Winter 4-30-2014

An exploration of online communication in dating relationships: The impact of cyber dating harassment on self-esteem and academic engagement

Kaitlin Hancock

King's University College, khancoc@uwo.ca

Follow this and additional works at: https://ir.lib.uwo.ca/psychK_uht

Part of the Psychology Commons

An exploration of online communication in dating relationships:

The impact of cyber dating harassment on self-esteem and academic engagement

by

Kaitlin Hancock

Honours Thesis

Department of Psychology

King's University College at *The* University *of* Western Ontario

London, Canada

April 2014

Thesis Advisor: Dr. Wendy Ellis

Abstract

The present study investigated the relationship between the predictor variable of cyber dating harassment and the criterion variables of self-esteem and academic engagement. The hypothesis of the study was that a negative relationship exists between cyber dating harassment and self-esteem. It was also hypothesized that a negative relationship exists between cyber dating harassment and academic engagement; furthermore, it was predicted that self-esteem would mediate this relationship, such that cyber dating harassment would lead to low self-esteem, which would then lead to lower levels of academic engagement. A convenience sample of 126 participants was selected from the Introductory Psychology classes at King's University College in London, Ontario. The revised sample consisted of 103 females and 23 males. Participants completed an online questionnaire composed of a cyber dating harassment scale, a self-esteem scale, and the academic sub-scale of the Student Experience in the Research University survey. Using regression analysis, a significant, negative relationship was found between cyber dating harassment and self-esteem. Furthermore, a significant relationship was also revealed between self-esteem and academic engagement. However, no significant relationship was found between cyber dating harassment and academic engagement, providing no support for the mediation hypothesis. Sex was also explored as a potential moderator variable; however, no significant interactions were found.

An exploration of online communication in dating relationships:

The impact of cyber dating harassment on self-esteem and academic engagement

The innovation of recent technology has undoubtedly provided the world with countless advantages; a wealth of knowledge is globally available simply through the use of one's fingertips. Like many inventions, however, the initial intentions of this technology may become corrupt. With the ability to communicate and share information instantaneously, there are opportunities for misuse and abuse. This becomes particularly troubling when considering the already prevalent problem of intimate partner violence and dating abuse. With respect to social media (e.g. social networking sites, e-mail, text messages), some even state that "these technologies redefine the boundaries of romantic relationships in ways that provide fertile ground for conflict and abuse" (Draucker & Martsolf, 2010, p. 141).

Data from a nationally representative survey in the United States showed that approximately 17 percent of adolescent females and 9 percent of adolescent males reported being the victim of dating violence and abuse; this survey used a limited definition of "dating abuse", which included threats of physical violence, actual physical violence, or sexual coercion (Ackard, Neumark-Sztainer, & Hannan, 2003). Furthermore, it has been found that approximately 10 percent of students in the United States are subject to physical dating violence, and about 25 percent are victims of verbal, psychological, emotional, or sexual dating violence each year (Draucker & Martsolf, 2010). This abuse is correlated with many poor outcomes, including injury, suicide attempts, substance abuse, unhealthy sexual behaviours, emotional distress, and disruptions in self-image. One form of abuse that has been scarcely studied involves "using communication technology to harass, intimidate, threaten, or otherwise harm others"

(Patchin & Hinduja, 2010, p. 615). The purpose of the present study is to examine the

relationship between cyber dating harassment and individual adjustment. Little research has

been conducted in the field of cyber dating harassment. Previous research on similar topics has

focused on either physical or verbal dating abuse or cyber-bullying in general.

Cyber harassment can be defined as "using communication technology to harass,

intimidate, threaten, or otherwise harm others" (Patchin & Hinduja, 2010, p. 615). There are four

main elements of which this act consists: first, cyber harassment is an intentional and deliberate

behaviour; second, it is repeatedly carried out over time; third, victims of cyber harassment

experience real, significant pain, either psychologically, emotionally, or relationally; and finally,

it is executed through the use of various electronic devices, which distinguishes it from

traditional forms of harassment (Patchin & Hinduja, 2010).

Although cyber harassment may be similar to traditional bullying and harassment in all

forms (e.g. psychological, relational, and indirect), there are a number of distinct differences

between the two. With cyberbullying, there are not any authorities to monitor online interactions

and ensure civility, therefore allowing harmful or inappropriate communication to continue

unabated (Patchin & Hinduja, 2010). Furthermore, it appears to be much easier to be cruel and

malicious through virtual social mediums (e.g. text message, e-mail, posted photo or video) due

to the physical distance between the perpetrator and the victim, and the fact that personal and

social norms, rules, morals, and laws become less pertinent when communicating electronically

(Patchin & Hinduja, 2006).

The use of technology is becoming more and more prevalent in the lives of teenagers and

young adults. A 2006 telephone survey revealed a high Internet usage rate among adolescents in

the United States; 93 percent of adolescent respondents were Internet users, 61 percent of which

used the Internet on a daily basis, and 34 percent used the Internet multiple times a day (Lenhart

& Madden, 2007). The 2007-2008 rate of cell phone usage by adolescents aged 12-17 was

equally striking; 71 percent of adolescents were cell phone owners, and 38 percent sent text

messages each day (Lenhart, 2009). It is evident from these statistics that technology is

becoming the main source of communication for youth. When technology is used to perpetrate

aggression against acquaintances, friends, or even intimate partners, this phenomenon is called

"electronic aggression" and is considered a serious emerging health concern among youth.

Electronic aggression can be defined as "any type of harassment or bullying, including teasing,

telling lies, making fun of, making rude or mean comments, spreading of rumors, or making

threatening or aggressive comments, that occurs through e-mail, a chat room, instant messaging,

a Web site, or text messaging" (David-Ferdon & Hertz, 2007, p. 2). It has been estimated that the

prevalence rates for electronic aggression lie somewhere between 9 and 34 percent for

victimization, and between 4 and 21 percent for perpetration (David-Ferdon & Hertz, 2007).

However, the incidence of electronic aggression among adolescents and young adults appears to

be increasing; a 50 percent increase was reported between 2000 and 2005 (Mitchell, Wolak, &

Finkelhor, 2007). Electronic aggression is associated with a number of negative psychosocial

consequences for both victims and perpetrators, including poor caregiver-child relationships,

substance abuse, interpersonal victimization, delinquency, depression, and school problems

(Ybarra & Mitchell, 2004). Victimization in particular is associated with social anxiety,

depression, perpetration of online harassment against others, interpersonal victimization, social

and behavioral problems, and school problems (e.g., skipping school, detentions, and/or

suspensions) (Hinduja & Patchin, 2006). In the present study, I will examine one form of

electronic aggression: cyber dating harassment (i.e. abuse through various forms of technology

and other new media; Zweig, Dank, Yahner, & Lachman, 2013).

Johnson's (1995) typology of intimate partner violence can account for the aggressive use

of technology in intimate relations. According to this typology, there are "four distinct forms of

couple aggression that are based on the degree of control and violence present within a

relationship: situational couple violence (SCV), intimate terrorism (IT), mutual violent control

(MVC), and violent resistance (VR)" (Melander, 2010, p. 263). Situational couple violence

(SVC) refers to aggressive behaviours that occur only within the context of a situation and rarely

escalate to severe forms of violence; minor forms of violence, such as slapping or grabbing a

partner, are typically considered to be a form of SVC. Intimate terrorism (IT) occurs when one

partner violently controls the other partner within an intimate relationship; controlling tactics

include economic subordination, threats, isolation, and physical aggression. Intimate terrorism is

a form of violence that is more likely to be expressed through technology; although a partner

may not be physically violent through technology, they may control their partner by monitoring

their behaviours through the use of cell phones and social networking websites. Mutual violent

control (MVC) occurs when both partners are mutually violent and controlling toward each

other. These behaviours are similar to those that occur with intimate terrorism. Finally, violent

resistance (VR) refers to situations in which one partner is violent and controlling and the other

partner retaliates with violence as a form of self-defense (Melander, 2010).

