2020

Electronic Media Use and Dating Aggression Among Young Adult College Students

Christy Bazemore
Walden University

Walden University

College of Social and Behavioral Sciences

This is to certify that the doctoral dissertation by

Christy Bazemore

has been found to be complete and satisfactory in all respects,
and that any and all revisions required by
the review committee have been made.

Review Committee
Dr. Donna Heretick, Committee Chairperson, Psychology Faculty
Dr. Steven Kriska, Committee Member, Psychology Faculty
Dr. Neal McBride, University Reviewer, Psychology Faculty

Chief Academic Officer and Provost
Sue Subocz, Ph.D.

Walden University
2020

Abstract

Electronic Media Use and Dating Aggression Among Young Adult College Students

by

Christy Bazemore

MA, Bowie State University, 2006

BAIS, George Mason University, 2001

Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Philosophy

Psychology

Walden University

February 2020

Abstract

Electronic media are popular for communication among adults ages 18 to 25. However, electronic media may also be used as tools for dating aggression, such as intimidation, insult, control, or abuse. The purpose of this quantitative casual-comparative study was to examine whether adult attachment styles predict electronically-mediated dating aggression. Adult attachment style theory provided the framework for the study. Survey data were collected from 300 first-year college students ages 18 to 25. The independent variable was students' attachment style as measured by the Experiences of Close Relationships Scale–Revised. Dependent variables were operationalized using the Partner Electronic Aggression Questionnaire, the Situational Triggers of Aggressive Responses, and the Partner Aggression Technology Scale. Results of between-group analyses of variance indicated no significant differences for attachment style in victimization or perpetration or for goals of dating aggression. Students with preoccupied attachment styles scored significantly higher than secure or anxious students in situational triggers for frustration. Results may inform stakeholders regarding risk factors for electronically-mediated dating aggression, and may help stakeholders in planning prevention and intervention activities.

Electronic Media Use and Dating Aggression Among Young Adult College Students

by

Christy Bazemore

MA, Bowie State University, 2006

BAIS, George Mason University, 2001

Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Philosophy

Psychology

Walden University

Feburary 2020

Dedication

This dissertation is dedicated to my extraordinary family, “the Griswolds,” as I often refer to them- my grandparents, my close friends, and support system who saw this through from the beginning to end. They never gave up on me, and they pushed me to accept not the least but rather the best. There were some difficult times, but what did not tear us apart brought us together. Without this great support system, I would have never had the drive, courage, or tenacity to push through and accomplish all that I have. It was their unconditional support, guiding wisdom, and unwavering belief in me to take flight and soar with eagles.

And then there is my sister Elizabeth from whom I presume my strength. She has so many challenges to overcome, yet her focus is on me and my success. I should be so thoughtful and encouraging. Her young spirit has taught me the wisdom of humility and the simplicity of “Hakuna Matata.”

To you, who have been so good to me, thank you.

With All My Love

Acknowledgments

To accomplish great things, we must not only act but also dream; not only plan, but also believe. First, I would like to recognize the goodness of God and all that He has done for me.

There are so many whom I would like to acknowledge for helping and guiding me during my doctoral process. I have greatly benefited from the support and guidance of some great academic researchers and scholars who imparted invaluable personal and professional resources to my educational career. It is largely because of my faith, my advisors, my family, and my friends who kept inspiring me to continuously strive for excellence in all my scholarly endeavors.

Second, I would like to express how grateful I am for my dissertation chair, Dr. Donna Heretick. When I first e-mailed her to see if she would be interested in being my committee chair, she embraced my research, and throughout the entire process she was nothing short of encouraging. She encouraged me to become a better writer and a better scholar and to increase my independent research and thinking skills that eventually helped shaped my research. She embodies and practices what being a true scholar is about. She set the standards high, and she has been a true role model throughout my entire process. In addition to having a phenomenal chair, I had the opportunity to have a great and exceptional doctoral committee whom I wish to thank: Dr. David Kriska, Dr. James Carroll, and Dr. McBride. This experience would not have been memorable without their intellectual contributions and continuous support to my research, which was

priceless. They never found it a burden to assist in any way for the success of my dissertation.

My work has led me to want to start a nonprofit organization, Respect Love Incorporated, in order that I might be a conduit in the field helping young adults gain access to the various resources that are available to deal with dating aggression, especially with the increase of electronic usage to encourage dating aggression. As I sit back and think, I never thought that I would ever be interested in the young adult population as I always wanted to work with teenagers. However, because of Dr. Heretick's encouragement to think outside of the box and really dig deep into filling the gaps in literature, I have developed an interest in doing more research with this population. It has sparked a passion, a calling, and a dedication to constantly remind me why I initially chose a helping profession path.

I would be remiss if I did not mention my appreciation and love for my family and my close friends for believing in me, encouraging me past my pain, and pushing me past my frustrations to give in and give up. I could not ask for a greater foundation of believers who said I could do anything and failure was not an option. One of my life verses, "I can do all things through Him who strengthens me" (Philippians 4:13), and my family foundation surely encouraged me to press on toward the mark by reminding me that I can do all things. All the support that they gave me throughout this entire process was so invaluable and means the world to me. Whenever there was any resignation, I knew whom to turn to for words of encouragement and uplifting words to regain my

wings to fly again. For those small reasons and many more reasons, to my family and close friends, I love you and thank you.

Now, Lord, commit what I have learned to my heart and my mind and allow me to be an inspiration, a leader, and above all a great scholar in the field of educational psychology to others in such a way that those who have contributed to my learning might say it was well worth their efforts. I am forever grateful for all of the paths that have crossed mine, wishing me well, encouraging me so, and spending time that is truly hard to come by.

Table of Contents

List of Tables

Chapter 1: Introduction to the Study

Violence is a subject that induces significant interest in various fields, especially within research and public interest fields. Research pertaining to violence spans many different areas. Prior research indicated associations between media violence, such as violent video games and movie content, with dating aggression among teenagers, domestic violence, racially motivated acts of violence, and other acts of aggression (Anderson 2017; Rodenhizer & Edwards, 2017). According to Campbell, Webster, and Koziol-McLain (2013), women ages 18-36 are 8 times more likely than men to be victimized by an intimate partner. For many years, violence among intimate partners has been a focus of research (Ali, Dhingra, & McGarry, 2016; Hamberger & Larson, 2015; Jennings, Okeem, Piquero, & Sellers, 2017). Aggression among intimate partners is especially troublesome. Individuals should feel safe and secure with family and in the church; the same goes for intimate relationships. When violence is apparent in intimate relationships, safety and security are compromised.

Often intimate violence is thought to occur only during marital relationships; however, violence among intimate partners occurs most often within dating couples, both homosexual and heterosexual (Machado, Martins, & Caridade, 2014). In many states, domestic violence is defined as any violence that involves minors or adults who are current or former spouses, who live together or have lived together, who are dating or have dated, and who are involved or have been involved in intimate relationships (National Conference of State Legislatures, 2019). Although physical violence is most

often discussed, sexual aggression, psychological aggression, verbal aggression, and electronically-mediated aggression are other forms of intimate violence (National Institute of Justice, 2019; Stephenson, Wickham, & Capezza, 2018).

Electronic media have been a vital source of information in the modern era, as the media influence individuals' lives in positive and negative ways. People living in the 21st century are more connected to electronic media than any other generation (Wickham & Capezza, 2018). Electronic media have become a modern phenomenon that have redefined human social communication and interactions (Wickham & Capezza, 2018). Young adult college students use electronic media often and for most forms of communication (Knight-McCord et al., 2016; Villanti et al., 2017). How young people think of themselves and others, especially in terms of social relationships, has been shaped by electronic media (Villanti et al., 2017). These individuals see each others' pictures and information online and are willing to approach others to make friends (Pittman & Reich, 2016). People may also expand their acquaintances from a meeting through electronic media (Pittman & Reich, 2016).

The most common goal of communications that takes place through electronic media is to reach and stay in touch with individuals already known. As students get older, the quality of their relationships usually improves, even those that develop through electronic media (Fox & Anderegg, 2014). Quite often romantic relationships also develop through media communications (Fox & Anderegg, 2014). Electronic media have become a central part of the communication in relationships (Billedo, Kerkhof, &

Finkenauer, 2015). Electronic media also have been used for dating aggression (Billedo et al., 2015).

Positive influences of electronic media exist. However, electronic media can also allow individuals to fulfill aggressive desires, such as cyberbullying which is making threats, leaking personal pictures, and dating aggression. Chauvin (2011) suggested that a pathway to violence, which often includes various stages (grievance, ideation, planning, breach, and attack), is more likely to occur through some form of electronic media outlet than face-to-face. Although research on intimate partner violence and the negative consequences of interactions that occur face-to-face exists, little is known about aggression that occurs while using electronic media. Electronic communication has increased and has changed the way individuals communicate with and show aggression toward their intimate partners (Marganski & Melander, 2018; Patton et al., 2014). Electronic media are forms of communication that can provide instant access to aggress an intimate partner while also turning private matters into public information via various social media outlets (Reed, Tolman, & Ward, 2016). Research has also suggested that advances in communication through electronic media provide a means for perpetrating verbal aggression, escalating arguments, or monitoring a partner's behavior (Borrajo, Gamez-Guadix, & Calvete, 2015).

Researchers have identified predictors of face-to-face dating aggression. One factor of interest is the adult attachment style. Before considering electronic means, Bookwala and Zdaniuk (1998) stated that face-to-face dating aggression is more frequent

among adults with insecure attachment styles. However, there is limited research to date (Reed, Tolman, & Safyer, 2015; Reed, Tolman, Ward, & Safyer, 2016) on the possible relationship between adult attachment styles and electronically-mediated dating aggression.

This chapter includes a brief introduction to the background of electronic media use and dating aggression among young adult college students (emerging adults). The chapter also includes the problem statement, a description and summary of relevant and significant aspects of the study, the purpose of the study, and the nature of the study. Furthermore, I present the research questions and hypotheses along with the theoretical framework, assumptions, and limitations. This chapter concludes with definitions of terms unique to the study, the significance of the study, and a transition to Chapter 2.

