and outcome (Muthén, Muthén, & Asparouhov, 2016). Such an analysis would ensure the robustness of the model given the scale transformation. Additionally, with regards to the aforementioned moderated mediation, it was decided that should the interaction term (i.e. the moderator) fail to be significantly associated with other key variables in the model,

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that this term would be excluded as a moderator for reasons of parsimony. The model would then be re-run both in Process and Mplus as a simple mediation with alcohol use (the moderator) and gender as covariates.

In order to test the second hypothesis, a multivariate regression was selected to determine whether sexual cyberbullying victimization predicted face-to-face sexual victimization and coercion. Given the gender differences in victimization seen across literature, it was decided that it would be appropriate to control for gender as a covariate in this analysis.

Finally, in order to test this third hypothesis, it was deemed appropriate to conduct a MANCOVA to assess whether individuals who were victims of sexual cyberbullying differed in their self-reported feelings of depression, anxiety, and stress. A second MANCOVA was also conducted to assess whether the aforementioned outcome variables differed across individuals who were perpetrators of sexual cyberbullying. Again, gender was controlled for as a covariate in both models. Moreover, given the link between face-to-face sexual aggression victimization and the aforementioned outcomes, it was deemed appropriate to control for one's status as a victim of face-to-face sexual aggression in both models as well.

CHAPTER 4: RESULTS

Eight hundred and eighty-one individuals completed the survey on Qualtrics. Fifteen participants indicated that they did not consent to participate in the study and were thus excluded from analyzes. Forty-one participants did not re-consent to participation in the study after being debriefed at its conclusion. An additional one hundred and thirty-one participants were excluded for having a survey completion time more than two standard deviations above or below the mean time. Finally, Mahalanobis distance revealed an additional 31 multivariate outliers who were subsequently excluded. Final participant count was N=663.

Little's MCAR was calculated for each measure in order to determine if data were missing completely at random. Three scales were significant, indicating that data are not missing completely at random: the UCLA Loneliness Scale -8, the Sexual Experiences Survey, and the SSS Self-Reported Scale for face to face aggression. While analyzes using these scales should be interpreted with some caution, it is worthy to note that none of the items on each of these scales demonstrated five or more percent missingness, and as such, they should be considered adequate for the proposed analyses. Potential explanations for this missingness and implications for future research will be discussed. All other scales were non-significant on Little's MCAR. In order to account for missing items, converted mean scores were used for each participant. This involves calculating a mean score for each participant on each scale, then multiplying this mean by the number of items to create a "Total" score. This technique essentially allows for imputation of data in a way that imputed values reflect mean responding and is a standard

method of dealing with missing data when missingness is relatively infrequent (i.e. <5%) (Downey and King, 1998).

Distributions of primary variables of interest were examined for skew and kurtosis. Measures of self-reported sexual aggression perpetration and cyber victimization were highly kurtotic (SSS face to face perpetration =15.546, SSS cyber= 20.916, and SSS-V=16.407). Each of these scales had a large proportion of participants who reported that they had never engaged in or experienced the associated behaviors, with a smaller portion reporting varying levels of some experience. As such, items on the aforementioned scales were dichotomized such that a lack of experience with or engagement in the behavior was scored as zero and any engagement or experience with was scored as one. A new converted mean was calculated and this new mean demonstrated significantly reduced kurtosis (SSS face to face perpetration =3.053, SSS cyber= 5.396, and SSS-V=6.379). It should be noted that these values are still higher than is generally considered ideal. However, given the relatively low base rate of these behaviors these results are not entirely unexpected. An additional truly dichotomized version of this scale was created, such that individuals who reported any engagement in self-reported sexual aggression across items was coded as one, with no engagement across items being coded as zero. Implications for future research and measurement of these behaviors will be discussed. All other variables had skew and kurtosis within acceptable ranges.

Frequencies regarding primary psychosocial variables of interest were calculated. With regards to the DASS-21, the majority of participants were in the normal or subclinical range across subscales (71.5% normal range for depression, 64.5% normal range for anxiety, and 73.7% normal range for stress). Similarly, 98.9%of participants reported experiencing no, or minimal loneliness on the UCLAL-8. According to the Audit-3, a concerning 51.3% of male

participants and 55.7% of female participants met criteria for being a Risky Drinker. However,

these numbers were somewhat lower on the more stringent Audit-4, with 24.4% of men, and

33.3% of women meeting Risky Drinker criteria respectively. All data presented in Table 2.

With regards to sexual aggression perpetration and victimization, frequencies were as

follows (Table 3). One hundred percent of participants reported believing their peers were

engaging in some form of sexually aggressive behavior both online and offline. With regards to

social norms of offline sexually aggressive behavior, the most commonly reported "norms" were

use of verbal coercion and use of intoxication. Interestingly however, only 30% of participants

reported engaging in some form of face to face sexually aggressive or coercive behavior

themselves. Moreover, only 15.6% self-reported engaging in some form of sexually aggressive

behavior online. The most commonly self-reported forms of face to face sexually coercive

behavior were threats of force and use of intoxication respectively. In terms of victimization,

52.6% of participants reported being a victim of at least one form of face to face sexual

aggression on the Sexual Experiences survey. In terms of online victimization, 70.7% of

participants reported being the victim of at least one form of online aggression on the CES-V,

with 40.7% of participants reporting being the victim of some form of specifically sexually

aggressive behavior via technology on the SSS-Cyber. Finally, a correlation matrix was

computed for all variables of interest (Table 4). All correlations were in the expected directions.

In order to assess whether sexual cyberbullying victimization was associated with

victimization of face to face sexual aggression, a regression was run controlling for participant

gender. This analysis indicated that being a victim of online sexual aggression significantly

predicted ones' status as a victim of face to face sexual aggression ($R^2= .210$, $F(15,25)=3.995$,

$p<.001$) Interestingly, gender was not a significant predictor of victimization of face to face

sexual aggression, nor was there an interaction between online victimization and gender on face to face victimization.

In order to assess whether victims and non-victims of sexual cyberbullying perpetration differed across their self-reported symptoms on measures of depression, anxiety, stress, or loneliness, when controlling for these individuals' status as victims of face to face sexual aggression and violence, a MANCOVA was performed. Given that a large body of research has demonstrated gender differences in victim status, gender was controlled for as a covariate in this analysis. Wilks' lambda was used as the multivariate test statistic. For an alpha value of .05, the *F* value of Wilks' lambda was significant (F(15,16)=1.779, *p*<.01, η_p^2=.044), revealing a significant impact of status as a victim of sexual cyberbullying on the outcome variables, when controlling for gender and status as a victim of face to face aggression and coercion. Tests of between-subject effects revealed that individuals who were victims of sexual cyberbullying reported significantly higher scores on measures of depression, anxiety, stress, and loneliness (*p depression*<.001, *p anxiety*<.001, *p stress*=.019, *p* loneliness=.090). Mean differences outlined in Table 5.

A second MANCOVA was conducted to determine whether individuals who reported engaging in sexual cyberbullying perpetration differed from non-perpetrators in levels of depression, anxiety, stress, and loneliness when controlling for gender. Again, Wilks' lambda was used as the multivariate test statistic with an alpha value of .05. The *F* value of Wilks' lambda was also significant in this model ((F(10,11)=1.999, *p*<.05, , η_p^2=.033), revealing a significant impact of perpetration status on outcome variables when controlling for gender. Tests of between-subject effects revealed that individuals who were perpetrators of sexual cyberbullying reported significantly higher scores on measures of anxiety (*p*=.015) and stress

($p=.002$) than non-perpetrators. Mean differences outlined in Table 6. However, no significant differences were found between perpetrators and non-perpetrators on measures of depression or loneliness when controlling for gender.