Various forms of couple aggression can be seen in electronic communications between

partners. Among adolescents, verbal aggression is often carried out through the use of

technology, particularly cell phones. Communication technologies can escalate arguments between partners, allow partners to monitor the behaviours of one another, and encourage interactions between estranged couples, which often results in more violence (Draucker & Martsolf, 2010). Zweig, Dank, Yahner and Lachman (2013) found that intimate partners communicated electronically primarily in eight ways, the last six of which were related to violence, abuse, or controlling behaviours: establishing a relationship; nonaggressive communication; arguing; monitoring the whereabouts of a partner or controlling their activities; emotional aggression toward a partner; seeking help during a violent episode; distancing a partner's access to self by not responding to calls, texts, and other contact by technology; and re-establishing contact after a violent episode.

With respect to online harassment particular to intimate partner relationships, a study commissioned by Liz Claiborne Incorporated found various types of cyber victimization; findings ranged from 10 percent of respondents being physically threatened by their partner through an e-mail, instant message, or text message, to 25 percent of respondents having been called names, harassed, or put down by their partner by text. Respondents also reported: being sexually coerced by their partners through the Internet or by cellphone (22%), their partners spreading rumors about them on the Internet or by cell phone (19%), being harassed by their partners through social networking sites (18%), and their partner sharing private or embarrassing pictures of them (11%; Picard, 2007). In terms of perpetration, approximately 12 percent of dating adolescents reported perpetrating cyber dating abuse within the past year (Zweig, Dank, Yahner, & Lachman, 2013).

A mass amount of research has accumulated over the years demonstrating that bullying and harassment have negative effects upon the development of adolescents. Due to the impact of one's social environment on identity formation during adolescence, one's self-esteem may be severely impacted by bullying. Patchin and Hinduja (2010) state that "self-esteem is a perception — one's belief as to his or her personal value and affected by one's participation in the social world" (p. 616); within this world there are often relational conflicts that lead to bullying, which simultaneously impact one's self esteem. Patchin and Hinduja (2010) found that both the victimization and perpetration of cyberbullying was correlated with significantly lower levels of self-esteem, even after controlling for demographic differences.

Dating violence in adolescence is also associated with low self-esteem and disruptions in self-concept. Romantic relationships can greatly impact one's identity development; individuals develop a "romantic self-concept" based on the content and quality of their intimate relationship. Positive relationships are likely to result in the view that one is an adequate and appealing romantic partner, while negative relationships may lead to a poor romantic self-concept, resulting in thoughts of unattractiveness and ineptitude. Furthermore, this romantic self-concept may alter one's self-esteem or overall sense of self, particularly in the domains of physical appearance and peer acceptance. Adolescents are able to project their self-images onto their intimate partners, allowing them to gain a deeper self-understanding as it is reflected back to them through their partners (Draucker, Cook, Martsolf & Stephenson, 2012). Self-esteem and adolescent dating violence are thus associated in a number of ways. Low self-esteem both predicts and correlates with dating violence (Draucker et al., 2012). It has also been found that low self-esteem is a mediator in the correlation between family variables and dating violence; poor parenting

processes (e.g. low monitoring, closeness, and support) lead to low self-esteem in adolescents, which then leads to both the victimization and perpetration of dating violence (Pflieger & Vazsonyi, 2006).

The use of cyber dating violence in particular may contribute to a poor quality relationship, although no research to date has specifically examined this link. As mentioned previously, a common form of cyber dating harassment is monitoring the whereabouts of a partner by technological means (Zweig et al., 2013). It is hypothesized that this constant monitoring is due to a lack of trust; for example, an individual may feel that they need to know where their partner is and whom they are with at all times to ensure fidelity. Evidently, this distrust may adversely affect the relationship as the monitored partner may feel as if they are being dominated or controlled. As such, a poor romantic self-concept (Draucker et al., 2012) may develop, as the monitored partner may perceive that they are untrustworthy or inadequate. Low self-esteem is thus expected of both partners; the low-self esteem of the perpetrator creates the need for monitoring (i.e. because they do not trust their partner), which then leads to low self-esteem in the victim (i.e. because they feel they are untrustworthy). Other aspects of cyber dating harassment, such as excessive or threatening text messages, or malicious use of social networking information, may further contribute to a poor romantic self-concept.

The link between cyber aggression and self-esteem is particularly troublesome, as educators have realized that low self-esteem is one of the primary predictors of many adolescent problems that negatively impact the academic and behavioral performance of students. In particular, research has demonstrated a correlation between self-esteem and academic

achievement, poor health, criminal behaviour, and other problematic consequences (Patchin & Hinduja, 2010).

Academic engagement can be defined as "a positive, fulfilling, work-related state of mind characterized by vigour, dedication and absorption" (Saks, 2009, p. 31). Therefore, academic engagement is comprised of three main elements: vigour, which involves being highly energized and mentally resilient while working; dedication, which refers to the deep immersion in work resulting in a sense of significance, enthusiasm and challenge; and absorption, which involves full concentration and becoming engrossed in one's work (Saks, 2009). This engagement can be negatively affected by dating violence, whose victims experience a variety of negative outcomes, including early substance abuse, depression, and poor academic achievement (Schnurr, Mahatmya, & Basche, 2013).

It is hypothesized that the negative outcomes of intimate partner violence, particularly low self-esteem, will lead to withdrawal by the victimized partner. Low self-esteem may result in a lack of motivation, leading to a decrease in vigour and dedication – two key elements of academic engagement. It may also flood the victim with worry and impair their concentration, leading to a decrease in absorption – the final element of academic engagement (Saks, 2009). Furthermore, the victim may avoid the school environment in fear that they may encounter their abusive partner, ultimately leading to academic disengagement.

Upon examination of gender differences, Schnurr, Mahatmya, and Basche (2013) found distinctions between opposite-sex partners with respect to their victimization and perpetration of cyber dating abuse. For both men and women, the perpetration of their partners' cyber aggression was a significant predictor of their own perpetration of intimate partner violence.

Women who engaged in cyber aggression with their partner were more likely than men to perpetrate physical violence. The researchers suggested that "cyber aggression may be viewed as a mechanism for committing non-physical actions with the intent of damaging a relationship and controlling an individual, otherwise known as relational aggression" (Schnurr, Mahatmya, & Basche, 2013, p. 80). It was also found that males' use of cyber aggression toward their girlfriend strongly predicted women's perpetration of physical and psychological abuse, more so than her own use of cyber aggression. This finding relates to Johnson's (1995) violent resistance typology, which occurs when one partner uses physical violence as a form of self-defense (Schnurr, Mahatmya, & Basche, 2013). The effects of intimate partner violence caused by cyber aggression appear to be long-lasting; the Centre for Disease Control and Prevention reports that approximately 22.4 percent of adult women and 15 percent of adult men who are victims of stalking, sexual, or physical violence by a romantic partner were also victims of intimate partner violence between the ages of 11 and 17 (Centers for Disease Control and Prevention, 2012).