Background

Electronic media are a modern phenomenon that have redefined human social communication and interactions. Emerging adults use electronic media often and for every form of communication; electronic media can shape how people think of themselves, especially in the context of their relationships (Brown, 2006; Kellerman, Margolin, Borofsky, Baucom, & Iturralde, 2013; Padilla-Walker, Nelson, Carroll, & Jensen, 2010). The most common goal of communication through electronic media is to reach and stay in touch with those whom the users already know (Blais, Craig, Pepler, & Connolly, 2008; Gross, 2004). In this context, use of electronic media is a pleasant experience as a means of prosocial connection through social networking websites (Blais

et al., 2008). However, use of electronic media also can have negative consequences, including providing opportunities for individuals to fulfill aggressive desires, such as cyberbullying (Felmlee & Faris, 2016; Machimbarrena & Calvete, 2018) and other forms of dating aggression (Marganski & Melander, 2018; Patton et al., 2014; Reed et al., 2015).

Acts of aggression are common among couples who are dating during the emerging adulthood stage, a developmental period between ages 18 and 25 (Jennings et al., 2017; Kaukinen, 2014). According to Arnett's (2000) theory of emerging adulthood, this developmental period is a time when identifying exploration and increased risk-taking occur. Among respondents in the National Longitudinal Study of Adolescent Heath who were between 18-28 years old, 25% reported some type of relationship violence during the previous year (Berger, Wildsmith, Manlove, & Steward-Streng, 2012). Similar rates have been reported by young adults from rural counties in the United States (Edwards, Mattingly, Dixon, & Banyard, 2014). More often, signs of psychological forms of aggression tend to be most common among this age group. According to Leisring and Giumetti (2014), 93% of college students reported cyber psychological abuse, which might include angry texts, online threats, or humiliating posts. Consequences of dating aggression, regardless of the medium used (either traditional modes of communication or through modern communication technology), are harmful to the physical (Kelly & Bagley, 2017) as well as psychological and emotional well-being of emerging adults (Hancock, Keast, & Ellis, 2017). Often those who

perpetrate aggression are victims of aggression and are at risk for a wide range of mental and physical health impairments and demonstrate risk behaviors across their life spans (McDonald & Merrick, 2013).

Dating Aggression as a Contemporary Problem Among College Students

Dating aggression among young adult students in community college or university settings is a problem that has begun to receive more attention. Recent work has highlighted risk factors for dating aggression among this population (Kaukinen, 2014; Littleton, 2014). Littleton (2014) suggested that stakeholders have a responsibility to understand the risk factors for aggression among college students.

Attachment Style and Relational Aggression

Arnett (1998) noted that early adulthood, or the period from the end of adolescence through the mid-20s, is a time of limited certainty regarding the future. This uncertainty can affect the nature and security of the commitment a person has with an intimate partner (Jamison & Ganong, 2011). Further, relational ambivalence or insecurity can be associated with relational aggression. For example, Bookwala and Zdaniuk (1998) found that undergraduate college students who scored higher on insecure attachment with preoccupation with their partners (rather than preoccupied of relationships) reported more relationship aggression. More recent research indicated relationships between attachment style and dating violence (Tussey, Tyler, & Simons, 2018). A limited amount of research has been published since the time I began my dissertation study to examine relationships

between attachment style and electronic forms of dating aggression, such as excessive monitoring of partner through social media (Reed, Tolman, & Ward, 2016).

Problem Statement

Research on dating aggression using electronic media among emerging adults is limited. Little information exists regarding how frequently this form of dating aggression occurs or how it may be related to attachment styles associated with this developmental stage. I addressed this gap in the literature through this study.

Although some researchers focused on the ways adolescents use electronic communication and electronic media in dating aggression (Draucker & Marsolf, 2010; Piitz & Fritz, 2009; Reed et al., 2016), comparable research is limited regarding young adult college students. The purpose of the current study was to expand work by Piitz and Fritz (2009) to examine the patterns and goals of electronically-mediated dating aggression (i.e., stalking, relational aggression, monitoring, controlling or domineering, and verbal or emotional aggression) experienced by emerging adults in relationships. Considering the findings of Bookwala and Zdaniuk (1998) and Tussey et al. (2018) regarding adult attachment style and relational aggression, I expected that undergraduate college students who score higher on insecure attachment would report higher incidences of relational aggression via electronic media than those with secure attachment styles.

Purpose of the Study

The purpose of this quantitative study was to examine types of experiences with electronically-mediated dating aggression in current relationships, either as perpetrator or

victim, among college-age young adults who varied on attachment style. I evaluated patterns of dating aggression and goals of electronically-mediated dating aggression (i.e., stalking, relational aggression, monitoring, controlling or domineering, and verbal or emotional aggression) among these attachment groups.

Nature of the Study

This quantitative study focused on logic and reason rather than subjectivity (Creswell, 2009). I examined between-group differences for college students who reported different forms of attachment styles on various dependent variables for patterns and goals of dating aggression employing electronic media. Using a casual-comparative design, I intended to draw conclusions about relationships between the variables. The independent variable (attachment style) was established but not manipulated, and its impact on the dependent variables was observed. Because I did not manipulate the independent variable, the research was not a true experiment. Instead, I compared individuals with pre-existing personal characteristics, specifically adult attachment styles. This was one of the few studies that addressed the relationship between attachment style and electronically-mediated dating aggression among first-year college students in the developmental stage of emerging adulthood. I collected primary data using various established questionnaire instruments that were presented in an online survey.

The two possibilities for my research design were casual-comparative or quasi-experimental. This study used a quantitative, casual-comparative survey design. Quantitative research processes are used to quantify the results while testing hypotheses

(Howell, 2010). Creswell (2009) noted that a quantitative method is most applicable for researchers who seek to examine factors or variables that affect outcomes. This study did not include a true experimental design. There was no systematic manipulation of the independent variable, and participants were not randomly assigned to an experimental condition (see Tabachnick & Fidell, 2012). Instead, I used a causal comparative study design (see Bordens & Abbott, 2008). Participants were grouped based on their preexisting self-reported attachment style. There was neither systematic manipulation of the independent variable nor random assignment to the condition.

In addition, I employed a survey technique to collect the data needed to classify participants on the independent variable and to examine between-group differences on the dependent variables. Surveys are typically the best way to contact people for larger sample sizes (Kothari, 2011). Using an online survey, I sampled first-year adult college students to examine their self-reported adult attachment styles and factors related to electronically-mediated dating aggression.

Through this quantitative, causal-comparative survey study, I determined whether significant differences exist between adult attachment styles for first-year college students' dating aggression, situational triggers, and goals. In the process of quantitative research, data are collected via a number of means, but each has to follow structured procedure for statistical analysis (Kothari, 2011). The optimal statistical analysis helps the researchers assess what associations and between-group differences exist among the variables (Kothari, 2011). To address the research questions, I used analyses of variance

(ANOVA) and multivariate analyses of variance (MANOVA) to assess whether dating aggression using electronic means differed as a function of the independent variable, adult attachment style group. The dependent variables corresponded to experiences of dating aggression, situational triggers, and goals. After considering causal-comparative and quasi-experimental research designs, I determined that my purpose was causal-comparative. My study did not include any form of treatment and was a true comparison of groups.

Research Questions and Hypotheses

The aim of the online survey was to gather the primary data pertaining to the question of hypothesized differences in self-reported experiences with electronically mediated dating aggression among young adult college students who differed in adult attachment styles. To respond to the gaps in the literature and examine associations between attachment style and experiences of electronically-mediated dating aggression, I used three research questions to guide this study. I considered experiences of both victims and perpetrators of electronically-mediated dating aggression.

RQ1: Are there between-group differences among first-year college students with different adult attachment styles (secure, preoccupied, fearful, dismissing) on reported experiences of dating aggression using electronic media?

H_o1: There are no between-group differences for first-year college students who differ in adult attachment style (as measured by the Experiences in Close Relationships

Scale Revised [ECR-R]) on experiences of dating aggression using electronic media (as measured by the Partner Electronic Aggression Questionnaire [PEAQ]).

H_a1a: There are between-group differences for first-year college students who differ in adult attachment style (as measured by the ECR-R) on experiences of electronically-mediated dating aggression using electronic media (as measured by the PEAQ).

H_a1b: First-year college students with fearful insecure attachment style (as measured by the ECR-R) report more experiences as perpetrators of electronically-mediated dating aggression (as measured by the PEAQ), while those with preoccupied attachment style report more experiences as victims of electronically-mediated dating aggression.

RQ2: Among first-year college students who report experiences with dating aggression using electronic media, are there between-group differences among college students with different adult attachment styles (secure, fearful, preoccupied, dismissing) on situational triggers (e.g., major disagreements, not feeling comforted when feeling down) for dating aggression using electronic media?

H_o2: Among first-year college students who report experiences with dating aggression (as measured by the PEAQ; PEAQ > 0), there are no between-group differences in situational triggers for dating aggression using electronic means, as measured by the Situational Triggers of Aggressive Responses (STARS) scale.

H_a2: Among first-year college students who report experiences with dating aggression (as measured by the PEAQ; PEAQ > 0), there are between-group differences among students with different adult attachment styles on situational triggers for dating aggression using electronic means, as measured by the STARS scale.

RQ3: Among first-year college students who report experiences with dating aggression using electronic media, are there between-group differences among those with different adult attachment styles on goals of relational aggression (e.g., stalking, monitoring, controlling/domineering, verbal/emotional aggression) for dating aggression using electronic media they have experienced?

H_o3: Among first-year college students who report experiences with dating aggression (as measured by the PEAQ; PEAQ > 0), there are no between-group differences among students with different adult attachment styles on goals of relational aggression (e.g., stalking, monitoring, controlling/domineering, verbal/emotional aggression), as measured by the Partner Aggression Technology Scale (PATS), for dating aggression using electronic media they have experienced.

H_a3: Among first-year college students who report experiences with dating aggression (as measured by the PEAQ; PEAQ > 0), there are between-group differences among students with different adult attachment styles on goals of relational aggression (e.g., stalking, monitoring, controlling/domineering, verbal/emotional aggression), as measured by the PATS, for dating aggression using electronic media they have experienced.

Theoretical Framework

In a world in which social roles are changing, transition into adulthood no longer occurs immediately after the adolescent stage. Erikson's (1963) stages of development theory suggest that individuals have psychological needs that often conflict with the needs of society. Erikson suggest that successful completion of each stage resulted in a healthy personality and the acquisition of basic virtues. According to Erikson, 18 to 25 year-old were grouped into two separate groups, whereas Chickering (1969) proposed that traditionally aged college students have distinctive developmental tasks, including establishing an identity that is specific to their age group. Establishing an identity includes developing competence, managing emotions, developing autonomy, establishing mature relationships, clarifying purpose, and developing integrity (Chickering, 1969).