In order to examine whether sexual cyberbullying mediates the relationship between perceived social norms of sexually aggressive behavior and engagement in face to face sexual aggression, and whether this potential mediation relationship is moderated by alcohol use, a series of moderated mediation analyzes were conducted. Analyzes were first run using the Audit-3 score as the moderator, and later run using the Audit-4 as the moderator. This analytic strategy was used as a sensitivity analysis given our original intent was to use the full Audit scale, rather than these short forms. Both models were run with gender as a covariate in order to control for this variable. Both models were analyzed using Hayes' PROCESS macro for SPSS (Hayes, 2018) with 95% percentile bootstrap confidence intervals using 20,000 bootstrap samples. Given that both models presented a similar pattern of results, only the model conducted using the Audit-3 will be reported on here for ease of interpretation. [1]

The first overall model (see Figure 1) significantly predicted engagement in face to face sexually aggressive behavior ($R^2 = .94$, $F (5,556) = 900.71$, $P<.0001$). Interestingly, while the model predicting sexual cyberbullying behavior approached significance ($R^2 = .1158$, $F (3,558) = 2.529$, $P=.0565$), neither perceived social norms of sexually aggressive behaviour (b Norms$= .0062$, $p=.0744$, 95% CI [-.006, .0131]), nor alcohol use (b Audit 3$=.1036$, $p=.2528$, 95% CI [-.0742, .2813]), nor the conditional effect of alcohol on perceived social norms predicted sexual cyberbullying behavior (b conditional effect$= -.0005$, $p=.4881$, 95% CI [-.0018,

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[1] As previously mentioned these models were also run in Mplus using truly dichotomized forms of the mediator and outcome, where any reported engagement in these behaviors across items was coded as one, with no engagement across items being coded as zero. The pattern of results in Mplus was consistent with findings in Process, and as such will not be discussed here.

.0008). However, sexual cyberbullying behavior did predict engagement in face to face sexual aggression (b=2.0525, p<.001, 95% CI [1.9907, 2.1142]) such that engagement in sexual cyberbullying was positively associated with engagement in face to face sexual aggression. Additionally, gender also predicted engagement in face to face sexual aggression (b=-.4188, p=.0123, 95% CI [-.7464, -.0913]) such that female gender was negatively associated with engagement in face to face sexual aggression. Somewhat surprisingly, neither perceived social norms, nor alcohol use predicted engagement in face to face sexual aggression (b Norms= .0004, p=.8840, 95% CI [-.0047, .0054]; b Audit 3= .0350, p=.8768, 95% CI [-.0009, .0010]). Mediation was not present in this initial model however, due to the lack of significant relationship between the predictor (i.e. social norms) and the mediator (i.e. sexual cyberbullying) (p=.07). Additionally, the present model failed to find moderated mediation, as demonstrated by the 95% confidence interval of the index of moderated mediation containing zero (*IMM*= -.0009, 95% CI [-.0038, .0018). Given that the predicted moderator was not significantly associated with any of the key variables in the model it was excluded as a moderator for the sake of parsimony, as previously discussed. Given the theoretical importance of this variable, it was instead included as a covariate.

Next, a simple mediation was run in order to assess whether sexual cyberbullying mediated the relationship between perceived social norms of sexually aggressive behavior and engagement in face to face sexual aggression. Again, this analysis was conducted twice, using both forms of the Audit as covariates, and again, both models produced the same pattern of results. As such, only the model containing the Audit-3 as a covariate will be discussed here for ease of understanding. These models were both run using gender as an additional covariate, and

were conducted using Hayes' PROCESS macro for SPSS (Hayes, 2018) with 95% percentile

bootstrap confidence intervals using 20,000 bootstrap samples.[2]

The first overall model (See Figure 2) significantly predicted engagement in face to face

sexually aggressive behavior (R^2 = .1506, F (4,559) = 24.7739, P<.0001). The model

predicting sexual cyberbullying behavior was also now significant (R^2 = .23, F (3,560) =

10.7352, P<.0001). Perceived norms of sexually aggressive behavior significantly predicted

engagement in sexual cyberbullying (b= .0019, p<.001, 95% CI [.0063, .0137]). Interestingly, as

a covariate, the relationship between alcohol use and sexual cyberbullying approached

significance (p=.0578). Moreover, sexual cyberbullying behavior continued to predict

engagement in face to face sexual aggression (b=.0800, p<.001, 95% CI [.5082, .8225]).

Additionally, gender continued to be predictive of engagement in face to face sexual aggression

(b=.4598, p<. 001, 95% CI [-2.9344, -1.1282]). Finally, there was support for an indirect effect

of perceived social norms of sexually aggressive behavior through sexual cyberbullying

(b=.0015, p<.001, 95% CI [.0030, .0110]), indicating mediation.

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[2] As with the moderated mediation model, this mediation only model was also run in Mplus using the dichotomized form of the mediator and outcome variables. The pattern of results in Mplus was again consistent with findings in Process, and as such will not be discussed here.

CHAPTER 5: DISCUSSION

Sexual cyberbullying is a relatively novel behavior little examined in scholarly research. However, the current study found that at least 15.6% of college students had engaged in sexual cyberbullying behavior recently, with 100% of participants believing their peers engaged in some form of sexually aggressive behavior either online or offline. This disturbing finding highlights students' awareness of the pervasive nature of sexual aggression and coercion. With regards to victimization, 40.7% of our sample endorsed being the victim of sexual cyberbullying and 52.6% of individuals reported being the victim of some form of face to face sexual aggression or coercion. While there is limited data on the prevalence of sexual cyberbullying, these data are consistent with experience broadly of sexual aggression found in research in college samples (Cantor et. al., 2015). Moreover, given that previous research has demonstrated that college students often underreport online aggressive behavior, due to it's being perceived as a "joke" or less serious (Ehman, Lair, & Gross, 2018; Baldasare et. al., 2012) it is possible that rates of sexual cyberbullying are even higher than those of face to face sexual aggression.

The present study also replicated previous findings in social norms literature. In previous research, perceived social norms have been used to predict risky and aggressive behavior in college samples (Brown and Messman-Moore, 2010; Neighbors et. al., 2007; Scholly et. al., 2005). In the present study, perceived social norms of sexually aggressive behavior predicted sexual aggression and sexual coercion both online and face to face. Thus, it appears that a social norms framework may be extended to help conceptualize and understand the behavior of sexual cyberbullying.

Present findings also demonstrated a mediation. In the present work, perceived social norms impacted face to face sexual aggression via sexual cyberbullying. In short, individuals who perceived sexually aggressive behavior as normative were more likely to engage in sexual cyberbullying, and in turn, those who engaged in sexual cyberbullying were more likely to engage in face to face sexual aggression and coercion. As would be expected, this relationship is stronger for men than women (Swartout et.al., 2015; Thompson et. al., 2011). This mediation further strengthens the argument for a social norms conceptualization of sexual cyberbullying and sexual aggression in a college sample.

The present study also found that online victimization significantly predicted offline victimization. Individuals who were victims of sexual cyberbullying were more likely to also be victims of face to face sexual aggression and violence than non-victims. This is consistent with previous literature regarding sexual assault more broadly, which demonstrates that being a victim of one form of sexual aggression or violence increases an individuals' likelihood of being a victim of another form of sexual aggression or violence (Humphrey and White, 2000). This finding is particularly concerning given data that victims of sexual cyberbullying are more likely to report experiencing symptoms of depression, anxiety, loneliness and stress than non-victims. Given that both cyberbullying and face to face sexual aggression and coercion have been similarly associated with negative psychosocial outcomes (Segal, 2009; Thompson and Kingree, 2010; McCauley et. al., 2009), it is possible that individuals who are victims of both of these forms of aggression may be experiencing an increased psychological burden and greater distress. Sexual cyberbullying perpetrators also reported negative psychosocial outcomes in the present study including greater report of stress and anxiety than non-perpetrators. Though the present data is not causal, this relationship nevertheless mirrors findings in research in cyberbullying

more broadly which illustrates that engagement in cyberbullying as either a victim or perpetrator is associated with numerous negative psychosocial outcomes (Campbell et al., 2012; Kowalski and Limber, 2013; Hinduja and Patchin, 2008).

The present study predicted that the mediation relationship between perceived social norms, sexual cyberbullying, and face to face sexual aggression would be moderated by alcohol use. However, alcohol did not have the expected moderating effect. One possible explanation for this may be the high levels of risky drinking behavior in the present sample. However, it should be noted that the majority of the participants in the present study were freshman, and past research has demonstrated levels of drinking tend to taper off among college students as they progress through their years in school (Bewick et. al., 2008). As such, future research might benefit from a wider sample of students to determine whether this sample was unique in their level of alcohol consumption across years in college. Another explanation for this finding may be the present study using an abbreviated measure of alcohol use due to experimenter error. However, as mentioned previously, the Audit-3 has demonstrated acceptable reliability and validity in previous research even when collected as part of the full Audit (Rumpf et. al., 2002).