Zweig and her colleagues (2013) also found significant gender differences in terms of victimization and perpetration rates of cyber dating abuse. In most areas of abuse, females reported significantly higher victimization rates than males, which included cyber dating abuse, psychological dating abuse, and sexual coercion. Females were particularly susceptible to sexual abuse, as victimization rates for sexual cyber dating abuse and/or sexual coercion were twice those of males. With regard to perpetration, females reported higher levels of perpetration of non-sexual cyber dating abuse. In contrast, males reported perpetrating significantly higher levels of sexual cyber dating abuse, which is consistent with findings from past studies examining sexual coercion.

The present study will explore the relationship between the predictor variable of cyber dating harassment and the criterion variables of self-esteem and academic engagement using self-reported behaviours from a first year university sample. Although much of the research cited above on this topic involves a mid-adolescent sample (aged 15-18), many first year students (aged 17-19) are relatively new to dating and are under considerable pressure to develop satisfying romantic relationships. It is hypothesized that a negative correlation exists between cyber dating harassment and self-esteem, such that higher levels of harassment will lead to lower levels of self-esteem. This prediction is based on research by Patchin & Hinduja (2010), which found that both victims' and perpetrators' cyberbullying experiences were associated with significantly lower levels of self-esteem, and other research showing a correlation between dating abuse and self-esteem (Draucker et al., 2012; Pflieger & Vazsonyi, 2006). Little research has been conducted on cyber harassment in dating relationships; most research pertains to cyber-bullying in general. The present study, however, will explore cyber-bullying particular to intimate partner relationships.

It is also hypothesized that cyber dating harassment is negatively correlated with academic engagement, such that higher levels of harassment are associated with lower levels of academic engagement. Furthermore, it is predicted that this relationship is partially mediated by the self-esteem variable, such that cyber dating abuse leads to low self-esteem, which then leads to lower levels of academic engagement. This prediction is based on research demonstrating a relationship between low self-esteem and poor academic performance, including absenteeism (Patchin & Hinduja, 2010). However, it has also been found that cyber aggression and intimate partner violence lead to poor academic achievement (Schnurr, Mahatmya, & Basche, 2013);

therefore, only a partial mediation is expected as the low self-esteem caused by cyber dating

harassment or the harassment itself may both lead to poor academic performance.

Gender and its relation to victimization will also be explored with regards to cyber dating

harassment. It is predicted, based on previous research, that females will more likely be victims

of cyber dating harassment than males; Zweig, Dank, Yahner, & Lachman (2013) found that, in

comparison to males, females reported twice the amount of victimization in terms of sexual

cyber dating abuse and/or sexual coercion in the previous year. Gender will be explored as a

possible moderator variable.

Method

Participants

The present study selected a convenience sample consisting of 133 first-year psychology

students from King's University College in London, Ontario. Participants were recruited from

Introductory Psychology classes. The sample consisted of 109 females and 24 males. Participants

ranged from 18 to 43 years of age, with a mean of approximately 20.08 years ($SD = 4.11$). The

present study aimed to examine the dating habits young adults (approximately 17-25 years of

age), and therefore any participants older than 25 years of age were regarded as outliers and their

data were not examined. This brought the sample down to 126 participants, consisting of 103

females and 23 males. Participants in the revised sample ranged from 18 to 25 years of age, with

a mean of approximately 19.24 years and a standard deviation of approximately 1.58 years.

Female participants in the revised sample ranged from 18 to 24 years of age ($M=19.07$,

$SD=1.38$), while males ranged from 18 to 25 years of age ($M=19.96$, $SD=2.16$).

Introductory Psychology students received bonus marks for completing a related assignment. Participants were free to withdraw from the study at any time and still received credit for completing the written assignment. The participants included those who are currently in a dating relationship or those who had a dating relationship within the past year that lasted a minimum of three months. These criteria were set in order to examine more serious dating relationships that are relatively recent in memory.

Materials

Participants first answered a variety of demographic questions pertaining to their dating habits, including: their gender; their sexual orientation; the length of their most recent serious relationship; the total number of relationships in their lifetime; their current age; and the age at which they began dating.

Cyber dating harassment. Levels of cyber harassment were measured through a scale developed by Zweig, Dank, Yahner, & Lachman (2013); specifically, 14 items were extracted from the scale, which focused on cyber victimization between intimate partners. The items focused on various forms of harassment (e.g. threats, humiliation, harsh comments, relational aggression) committed through a variety of social mediums (e.g. texts, e-mails, chats, social networks). The items asked for instances of harassment occurring within the past year, and included items that measured, for example, how often a partner had "posted embarrassing photos or other images of [the participant] online" or "sent threatening text messages to [the participant]" (Zweig, Dank, Yahner, & Lachman, 2013). The 14 items pertaining to cyber dating harassment had a Cronbach's Alpha of 0.792. Two items pertaining to sexual cyber dating harassment were excluded as it was thought that they might cause the participants significant distress.

Self-esteem. Participants' levels of self-esteem were measured through the Rosenberg Self-Esteem Scale (1965). The 4-point Likert-type scale consisted of 10 items, which included items such as "I feel that I'm a person of worth, at least on an equal plane with others" and "All in all, I am inclined to feel that I am a failure" (reverse-scored; Rosenberg, 1965). Five items were reverse-scored, as they are negative in valence. The scale had a Cronbach's Alpha of 0.878.

Academic engagement. Levels of academic engagement were measured through a sub-scale adapted from The Student Experience in the Research University (SERU) survey. The SERU survey is divided into four sub-scales: academic engagement, community and civic engagement, global knowledge and skills, and student life and development (Stebleton, Soria, Aleixo, & Huesman, 2012). The present study focused specifically on the academic engagement subscale, which assessed three primary aspects of engagement: class behaviour, connectedness, and dedication of time. The 7-point Likert-type sub-scale asked participants to rate the frequency with which they engage in certain academic behaviours and their level of agreement with statements pertaining to their academic life. Questions included: "How often have you contributed to a class discussion?" (class behaviour); "How often have you worked on class projects as a group with other classmates outside of class?" (connectedness); and "On average, how many hours a week do you spend on studying and other academic activities outside of class?" (dedication of time; Soria, Stebleton, & Huesman, 2011). The scale also asked about participants' engagement in various social activities (e.g. socializing with friends, partying). All of these items were combined together into one scale to assess levels of academic engagement. The 18 items of the academic engagement sub-scale had a Cronbach's Alpha of 0.741. A copy of the measures used can be referenced in Appendix A.

Procedure

Participants were recruited by means of a sign-up poster directed towards Introductory Psychology students at King's University College, which was advertised through the online SONA system for Western University. This sign-up poster included the title of the present study, a description of the tasks required of the participants, and the approximate length of time it would take to complete the study. The study was worth one credit, meaning that the participants could receive up to an additional 2.5% towards their Introductory Psychology mark upon the completion of a related assignment.

Upon registering for the study, participants were sent an e-mail containing a link to the study and an electronic copy of the Psychology 1000 Research Participation assignment in a Word document format. Participants followed the link and logged-in to the survey by using their UWO username and password. Consent was administered to the participants electronically. Once they signed-in to the survey, a consent form immediately appeared. After reading the consent form, the participants were only allowed to continue to the study if they clicked to agree with the terms of the study. Participants were prompted with the question "I have read and agree to the terms above", which was required; this means that the participants were not allowed to continue without answering this question. The only option was for the participants to agree, which ensured that the participants gave consent before continuing to the study. Upon consenting to the terms of the study, participants were administered the questionnaire using the UWO survey tool as their answers were recorded electronically.