More recently, Arnett (1998) describes the same transitional stage as "emerging adulthood," or a time when individuals are evolving and transitioning their skills, qualities, and capacities of their character, as influenced by their culture, to move into adulthood. In comparison to Chickering (1969), Arnett offered five characteristics of emerging adults: the age of instability, the age of identity exploration, the self-focused age, the age of feeling in between, and the age of possibilities. Often, emerging adults are torn between desiring an intimate relationship and fearing entanglement (Arnett, 1998). Arnett described the emerging adult as being in a transitional developmental period with characteristic emotions, attitudes, and behaviors related to intimate relationships as less secure than those observed in adulthood. According to Arnett, emerging adults have

limited confidence in their future, which ultimately limits the idea, security, and level of commitment with an intimate partner. For example, rather than marriage, emerging adults may favor transitional relationships and less involvement in living together.

Shaver, Hazan, and Bradshaw (1998) observed that attachment styles previously seen in infants and young children were present in adult interpersonal functioning, including romantic relationships. Shaver et al. suggested that characteristics of secure or insecure interpersonal attachment styles would also apply to adults. In particular, adult attachment style may lead individuals to approach relationships with emotional security or with fear, anxiety, or avoidance (Shaver et al., 1998).

Definition of Terms

The following definitions of terms related to the study topic and provide a reference for readers.

Attachment: An enduring and deep emotional bond between individuals that connects a person to another across space and time (Ainsworth, 1973; Bowlby, 1969).

Attachment behavior: A person's natural instinct to respond to distress or any other uncertainty with a particular behavior (Reber & Reber, 2001).

Attachment style: "A person's characteristic ways of relating in intimate care giving and receiving relationships with attachment figures, often parents, children, and romantic partners" (Levy, Ellison, Scott, & Bernecker, 2011, p. 193). Attachment is often characterized as patterns of behaviors, expectations, wants, or emotions that occur from the interaction of an innate attachment situation (Shaver & Mikulincer, 2002).

Dating aggression: Acts of psychological, sexual, or physically violence from a partner toward the other partner (Burke & Follingstad, 1999). Dating aggression includes a range of behaviors such as verbal threats, emotional threats, intimidation, physical threats, or physical fighting (Durant et al., 2007).

Dismissing attachment style: An insecure attachment style often characterized by people who tend to keep an emotional distance between themselves; a combination of both fearful and preoccupied attachment styles in which connections with others are low on their list of values (Lapsley, Varshney, & Aalsma, 2000; Vogel & Wei, 2005).

Dominating behavior: The restriction that a partner poses on the counterpart in making friends and communicating with other people. Asking the partner not to contact someone or asking the partner to contact someone counts as controlling or dominating behavior (Seltzer, 2012).

Electronic aggression: Harmful behavior directed toward others through various electronic media including e-mail, text, instant messaging, social media networks, or even chat rooms (Raskauskas & Stolz, 2007).

Electronic media: A modern phenomenon that has redefined human social communication and interactions and requires digital encoding of information, which includes but is not limited to text messages, e-mail messages, and social media outlets such as Facebook, Instagram, or Snapchat. Electronic media have increasingly influenced situations that take place in physically defined settings (Meyrowitz, 2005)

Emerging adulthood: The period in which individuals 18 to 25 years old are developing and transitioning skills, capacities, and qualities of their character as influenced by their culture to transition successfully into adulthood (Arnett, 1998).

Fearful attachment style: An insecure attachment style often characterized by an extreme need for approval from other individuals and an excessive amount of fear of rejection by other individuals (Vogel & Wei, 2005). High levels of fearfulness are generalized by a preoccupation with fear of abandonment by those they are attached to this style (Mohr & Fassinger, 2003).

Heterosexual relationship: A romantic relationship or involvement between dating individuals of the opposite sex (Mackey, Diemer, & O'Brien, 2000).

Insecure attachment style: A style that is often demonstrated by high levels of fearful or preoccupied behaviors (Vogel & Wei, 2005).

Monitoring: Acts of a partner to keep track of his or her counterpart's contacts and messages to others via social media (Brendgen, Viaro, Tremblay, & Lavoie, 2001).

Preoccupied attachment style: An insecure attachment style often generalized by a negative image of self (feelings of unworthiness and unloving) and others (feelings that others are unresponsive, unavailable, rejecting, and untrusting; Lapsley et al., 2000).

Physical aggression: Any use of physical aggression or force to intimidate or control a partner by slapping, fighting, pushing, throwing objects, or other physically aggressive acts (Burke & Follingstad, 1999).

Relational aggression: An act to disrupt the victim's social relationships with others by spreading false rumors, sharing hurtful information, and attacking the victim's reputation (Archer & Coyne, 2005).

Secure attachment style: Having a highly positive sense of self-worth and the belief that others are available, trustworthy, and reliable (Lapsley et al., 2000). Individuals with secure attachment are comfortable in relationships and will most likely not admit to types of aggression.

Stalking: Sending instant messages to the partner, which elicit a high level of annoyance for the recipient (Brendgen et al., 2001).

Verbal and emotional aggression through electronic media: An act of insulting or swearing at the partner through social media (Attewell & Fritz, 2010).

Assumptions, Delimitations, and Limitations

Assumptions

I assumed participants would provide honest responses to the survey questions and would carefully consider their responses to ensure accuracy. All responses were provided voluntarily and anonymously.

Delimitations

The sampling procedures limited participants to individuals who were first-year students in a college or university, who were between 18-24 years of age, and who were from specific schools in a specific geographical region. The study did not include individuals from other age groups, education levels, and geographical locations.

Limitations

Several limitations exist when conducting a quantitative study. According to Antonius (2003), quantitative studies can be useful to statistically analyze data to address research questions and hypotheses, but do not allow researchers to assess individual or group experiences with the same depth as a qualitative study. However, because no way existed to create attachment styles for group assignments, this issue could not be addressed. I took this limitation into account when interpreting the results. This design did not allow for verification of cause-and-effect relationships between the independent and dependent variables. In addition, the sample may have been unrepresentative of the entire population of interest. Volunteers may not have represented the general population from which the data were drawn. Selecting participants from one location limited the generalizability of the findings to the full population.

Summary

Researchers have studied adolescents' experiences of electronic media use and dating aggression, but few researchers conducted studies with young adults, despite the fact that previous researchers found dating aggression to be a notable risk for young adults during their early college years (Subrahmanyam & Greenfield, 2008). Manson (2012) suggested that adolescents and early young adults with their inexperience and lack of emotional stability are vulnerable to some form of dating aggression. However, data have indicated that college students also experience dating aggression at alaraming rates, including individuals who use electronic media (Manson, 2012). Examining the

relationship between electronic media use and dating aggression during this developmental stage may improve the understanding of consequences of dating aggression (Manson, 2012; Subrahmanyam & Greenfield, 2008). Further, examination of the relationship between dating aggression and adult attachment style (see Reed et al., 2015; Yarkovsky & Fritz, 2013) may reveal risk factors for dating aggression among college students.

The current study was conducted to expand the understanding of electronically-mediated dating aggression among young adult college students, and may inform stakeholders, such as college counselors, regarding risk factors, such as adult attachment style, for perpetration or victimization. Results may be useful for planning prevention and intervention activities. Chapter 2 provides an a exhaustive review of appropriate literature, including a discussion of the gap in research regarding electronically-mediated dating aggression among emerging adult college students and adult attachment styles.

Chapter 2: Literature Review

Aggression is defined as specific behaviors directed toward another individual and carried out with the immediate intent to cause harm to that individual who does not wish to be harmed (Huesmann, Moise-Titus, Podolski, & Eron, 2003; Geen, 2001). A review of the literature showed that violence and aggression exist in all sorts of relationships. Parents show aggression and violence toward their children, siblings have fights with each other, girlfriends have been reported to slap their boyfriends, friends get into fights, husbands maltreat their wives, and abused wives have been reported to murder their husbands (Bennett, Guran, Ramos, & Margolin, 2011; Dutton & White, 2012; Huesmann, 2014). The focus for this review was aggression in dating relationships and the use of electronic media in such aggression.

Following the feminist movement in the 20th century and the increase in the cultural emphasis on gender equality, researchers examined the violence between intimate partners, or individuals who are dating, living together, and married (Hewitt, 2011). These actions are called intimate partner violence (Attewell & Fritz, 2010; Bennett et al., 2011). Intimate partner violence has three main types identified by the control context of the relationship in which they take place. The first type of intimate partner violence involves a violent attempt by a partner to take complete control of the other or to dominate the relationship shared by the two, which is also called intimate terrorism (Attewell & Fritz, 2010). The second type of intimate partner violence involves violent resistance to a control or dominance attempt by the opposing partner, which is also called

violent resistance (Attewell & Fritz, 2010). The third type of intimate partner violence is a product of particular conflicts or tensions that have occurred within the relationship, also known as situational couple violence (Attewell & Fritz, 2010). The major theme in the literature regarding intimate partner violence is the nature of the control context (Attewell & Fritz, 2010; Bennett et al., 2011; Blais et al., 2008; David-Ferdon & Hertz, 2009; Love, Spencer, May, Mendez, & Stith, 2018; Straus & Gozjolko, 2016).

Although intimate partner violence may be found in all age groups, occurrence is on the rise among young adults who are said to be in the emerging adulthood stage of lifetime development (Kaukinen, 2014; Littleton, 2014). During emerging adulthood, young adults may be more ambivalent about their life goals and, while seeking companionship and intimacy, may also experience increased insecurity and ambivalence with making relational commitments (Arnett, 1998). Insecure attachment has also been found to be a risk factor for intimate partner violence and dating aggression among undergraduate college students (Bookwala & Zdaniuk, 1998; McDermott, Cheng, Lopez, McKelvey, & Schneider, 2017; Reed et al., 2015). Electronic media offer new avenues for dating aggression, such as through e-mails, texts, and posts on websites (DeKeseredy et al., 2019; Reed et al., 2015).