The present study served as a preliminary examination of sexual cyberbullying behavior which has been little studied. As such, the present study does have some limitations. For instance, the present study only involved a college sample. Future research would benefit from a broader community sample, as sexual cyberbullying does not solely occur in college populations (Citron and Franks, 2014; Powell and Henry, 2019). Additionally, the present study examined the most common experiences of sexual cyberbullying and did not look at more severe forms of this behavior. Thus, future research would benefit from examining more specific and severe forms of sexual cyberbullying (e.g. revenge porn) on victims versus those forms which may be

perceived as milder (e.g., receiving an unwanted or coercive sexual request from a partner via social media) (Citron and Franks, 2004; Melander, 2010; Thomas, 2017).

Overall, the present study highlights the importance of greater research in the domain of sexual cyberbullying. Our findings highlight the impact of online sexual aggression in facilitating offline aggression. Moreover, the present study provides support for using a social norms framework to understand and address sexually aggressive behavior. Finally, the present findings illustrate the significant psychosocial impact of sexual cyberbullying on both victims and perpetrators, illustrating the clinical significance of this body of research.

FIGURES

Figure 1. *

* Dashed line indicates non-significant relationships

(*p's* > .05)

42
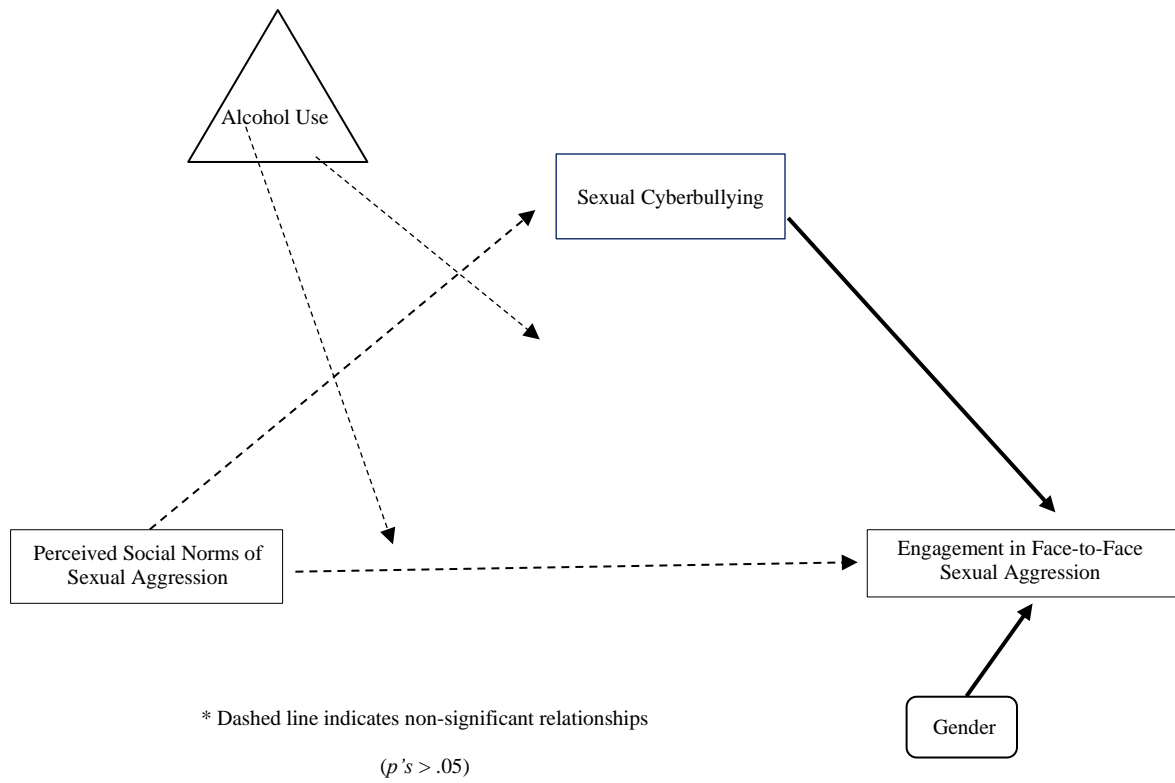
Figure 2. *
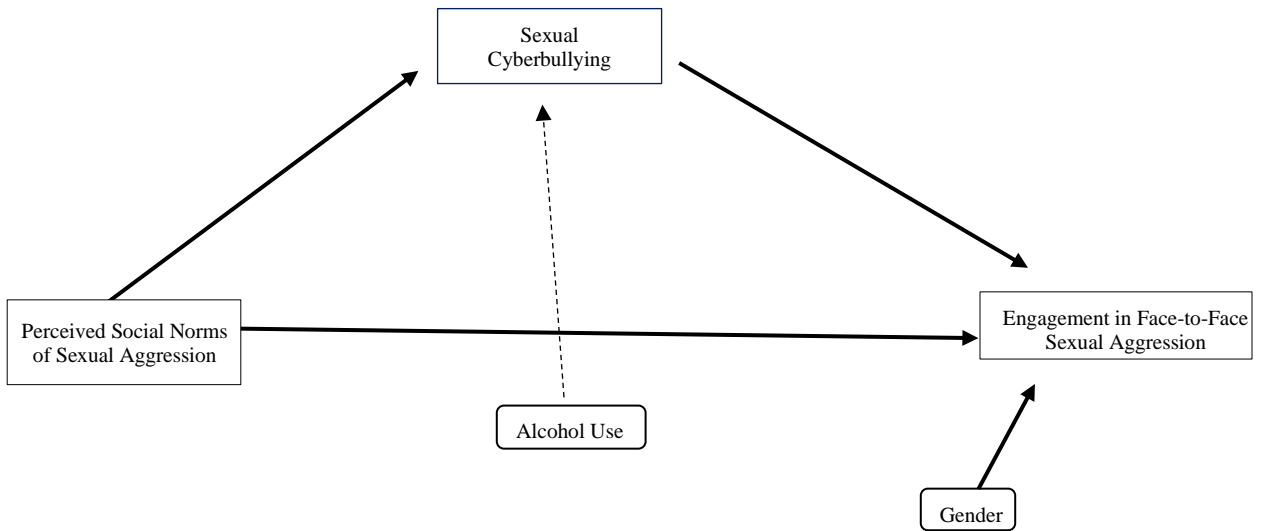
* Dashed line indicates non-significant relationships

(*p's* > .05)

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TABLES

Table 1: Descriptive Statistics of Participants (N=641)

	Frequency	Percent%
Gender		
Male	169	26.4
Female	472	73.6
Gender		
Male	169	26.4
Female	470	73.3
Transmale	2	0.3
Sexual Orientation		
Heterosexual	583	91.0
Homosexual (i.e. Gay/Lesbian)	11	1.7
Bisexual	30	4.7
Pansexual	3	0.5
Asexual	6	0.9
Other	1	0.2
Prefer not to say	3	0.5
Questioning	1	0.2
Relationship Status		
Single	378	59.0
Dating (casual)	82	12.8
Dating (in a committed relationship)	174	27.1
Engaged/Married	6	0.9
Ethnicity		
Caucasian	505	78.8
Black or African	92	14.4
Hispanic/Latino	13	2.0
Asian	12	1.9
Other	7	1.1
Mixed Race or Biracial	7	1.1
Middle Eastern	1	0.2
Indian	1	0.2
Native American	1	0.2
Member of a Fraternity or Sorority		
Yes	377	58.8
No	261	40.7
Year in college		
Freshman	446	69.6
Sophomore	106	16.5
Junior	48	7.5
Senior	35	5.5
Other	5	0.8
	Mean	**Standard Deviation**
Age	18.84	2.089