Upon completion of the study, debriefing forms appeared on the final page of the survey. Participants were also able to request PDF copies of the debriefing forms, which were sent to

them by e-mail. Upon completion of the research participation assignment, participants were

granted credit on the SONA system. Participants were given the phone number for the London

Distress Centre in the debriefing form, and were advised to call if they felt like they were being

harassed or abused by their intimate partner and would like support.

Results

Demographic Information: Descriptive Statistics about the Sample

The sample was first analyzed to determine demographic information about the dating

habits of the participants. Most participants started dating at age 15 (M=15.49, SD=1.82), with a

range of 7-20 years of age. The majority of participants were involved in 1-3 relationships (80%)

within their lifetime (M=2.65, SD=1.76), with a range 1-12 relationships. Approximately 65% of

participants were involved in an intimate relationship during the study, while 35% were not. For

those who were in a relationship, participants' length of their current relationship ranged from 1-

240 months (M=25.54 months, SD=31.27). For those who were not in a relationship, participants'

length of their past relationship ranged from 1-57 months (M=13.52 months, SD=11.63). The

majority of the participants were involved in heterosexual relationships; 130 participants were

involved in opposite-sex relationships, while only 3 were involved in same-sex relationships.

Cyber Dating Harassment Behaviours

The frequencies of all cyber dating harassment behaviours were calculated to determine

the most commonly observed behaviours within the sample. The 7 items that were experienced

by more than 10% of participants are listed in Table 1. The most common behaviour (77%)

involved participants receiving text messages from their partners checking up on them (e.g.

where are you, what are you doing, who are you with). The second most common behaviour

Table 1

Frequencies of Cyber Dating Harassment Behaviours

Behaviour	Percentage
Participant received text messages from their partner checking up on them (e.g. where are you, what are you doing, who are you with)	77%
Partner shouted at participant over the phone	43%
Partner made participant feel afraid when they did not respond to cell phone calls, texts, postings on social networking page, or instant messages	15%
Partner sent participant instant messages or chats that made the participant feel scared or afraid	14%
Participant had been harassed or put down by their partner on social networking websites	13%
Participant had been sent threatening text messages by their partner	12%
Partner posted embarrassing photos or videos of the participant online	12%

(43%) involved participants being shouted at by their partners over the phone. The frequencies of other cyber dating harassment behaviours can be referenced in Table 1. Only 10% or less (3-10%) of participants had experienced the remaining seven cyber dating harassment behaviours that were examined (e.g. spreading rumours on social networking sites, threatened physical harm by cell phone, text message, social networking page, etc.)

Correlations and Gender Differences Among Variables

Correlations were computed among the variables of interest and are presented in Table 2. Results indicated that several outcome variables were significantly correlated. First, a significant positive correlation was found between self-esteem and academic engagement, such that higher levels of self-esteem were associated with higher levels of academic engagement. Similarly, a significant positive correlation was found between academic engagement and social engagement, such that higher levels of academic engagement related to higher levels of social engagement. In contrast, the analysis revealed a significant negative correlation of between age and academic engagement, such that younger participants demonstrated higher levels of academic engagement.

It was found that the age of participants' first relationship negatively correlated with a number of variables, including cyber dating harassment, number of relationships, and length of current relationship. A significant negative correlation was found between age of first relationship and cyber dating harassment, such that participants who began dating at younger ages demonstrated higher levels of cyber dating harassment. The analysis revealed a significant negative relationship between number of relationships and age of first relationship, such that participants who began dating at younger ages reported higher numbers of relationships in their lifetime. A final negative correlation was found between age of first relationship and length of

Table 2

Correlations Between Academic Engagement, Self-Esteem, Cyber Dating Harassment, Social

Engagement, Age, Age of First Relationship, Number of Relationships, Length of Current

Relationship, and Length of Past Relationship.

	1	2	3	4	5	6	7	8	9
1. Academic Engagement	-								
2. Self-Esteem	.28**	-							
3. Cyber Dating Harassment	.03	-.14	-						
4. Social Engagement	.20*	-.02	.06	-					
5. Age	-.18*	.06	.03	-.20*	-				
6. Age of First Relationship	-.03	.06	-.19*	-.07	-.01	-			
7. Number of Relationships	-.07	-.08	.16	.12	.26**	-.57**	-		
8. Length of Current Relationship	-.10	-.02	-.04	-.05	.28*	-.29**	.04	-	
9. Length of Past Relationship	.11	.29	-.01	-.30*	.17	-.15	-.22	.94	-

*Note. * p < .05, **p < .01*

current relationship, such that participants who began dating at younger ages reported longer

current relationships.

Age significantly predicted levels of academic and social engagement, as well as length of

current relationship. A significant positive correlation was revealed between age and length of

current relationship, such that older participants reported longer current relationships. In contrast,

a significant negative correlation was found between age and academic engagement, and age and

social engagement, such that younger participants demonstrated higher levels of engagement. A

significant negative correlation was also found between social engagement and length of past

relationship, such that participants who reported shorter past relationships demonstrated higher

levels of social engagement.

A series of independent samples t-tests revealed that sex was a significant, negative

predictor of social engagement, t (130) = -2.06, $p < .05$, such that females reported higher levels

of social engagement than males. Similarly, sex was significantly predicted levels of self-esteem,

t (130) = -2.85, $p < .01$, such that females reported higher levels of self-esteem than males.

Finally, sex was a significant predictor of cyber dating harassment, t (130) = -2.06, $p < .05$, such

that females reported higher levels of harassment.

Analytic Plan

The hypotheses of the present study were tested using multiple regression analysis in

SPSS. To test the first hypothesis, the variables were entered into the regression analysis in two

steps: a) sex and age, and b) cyber dating harassment; this was done to control for sex and age

while determining significant predictors of self-esteem. To test the second hypothesis, a

mediation model was tested using a series of regression analyses (Baron & Kenny, 1986). The

first regression analysis tested the relationship between cyber dating harassment and academic engagement. The next regression analysis tested the relationship between self-esteem and academic engagement. However, because the pathway from cyber dating harassment to academic engagement was non-significant, the mediation model could not be tested further.

The data were also examined to determine whether an interaction exists between the sex, age, and cyber dating harassment variables. Interaction terms were created and entered in the final step of each regression analysis. However, once gender and age interactions were tested, no significant results were found, suggesting no moderating effects.

Hypothesis Testing

The first regression analysis was computed to determine whether cyber dating harassment could predict levels of academic engagement. This model was non-significant, $F (3, 122) = 1.47$, *ns*. As shown in Table 3, age was a significant predictor of academic engagement, indicating that younger participants reported higher levels of academic engagement while older participants indicated lower levels. Cyber dating harassment was not a significant predictor (see Table 3).

The second regression was computed to determine whether cyber dating harassment significantly predicted levels of self-esteem. This model was significant, $F (3, 122) = 4.83$, $p < .01$, and accounted for 10.9% of the variance in self-esteem. As shown in Table 3, sex was a significant predictor of self-esteem, indicating that females reported lower levels of self-esteem than males. Cyber harassment was also a significant, negative predictor of self-esteem and showed that participants who were subject to higher levels of cyber dating harassment reported lower levels of self-esteem.