The purpose of this study was to examine the relationships between adult attachment styles and experiences with dating aggression via electronic media among traditional college age students. Chapter 2 provides a review of background theory and research for clarification of the gap in the literature. Chapter 2 is organized to present

information regarding the strategy used for this literature review, the theoretical framework, the conceptual framework, key variables, and summary and conclusions.

Literature Search Strategy

I conducted an exhaustive literature search using psychology and education electronic databases, including PsycINFO, PsycArticles, PsycBooks, ProQuest, ERIC, EBSCO, Airiti, PsycARTICLES, PsycEXTRA, PsycTEST, iSEEK, Infomine, and GoogleScholar, as well as through Bowie State and George Mason University library databases. Search terms used to conduct this literature search included dating aggression, emerging adulthood, acts of aggression, consequences of dating aggression, electronic aggression, electronically-mediated dating aggression, forms of dating aggression, goals of dating aggression, attachment styles, relational aggression, social media use in dating aggression, college students' attachment styles and their experiences of dating aggression, and situational triggers of dating aggression. Although no time limits were placed on the search so that foundational works in key areas could be considered, more than half of the sources in this review were published within the past 10 years.

Theoretical Foundation

Developmental Theories

Interpersonal functioning has been recognized as a key dimension of human development (Erikson, 1968; Keniston, 1971; Levinson, 1978). In general, stages of development are described as proceeding from early key bonding experiences with primary caretakers to social skills and attachment with other adults and peers (Erikson,

1968). Erikson (1968) emphasized the particular tasks of development during adolescence, such as exploring identity, as well as a time of initial experiences with more intimate peer relationships. Adulthood follows adolescence and is characterized by commitments to adult roles, such as marriage. However, changes in social roles have extended some of these developmental processes to suggest another transitional stage between adolescence and adulthood. Chickering (1969) proposed unique development tasks specific to traditionally aged college students. Chickering suggested that all college students are primarily concerned with the central task of establishing an identity. Chickering proposed the sequence of developmental tasks included developing competence, managing emotions, developing autonomy, establishing identity, establishing mature relationships, clarifying purpose, and developing integrity.

More recently, Arnett (1998) described "emerging adulthood" (p. 296) as a time in which individuals are developing and transitioning their capacities, skills, and qualities of their character as deemed necessary by their specific culture to successfully transition into adulthood. Arnett suggested five characteristics of emerging adults: the age of instability, the age of identity exploration, the self-focused age, the age of feeling in between, and the age of possibilities. Postponing these transitions until at least the late 20s leaves those in their late teens and 20s available for exploring possible life directions, including intimate relationships. Jamison and Ganong (2011) found college-educated emerging adults are torn between wanting intimate relationships and fearing entanglement. Like the developmental stage, relationship behavior is transitional and

marked by certain behaviors, such as overnight stays rather than living together (Jamison & Ganong, 2011). Additionally, Jamison and Ganong suggested limited certainty of the future limits the nature and security of the commitment a person has with an intimate partner; therefore, attitudes, emotions, and behaviors related to intimate relationships may be less secure during this transitional developmental period.

Attachment Theories

In 1998, Shaver et al. proposed that attachment styles for infants and young children, described by Bowlby (1969) and Ainsworth (1991), may be observed in adult interpersonal functioning, including romantic relationships. Similar to Bowlby's and Ainsworth's theories of early attachment, Shaver et al. proposed that the beliefs, emotions, and behaviors said to be characteristic of either secure or insecure interpersonal attachment also apply to adults. Secure attachment styles, patterns, and orientations are characterized by the extent to which a person experiences a sense of safety, intimacy, sharing, and trust in relationships (Shaver et al., 1998).

Brennan, Clark, and Shaver (1998) identified two basic dimensions in adult attachment patterns: attachment-related anxiety and attachment-related avoidance. According to Brennan et al., people who are higher on attachment-related anxiety worry about their partner's availability, attention, and responsiveness while those with lower scores are more secure. Additionally, Brennan et al. stated that people who are high on attachment-related avoidance are reluctant to rely on, trust, and approach intimacy with another while those on the low end of the dimension are more comfortable with intimacy

and mutual dependency. Brennan et al. proposed four classifications for adult attachment based on the two dimensions: secure (low preoccupied, low fearful), dismissing (low preoccupied, high fearful), preoccupied (high preoccupied, low fearful), and fearful (high preoccupied, high fearful).

Dutton and White (2012) proposed that fearful (high anxiety) and preoccupied (high avoidant) attachment styles increase the risk of intimate partner aggression because of associated cognitive appraisals of threat, inability to call up cognitive schemas of parental support, and deficits in affective control. These mechanisms are consistent with contemporary social-cognitive information processing theories of aggression (Crick & Dodge, 1994; Huesmann, 1982, 1986, 1988, 1998). These cognitive information processing theories emphasize three major factors that interact to affect the likelihood of interpersonal aggression: cognitive appraisals (attention to and interpretation of cues and events), script retrieval (engagement of behavioral response patterns that are triggered by the cognitive appraisals), and selection of a behavioral response (Huesmann, 2014). Some risk factors for interpersonal aggression are hostility biases that increase negative cognitive appraisals, thereby increasing the likelihood of defensive and offensive behavioral responses, especially when accompanied by a negative emotional arousal, such as anger (Eckhardt & Jamison, 2002). Conceptually, attachment styles may represent cognitive patterns of cognitive appraisals, behavioral scripts, and behavioral responses that affect the risk of partner aggression, including via electronic media.

Aggression Theories

Social psychologists have stated that a person cannot understand the social psychology of aggressive behaviors without placing it in relation to developmental context of differing social cognitive processes at various ages (Coie & Dodge, 1998). Huesmann et al. (2003) suggested that aggressive behavior occurs in both children and adults but manifests differently. Additionally, Huesmann et al. said that understanding social psychology of aggression is the ability to map relations between adulthood and childhood aggression. Also, social psychologists view aggressive behavior as falling along a continuum, running from low level aggression (Archer & Coyne, 2005) to intense violence (Anderson & Huesmann, 2003).

Social psychologists have defined human aggression as behavior directed toward another individual carried out with the proximate (immediate) intent to cause harm (Anderson & Huesmann, 2001; Geen, 2001). Further, the perpetrator must believe that the behavior will harm the intended target, and the intended target is motivated to avoid the behavior (Anderson & Huesmann, 2003). Actual harm is not required for it to be aggressive behavior (Baron & Richardson, 1994; Berkowitz, 1993; Bushman & Anderson, 2001; Geen, 2001).

A difference between aggression and violence is that violence is physical aggression at the high end of the aggression continuum, such as murder and aggravated assault. “All violence is aggression, but much aggression is not violence” (Anderson & Huesmann, 2003, p. 298). Other differentiations for types of aggression and violence

include direct versus indirect; physical, verbal, or social; and reactive/impulsive versus planned/instrumental (Anderson & Huesmann, 2003; Archer & Coyne, 2005).

Social cognitive models of aggression emphasize the interplay of individuals' previous experiences and social learning processes that help to develop expectations, beliefs, and attitudes about others' motives and intentions (the hostile attribution bias; Archer & Coyne, 2005). Anderson and Huesmann (2003) stated that "what is important is the cognitive evaluation of events taking place in the individual's environment; how they interpret those events and these cognitions provide a foundation for stability of behavior tendencies across a variety of situations" (p. 301). In addition, such models consider behavioral scripts that have been learned for how to react to people and situations perceived as threatening. Cognitive appraisals of situations, as well as availability of aggressive behavioral scripts, are central factors in predicting risk of aggressive responses in social cognitive models of aggression (Anderson & Huesmann, 2003).

Berkowitz (1989, 1993) expanded these social cognitive models to consider the importance of enduring associations between affect, situational cues, and cognition cues. According to the authors, "Aversive stimulation produces initially undifferentiated negative affect" (Anderson & Huesmann, 2003, p. 301). This negative affect and other situational cues prime a network of cognitive structures that often influence the evaluation of the meaning of the negative affect and aversive stimulus, thus affecting the risk and type of aggressive response to that situation (Anderson & Huesmann, 2003).

The general aggression model offers an updated integration of these social cognitive and neoassociation approaches to aggression, which have improved both explanation and prediction of aggression, such as in research on effects of exposure to media violence (Allen & Anderson, 2017; Anderson & Bushman, 2002; DeWall, Anderson, & Bushman, 2011). DeWall et al. (2011) suggested the general aggression model is inclusive of both a descriptive model that aligns short term processes involved in each episode of aggressive behavior as well as in the long-term processes by which aggression relates knowledge structures.

Contributions to Dating Aggression

Dating aggression among young adult students in community college and university settings is a contemporary problem that has begun to receive more national attention (Kaukinen, 2014; Littleton, 2014; Reed et al., 2016). Dating violence is one focus of the Jeanne Clery Act, which was amended in 2013, to include the Campus Sexual Violence Elimination Act (Reed et al., 2016). Colleges are required by law to report occurrences and to provide effective support for those victims of various forms of violence, including dating aggression (Kaukinen, 2014). Colleges have a legal obligation and duty to warn students of known risks and to provide reasonable protection (Finn, 1995; Hoff, 2015). First-year college students are particularly at risk for experiencing abuse by a dating partner, often because they are separated from their usual support networks, may be too inexperienced to recognize verbal or emotional abuse, may accept aggressive behaviors as normal, and may not know how to change or leave the

relationship (Kaukinen, 2014; Littleton, 2014; Smith, White, & Holland, 2003). Thus, it is important for students, educators, administrators, and those who serve as student counselors, advisors, and advocates to have access to updated information regarding patterns and risk factors for contemporary forms of dating aggression (Pentz, 2004). Littleton (2014) suggested all stakeholders have a responsibility to understand the risk factors for aggression among college students.

Through this study, I aimed to provide important information on a relatively new form of dating aggression: electronically-mediated aggression; that is, psychological or emotional aggression through such media as e-mails, texts, and posts on websites (Raskauskas & Stolz, 2007; Mishna, Regebr, Lacombe-Duncan, Daciuk, & Van Wert, 2018). David-Ferdon and Hertz (2009) suggested although online and mobile forms of communication often present various social benefits, they also can be an outlet for harm in relationships. The growing literature suggests various electronic modalities, including, but not limited to, e-mail, text messaging, and social networking sites, are often used to damage, humiliate, or terrorize others (Kellerman et al., 2013; Marganski et al., 2018).