Table 2. Descriptive Statistics of DASS-21, Audit-3 and Audit-4, and UCLAL-8

DASS-21	Frequency	Percent %
Depression		
Normal	455	71.0
Mild	54	8.4
Moderate	78	12.2
Severe	21	3.3
Extremely Severe	28	4.4
Anxiety		
Normal	407	63.5
Mild	48	7.5
Moderate	93	14.5
Severe	32	5.0
Extremely Severe	51	8.0
Stress		
Normal	462	72.1
Mild	76	11.9
Moderate	57	8.9
Severe	27	4.2
Extremely Severe	5	0.8
	Frequency	**Percent %**
Audit-3		
Men		
Risky-Drinker	76	45.0
Not Risky Drinker	80	47.3
Women		
Risky-Drinker	202	43.0
Not Risky Drinker	254	54.0
Audit-4	**Frequency**	**Percent %**
Men		
Risky-Drinker	118	69.8
Not Risky Drinker	38	22.5
Women		
Risky-Drinker	303	64.5
Not Risky Drinker	153	32.6
	Mean	**Standard Deviation**
UCLAL-8	.87	.549

Table 3. Descriptive Statistics of Sexual Aggression Perpetration and Victimization

	Frequency	**Percent %**
Face to Face Sexual Aggression Perpetration (SSS Perpetration - Self)		
Any	262	40.9
None	379	59.1
Sexual Cyberbullying Perpetration (SSS Perpetration – Self, Cyber Subscale)		
Any	101	15.8
None	540	84.2
Face to Face Sexual Aggression and Coercion Victimization SES		
Any	337	52.6
None	304	47.4
Sexual Cyberbullying Victimization SSS Victimization		
Any	261	40.7
None	380	59.3

Table 4. Correlation Matrix

		1	2	3	4	5	6	7	8	9	10	11	12
SSS-Victimization	Pearson Corr.	1	.352**	.126**	.402**	.197**	.254**	.148**	.528**	.377**	.178**	.092*	.101*
	Sig (2t)	--	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.023	0.013
	N	641	640	641	641	636	631	627	618	630	622	614	614
SSS- Perpetration Social Norms	Pearson Corr.	.352**	1	.080*	.136**	.125**	.114**	-0.004	.303**	.882**	0.071	0.047	0.048
	Sig (2t)	0.000	--	0.043	0.001	0.002	0.004	0.916	0.000	0.000	0.079	0.246	0.239
	N	640	640	640	640	635	630	626	617	630	621	613	613
UCLAL-8	Pearson Corr.	.126**	.080*	1	.191**	.590**	.444**	.431**	.209**	.091*	.152**	-0.018	-0.015
	Sig (2t)	0.001	0.043	--	0.000	0.000	0.000	0.000	0.000	0.022	0.000	0.660	0.713
	N	641	640	641	641	636	631	627	618	630	622	614	614
SES	Pearson Corr.	.402**	.136**	.191**	1	.291**	.340**	.306**	.351**	.170**	.170**	.146**	.150**
	Sig (2t)	0.000	0.001	0.000	--	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	N	641	640	641	641	636	631	627	618	630	622	614	614
DASS-21 Depression	Pearson Corr.	.197**	.125**	.590**	.291**	1	.690**	.703**	.345**	.156**	.140**	0.034	0.043
	Sig (2t)	0.000	0.002	0.000	0.000	--	0.000	0.000	0.000	0.000	0.000	0.397	0.293
	N	636	635	636	636	636	626	622	614	625	617	609	609
DASS-21 Anxiety	Pearson Corr.	.254**	.114**	.444**	.340**	.690**	1	.768**	.385**	.109**	.171**	0.055	0.064
	Sig (2t)	0.000	0.004	0.000	0.000	0.000	--	0.000	0.000	0.006	0.000	0.175	0.118
	N	631	630	631	631	626	631	618	608	620	612	604	604
DASS-21 Stress	Pearson Corr.	.148**	-0.004	.431**	.306**	.703**	.768**	1	.327**	0.015	.193**	0.015	0.022
	Sig (2t)	0.000	0.916	0.000	0.000	0.000	0.000	--	0.000	0.711	0.000	0.722	0.596
	N	627	626	627	627	622	618	627	605	616	610	600	600
CES-Victimization	Pearson Corr.	.528**	.303**	.209**	.351**	.345**	.385**	.327**	1	.364**	.165**	.170**	.174**
	Sig (2t)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	--	0.000	0.000	0.000	0.000
	N	618	617	618	618	614	608	605	618	607	600	593	593
SSS-Self; Face to Face	Pearson Corr.	.377**	.882**	.091*	.170**	.156**	.109**	0.015	.364**	1	.118**	0.060	0.065
	Sig (2t)	0.000	0.000	0.022	0.000	0.000	0.006	0.711	0.000	--	0.004	0.142	0.113
	N	630	630	630	630	625	620	616	607	630	613	604	604
SSS-Social Norms Sexual Cyberbullying	Pearson Corr.	.178**	0.071	.152**	.170**	.140**	.171**	.193**	.165**	.118**	1	-.082*	-.083*
	Sig (2t)	0.000	0.079	0.000	0.000	0.000	0.000	0.000	0.000	0.004	--	0.045	0.043
	N	622	621	622	622	617	612	610	600	613	622	597	597
Audit-3	Pearson Corr.	.092*	0.047	-0.018	.146**	0.034	0.055	0.015	.170**	0.060	-.082*	1	.997**
	Sig (2t)	0.023	0.246	0.660	0.000	0.397	0.175	0.722	0.000	0.142	0.045	--	0.000
	N	614	613	614	614	609	604	600	593	604	597	614	614
Audit 4	Pearson Corr.	.101*	0.048	-0.015	.150**	0.043	0.064	0.022	.174**	0.065	-.083*	.997**	1
	Sig (2t)	0.013	0.239	0.713	0.000	0.293	0.118	0.596	0.000	0.113	0.043	0.000	--
	N	614	613	614	614	609	604	600	593	604	597	614	614

Table 5. Mean Differences Between Victims and Non-Victims of Sexual Cyberbullying on Measures of Psychological Wellbeing

	Victim	Non-victim
Depression	5.88	8.47
Anxiety	5.25	8.27
Stress	9.12	11.83
Loneliness	6.55	7.38

Table 6. Mean Differences Between Perpetrators of Sexual Cyberbullying and Non-Perpetrators on Measures of Psychological Wellbeing

	Perpetrator	Non-perpetrator
Depression	7.84	6.78
Anxiety	7.78	6.27
Stress	10.96	10.10
Loneliness	7.65	6.75

Appendix

Demographics

1. What was your gender at birth?
   - ☐ Male
   - ☐ Female
   - ☐ Other: _____
2. How do you currently identify your gender?
   - ☐ Male
   - ☐ Female
   - ☐ Transmale
   - ☐ Transfemale
   - ☐ Other: _____
3. What is your sexual orientation?
   - ☐ Heterosexual
   - ☐ Homosexual (i.e. Gay/Lesbian)
   - ☐ Bisexual
   - ☐ Pansexual
   - ☐ Asexual
   - ☐ Other: _____
4. What is your race/ethnicity? (Check all that apply)
   - ☐ Caucasian
   - ☐ African American
   - ☐ Hispanic/Latino(a)
   - ☐ Asian American
   - ☐ Other: _____
5. Are you a member of a fraternity or sorority?
   - ☐ Yes
   - ☐ No
6. What year in college are you?
   - ☐ Freshman
   - ☐ Sophomore
   - ☐ Junior
   - ☐ Senior
   - ☐ Other: _____

CES - Victimization

Please answer the following questions based on how often you have experienced the situations described below **in the past year**						
	0 Never	1 Less than a few times a year	2 A few times a year	3 Once or twice a month	4 Once or twice a week	5 Every day/nearly every day
Someone distributed information electronically while pretending to be you	0	1	2	3	4	5
Someone changed a picture of you in a negative way and posted it electronically	0	1	2	3	4	5
Someone wrote mean messages about you publicly electronically	0	1	2	3	4	5
Someone logged into your electronic account and changed your information	0	1	2	3	4	5
Someone posted a nude picture of you electronically	0	1	2	3	4	5
Someone printed out an electronic conversation you had and then showed it to others	0	1	2	3	4	5
You completed an electronic survey that was supposed to remain private but the answers were sent to someone else	0	1	2	3	4	5
Someone logged into your electronic account and pretended to be you	0	1	2	3	4	5
Someone posted an embarrassing picture of you electronically where other people could see it	0	1	2	3	4	5
Someone called you mean names electronically	0	1	2	3	4	5
Someone was mean to you electronically	0	1	2	3	4	5
Someone cursed at you electronically	0	1	2	3	4	5
Someone made fun of you electronically	0	1	2	3	4	5
Someone teased you electronically	0	1	2	3	4	5
You received a nude or partially nude picture that you **did not want** from someone electronically that was not spam	0	1	2	3	4	5
You received an unwanted sexual message from someone electronically	0	1	2	3	4	5
You received an offensive picture electronically that was not spam	0	1	2	3	4	5
Someone pretended to be someone else while talking to you electronically	0	1	2	3	4	5
Someone lied about themselves to you electronically	0	1	2	3	4	5
You shared personal information with someone electronically and then later found out the person was not who you thought it was	0	1	2	3	4	5