Table 3

Regression 1: Predicting Academic Engagement from Cyber Dating Harassment

Variable	Beta	SE	t
Age	-.19	.04	-2.05*
Sex	.07	.15	.72
Cyber Dating Harassment	.02	.20	.24

Regression 2: Predicting Self-Esteem from Cyber Dating Harassment

Variable	Beta	SE	t
Age	.03	.03	.28
Sex	.30	.12	3.33**
Cyber Dating Harassment	-.19	.16	-2.21*

Regression 3: Predicting Academic Engagement from Self-Esteem

Variable	Beta	SE	t
Age	-.20	.03	-2.23*
Sex	-.01	.14	-.07
Self-Esteem	.29	.11	3.34**

Regression 4: Predicting Social Engagement from Cyber Dating Harassment

Variable	Beta	SE	t
Age	-.230	.046	-2.569*
Sex	.221	.194	2.431*
Cyber Dating Harassment	.028	.259	.313

*Note. * p < .05, ** p < .01*

The third regression was computed to determine whether self-esteem could significantly predict levels of academic engagement as the second step of the mediation model. This model was significant, $F(3, 124) = 5.35$, $p < .01$, and accounted for 11.7% of the variance in academic engagement. As shown in Table 3, age was a significant, negative predictor of academic engagement, indicating that younger participants reported higher levels of academic engagement, while older participants reported lower levels. Furthermore, self-esteem was a significant predictor of academic engagement, such that participants with higher self-esteem reported higher levels of academic engagement. In contrast, sex did not significantly predict levels of academic engagement.

A fourth regression was computed to determine whether cyber dating harassment significantly predicts levels of social engagement. This model was significant, $F(3, 122) = 3.66$, $p < .05$, and accounted for 8.4% of the variance in social engagement. As shown in Table 3, age was a significant predictor of social engagement, such that younger participants reported higher levels of social engagement while older participants reported lower levels. Furthermore, sex was also a significant predictor of social engagement, such that females reported lower levels of social engagement than males. Cyber dating harassment was not a significant predictor.

Discussion

The results of the present study were partially in line with my hypotheses and revealed that a negative relationship exists between cyber dating harassment and self-esteem, such that higher levels of cyber dating harassment related to lower levels of self-esteem. However, no relationship was found between cyber dating harassment and academic engagement and the hypothesized mediation was not supported.

In terms of cyber dating harassment, the most common behaviours involved: harassment by cell phone (e.g. partner shouted at participant over the phone); fear arousal or threats (e.g. partner made participant afraid when they did not respond to messages via social media); and embarrassment or degradation (e.g. partner posted embarrassing photos or videos of the participant online). These findings contrast slightly from those of a study commissioned by Liz Claiborne, which found higher rates of degradation (e.g. respondents having been called names, harassed, or put down by their partner by text; 25%), sexual coercion (e.g. through the Internet or by cell phone; 22%), and relational aggression (e.g. their partners spreading rumours about them on the Internet or by cell phone; 19%). Furthermore, the respondents in the Liz Claiborne study reported more threats of physical harm by text, email, or instant message (10%; Picard, 2007), while threats of physical harm were less common in the present study (i.e. less than 10%). It is evident from these findings that cyber dating harassment is quite prevalent among today's youth. The fact that these rates are so high is a major concern, and the phenomenon should be brought to the attention of the general population in order to raise public awareness.

Cyber Dating Harassment and Self-Esteem

The primary hypothesis of the study was supported as participants experiencing cyber dating harassment reported lower levels of self-esteem. This supports previous research by Patchin and Hinduja (2010), which found a significant correlation between self-esteem and both the victimization and perpetration of cyber harassment by peers. Furthermore, this finding supports research by Draucker and colleagues (2012) suggesting that dating violence is associated with low self-esteem and disruptions in self-concept. Most previous research focuses on either cyber harassment (e.g. by peers) or dating violence; the present study, however, yielded

significant results regarding cyber harassment behaviours in the context of a dating relationships

and its impact on self-esteem. As revealed by a number of studies, technology has substantial

influence upon interpersonal communication within the young adult population, and

consequently a large influence on interpersonal harassment (Patchin & Hinduja, 2006; Lenhart &

Madden, 2007; Lenhart, 2009; David-Ferdon & Hertz, 2007; Mitchell, Wolak, & Finkelhor,

2007; Ybarra & Mitchell, 2004; Zweig, Dank, Yahner, & Lachman, 2013). Evidently, the

negative impact of cyber harassment extends into intimate relationships as well. Because the

self-images of young adults are so deeply intertwined with their intimate relationships, one's

self-esteem can easily be damaged by conflict with or harassment by their intimate partner

(Draucker, Cook, Martsolf, & Stephenson, 2012). Furthermore, the constant monitoring involved

in cyber dating harassment likely creates a sense of distrust between the partners, resulting in a

poor romantic self-concept (Draucker et al., 2012) and lowered self-esteem (i.e. because they

feel untrustworthy). The majority of participants in the present study experienced this

monitoring, as 77% reported their partner sending them text messages to check up on them (e.g.

where are you, what are you doing, who are you with). Furthermore, this monitoring was the

harassment behaviour that was most experienced by all participants; this may suggest that a lack

of trust acts as a gateway into further dating harassment behaviours.

A question of directionality in the present study is raised when considering previous

research. Draucker and colleagues (2012) found that low self-esteem both predicts and correlates

with dating violence. Furthermore, the literature regarding bullying and self-esteem consistently

finds that victims of cyber harassment tend to have lower self-esteem than non-victims; Patchin

and Hinduja (2010) speculate that it may be that the experience of being victimized that

decreases one's self-esteem, or that those who have low self-esteem are more likely to be targeted as victims. Although the primary finding of the present study indicated that cyber dating harassment predicted self-esteem, it possible that self-esteem would also be predicted cyber dating harassment given that this was a cross-sectional study. There is likely a bidirectional relationship between cyber dating harassment and self-esteem; although the experience of cyber dating harassment may lead to lower self-esteem, those with low self-esteem may be more susceptible to cyber dating harassment due to this deficit. The latter relationship supports previous findings of self-esteem as a mediator between family variables and dating violence; Pflieger and Vazsonyi (2006) found that poor parenting led to low self-esteem, which then led to victimization in dating violence.

Cyber Dating Harassment and Academic Engagement

There was no support for the hypothesis that cyber dating harassment is related to lower levels of academic engagement. However, there are a few reasons why this relationship may not have been found, apart from the possibility that it simply does not exist. First, this hypothesis was generated based on the assumption that cyber dating harassment would lead to avoidance of the partner, and consequently the school setting, assuming that the partners attended the same school. First year students, however, often engage in long-distance relationships with a partner once a high school relationship is separated by the distance of attending two different universities in different cities. It may have been the case that some of the participants who experienced cyber dating harassment were involved in long-distance relationships and were not threatened by the presence of their abusive partner at school; therefore, there would be no need for avoidance of the academic setting leading to academic disengagement. Previous research finding a link

between harassment and academic disengagement focused primarily on cyber-bullying in a secondary school setting (Schnurr, Mahatmya, & Basche, 2013); in this case, the harasser would be more likely to attend the same school as the victim, which may lead to avoidance of the school and thus explaining the victim's academic disengagement. In future research, it should be determined whether the partners of the participants attended the same school as the participant before assessing this relationship.

A second reason why this regression may not have yielded significant results was the lower validity of the academic engagement scale. The Cronbach's Alpha of the academic engagement scale was 0.741; this was using all the academic engagement items combined into one scale. These items were combined, as this is how the scale has been used in previous research; however, it is possible that if the scale focused on one or two of the three primary aspects of engagement (e.g. connectedness or class behaviour), then perhaps the relationship would have been significant. This suggestion is based on the logic that measuring class behaviour, for example, would require the participant to be in class, which may not occur if the participant is being harassed, as this often leads to poor academic performance and achievement, or absenteeism (Patchin & Hinduja, 2010; Schnurr, Mahatmya, & Basche, 2013). This should be considered in future research.