Electronically-mediated dating aggression may exist along with other forms, such as physical aggression, in dating relationships (Bennett et al., 2011). Electronic forms of dating aggression are known to be risk factors for negative effects on well-being, including increased depression, anxiety, social isolation, and impaired performance (Hinduja & Patchin, 2007; Mishna et al., 2018). In addition, the occurrence of nonphysical forms of dating aggression also poses a higher risk for later incidences of

physical aggression within a relationship (Capaldi & Crosby, 1997; Leadbeater, Connolly, & Temple, 2018; Prather, Dahlen, Nicholson, & Bullock-Yowell, 2012). Physical aggression between partners is most often associated with outcomes that are negative in nature for all involved (Jouriles, Rosenfield, McDonald, VU, Rancher, & Mueller, 2018). The negative outcomes for both children and adults could range from mental and physical health problems to reduced work productivity and cognitive abilities (Jouriles et al., 2018; Rhoades, Stanley, Kelmer, & Markman, 2010).

Aggression in Intimate Relationships

Aggression in dating relationships is common and has significant medical, behavioral, and social consequences for individuals and society. According to Saxbe, Margolin, Spies, and Baucom (2012), often an aggressive family environment will increase future risk for dating aggression, especially during the young adult years (Davis, Masters, Casey, Kaiumulo, Norrise, & George, 2018; Saxbe, Margolin, Spies, & Baucom, 2012). Further, Saxbe et al. (2012) noted various psychosocial and psychobiological mechanisms underlie dating aggression and factors that often predict discontinuity from familial aggression to dating aggression in young adulthood, and they are poorly understood. An aggressive family environment increases future risk for dating aggression, but many at-risk individuals do not continue aggressive patterns into the next generation. Jankowski, Leitenberg, Henning, and Coffey (2001) found in their study of a sample of undergraduate students that the association between witnessing interparental

violence as a child strongly increases the risk for perpetrating, and for being the victim of, dating aggression as a young adult.

Violence in intimate relationships is a form of domestic violence. The term domestic violence covers all forms of violence between adults in all types of relationships (Jankowski et al., 2001). Coble (2015) stated,

> In most states, you do not have to be married to an abuser to be a victim of domestic violence; for example, Texas has a specific statute defining dating violence as violence committed against a person with whom the actor has a dating relationship. (para. 3)

Violence can be psychological, sexual, or physical. Violence can occur with a married couple, in dating relationships, or in any romantic relationship, be it heterosexual or homosexual, even when the couple is not sharing a common home or is separated (Greenless, 2012).

It is not possible to provide reliable estimates on the extent of this phenomenon in the world. According to the National Intimate Partner and Sexual Violence Survey conducted by the Center for Disease Coontrol (2010), noted 10% to 20% of women experience physical violence and sexual violence from their partners during their lifetime, and 20% to 40% of women experience physical violence (CDC, 2010). When a broader continuum of behaviors is considered, females are also likely to exercise violence or aggression against their (former) romantic partners, and gender differences with regard to

aggression becoming minimal (Alatupa et al., 2011; Attewell & Fritz, 2010; Blais et al., 2008; Archer & Coyne, 2005; Huesmann, 2010).

Dewall et al. (2011) suggested those in the scientific community accept that no one factor alone explains the causes of violence, but different factors interact at various levels and can account for this phenomenon. Researchers have explained several factors are correlated with the onset of these displays of violence and aggressive behaviors, and researchers found no one factor alone explains the occurrence of violent or aggressive behaviors in romantic or intimate relationships (Moffitt, Caspi, Rutter, & Sylva, 2000; Reebye, 2005). The establishment of a causal relationship between violence enhancement factors (e.g., alcohol consumption, addictions, and other substance abuse) and purely descriptive characteristics (e.g., age and other demographical factors) is significantly difficult and even impossible to structuralize (Moffitt et al., 2000). Haj-Yahia, Sousa, Lugassi (2019) and Forke et al. (2019) reported clear relationships between exposure to family violence as a child to psychological distress and experiences with intimate partner violence among college students. Therefore, it is widely accepted among experts, and it has also been empirically demonstrated, that direct or indirect victims of domestic violence in their childhood particularly have a tendency to become victims or inflictors of violence in relationships (Forke et al., 2019; Haj-Yahia et al., 2019; Pepler, Jiang, Craig, & Connolly, 2008).

Vaccaro and Lavick (2008) suggested everyone experience's various events that significantly influence their perceptions of the world and often determine how people

interpret and respond to future experiences. At times, these experiences are painful and may overwhelm the ability to cope emotionally (Fonagy, 2007). Aldorando and Strauss (1994) showed males who underwent harsh physical treatment or sexual abuse in childhood (direct victims) or who have witnessed violence between their parents (indirect victims) had the highest propensity to commit acts of violence and aggressive behaviors against their romantic partner (Haj-Yahia et al., 2019). For some time, situational stressors, such as unemployment, have been known to increase the risk of victimization by intimate partner violence (Felson, 1992). Recently, other sociocultural stressors, such as minority status, are being integrated into models of interpersonal violence (Dixon, Harkins, & Wegerhoff, 2018; Sherrill, Bell, & Wyngarden, 2016). On the other hand, the results for women were not as uniform as the ones for men. Even though Archer and Coyne (2005) showed female victims of domestic violence in childhood or witnesses of violence between parents had a higher tendency to be in relationships that were marked by violence; results from Eckert and Jamison (2002) indicated no such link. Thus, the relationship between one's childhood experiences with domestic violence or aggression and one's adult relationships may not be directly correlated, especially for females.

Other important factors appear to be situational. For example, Graham and Livingston (2011) reported a close interaction exists between alcohol and violence in relationships. There is a correlation between all forms of addiction and violence in relationships (Graham & Livingston, 2011). Graham and Livingston reported women in relationships with men who abused alcohol were much more likely to suffer attacks from

their partner during their lives, compared to other women in relationships where alcohol abuse was not present.

Women whose partners have behaved violently outside the family are also at an increased risk of being the victims of violence from their partners during their lifetime (Swan, Gambone, Caldwell, Sullivan, & Snow, 2008). In addition, evidence shows a correlation between the presence of socially unacceptable behavior (e.g., stealing, lying, and breaking traffic rules) and the display of violence or aggression in intimate relationships (Alatupa et al., 2011; Archer & Coyne, 2005; Attewell & Fritz, 2010; Huesmann, 2010). Felson (1992) demonstrated a correlation between stressful situations, such as unemployment and being overworked, and violence. The influence of stress on the risk of violence in intimate relationships grows in the presence of other risk factors (Felson, 1992). For example, stress can increase other risk factors, such as patterns of violent behavior internalized during childhood or a relationship in which men have little respect for their partner, and stress management strategies are lacking (Felson, 1992).

Intimate Aggression

Although all intimate partner violence is intimate partner aggression, not all intimate partner aggression is intimate partner violence (Breiding, Basile, Smith, Black, & Mahendra, 2015). Despite common misconceptions regarding intimate partner aggression, offenders (perpetrators) can “hurt a partner very deeply without ever lifting a finger” (Straus, 2005, p. 56). Intimate aggression is any coercive psychological, physical, verbal, or sexual act committed toward the partner with whom one is intimate (Breiding

et al., 2015; Centers for Disease Control and Prevention, 2015). Aggression can manifest in a variety of nonphysical forms; however, it still may result in some form of injury to the partner (Straus, 2005). Stets (1991) sampled 583 college freshmen to assess psychological aggression, such as through derogatory, insulting, critical, and degrading behaviors. The researcher found psychological aggression is reciprocal and exhibits a significant correlation between recipient and perpetrator. Additionally, Stets found psychological aggression correlated with lower self-esteem and higher relationship involvement.

Further, Straus, and Sweet (1992) studied what they conceptualized as "verbal or symbolic aggression" (p. 347). Straus and Sweet suggested verbal or symbolic aggression is either nonverbal or verbal communication intended to cause some sort of psychological pain to another person. Saltzman, Fanslow, McMahon, and Shelley (1999) conducted a telephone survey and obtained data for the National Family Violence Survey from more than 5,000 American couples. The researchers found the probability of verbal or symbolic aggression was higher in college-aged couples and declined with age and the number of children in the household (Shook, Gerrity, Jurich, & Segrist, 2000).

Domination and Control

According to Barnish (2004), the systematic behavior to dominate and control in intimate relationships is the most reported and best documented type of aggression that exists but is far less common among couples who practice co-decision making in relationships and where the male partner has the last word. Domination defined in the

context of relationships, as reported by Isariyawongse (2001), occurs when one of the two partners is more dominate, assertive, and forward in the relationship. In some cases, domination is not present in relationships; however, Isariyawongse stated most times when two people are involved in a relationship, a partner within the couple controls the actions and activities of the relationship. Traditionally, in heterosexual relationships, Isariyawongse suggested are expected to be, in general, more aggressive. “This might be connected to the fact that men are on average bigger than women, but, nonetheless, domination is expected much more from men” (Isariyawongse, 2001, p. 3). In nearly all types of media, the man is usually presented as the one who controls a submissive woman, or at least a woman in a lesser position of power (Wood, 1994).

In comparison to Isariyawongse (2001), a decade later, Mastripieri (2012) suggested both men and women in the relationship can be dominating, and it is equally common to see dominating women in the relationship as men. Dominating individuals often have a tendency to be with other individuals who are significantly less dominating (Mastripieri, 2012). Mastripieri explained, “Dominating people avoid people with strong opinions and self-confidence who will challenge them, and they are instead attracted to those who will allow them to control” (p. 4). Additionally, Mastripieri suggested the person being dominated in the relationship will have low self-esteem and a passive personality, often coming from a background where the environment was controlling. Both Isariyawongse (2001) and Mastripieri (2012) agreed the dominant one in the

relationship has a larger amount of control of the relationship and other elements common to the relationship, including, but not limited to, sex, friendships, or money.

Verbal Abuse and Humiliation

Verbal abuse and humiliation are also more frequent in couples who experience aggression. Verbal abuse and humiliation are often referred to as emotional abuse; however, unlike physical abuse, the people involved (either doing or receiving) may not realize such abuse is occurring (Bogdanos, 2015). Bogdanos (2015) suggested verbal abuse and humiliation are often more harmful than physical abuse because of its ability to weaken what an individual thinks about himself or herself. Verbal abuse and humiliation can happen between various types of relationships: parent and child, husband and wife, boyfriend and girlfriend, and between friends (Bogdanos, 2015). The abuser often projects his or her attitudes, actions, or words onto the other individual in the relationship "usually because they themselves have not dealt with childhood wounds that are now causing them to emotionally harm others" (Bogdanos, 2015, p. 2).