CES - Perpetration

Please answer the following questions based on how often you have engaged in the behaviors described below **in the past year**						
	0 Never	1 Less than a few times a year	2 A few times a year	3 Once or twice a month	4 Once or twice a week	5 Every day/nearly every day
You sent an unwanted pornographic picture to someone electronically	0	1	2	3	4	5
You tried to meet someone in person that you talked to electronically who did not want to meet you in person	0	1	2	3	4	5
You sent an unwanted sexual message to someone electronically	0	1	2	3	4	5
You sent an unwanted nude or partially nude picture to someone electronically	0	1	2	3	4	5

You sent a message to a person electronically that claimed you would try to find out where they live	0	1	2	3	4	5
You tried to get information from someone you talked to electronically that they did not want to give	0	1	2	3	4	5
You sent a message electronically to a stranger requesting sex	0	1	2	3	4	5
You asked a stranger electronically about what they are wearing	0	1	2	3	4	5
You sent a rude message to someone electronically	0	1	2	3	4	5
You teased someone electronically	0	1	2	3	4	5
You were mean to someone electronically	0	1	2	3	4	5
You called someone mean names electronically	0	1	2	3	4	5
You made fun of someone electronically	0	1	2	3	4	5
You cursed at someone electronically	0	1	2	3	4	5
You pretended to be someone else while talking to someone electronically	0	1	2	3	4	5
Someone shared personal information with you electronically when you pretended to be someone else	0	1	2	3	4	5
You lied about yourself to someone electronically	0	1	2	3	4	5
You posted an embarrassing picture of someone electronically where other people could see it	0	1	2	3	4	5
You posted a picture of someone electronically that they did not want others to see	0	1	2	3	4	5
You posted a picture electronically of someone doing something illegal	0	1	2	3	4	5

Alcohol Use Disorders Identification Test (AUDIT)

Questions	0	1	2	3	4
How often do you have a drink containing alcohol?	Never	Monthly or less	2-4 times a month	2-3 times a week	4 or more times a week
How many drinks containing alcohol do you have on a typical day when you are drinking?	1 or 2	3 or 4	5 or 6	7 to 9	10 or more
How often do you have six or more drinks on one occasion?	Never	Less than monthly	Monthly	Weekly	Daily or almost daily
How often during the last year have you found that you were not able to stop drinking once you started?	Never	Less than monthly	Monthly	Weekly	Daily or almost daily
*How often during the last year have you needed a first drink in the morning to get yourself going after a heavy drinking session?	Never	Less than monthly	Monthly	Weekly	Daily or almost daily
How often during the last year have you had a feeling of guilt or remorse after drinking?	Never	Less than monthly	Monthly	Weekly	Daily or almost daily
How often during the last year have you been unable to remember what happened the night before because of your drinking?	Never	Less than monthly	Monthly	Weekly	Daily or almost daily
Have you or someone else been injured because of your drinking?	No		Yes, but not in the last year		Yes, during the last year
Has a relative, friend, doctor, or other health care worker been concerned about your drinking or suggested you cut down?	No		Yes, but not in the last year		Yes, during the

				last year

*Indicates item left off scale due to experimenter error.

SES – Victimization (SELF)

The following are questions about experiences you may or may not have had **in your lifetime**. Please read the questions carefully and answer to the best of your ability.		
Have you had sexual intercourse with another person when you both wanted to?*	Yes	No
Have you had a situation where a person misinterpreted the level of sexual intimacy you desired?	Yes	No
Have you been in a situation where another person became so sexually aroused that you felt it was useless to stop them even though you did not want to have sexual intercourse?	Yes	No
Have you had sexual intercourse with a person even though you did not really want to because they threatened to end your relationship otherwise?	Yes	No
Have you had sexual intercourse with another person when you did not want to because you felt pressured by their continual arguments?	Yes	No
Have you found out that a person obtained sexual intercourse with you by saying things they did not really mean?	Yes	No
Have you been in a situation where another person used some degree of physical force (twisting your arm, holding you down, etc.) to try to make you engage in kissing or petting when you did not want to?	Yes	No
Have you been in a situation where another person tried to get sexual intercourse with you when you did not want to by threatening to use physical force (twisting your arm, holding you down, etc.) if you didn't cooperate, **but for various reasons sexual intercourse did not occur**?	Yes	No
Have you been in a situation where another person used some degree of physical force (twisting your arm, holding you down, etc.) to try to get you to have sexual intercourse with them when you did not want to, **but for various reasons sexual intercourse did not occur**?	Yes	No
Have you had sexual intercourse with another person when you did not want to because they threatened to use physical force (twisting your arm, holding you down, etc.) if you didn't cooperate?	Yes	No
Have you had sexual intercourse with a person when you didn't want to because they used some degree of physical force (twisting your arm, holding you down, etc.)?	Yes	No
Have you been in a situation where another person obtained sexual acts with you such as anal or oral intercourse when you did not want to by using threats or physical force (twisting your arm, holding you down, etc.)?	Yes	No
Have you ever been raped?	Yes	No

*Indicates an item not included in the final sum score

Sexual Cyberbullying Victimization Scale (SELF)

In the past, what percentage of the time has someone else used the following strategies to try convince **you** to have sex (manual stimulation, oral, anal, or vaginal intercourse) with them **after you initially said "no"**? (Check all that apply)										
Pressuring you to provide them with sexually explicit photos or videos of yourself (i.e. nudes) instead of having sex with them	None or <10% of the time	10-20% of the time	21-30% of the time	31-40% of the time	41-50% of the time	51-60% of the time	61-70% of the time	71-80% of the time	81-90% of the time	>90% of the time
Pressuring you to send them sexually explicit messages via text or a social networking site/app instead of having sex with them										
Sending you a sexually explicit or suggestive message privately via text or a social networking site/app **that you did not want**										
Sending you sexually explicit photos or videos of themselves via a cell phone or social networking site/app **that you did not want**										
Posting a sexually explicit or suggestive message publicly on your social networking site										
Making a sexually explicit comment on a photo of you on a social networking site/app										
Threatening to post an embarrassing photo of you on a social networking site if you did not give in to sex										
Threatening to share a sexually explicit photo, video, or messages that you had shared privately with them with others if you do not give in to sex										
Threatening to post a sexually explicit photo or video of you on a social networking site if you did not give in to sex										
Threatening to share a sexually explicit photo online or with others and claim it was a photo of you if you did not give in to sex										
Sharing a sexually explicit photo, video, or messages that you had shared privately with them, with others, when you did not initially give in to sex										
If others have used any of the above strategies with you, are they typically effective (i.e. do you usually end up having a sexual interaction with the other person)?	Yes					No				
The last time someone used any of the above strategies with you, was it effective (i.e. did you end up having a sexual interaction with the other person)?	Yes					No				
No one has ever used any of the above strategies with me										

SSS – Perpetration (SELF; Modified)