Testing the Mediation Model: Academic Engagement and Self-Esteem

While testing the mediation model (Baron & Kenny, 1986), the pathway from cyber dating harassment to academic engagement was non-significant; however, a secondary hypothesis of the study was supported as the results revealed a significant relationship between academic engagement and self-esteem. This finding extends previous research by Patchin and

Hinduja (2010), which found a correlation between self-esteem and academic achievement, poor

health, criminal behaviour, and other problematic consequences. It was hypothesized that low

self-esteem may result in a lack of motivation, leading to a decrease in vigour and dedication (i.e.

two key elements of academic engagement; Saks, 2009). This relationship may occur due to a

damaged self-concept and sense of self-efficacy; those with low self-esteem may believe that

they are less capable than those with high self-esteem, thus less effort is put forth and they are

less engaged academically.

Cooper (2009) found that self-esteem was a mediator in the relationship between father-

daughter relationship quality and academic engagement in adolescent girls; poor relationship

quality led to low self-esteem, which then led to lower levels of academic engagement. The

researcher suggests that important relationships play a major role in the development of females'

self-views and sense of self. Following this logic, an intimate relationship (i.e. an important

relationship) should also impact one's self-esteem, and consequently their academic engagement

– as hypothesized in the present study. As mentioned previously, this mediation may not have

been significant in the present study due to issues with the validity of the academic engagement

measure. Furthermore, Cooper (2009) distinguished between self-esteem and academic self-

esteem; academic self-esteem pertains specifically to an individual's self-views regarding their

academics (e.g. their academic capabilities). Perhaps if this distinction were made and academic

self-esteem was measured in the present study, a mediation may have been found. However, in

previous studies, this mediation was found using both global and academic-specific measures of

self-esteem (Cooper, 2009). This distinction should be considered in future research.

Gender and Age Effects

An additional hypothesis of the present study was supported, as it was found that females experienced higher levels of cyber dating harassment than males. This relates to previous research findings indicating that women are subject to approximately one and a half times more intimate partner violence than males (Centre for Disease Control and Prevention, 2012). With respect to cyber dating abuse in particular, Zweig and colleagues (2013) found significantly higher victimization rates with females; this gender difference was found in most areas of abuse, including cyber dating abuse, psychological dating abuse, and sexual coercion. A potential reason for this difference might relate to gender differences in self-esteem; Kling, Hyde, Showers and Buswell (1999) found evidence that females tend to score lower on standard measures of global self-esteem than males. This may relate to the hypothesized bidirectional relationship between cyber dating harassment and self-esteem; females tend to have lower self-esteem, which may make them more susceptible to cyber dating harassment (and other forms of harassment), thus leading to higher levels of harassment reported by females than males.

It was also found within the present that sex significantly predicted levels of self-esteem; females reported lower levels of self-esteem than males. Self-esteem also related to levels of academic engagement, such that higher self-esteem was linked to higher levels of academic engagement. Age was a significant factor in academic engagement as well; a negative relationship was revealed between age and academic engagement, indicating that younger participants reported higher levels of academic engagement. Significant results were found with respect to academic engagement as well; age and sex significantly predicted levels of social

engagement. Similar to academic engagement, younger participants reported higher levels of social engagement; furthermore, females reported lower levels of social engagement than males.

General Conclusions

The findings of the present study allow a number of conclusions to be drawn. First, cyber dating harassment appears to negatively impact one's self-esteem. This relationship may occur due to the lack of trust that permeates these intimate relationships, which is particularly evident in common cyber harassment behaviours, such as constant monitoring of a partner's whereabouts through electronic mediums (e.g. text messages, phone calls, e-mails). However, this relationship may be bidirectional; it appears that individuals with low self-esteem are more likely to experience cyber dating harassment as well. As females tend to have lower self-esteem, they are more likely to be the victims of cyber dating harassment. This would have a negative, cyclical effect on females' self-esteem; their low self-esteem allows them to be targeted as victims, which exacerbates their already low self-esteem, and so forth. Furthermore, low self-esteem appears to negatively impact an individual's academic engagement; thus, cyber dating harassment may harm and individual in multiple, interrelated ways.

Practical Implications

These findings have practical, preventative implications with respect to dating harassment and emotional abuse. Although cyber dating harassment is a new area of study, it is evident from the current findings, including those of this study, that it has a variety of negative implications; in particular, this form of harassment can be quite damaging to an individual's self-esteem or self-concept. It may also indirectly impact one's academic engagement, as cyber dating harassment may lead to low self-esteem, which is correlated with lower levels of academic engagement. The

findings of the present study also suggest that cyber dating harassment behaviours are prevalent even within well-adjusted populations (e.g. liberal arts university students). As such, it is necessary to raise the awareness of this understudied form of abuse in order to initiate its prevention. Without this awareness, many victims may not be aware that they are being victimized; individuals may simply perceive this abuse as a maladaptive norm. For example, although the monitoring of a partners whereabouts may be perceived ambiguously (i.e. as caring or as paranoid), the recorded prevalence of this behaviour in the present study was quite high (77%); as such, this behaviour may be perceived as a norm by some, although it can be detrimental to a relationship (or an individuals self-esteem) under certain circumstances.

As low self-esteem may lead to higher rates of victimization, particularly with females, improving one's self-esteem may also decrease the likelihood of being victimized. The use of technology is extremely prevalent within the young adult population; as such, Draucker & Martsolf (2010) state that "these technologies redefine the boundaries of romantic relationships in ways that provide fertile ground for conflict and abuse" (p. 141). It is possible, however, to use these technologies in a more constructive manner; for example, virtual campaigns directed towards young adults (particularly females) can be created to improve their self-image, increase their self-esteem, and heighten their sense of self worth. Consequently, the affected individuals may be less likely to be subjected to cyber dating harassment due to their increased self-esteem. Furthermore, this may help to end the perpetuation of negative self-esteem from cyber dating harassment, as higher self-esteem may lessen the experience of harassment, thus diminishing the negative impact of harassment on the individual's self-esteem.

With respect to academic engagement, these preventative measures may also prove to be helpful; due to the positive relationship between academic engagement and self-esteem, these measures may increase one's engagement by increasing their self-esteem. They may also prevent other negative outcomes associated with poor self-esteem and dating violence, including poor academic achievement, absenteeism, poor health, depression, criminal behaviour, and early substance abuse (Patchin & Hinduja, 2010; Schnurr, Mahatmya, & Basche, 2013).

Potential Limitations

As mentioned previously, the validity of the academic engagement measure may have affected the significance of the relationships found between academic engagement and other variables. The measure is relatively new, and therefore the validity has not been widely tested. Previous research using this measure has combined all items into one scale (or sub-scale) measuring academic engagement; however, in the present study the items were divided into two scales: academic engagement and social engagement. Certain items appeared to address more social than academic aspects (e.g. "On average, how many hours do you spend per week (seven days) partying"; Soria, Stebleton, & Huesman, 2011), and were therefore designated to their own scale. However, the items within the academic engagement scale seemed to vary in content as well, and perhaps should have been further divided into three sub-scales, measuring class behaviour, connectedness, and dedication of time. This may have increased the internal validity of each scale, as the items appeared more strongly related, thus increasing the Cronbach's Alpha and providing a more accurate measure of academic engagement. This division should be considered in future research.