Development of Dating Relationships

Early adulthood, roughly the end of adolescence through the mid-twenties, is a time of limited certainty of one's own future which can influence the nature and security of the commitment one has with an intimate or dating partner (Arnett, 1998; Jamison & Ganong, 2011). This kind of relational ambivalence or insecurity can be associated with relational aggression. Relational aggression can manifest in a variety of nonphysical forms, including psychological, verbal, social, and emotional, and result in personal

distress, anxiety, depression, substance use, reduced self-esteem, and avoidant coping (Arriaga & Schkeryantz, 2015; DiBello, Preddy, Overup, & Neighbors, 2017; Shepher-McMullen, Mearns, Stokes, & mechanic, 2015; Straus, 2005). Verbal and symbolic aggression has higher incidence among college-aged couples with no children, when compared with older couples with children in the household (Shook, Gerrity, Jurich, & Segrist, 2000). For example, Bookwalla and Zdaniuk (1998) found undergraduate college students who scored higher on insecure attachment with preoccupation with their partners (rather than preoccupied of relationships) reported more relationship aggression. Less known is the relationship between adult attachment style and electronically-mediated aggression among underage college students (Reed et al., 2015; Reed et al., 2016).

Dating Aggression

Dating aggression among teens. A survey of a representative sample of adolescents indicated 53% of girls aged 13 and 83% of 16 year-old-girls have had sexual experiences (Kaestle, Morisky, & Wiley, 2002). However, even in the context of first dating, love and violence are not always mutually exclusive. In fact, an alarming proportion of adolescent's report being abused by their romantic partners (Silverman, Raj, Mucci, & Hathway, 2001). Additionally, the U.S. Department of Justice (2001) found females between the ages 16-24 are more vulnerable to intimate partner violence than any other age group at a rate that triples the national average. The new generation is readily exposed to and involved in activities that can be risk factors for the development of aggressive relationship behaviors, such as substance use, high levels of stress (Alatupa

et al., 2011; Archer & Coyne, 2005; Attewell & Fritz, 2010; Huesmann, 2014). Across the studies (Alatupa et al., 2011; Archer & Coyne, 2005; Attewell & Fritz, 2010; Huesmann, 2014) included in this review, on average, one-in-four women (24%) and one-in-five men (19.4%) experienced physical violence in their intimate relationships. The overall pool of individuals who experienced physical violence in their relationships was 22.5% (Alatupa et al., 2011; Archer & Coyne, 2005; Attewell & Fritz, 2010; Huesmann, 2014). The prevalence rates of physical violence in intimate relationships for both males and females widely range depending on the group under study (Alatupa et al., 2011).

Raskauskas and Stolz (2007) observed early adolescent students typically choose romantic partners who have similar interests in the things they consider attractive and appealing. During the early adolescence stage and also, in some cases, in the middle adolescence stage, the choices of potential partners may not always lead to actual interaction between the two individuals. However, when the interactions do start to occur, they are generally weak attempts at establishing some sort of romantic relationship through texts, social media networks, or phone calls. Studies have also shown that a potential partner normally has more interest in the relationship than the other partner does. As a result, these relationships do not usually allow for an open dialogue between the two regarding their desired expectations or feelings, and, therefore, they are rarely romantically sustainable relationships (Alatupa et al., 2011; Archer & Coyne, 2005; Attewell & Fritz, 2010; Blais et al., 2008; Huesmann, 2010).

Usually, as the students age, the number of opposite-sex friends increases. This interaction with members of the opposite sex also allows students to take note of behaviors and attitudes of the other sex (Alatupa et al., 2011). Therefore, students develop a more comfortable feeling around the opposite sex and can begin to engage with them. Most of these interactions are not intimate and usually focus on normal social settings, such as college events, parties, and breaks in between classes. The focus of the individuals in the affiliation phase is on developing a companionship, rather than on intimacy (Alatupa et al., 2011).

Companionship is something that defines the friendship even though some teenage individuals, especially those in early adolescence, sometimes believe it to be a romantic relationship (Attewell & Fritz, 2010). Through the development of a companionship, the students or the young adults have the opportunity to develop trust and confidence without the exclusivity of a romantic relationship or any such label. For the girls in the middle adolescence stage, physical characteristics in their selection of a mate gives way to personality and character traits, such as sense of humor, trust, kind heartedness, good listening skills, and social appeal (Blais et al., 2008). The behavior of these young adults during the affiliation stage can be best described by awkwardness. The students begin to learn the process of interacting with the opposite sex in hopes of a romantic relationship (Alatupa et al., 2011; Archer & Coyne, 2005; Attewell & Fritz, 2010; Blais et al., 2008; Huesmann, 2010).

Dating aggression as a contemporary problem among college students. Dating aggression among adult students in community college or university settings is a contemporary problem that has begun to receive more national attention. Researchers have highlighted risk factors for dating aggression among this population (Kaukinen, 2014; Littleton, 2014). Littleton (2014) suggested all stakeholders have a responsibility to understand the risk factors for aggression among college students.

Acts of aggression are common among couples who are dating during the emerging adulthood stage, a developmental period covering ages 18 to 25 (Bookwala & Zdaniuk; 1998; Dutton et al., 1994; Woodin, Calderia, & O'Leary, 2013). Woodin et al. (2013) noted that highly aggressive emerging adult couples differed from lower aggressive and nonaggressive couples by having weaker relationship bonds, the females reported less satisfaction with the relationship and more depression, while the males in these couples also expressed attitudes that where more accepting of aggression. This developmental period often is a time when identity exploration and increased risk-taking occur (Arnett, 2000). Additionally, during this developmental period, about one-third of dating couples reported engaging in acts of physical aggression, such as shoving or slapping (Chan et al., 2008; Lewis & Fremouw, 2001).

More often, signs of psychological forms of aggression tend to be most common among this age group. For example, Scott and Straus (2007) found more than half of male and female college students reported engaging in "minor psychological aggression (e.g., insulting and yelling) against a dating partner, while just under one-quarter of these

students admitted to committing more severe forms of psychological aggression (destroying others property or threatening" (p. 860).

Prather et al. (2012) focused on romantic relational aggression among emerging adult college students. Prather et al. sampled 260 college student participants between the ages of 18 and 25 who reported they had been in a romantic relationship during the past year. In Prather et al.'s study, the students completed measures of romantic relational aggression, sex role attitudes, acceptance of couple violence, and trait anger. Prather et al. found acceptance of violence was the key predictor of perpetration of romantic relational aggression after adjusting for gender and trait anger.

Draucker and Marsolf (2010) examined retrospective reports by emerging adults regarding their aggressive dating behavior through electronic media when they were adolescents. The authors found several purposes for using electronic media in a relationship; for instance, an individual's attempts to reconnect with a partner after a violent encounter or break-up to limit the partner's access to that individual (e.g., an individual turns off a cell phone so that the partner cannot contact him or her) to control or monitor the whereabouts of the partner and to argue.

Electronically-mediated dating aggression may exist along with other forms, such as physical aggression, in dating relationships (Bennett et al., 2011). Electronic forms of dating aggression are known to be risk factors for negative effects on well-being, including increased depression, anxiety, social isolation, and impaired performance (Hinduja & Patchin, 2007). In addition, the occurrence of nonphysical forms of dating

aggression also pose a higher risk for later incidences of physical aggression within a relationship (Capaldi & Crosby, 1997; Prather et al., 2012). Physical aggression between partners is often associated with negative outcomes for all involved (Capaldi & Crosby, 1997). The negative outcomes for both children and adults could range from mental and physical health problems to reduced work productivity and cognitive abilities (Rhoades et al., 2010).

Electronic Media Use

Much of the research on electronically-mediated dating aggression has pertained to young teens and adolescents. For example, according to Piitz and Fritz (2009), qualitative researchers studying dating aggression through electronic means among adolescents identified five forms of dating aggression that are present across five forms of electronic media. The five forms of dating aggression are stalking, relational aggression, monitoring, controlling or domineering behaviors, and verbal or emotional aggression. The five forms of electronic media are social networking websites, instant message, e-mail, text, and telephone (Piitz & Fritz, 2009).

An example of using electronic media for stalking is a frequent rate of sending instant messages to the partner, which then reaches a high level of annoyance for the recipient. Social networks that share information with known and unknown others can become a dangerous tool for relational aggression in a dating relationship (Casper & Card, 2017). The goal of relational aggression is to disrupt the victim's social relationships with others by spreading false rumors, sharing hurtful information, attacking

the victim's reputation (Archer & Coyne, 2005; Casper & Card, 2017). Monitoring can be defined as the acts of a partner to keep track of the counterpart's contacts and messages others through social media (Archer & Coyne, 2005). Dominating behavior is the restriction that a partner poses on the counterpart in making friends and communicating other people. Other than practically restricting, even asking the partner not to contact someone or asking to contact someone counts as controlling or dominating behavior. Verbal and emotional aggression is the act of insulting or swearing at the partner through social media (Attewell & Fritz, 2010).

Draucker and Marsolf (2010) examined retrospective reports by emerging adults regarding their behavior of dating aggression through electronic media when they were adolescents. Only the last two purposes were considered aggressive by the authors. Electronic aggression and dating aggression among adolescents are related to an assortment of psychosocial and psychological difficulties (Hinduja & Patchin, 2007; Li, 2007; Temple et al., 2016).

By contrast, little research exists regarding emerging adults to understand dating aggression that involves electronic media, such as through social media networks, e-mails, text messaging, instant messaging, or chat rooms. Bennett et al. (2011) surveyed college students regarding their experiences with electronic aggression with associates and intimate (dating) partners. The researchers inquired about motivations and other risk or protective factors (Bennett et al., 2011). Bennett et al. found both male and female university students reported electronic victimization by both friends and dating partners,

with males reporting being victimized more frequently than perpetrating. Similarly, females reported lower perpetration and higher victimization, but mostly with friends. The most common motivations for electronic aggression were jealousy and insecurity (Bennett et al., 2011). The next most common motivations were different for males and females: males reported humor, while females reported emotional distress, as motivations (Bennett et al., 2011). Social support and ability to regulate self emotions were protective factors (Bennett et al., 2011).