In the past, what percentage of the time have **you used** the following strategies to convince another person to have sex (manual stimulation, oral, anal, or vaginal intercourse) with you **after the other person initially said "no"**? (Check all that apply)	None or <10% of the time	10-20% of the time	21-30% of the time	31-40% of the time	41-50% of the time	51-60% of the time	61-70% of the time	71-80% of the time	81-90% of the time	>90% of the time
Continuing to touch and kiss them in the hopes that they will give in to sex										
Telling them lies (e.g. saying "I love you" when you don't)										
Using your older age to convince them										
Getting them drunk/high in order to convince them to have sex										
Threatening to tell others a secret or lie about them if they don't have sex (i.e. blackmail)										
Asking them repeatedly to have sex										
Blocking them if they tried to leave the room										
Threatening to harm them physically if they don't have sex										
Taking advantage of the fact that they are drunk/high										
Threatening to harm yourself if they don't have sex										
Using a weapon to frighten them into having sex										
Taking off their clothes in the hopes that they will give in to sex										
Taking off your clothes in the hopes that they will give in to sex										
Using physical restraint										
Threatening to break up with them if they don't have sex										
Questioning their sexuality (e.g. calling them gay, a lesbian, etc.)										
Using your authority to convince them (e.g. if you were their boss, their supervisor, their camp counsellor, etc.)										
Harming them physically										
Tying them up										
Questioning their commitment to the relationship (e.g. saying "if you loved me, you would").										
Accused them of "leading you on" or being "a tease"										
Slipping them drugs (e.g. GHB or "Roofies") so that you can take advantage of them										
Pressuring them to provide you with sexually explicit photos or videos of themselves (i.e. nudes) instead of having sex with you										
Pressuring them to send you sexually explicit messages via text or a social networking site/app instead of having sex with you										
Sending them a sexually explicit or suggestive message privately via text or a social networking site/app										
Sending them sexually explicit photos or videos of yourself via a cell phone or social networking site/app										
Posting a sexually explicit or suggestive message publicly on their social networking site										
Making a sexually explicit comment on a photo of them on a social networking site/app										
Threatening to post an embarrassing photo of them on a social networking site if they did not give in to sex										
Threatening to share a sexually explicit photo, video, or messages that they had shared privately with you with others if they do not give in to sex										
Threatening to post a sexually explicit photo or video of them on a social networking site if they did not give in to sex										
Threatening to share a sexually explicit photo online or with others and claim it was a photo of them if they did not give in to sex										
Sharing a sexually explicit photo, video, or messages that they had shared privately with you, with others, when they did not initially give in to sex										
If you have used any of the above strategies, is it typically effective (i.e. do you usually end up having a sexual interaction with the other person)?	Yes					No				
The last time you used any of the above strategies, was it effective (i.e. did you end up having a sexual interaction with the other person)?	Yes					No				
I have never used any of the above strategies										

SSS Perpetration (PEERS; Modified)

In the past, please indicate what percentage of the time you think **your peers** may have used any of the following strategies to convince another person to have sex with them (manual	None or <10% of the time	10-20% of	21-30% of	31-40% of	41-50% of	51-60% of	61-70% of	71-80% of	81-90% of	>90% of the time

stimulation, oral, anal, or vaginal intercourse) **after the other person initially said "no"**? (Check all that apply)		the time	the time	the time	the time	the time	the time	the time	the time	
Continuing to touch and kiss the other person in the hopes that they will give in to sex										
Telling the other person lies (e.g. saying "I love you" when they don't)										
Using older age to convince the other person										
Getting the other person drunk/high in order to convince them to have sex										
Threatening to tell others a secret or lie about the other person if they don't have sex (i.e. blackmail)										
Asking the other person repeatedly to have sex										
Blocking the other person if they tried to leave the room										
Threatening to harm the other person physically if they don't have sex										
Taking advantage of the fact that the other person is drunk/high										
Your peer threatening to harm themselves if the other person doesn't have sex										
Using a weapon to frighten the other person into having sex										
Taking off the other person's clothes in the hopes that they will give in to sex										
Your peer taking off their own clothes in the hopes that the other person will give in to sex										
Using physical restraint										
Threatening to break up with the other person if they don't have sex										
Questioning the other person's sexuality (e.g. calling them gay, a lesbian, etc.)										
Using authority to convince the other person (e.g. if your peer was their boss, their supervisor, their camp counsellor, etc.)										
Harming the other person physically										
Tying the other person up										
Questioning the other person's commitment to the relationship (e.g. saying "if you loved me, you would").										
Accused the other person of "leading them on" or being "a tease"										
Slipping the other person drugs (e.g. GHB or "Roofies") so that your peer could take advantage of them										
Pressuring the other person to provide sexually explicit photos or videos of themselves (i.e. nudes) instead of having sex										
Pressuring the other person to send sexually explicit messages via text or a social networking site/app instead of having sex										
Sending the other person a sexually explicit or suggestive message privately via text or a social networking site/app										
Your peer sending a sexually explicit photo or video of themselves via a cell phone or social networking site/app										
Posting a sexually explicit or suggestive message publicly on the other person's social networking site										
Making a sexually explicit comment on a photo of the other person on a social networking site/app										
Threatening to post an embarrassing photo of the other person on a social networking site if the other person did not give in to sex										
Threatening to share a sexually explicit photo, video, or messages that the other person had shared privately with them, with others if the other person did not give in to sex										
Threatening to post a sexually explicit photo or video of the other person on a social networking site if they did not give in to sex										
Threatening to share a sexually explicit photo online or with others and claim it was a photo of them if they did not give in to sex										
Sharing a sexually explicit photo, video, or messages that they had shared privately with you, with others, when they did not initially give in to sex										
If your peers may have used any of the above strategies, do you think it is typically effective (i.e. do they usually end up having a sexual interaction with the other person)?		Yes				No				
The last time your peers may have used any of the above strategies, do you think it was it effective (i.e. do you think		Yes				No				

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they ended up having a sexual interaction with the other person)?		
I do not think my peers have ever used any of the above strategies		

DASS 21

Please read each statement and circle a number 0, 1, 2, or 3 which indicates how much the statement applied to you **over the past week**. There are no right or wrong answers. Do not spend too much time on any statement.				
	0 Applied to me Never	1 Applied to me Sometimes	2 Applied to me Often	3 Applied to me Almost Always
I found it hard to wind down	0	1	2	3
I was aware of dryness of my mouth	0	1	2	3
I couldn't seem to experience any positive feeling at all	0	1	2	3
I experienced breathing difficulty (e.g., excessively rapid breathing, breathless in the absence of physical exertion)	0	1	2	3
I found it difficult to work up the initiative to do things	0	1	2	3
I tended to over-react to situations	0	1	2	3
I experienced trembling (e.g. in the hands)	0	1	2	3
I felt that I was using a lot of nervous energy	0	1	2	3
I was worried about situations in which I might panic and make a fool of myself	0	1	2	3
I felt that I had nothing to look forward to	0	1	2	3
I found myself getting agitated	0	1	2	3
I found it difficult to relax	0	1	2	3
I felt down-hearted and blue	0	1	2	3
I was intolerant of anything that kept me from getting on with what I was doing	0	1	2	3
I felt I was close to panic	0	1	2	3
I was unable to become enthusiastic about anything	0	1	2	3
I felt I wasn't worth much as a person	0	1	2	3
I felt I was rather touchy	0	1	2	3
I was aware of the action of my heart in the absence of physical exertion (e.g. sense of heart rate increase, heart missing a beat)	0	1	2	3
I felt scared without any good reason	0	1	2	3
I felt that life was meaningless	0	1	2	3

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Below are some situations which you may or may not have experienced. Please indicate the extent to which you have experienced these situations in the **past year**.				
	0 Never	1 Sometimes	2 Often	3 Always
I lack companionship	0	1	2	3
There is no one I can turn to	0	1	2	3
I am an outgoing person*	0	1	2	3
I feel left out	0	1	2	3
I feel isolated from others	0	1	2	3
I can find companionship when I want it*	0	1	2	3
I am unhappy being so withdrawn	0	1	2	3
People are around me but not with me	0	1	2	3

*Indicates reverse scored item

Anandi C. Ehman

CV

Education

PhD. in Clinical Psychology

University of Mississippi   Expected Spring 2021

Dissertation: *Do these violent delights have violent ends: Social Norms, Alcohol & Sexual Cyberbullying*

Committee: Alan Gross PhD. (Chair), Laura Dixon PhD., John Bentley PhD., & Elicia Lair PhD.

M.A. in Clinical Psychology

University of Mississippi   April 2016

Thesis: *Some men just want to watch the world burn: The role of sensation seeking, impulsivity, and empathy in cyberbullying*

Committee: Alan Gross PhD. (Chair), Elicia Lair PhD., & Carrie Dowling PhD.