Another potential limitation of the present study was the large gender discrepancy within the sample. As participants were recruited on a voluntary basis, it was difficult to control this discrepancy. Nearly four and a half times as many females (82%) volunteered for the study relative to males (18%). This lack of male participants may have been detrimental in yielding significant results. Furthermore, the participants were recruited from a low-risk population; it is likely that well-adjusted university students are less likely to experience dating violence, which may also have impacted the results. The participants were also students from a small liberal arts college, which may have increased the likelihood for higher levels of academic engagement; this may explain why high levels of academic engagement were observed, particularly with younger students, despite the levels of cyber dating harassment.

Future Research

Future research should explore and compare the experiences of same-sex versus opposite-sex couples with cyber dating harassment. Research on the relationships of gay and lesbian couples often cites that few differences exist between heterosexual and homosexual couples when examining their relationship quality (e.g. their satisfaction, loves, joys, and conflicts; Hyde, DeLamater, & Byers, 2012). However, it is possible that gay and lesbian individuals may experience lower self-esteem due to the social stigma surrounding homosexuality; previous research has found that, depending on the context, social stigma may become internalized by an individual and damage one's self-esteem (Crocker, 1999; Crocker & Major, 1989). This lowered self-esteem may make these individuals more susceptible to cyber dating harassment and other forms of dating violence. Therefore, sexual orientation could be explored in future research as a

potential moderator variable in the relationship between cyber dating harassment and self-esteem.

The present study solely explored the victimization rates of cyber dating harassment. Previous research by Patchin & Hinduja (2010) found that low self-esteem was also associated with higher perpetration of cyber harassment or cyber-bullying. Future research should thus examine perpetration rates of cyber dating harassment and its relation to self-esteem. Previous researchers have also found that individuals, particularly females, often commit acts of cyber aggression as a form of self-defense (Schnurr, Mahatmya, & Basche, 2013). This self-defensive mechanism should be considered when examining the rates of perpetration, particularly when examining the rates of females.

Another area for future research involves a comparison of cyber dating harassment to other forms of dating abuse (e.g. physical, psychological, emotional, and sexual). It is possible that the accessibility and impersonal nature of cyber dating harassment may make this phenomenon more common than other forms of abuse. Although the physical outcomes may be less relevant, the psychological outcomes of cyber dating harassment may be more harmful than other forms of abuse. Furthermore, this form of harassment may serve as a gateway to other forms (e.g. sexual abuse); Zweig, Dank, Yahner, & Lachman (2013) found that, in comparison to males, females reported twice the amount of victimization in terms of sexual cyber dating abuse and/or sexual coercion in the previous year. Both the prevalence and outcomes of cyber dating harassment should be examined in future research, in comparison to other forms of intimate partner violence and abuse.

Major Conclusions/Contributions

The present study offers insight into the negative implications of a newer phenomenon in dating abuse: cyber dating harassment. The results suggest that cyber dating harassment can be damaging to one's self-esteem, while low self-esteem can diminish one's academic engagement. Low self-esteem may also make an individual vulnerable to cyber dating harassment, suggesting a bidirectional relationship between the two variables. By understanding this relationship, this allows for campaigns increasing self-esteem and reducing cyber dating harassment to be implemented, thus decreasing the likelihood of cyber dating harassment victimization. As we continue to understand the role that technology plays in dating violence, we can implement strategies for its prevention. This study offers an important milestone in the pathway to this understanding.

References

Ackard, D. M., Neumark-Sztainer, D., & Hannan, P. (2003). Dating violence among a nationally

representative sample of adolescent girls and boys: Associations with behavioral and

mental health. *Journal of Gender Specific Medicine, 6*, 39–48.

Baron, R. M. & Kenny, D. A. (1986). The Moderator-Mediator Variable Distinction in Social

Psychological Research – Conceptual, Strategic, and Statistical Considerations. *Journal

of Personality and Social Psychology, 51,* 1173–1182.

Centers for Disease Control and Prevention. (2012). Understanding teen dating violence fact

sheet. Retrieved from: http://www.cdc.gov/ViolencePrevention/pdf/TeenDatingViolence

2012-a.pdf.

Cooper, S. M. (2009). Associations between father-daughter relationship quality and the

academic engagement of African American adolescent girls: Self-esteem as a mediator.

Journal of Black Psychology, 35, 495–516.

Crocker, J. & Major, B. (1989). Social stigma and self-esteem: The self-protective properties of

stigma. *Psychological Review, 96*, 608–630.

Crocker, J. (1999). Social stigma and self-esteem: Situational construction of self-worth. *Journal

of Experimental Social Psychology*, *35*, 89–107.

David-Ferdon, C. & Hertz, M. F. (2007). Electronic media, violence, and adolescents: An

emerging public health problem. *Journal of Adolescent Health, 41*, 1–5.

Draucker, C. B. & Martsolf, D. S. (2010). The role of electronic communication technology in

adolescent dating violence. *Journal of Child and Adolescent Psychiatric Nursing, 23*,

133–142.

Draucker, C. B., Cook, C. B., Martsolf, D. S., & Stephenson, P. S. (2012). Adolescent dating

violence and Peplau's dimensions of the self. *Journal of the American Psychiatric Nurses*

Association, 18, 175–188.

Egan, S. K. & Perry, D. G. (1998). Does low self-regard invite victimization? *Developmental*

Psychology, 34, 299–309.

Hyde, J. S., DeLamater, J. D., & Byers, E. S. (2012). Sexual orientation and identity: Gay,

Lesbian, Bi, Straight, or Asexual? In M. Siekowski, L. MacDonald, C. Biribauer & C.

Haggert (Eds.), *Understanding Human Sexuality* (393–423). Canada: McGraw-Hill

Ryerson Limited.

Kling, K. C., Hyde, J. S., Showers, C. J., & Buswell, B. N. (1999). Gender differences in self-

esteem: A meta-analysis. *Psychological Bulletin, 125*, 470–500.

Johnson, M. P. (1995). Patriarchal terrorism and common couple violence: Two forms of

violence against women. *Journal of Marriage & the Family, 57,* 283–294.

Lenhart, A. & Madden, M. (2007). Teens, privacy, & online social networks. *Pew Internet &*

American Life Project, 1–45.

Lenhart, A. (2009). Teens and mobile phones over the past five years: Pew Internet looks back.

Pew Internet & American Life Project, 1–17.

Melander, L. A. (2010). College students' perceptions of intimate partner cyber harassment.

Cyber Psychology, Behaviours, and Social Networking, 13, 263–268.

Mitchell, K. J., Wolak, J., & Finkelhor, D. (2007). Trends in youth reports of sexual solicitations,

harassment and unwanted exposure to pornography on the internet. *Journal of Adolescent*

Health, 40, 116–126.

Patchin, J.W. & Hinduja, S. (2006). Bullies move beyond the schoolyard: A preliminary look at cyberbullying. *Youth Violence Juvenile Justice, 4*, 148–169.

Patchin, J. W. & Hinduja, S. (2010). Cyberbullying and self-esteem. *Journal of School Health, 80*, 614–621.

Pflieger, J. C. & Vazsonyi, A. T. (2006). Parenting processes and dating violence: The mediating role of self-esteem in low- and high-SES adolescents. *Journal of Adolescence, 29*, 495–512.

Picard, P. (2007). *Tech abuse in teen relationships.* Chicago, IL: Teen Research Unlimited. Retrieved from: http://www.loveisrespect.org/wp-content/ uploads/2009/03/liz-claiborne-2007-tech-relationship-abuse.pdf.