Borrajo, Gamez-Guadix, and Calvete (2015) surveyed college students between the ages of 18-30. More than half of the students reported being victims of cyber dating abuse during the previous six months. They also found that most of this kind of electronic aggression was related to jealousy. Further, online cyber aggression was positive related to occurance of offline dating aggression. Kellerman, Margolin, Borofsky, Baucom, and Ituuralde (2013) also found that while jealousy and insecurity were common motivations for electronic perpetration among emerging adults, followed by humor for males and negative emotions among females. They also found that negative family enviornments were related to electronic aggression.

Role of Electronic Media

The new generation is more connected to the electronic media than any other generation of the past (Bennett al., 2011). Therefore, electronic media also have become an important part of relationships with the development of applications like Snapchat, a messenger for sharing texted pictures and messages instantaneously. Electronic media

have become a modern phenomenon that has redefined human social communication and interactions (Kellerman et al., 2013). Young adults use electronic media often and for almost every form of communication. This media ultimately shaped how young adults think of themselves, especially as it relates to their relationships (Brown, 2006; Kellerman et al., 2013; Padilla-Walker et al., 2010). The most common goal of communications that takes place through electronic media is to reach and stay in touch with those whom the individuals already know (Blais et al., 2008; Gross, 2004). Keeping this in mind, communications through electronic media are presented as a pleasant experience and also as a means of provocative social connections through social network websites and applications (Bennett et al., 2011; Giumetti & Kowalski, 2016).

Media Violence and Aggression

Observation of violence in media stimulates aggressive behavior, sometimes by priming aggressive scripts and schemas (Anderson & Bushman, 2018; Anderson & Huesmann, 2003). Other researchers devoted to the influence of media on aggression suggested exposure to media aggression or violence shows a direct relationship to aggressive behaviors (Anderson & Bushman, 2002; Anderson & Huesmann, 2003; Martins & Weaver, 2019; Prot, Anderson, Barlett, Coyne, & Saleem, 2017; Rosenthal, 1986). Anderson and Bushman (2002) found consistency of results regardless of media type. Huesmann and Eron (1986) conducted a 3-year study regarding the relationship between aggression and media and how children are affected. In a 15-year follow up study, Huesmann et al. (2003) found children who lived in countries that were not

viewers of large amounts of violent programming were less aggressive during their emerging adulthood stage; however, in the United States, both boys and girls who had been high violence viewers in childhood behaved significantly more aggressively in their emerging adulthood stage (Anderson & Huesmann, 2003). Researchers have determined exposure to violence in the media predicts other risks for aggressive behaviors; for example, watching violent movie clips often increases aggressive thoughts (Anderson & Dill, 2000; Anderson & Huesmann, 2003; Bushmann, 1998).

College Students and Electronic Aggression in Relationships

Bennett et al. (2011) surveyed college students about their experiences with electronic aggression with associates and intimate (dating) partners. The researchers also inquired about motivations and other risk or protective factors. Bennett et al. found both male and female university students reported electronic victimization, with males reporting being victimized more frequently than perpetrating, by both friends and dating partners. Similarly, females reported lower perpetration and higher victimization, but mostly with friends. The results revealed the most common motivations for electronic aggression were jealousy and insecurity. The next most common motivations were different for males and females: Males reported humor, while females reported emotional distress as motivations (Bennett et al., 2011). Social support and ability to regulate self emotions appeared to be protective factors (Attewell & Fritz, 2010).

Early adulthood, roughly the end of adolescence through the mid-twenties, is a time of limited certainty of one's own future (Arnett, 1998), which can influence the

nature and security of the commitment one has with an intimate or dating partner (Jamison & Ganong, 2011). This kind of relational ambivalence or insecurity can be associated with relational aggression. For example, Bookwalla and Zdaniuk (1998) found undergraduate college students who scored higher on insecure attachment with preoccupation with their partners (rather than preoccupied of relationships) reported more relationship aggression. However, no researchers have analyzed attachment styles and electronically-mediated dating aggression.

Summary

Although intimate partner violence may be found in all age groups, occurrence is on the rise among young adults in the emerging adulthood stage of lifetime development (Kaukinen, 2014; Littleton, 2014). Electronic media offer new avenues for dating aggression, such as through e-mails, texts, and posts on websites (Kellerman et al., 2013). This review of the available literature showed a gap in understanding of dating aggression using electronic media among young or emerging adults. The limited research in this area has largely pertained to young teens and adolescents. Several key findings emerged. Piitz and Fritz's (2009) qualitative research disclosed five forms of dating aggression (i.e., stalking, relational aggression, monitoring, controlling or domineering behaviors, and verbal or emotional aggression), which are present across five forms of electronic media (i.e., social networking website, instant message, e-mail, text, and telephone). Retrospective accounts from young adults regarding their adolescent experiences identified various motivations for the use of electronic media in dating

aggression. Consequences of electronically-mediated dating aggression among adolescents related to an assortment of psychosocial and psychological difficulties (Hinduja & Patchin, 2007; Li, 2007).

By contrast, little research existed to understand dating aggression that involves electronic media among young or emerging adults. Researchers have identified the most common motivations are jealousy and insecurity, with emotional distress being a more common motivation for female perpetrators (Bennett et al., 2011). However, little is known about dating aggression using electronic media among this developmental group.

One variable found to be related to dating aggression (but not specific to employing electronic media) among undergraduate college students is adult attachment style. Bookwalla and Zdaniuk (1998) found those emerging adults who scored higher on insecure attachment with preoccupation (high anxiety) with their partners (rather than preoccupied of relationships) reported more relationship aggression. However, no researchers have analyzed attachment styles and electronically-mediated dating aggression. Similar relationships have been noted since Bookwalla and Zdaniuk's earlier work, many of were published after I began to collect data for my research study (Godbout, Daspe, Lussier, Sabourin, Dutton, & Hebert, 2017; Kaufman-Parks, DeMaris, Giordano, Manning, & Longmore, 2018; Wright, 2017).

In an effort to respond to these gaps in the literature and expand understanding of the possible associations between attachment style and experiences of electronically-

mediated dating aggression among emerging adult college students, I applied a quantitative, causal-comparative survey study to explore three key research questions.

Research Question 1. Are there between-group differences among first-year college students with different adult attachment styles (secure, preoccupied, fearful, dismissing) on reported experiences of dating aggression using electronic media?

Research Question 2. Among first-year college students who report experiences with dating aggression using electronic media, are there between-group differences among college students with different adult attachment styles (secure, preoccupied, fearful, dismissing) on situational triggers (e.g., major disagreements, not feeling comforted when feeling down) for dating aggression using electronic media?

Research Question 3. Among first-year college students who report experiences with dating aggression using electronic media, are there between-group differences among those with different adult attachment styles on goals (stalking, relational aggression, monitoring, controlling/domineering, verbal/emotional aggression) of dating aggression using electronic media they have experienced?

Chapter 3 includes details of of the research design and methodologies, such as sampling, instrumentation, procedures, planned analyses, and ethical considerations. In Chapter 4, I present results of the analyses. Chapter 5 includes a summary and discussion of the results.

Chapter 3: Research Method

Although intimate partner violence may be found in all age groups, occurrence is on the rise among young adults who are said to be in the emerging adulthood stage of lifetime development (Kaukinen, 2014; Littleton, 2014). Electronic media offer new avenues for dating aggression, such as through e-mails, texts, and posts on websites (Kellerman et al., 2013). My review of the available literature showed a gap in understanding the relationship between dating aggression and the use of electronic media among young or emerging adults. The limited research in this area pertained to young teens and adolescents. Several key findings emerged; for example, Piitz and Fritz (2009) disclosed five forms of dating aggression (stalking, relational aggression, monitoring, controlling or domineering behaviors, and verbal or emotional aggression), which are present across five forms of electronic media: social networking website, instant message, e-mail, text, and telephone.

Retrospective accounts from young adults regarding their adolescent experiences indicated various motivations for the use of electronic media in dating aggression, such as when an individual attempts to reconnect with a partner after a violent encounter or breakup to limit the partner's access to that individual (e.g., an individual turns off a cell phone so that the partner cannot contact him or her), to control or monitor the whereabouts of a partner and to argue (Draucker & Martsolf, 2010). The consequences of electronically-mediated dating aggression among adolescents are related to an assortment of psychosocial and psychological difficulties (Hinduja & Patchin, 2007; Li, 2007).

Little research exists on dating aggression that involves electronic media among young or emerging adults. The most common motivations are jealousy and insecurity, with emotional distress being a more common motivation for female perpetrators (Bennett et al., 2011). However, little is known regarding the relationship between dating aggression and use of electronic media among this developmental group.

Another variable related to dating aggression, but not specific to electronic media, among undergraduate college students is adult attachment style. Bookwala and Zdaniuk (1998) found that emerging adults who scored higher on insecure attachment with preoccupation with their partners, rather than avoidance of relationships, reported more relationship aggression. However, no researchers have analyzed the relationship between attachment styles and electronically-mediated dating aggression. In this chapter, I detail the research design and methodologies, including sampling, instrumentation, procedures, planned analyses, and ethical considerations. The chapter closes with a summary and transition to Chapter 4.

Research Questions and Hypotheses

To respond to gaps in the literature and expand understanding of the possible associations between attachment style and experiences of electronically-mediated dating aggression among emerging adult college students, I used three research questions to guide this study. I considered experiences of both victims and perpetrators of electronically-mediated dating aggression.

RQ1: Are there between-group differences among first-year college students with different adult attachment styles (secure, preoccupied, fearful, dismissing) on reported experiences of dating aggression using electronic media?

H_o1: There are no between-group differences for first-year college students who differ in adult attachment style (as measured by the Experiences in Close Relationships Scale Revised [ECR-R]) on experiences of dating aggression using electronic media (as measured by the Partner Electronic Aggression Questionnaire [PEAQ]).

H_a1a: There are between-group differences for first-year college students who differ in adult attachment style (as measured by the ECR-R) on experiences of electronically-mediated dating aggression using electronic media (as measured by the PEAQ).