B.A. in Psychology & English

Minor in Biology

Florida Gulf Coast University   December 2013

Summa cum Laude

Liscences, Certifications, & Additional Training

Graduate Minor in Applied Statistics   In progress

Examination for Professional Practice in Psychology (EPPP)   Passed at Doctoral

Level July 2017

American Red Cross Certified Adult & Pediatric First Aid/CPR/AED   September 2017

Publications

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Ehman, A.C., Lair, E.C. (2019). *Is it Your Fault or Our Responsibility? The Impact of Realistic Individual and Collective Messaging on Victim Blame and Stigma Behaviors*. Data blitz presented at the 6th annual Psychology Department Research Day, April 12th, Oxford M.S.

Ehman, A.C., Lair, E.C. (2018). *Blame it all on me: Individual and Collective Construal Priming Effects on Victim Blaming in Sexual Assault*. Data blitz presented at the 5th annual Psychology Department Research Day, April 13th, Oxford M.S.

Ehman, A.C., Russell, K., Long, A., Phipps, S. (2018). *Optimism and Connectedness in Psychological Wellbeing of Cancer Survivors*. Paper talk presented at the 64th annual meeting of the Southeastern Psychological Association, March 6-9, Charleston S.C.

Poster Presentations

Ehman, A.C., Lair, E.C. (2019) *We get by with a little help from our friends: Victim blame mediates the relationship between Construal Prime and Perceived Intentions to Help Victims. This Mediation is Moderated by Gender*. Poster presented at the 53rd Annual meeting of the Association of Behavioral and Cognitive Therapies, November 21-24, Atlanta G.A.

Ehman, A.C., Russell, K., Phipps, S.P. (2019). *Rightfully Worried? Estimations of Fertility Risk, Anxiety, Depression, and Neuroticism in Survivors of Pediatric Cancer and Healthy Peers*. Poster presented at the 31st Annual Convention for the Association of Psychological Science, May 23-26, Washington, D.C.

McMullen, A., **Ehman, A.C.** (2019). *You're the Problem, We're the Solution: Individual vs. Collective Message Framing in Sexual Assault Victim Blaming*. Poster presented at the Annual Meeting of the Society for Social and Personality Psychology, February 7-9, Portland O.R.

Ehman, A.C., Lair, E.C. (2017). *Putting the "Me" in Blame: Self & Collective construal priming effects on sexual assault victim blaming*. Poster presented at the 29th annual meeting of the Association for Psychological Science, May 24-28, Boston M.A.

Ehman, A.C., Simmons, J.L., Russell, K.M., Lehmann, V., & Klosky J.L. (2017). *Predicting Risky Sexual Behavior Among Young Adult Females with and without a History of Childhood Cancer: Does Human Papillomavirus (HPV) Vaccination Matter?* Poster accepted at the 29th annual meeting of the Association for Psychological Science, May 24-28, Boston M.A.

Ehman, A.C., Lair, E.C. & Gross, A.M. (2016). *Some men just want to watch the world burn: The role of Empathy, Impulsivity, and Sensation Seeking in Cyberbullying Behavior of College Students*. Poster presented at the 50th annual meeting of the Association of Behavioral and Cognitive Therapies, October 27-30, New York, NY.

Kimbler, K., & **Ehman, A.C.** (November 2013). *Student responses to service learning: Unique learning and attitude benefits from working with older adults*. Poster presented at the annual meeting of the Gerontological Society of America, New Orleans, LA.

Ehman, A.C. (December 2013). *Gender related attribution biases in errors involving instrumental activities of daily living*. Poster presented at Florida Gulf Coast University's "STEM Symposium".

Kimbler, K., & **Ehman, A.C.** (December 2013). *Student responses to service learning: Unique learning and attitude benefits from working with older adults*. Poster presented at Florida Gulf Coast University's "Teaching, Learning and Assessment Initiative" (TLAI).

Awards & Honors

UM Psychology Department Graduate Student Research Award   Spring 2019

Manuscripts Under Review, Submitted, or in Preparation

Ehman, A.C, & Lair, E.C. (In progress). *Putting the "Me" in Blame: Independent vs. Interdependent Construal Message FramingEffects on Victim Blaming and Expressions of Stigma in Sexual Assault Scenarios*.

<u>Grant Applications</u>

University of Mississippi Department of Writing and Rhetoric

    Grant for Graduate Instructors of Record   Received Spring 2019

APA Division 35 Graduate Research Award   Applied for Spring 2019

APA Graduate Student Dissertation Fellowship   Applied for Fall 2018

APF Graduate Student Scholarship   Applied for Summer 2018

<u>Clinical Experience & Training</u>

Graduate Student Therapist   **Fall 2018-Spring 2019**

University of Mississippi Counseling Center

The University of Mississippi, Oxford, MS

Supervisors: Daniel Deason, PhD (Fall 2018) & Mary Ward-Black, PhD (Spring 2019)

- Provided individual therapy using evidenced based practices.
- Emphasis on working with clients with multiple complex issues including trauma, disordered eating, substance abuse, and suicidality/self-harm behaviors
- Co-led a weekly Sexual Assault process group, including providing psychoeducation on trauma, participating in screeners to assess individuals' fit for group, leading mindfulness exercises in session, and discussing various trauma related coping techniques
- Conducted a minimum of two weekly intakes while maintaining a case load of eight to twelve clients
- Held weekly triage hours for emergency walk-in appointments
- When needed, engaged in both voluntary and involuntary hospitalizations of clients with suicidal or para-suicidal behaviors
- Received training in crisis management including procedures for using in room panic buttons in case of emergency
- Worked with community resources to connect students with additional services including psychological assessment, medication management, nutritional

information and provider referrals, legal guidance, academic resources, and financial support
- Participated in outreach activities including but not limited to: Take Back the Night Sexual Assault Awareness, Mental Health Awareness week, and Semi-colon Day for Suicide Prevention and Awareness
- Attended weekly individual supervision, as well as weekly group supervision with the interdisciplinary staff of the UCC
- Provided case presentations twice a semester during interdisciplinary group supervision meetings including information on clients' presenting problems, course of treatment, barriers to care, and possible future concerns
- Facilitated transition of care between self and other full time staff as pre-appointed time at this position ended
- Attended weekly training seminars covering topics as varied as: Tele-mental health services, Group Therapy Work, Treating Substance Abuse Disorders, Planning Outreach Programming, Meditation and Mindfulness, Treating Trauma, and Working with Individuals with Disordered Eating

Graduate Lambda LGBTQ+ Support Group Co-Leader   Fall 2018-Present

The University of Mississippi, Oxford, MS

Supervisor: Laura Johnson, PhD.

- Held weekly process group meetings for members of Lambda, individuals who identify as members of the LGBTQ+ community and their allies
- Provided psychoeducation on self-care, coping mechanisms, as well as facilitating other ad hoc discussions on various topics including but not limited to: coming out, sexual health in the LGBTQ+ community, identity and labels, romantic relationships, LGBTQ+ identity and religion, intersectionality of identity and prejudice, and providing support/role modeling to other younger members of the LGBTQ+ community
- Facilitated outreach and participation in LGBTQ+ geared events, such as social gatherings, talks, and the yearly Oxford Pride Parade
- Participated in ad hoc peer supervision
- Participated group supervision

Graduate Student Individual Therapist   Fall 2015-Present

Psychological Services Center

The University of Mississippi, Oxford, MS

Supervisors: Alan Gross, Ph.D. (Fall 2015-Spring 2015), Scott Gustafson Ph.D. (Summer 2016, 2017, 2018), Kelly Wilson, Ph.D. (Fall 2016-Spring 2017 & Fall 2018-Spring 2019), Laura Dixon (Fall 2017-Spring 2018)

- Provided individual therapy using evidence based practices. Emphasis on working with clients with multiple complex issues. Express experience in working with clients struggling with the following:
  - Substance Use Disorders
  - Emotional Dysregulation
  - Generalized Anxiety Disorder
  - Major Depression
  - Eating Disorders
- Experience with the following therapeutic styles and practices:
  - ACT
  - DBT
  - CBT
  - Functional assessment and traditional behavioral techniques
- Participated in weekly individual, group, and peer supervision.
- Administered the following measures based upon client needs: OQ, YOQ, YOQ-Parent Version, RCADS, RCADS-P, DASS-21, BAI, BDI, PHQ-9, GAD-7, APQ, DMQ-R, AUDIT, & DERS.
- Utilized the following structured clinical interviews during intake appointments: MINI 5.0, MINI 6.0, SCID-II, DIPD, ChIPS, and P-ChIPS.