Rosenberg, M. (1965). *Society and the adolescent self-image.* Princeton, NJ: Princeton University Press.

Saks, A. (2009). Engagement: The academic perspective. *Canadian HR Reporter, 22*, 31–32.

Schnurr, M. P., Mahatmya, D., & Basche, R. A. (2013). The role of dominance, cyber aggression perpetration, and gender on emerging adults' perpetration of intimate partner violence. *Psychology of Violence, 3*, 70–83.

Soria, K. M., Stebleton, M. J., & Huesman, R. L. Jr. (2011). *Mapping the Academic & Social Engagement of First Year Students @ UMNTC.* [PDF document]. Retrieved from http://www.oir.umn.edu/static/papers/FIRST_YEAR_CONFERENCE_2011/Mapping_ Presentation.pdf.

Stebleton, M. J., Soria, K. M., Aleixo, M. B., & Huesman, R. L. Jr. (2012). Student-faculty and peer interactions among immigrant college students in the United States. *Multicultural Learning and Teaching, 7*, 1–21.

Ybarra, M. L. & Mitchell, J. K. (2004). Online aggressor/targets, aggressors and targets: A

comparison of associated youth characteristics. *Journal of Child Psychology and*

Psychiatry, 45, 1308–1316.

Zweig, J. M., Dank, M., Yahner, J. & Lachman, P. (2013). The rate of cyber dating abuse among

teens and how it relates to other forms of teen dating violence. *Journal of Youth*

Adolescence, 42, 1063–1077.

Appendix A

Academic Life

How often this year have you...

Gone to class unprepared
Never   Rarely   Occasionally   Somewhat often   Often   Very Often

Gone to class without completing the assigned reading
Never   Rarely   Occasionally   Somewhat often   Often   Very Often

Skipped class
Never   Rarely   Occasionally   Somewhat often   Often   Very Often

Contributed to a class discussion
Never   Rarely   Occasionally   Somewhat often   Often   Very Often

Turned in a course assignment late
Never   Rarely   Occasionally   Somewhat often   Often   Very Often

Sought academic help from an instructor or tutor when needed
Never   Rarely   Occasionally   Somewhat often   Often   Very Often

Worked on class projects as a group with other classmates outside of class
Never   Rarely   Occasionally   Somewhat often   Often   Very Often

Helped a classmate better understand the course material when studying together
Never   Rarely   Occasionally   Somewhat often   Often   Very Often

Interacted with faculty outside of class sessions
Never   Rarely   Occasionally   Somewhat often   Often   Very Often

Had a class in which a professor knew or learned your name
Never   Rarely   Occasionally   Somewhat often   Often   Very Often

Had trouble finding students in your classes to study with?
Never   Rarely   Occasionally   Somewhat often   Often   Very Often

Please rate how strongly you agree with the following statements:

I feel valued as an individual on this campus
Strongly Agree   Agree   Somewhat Agree
Somewhat Disagree   Disagree   Strongly Disagree

I feel that I belong at this campus
Strongly Agree   Agree   Somewhat Agree
Somewhat Disagree   Disagree   Strongly Disagree

I feel satisfied with my overall academic experience
Strongly Agree   Agree   Somewhat Agree
Somewhat Disagree   Disagree   Strongly Disagree

On average, how many hours do you spend per week (seven days) socializing with friends (not including your dating partner)?
Less than 5   5-10 hours   10-15 hours   15-20 hours   20+ hours

On average, how many hours do you (or did you) spend per week (seven days) with your dating partner?
Less than 5   5-10 hours   10-15 hours   15-20 hours   20+ hours

On average, how many hours do you spend per week (seven days) partying?
Less than 5   5-10 hours   10-15 hours   15-20 hours   20+ hours

On average, how many hours a week do you spend on studying and other academic activities outside of class?
Less than 5   5-10 hours   10-15 hours   15-20 hours   20+ hours

Reference:
Soria, K. M., Stebleton, M. J., & Huesman, R. L. Jr. (2011). *Mapping the Academic & Social Engagement of First Year Students @ UMNTC.* [PDF document]. Retrieved from http://www.oir.umn.edu/static/papers/FIRST_YEAR_CONFERENCE_2011/Mapping_ Presentation.pdf.

Feelings about yourself

Please rate the extent to which you agree with the following statements:

I feel that I'm a person of worth, at least on an equal plane with others.
Strongly Agree   Agree   Disagree   Strongly Disagree

I feel that I have a number of good qualities.
Strongly Agree   Agree   Disagree   Strongly Disagree

All in all, I am inclined to feel that I am a failure.
Strongly Agree   Agree   Disagree   Strongly Disagree

I am able to do things as well as most other people.
Strongly Agree   Agree   Disagree   Strongly Disagree

I feel I do not have much to be proud of.
Strongly Agree   Agree   Disagree   Strongly Disagree

I take a positive attitude toward myself.
Strongly Agree   Agree   Disagree   Strongly Disagree

On the whole, I am satisfied with myself.
Strongly Agree   Agree   Disagree   Strongly Disagree

I wish I could have more respect for myself.
Strongly Agree   Agree   Disagree   Strongly Disagree

I certainly feel useless at times.
Strongly Agree   Agree   Disagree   Strongly Disagree

At times I think I am no good at all.
Strongly Agree   Agree   Disagree   Strongly Disagree

Reference:
Rosenberg, M. (1965). *Society and the adolescent self-image.* Princeton, NJ: Princeton
       University Press.

Online communication

These questions ask you about your recent experience with your romantic partner, someone you are currently dating for at least three months, or a recent ex that you were dating for at least 3 months.

In the **past year**, how often has this person done any of the following things **to you**?

Posted embarrassing photos or other images of you online
Never   Rarely   Sometimes   Very Often

Sent threatening text messages to you
Never   Rarely   Sometimes   Very Often

Shouted at you over the phone
Never   Rarely   Sometimes   Very Often

Taken a video of you and sent it to his/her friends without your permission
Never   Rarely   Sometimes   Very Often

Used your social networking account without permission
Never   Rarely   Sometimes   Very Often

Sent you instant messages or chats that made you feel scared
Never   Rarely   Sometimes   Very Often

Wrote nasty things about you on his/her profile page (e.g., on Facebook, MySpace, etc.)
Never   Rarely   Sometimes   Very Often

Created a profile page (like Facebook, MySpace or YouTube) about you knowing it would upset you
Never   Rarely   Sometimes   Very Often

Sent you so many messages (like texts, e-mails, chats) that it made you feel unsafe
Never   Rarely   Sometimes   Very Often

Sent you text messages on your cell phone to check up on you (where are you, what are you doing, who are you with)
Never   Rarely   Sometimes   Very Often

Spread rumors about you using a cell phone, email, IM, web chat, social networking site, etc.
Never   Rarely   Sometimes   Very Often

Used information from your social networking site to harass you or put you down
Never   Rarely   Sometimes   Very Often

Made you afraid when you did not respond to your cell phone call, text, posting on social networking page, IM, etc.
Never   Rarely   Sometimes   Very Often

Threatened to harm you physically through a cell phone, text message, social networking page, etc.
Never   Rarely   Sometimes   Very Often

Reference:
Zweig, J. M., Dank, M., Yahner, J. & Lachman, P. (2013). The rate of cyber dating abuse among teens and how it relates to other forms of teen dating violence. *Journal of Youth Adolescence, 42*, 1063–1077.