Graduate Student DBT Group Co-Leader   September –November 2017

Psychological Services Center

The University of Mississippi, Oxford, MS

Supervisor: Laura Dixon, Ph.D.

- Led mindfulness exercises every other week
- Provided didactic training on Mindfulness and Distress Tolerance skills
- Facilitated group discussion related to skills and homework practice
- Provided information to other individual therapists about the referral process, including discussing whether or not particular clients would be an appropriate fit for the group
- Attended weekly individual and group supervision

Psychological & Behavioral Services Graduate Intern   July 2015-July 2016

North Mississippi Regional Center, Oxford, MS

Supervisor: Scott Bethay, Ph.D.

- Provided individual and group therapy to residents with intellectual disabilities.
- Co-facilitated a social skills group. Topics covered included: initiating a conversation, rapport building, and appropriate interpersonal interaction.
- Involved in treatment planning and construction of behavior programs for residents utilizing a multidisciplinary treatment approach.

- Conducted Functional Assessments to ascertain the function of client problem behavior, and provided suggestions for revisions to client programs designed to decrease problem behavior based upon the results of the functional assessment.
- Trained direct care staff in the proper implementation of a simple token economy as part of a program revision to aid in decreasing a client's problem behavior.
- Administered Vineland's to Direct Care staff and wrote up results as part of annual paperwork.
- Conducted assessment batteries in the Diagnostics and Evaluation department using the following measures: WAIS-IV, WISC-V, BASC-2, Vanderbilt, Vineland, ICAP, WRAT-4, MMSE-2.
- Trained incoming graduate therapists on facility policies in addition to integrating transition of patient care.
- Participated in weekly individual, group, and peer supervision.

Clinical Interests

- Promoting psychosocially healthy behavior in young adults.
- Trauma survivorship, resilience, and treatment in young adults.
- Substance use reduction and harm management in college students.
- Risky behavior, coping, and resilience among college students.
- De-stigmatizing the use of psychological services among college students.
- Emotional regulation and distress tolerance in adolescents and young adults.

External Research Training

Psychology Department Graduate Student Intern   September 2017-September 2018

St. Jude Children's Research Hospital, Memphis, TN

Supervisor: Sean Phipps, Ph.D.

- Analyzed archival data from the PTSD2 and BMTPE3 studies pertaining to psychosocial wellbeing, risky behavior, and fertility concerns in survivors of childhood cancer.
- Presented findings in paper format at the Southeastern Psychological Association (SEPA) symposium in Spring 2018.
- Facilitated clinical interviews with patients regarding their experiences with a bone marrow donation procedure.
- Participated in clinical interviews with patients and control participants regarding challenging events in their life, including cancer, to ascertain the extent to which cancer is viewed as a uniquely traumatic event.
- Assisted in quality assurance by re-entering participant data in SPSS for confirmation of accuracy.
- Contacted potential participants about outstanding data packets via telephone to facilitate complete collection of data.
- Attended bi-weekly lab meetings and participated in discussions about the progression of various projects and manuscripts.

- Participated in regular supervision and didactics both with Dr. Sean Phipps and his post-doctoral fellow.

Psychology Department Graduate Student Intern   September 2016-September 2017

St. Jude Children's Research Hospital, Memphis, TN

Supervisor: James L. Klosky, Ph.D., ABPP

- Created a measure to assess clinical needs of individuals seen for a psychological consult in the Fertility clinic. Collaborated with clinic staff as well as lab. members to ensure the measure was both informative and psychometrically sound
- Assisted in the creation of measures to be used to assess parental concerns about a testicular screening and freezing protocol designed to preserve fertility in pediatric cancer patients.
- Analyzed archival study data and detailed findings in poster format at the Association of Psychological Science (APS) symposium in Spring 2017.
- Provided a half hour presentation at Psychology Rounds on additional research conducted using archival study data.
- Assisted in discussions with patients regarding fertility decision making and potential clinical implications of long term infertility due to cancer treatment
- Conducted weekly screenings of patients in the Survivorship and Leukemia clinics to ascertain whether individuals in these clinics met criteria for study recruitment.
- Received training on confidentiality and consent processes utilized when participants were queried about their desire to participate in the study. Additionally observed senior project members consenting potential study participants.
- Facilitated communication between home lab and affiliate labs including sending detailed monthly updates of study progress to affiliates as well as sharing necessary documentation for records and monitoring purposes.

Research in Progress

Title IX: What are students' perceptions of changes to the Title IX policy? How do these perceptions, social norms, and experience with sexual assault (either as a victim, friend of victim, accused, or friend of the accused) impact likelihood of future reporting behavior? Moreover, how does the interaction between these variables change from before the implementation of Title IX changes, to post implementation, to one year out?

Priming and Blame: Does the relationship between priming, acceptance of rape myths, and victim blame change if individuals are presented with non-heteronormative assault scenarios, or scenarios with male victims. Does this relationship further change if participants are provided information about the psychosocial consequences experienced by victims and perpetrators.

What are the attitudes and beliefs held by University faculty about sexual assault on college campuses? Do these attitudes reflect victim blame?

Interpersonal romantic relationships and technology: Does belief in the norm of "hookup" culture increase involvement in sexual cyberbullying among college students?

What factors affect usage of mental health services among students in higher education? What barriers are there to care seeking, and how can these be modified or removed such that individuals are more effectively able to seek treatment?

Research Interests

- Technology use and impact on the psychosocial functioning and interpersonal relations of adolescents and young adults.
- Creation of empirically supported and normed measures of psychological constructs.
- Message framing as a tool for shaping behavior (i.e. decreasing aggressive behavior or increasing pro-social/healthy behavior).
- Use and impact of technology in the therapeutic context.
- The role of affect and cognitive processing styles in shaping therapy seeking behavior, with the intent of facilitating treatment seeking (particularly of evidenced based practices), and commitment to the therapeutic process.
- Perceptions and use of psychological services among graduate students, specifically those studying in the domain of psychology, counseling, and mental health services.
- Strategies for effective undergraduate teaching, including the implementation of service-learning.

Departmental Involvement

Psychology Department Research Day   Spring 2019

    Senior Clinical Grad Student Representative to the Research Day committee

- Recruited graduate students to serve as judges for undergraduate posters
- Assisted with the selection of undergraduate presentations
- Served as a judge for undergraduate poster presentations
- Coordinated student nomination submissions and served as a judge for the Graduate School Faculty Mentor Award
- Panelist on Graduate School Applications & Interviews Panel

Senior Clinical Student Representative to the Chair   Fall 2018-Spring 2019

- Met on a bi-semesterly basis with the psychology department chair to discuss current issues
- Surveyed graduate students regarding departmental concerns

Departmental Statistics Tutor   Fall 2018-Spring 2019

- Held weekly tutoring hours for undergraduate statistics students
- Answered homework questions and provided ad hoc resources

- Provided students with information on study skills and other departmental resources as needed

Psychology Department Research Day   Spring 2018

Member of Research Day committee

- Assisted with the selection of undergraduate presentations
- Served as a judge for undergraduate poster presentations
- Served as a judge for the Graduate School Faculty Mentor Award

Presenter in graduate school education symposium

When wacky witticisms won't work: Graduated School Applications Adventure, Research and Personal Statements

Psychology Department Research Day   Spring 2017

Presenter in graduate school education symposium

How to write right: Paperwork and graduate school applications

Graduate student survival guide   Spring/Summer 2017

Contributing author on the following sections:

Clinical Placements: NMRC, Research Placements: St. Jude, Second Year: General Words of Wisdom, Resources: Parking, How do I do this: Registering for classes, How do I do this: The ICAS (Stats Certificate), General Advice: Imposter Syndrome, and General Advice: Self Care

Ad Hoc Reviewer

Aggression and Violent Behavior

Current Psychology

Clinical Case Studies

Computers in Human Behavior

Journal of Happiness Studies

Teaching Experience

Graduate Instructor of record

General Psychology   Fall 2019-Spring 2020

Guest Lecturer

      General Psychology   Spring 2016 & Spring 2017

      Social Psychology   Spring 2016 & Spring 2015

Teaching Interests

- Introductory/General Psychology
- Abnormal Psychology
- Research Methods
- Introduction to Clinical Psychology (or other special topics classes)
- Multicultural Psychology
- Ethics
- Social Psychology