H_a1b: First-year college students with fearful insecure attachment style (as measured by the ECR-R) report more experiences as perpetrators of electronically-mediated dating aggression (as measured by the PEAQ), while those with preoccupied attachment style report more experiences as victims of electronically-mediated dating aggression.

RQ2: Among first-year college students who report experiences with dating aggression using electronic media, are there between-group differences among college students with different adult attachment styles (secure, fearful, preoccupied, dismissing) on situational triggers (e.g., major disagreements, not feeling comforted when feeling down) for dating aggression using electronic media?

H_o2: Among first-year college students who report experiences with dating aggression (as measured by the PEAQ; PEAQ > 0), there are no between-group differences in situational triggers for dating aggression using electronic means, as measured by the Situational Triggers of Aggressive Responses (STARS) scale.

H_a2: Among first-year college students who report experiences with dating aggression (as measured by the PEAQ; PEAQ > 0), there are between-group differences among students with different adult attachment styles on situational triggers for dating aggression using electronic means, as measured by the STARS scale.

RQ3: Among first-year college students who report experiences with dating aggression using electronic media, are there between-group differences among those with different adult attachment styles on goals of relational aggression (e.g., stalking, monitoring, controlling/domineering, verbal/emotional aggression) for dating aggression using electronic media they have experienced?

H_o3: Among first-year college students who report experiences with dating aggression (as measured by the PEAQ; PEAQ > 0), there are no between-group differences among students with different adult attachment styles on goals of relational aggression (e.g., stalking, monitoring, controlling/domineering, verbal/emotional aggression), as measured by the Partner Aggression Technology Scale (PATS), for dating aggression using electronic media they have experienced.

H_a3: Among first-year college students who report experiences with dating aggression (as measured by the PEAQ; PEAQ > 0), there are between-group differences

among students with different adult attachment styles on goals of relational aggression (e.g., stalking, monitoring, controlling/domineering, verbal/emotional aggression), as measured by the PATS, for dating aggression using electronic media they have experienced.

Quantitative Methods

Through this quantitative, causal-comparative survey study, I determined whether significant differences exist between adult attachment styles for first-year college students' dating aggression, situational triggers, and goals. In the process of quantitative research, data are collected via a number of means, but each has to follow structured procedure for statistical analysis (Kothari, 2011). This statistical analysis helps the researcher assess what the differences are among the dependent variables and the independent variables (Kothari, 2011). To answer the research questions, I used ANOVAs and MANOVAs to assess whether dating aggression using electronic means differed as a function of the independent variable, adult attachment style group. The dependent variables corresponded to experiences of dating aggression, situational triggers, and goals.

Research Design and Approach

In this study, I used a quantitative, causal-comparative survey design. Quantitative research processes are used to quantify the results and the conclusion while testing the hypotheses (Howell, 2010). Creswell (2009) noted that the quantitative method is most applicable for researchers who seek to establish factors or variables that

affect outcomes. The experimental approach for this study did not follow a true experimental design. There was no systematic manipulation of the independent variable, and participants were not randomly assigned to an experimental condition (see Tabachnick & Fidell, 2012). Instead, I used a causal-comparative study design (see Bordens & Abbott, 2008). Participants were grouped based on their preexisting self-reported attachment style. There was neither systematic manipulation of the independent variable nor random assignment to the condition.

In addition, I employed a survey technique to collect the data needed to classify participants on the independent variable and to examine between-group differences on the dependent variables. Surveys are typically the best way to contact people for larger sample sizes (Kothari, 2011). Using an online survey, I sampled first-year adult college students to examine their self-reported adult attachment styles and factors related to electronically-mediated dating aggression.

Sampling and Procedures

I performed a power analysis to establish the minimum sample size I would need to achieve adequate power for my planned one-way MANOVAs and ANOVAs to test my research hypotheses. Based on an a priori power analysis using G*Power 3.1.7 and assuming a medium effect size of .25 (see Cohen, 1988), a power of at least .80, and an alpha level of .05 for data analysis using a multiple analysis, I planned for a minimum sample size of 180 to achieve desired statistical power. However, my goal was to have an estimated 300 students who provided useable data.

Data Collection Procedures

After receiving approval from Walden University's Institutional Review Board (IRB 01-04-17-0240585) and permissions from administrators at community partners, I placed flyers (see Appendix A) on bulletin boards at school locations to invite students to participate in the study. The flyers contained information about the study and information about the website where students, if interested in participating, could find more information about the study and the survey. All information required for informed consent, such as the study's purpose risks and benefits, were presented on page 1 of the online site (see Appendix B). Individuals were informed how they could contact me to receive additional information about the study if they still had questions before deciding to participate, and were informed regarding how to contact the Walden University IRB. The participants were also informed of their right to exit the survey at any point without any consequences if they did not want to continue. The survey contained a demographics questionnaire (see Appendix B), and the following instruments: Experiences in Close Relationships Scale Revised (ECR-R), Partner Electronic Aggression Questionnaire (PEAQ), Partner Aggression Technology Scale (PATS), and Situational Triggers of Aggressive Responses (STARS).

Instrumentation

Demographic questionnaire. The first section of the survey contained demographic questions that were developed by me, such as gender, age, race, relationship status, education level, and location. Information from the demographic questionnaire

was used not only to describe the sample, but also to identify individuals who did not meet inclusion criteria for this study (i.e., a first-year college student between 18 and 25 years of age). Appendix B presents the demographic questionnaire.

Adult attachment style. The ECR-R (Fraley, Waller, & Brennan, 2000) allowed me to classify participants on the independent variable, adult attachment style. The 36-item instrument is used to measure levels for anxiety and avoidance. The first 18 items correspond to attachment-related anxiety. The second 18 items correspond to attachment-related avoidance. Composite (mean) scores are generated for the two measurements by taking averages of the 18 items. According to Gleeson and Fitzgerald (2014), participants are classified into four attachment style groups (secure, fearful, preoccupied, dismissing) based on their co-classification (low, high) on the two ECR-R subscales: avoidance and anxiety. Using this method, those whose scores are low (below the median) on both the avoidance and anxiety scales are classified into the secure adult attachment style group. Those who are high (above the median) on avoidance and low on anxiety are classified into the dismissing attachment style group. Those who are low on avoidance and high on anxiety are classified as having fearful attachment style, and those who are high on both was selected because the ECR-R was reliable instrument for identifying attachment styles. Wei, Mallinckrodt, Larson, and Zakalik (2005) administered the ECR-R to a large sample of college students. They reported excellent reliability for both subscales, $\alpha = .92$ (anxiety) and $\alpha = .93$ (avoidance).

The Partner Electronic Aggression Questionnaire. The PEAQ (Preddy, 2015) was used to measure electronic aggression victimization and perpetration within romantic relationships. The PEAQ was developed as a psychometrically sound instrument of electronic aggression that allows a person to examine how electronic aggression relates to psychosocial factors and IPV for both victims and perpetrators. The PEAQ has four subscales including: private electronic aggression victimization, private electronic aggression perpetration, public electronic aggression victimization, and public electronic aggression perpetration. For each subscale to be considered reliable, they each must show a Cronbach's alpha (α) of at least 0.70, and the average inter-item correlation required is to be at least 0.3 for each factor (Kline, 1999). The subscales demonstrated validity with psychological aggression perpetration, while public and private perpetration, demonstrated discriminant validity with self-reported openness and negotiation of each subscale (Preddy, 2015). Preddy (2015) suggested that the subscales are valid on the PEAQ because the premises are true therefore the conclusions must also be true. The measure asks participants to rate how often the individual and his or her partner have engaged in various types of aggressive behaviors involving electronic communication and social media during the past 6 months. The PEAQ includes 29 victimization-perpetration item sets for a total of 58 items. Items are rated on a 7-point Likert scale with 0 = *Never,* 1 = *Once*, 2 = *Twice,* 3 = *3 to 5 times*, 4 = *6 to 10 times*, 5 = *11 to 20 times*, and 6 = *More than 20 times* (Leisring & Giumetti, 2014). Test-retest reliability statistics were acceptable for the scale to be .33 (Robinson, Shaver, & Wrightsman (1991). The

total scores for the two victimization scales were used to define the individual's victimization experiences, and the total scores for the two perpetration scales were used to define the individual's perpetration experiences.

Situational Triggers of Aggressive Responses. STARS (Lawrence, 2006), a unidimensional scale measuring a number of triggers, allows participants to self-report types of events that make them feel aggressive. The STARS consist of 22 questions corresponding to situations in which a participant may have felt aggressive. The questions are based on recent incidences in which participants had produced aggressive feelings. The STARS scale has 10 questions that reflect sensitivity to frustrations and 12 questions that reflect sensitivity to provocations (Lawrence, 2006). Lawrence (2006) reported individuals are asked to rate how aggressive each situation makes them feel on a 5-point scale ranging from 1 (*not aggressive*) to 5 (*very aggressive*). Individuals reporting higher ratings on Questions 1, 2, 3, 4, 6, 11, 13, 16, 19, 20, and 22 are prone to feeling aggressive in response to provocation from other individuals, while individuals reporting higher on questions not listed are prone to feel more aggressive because of their frustrations (Lawrence, 2006). I calculated separate scores for each participant for provocations and for frustrations. Twelve of the items measure propensity to feel aggressive in response to provocation from another individual. Ten of the items measure propensity to feel aggressive in response to frustrations. Lawrence (2006) administered the STARS to a sample of 145 undergraduate students and found Cronbach's alpha reliability statistics were acceptable for both constructs, $\alpha = .80$ (frustrations) and $\alpha = .82$

(provocations). The results of the study also indicated good levels of convergent validity for the STARS scale in relation to trait aggression and personality variables associated with regression.

Partner Aggression Technology Scale (PATS). Goals of dating aggression were measured with the PATS (Piitz & Fritz, 2009). The PATS is a 130-item questionnaire that measures victimization and perpetration across five dimensions—stalking, relational aggression, monitoring, emotional/verbal aggression, and dominance/controlling behaviors—of psychological partner aggression. Likert-scaled items ranged from 0 (*never)* to 3 (*very often*). Sample items from this questionnaire include, "Told your partner they would not text message their family" and "Instant messaged your partner something to hurt your partner's feelings on purpose." Mean values will be calculated for each participant for each of the five dimensions. Past studies have demonstrated the PATS to be a reliable instrument, with Cronbach's alpha of α=.80 (Attewell & Fritz, 2010).

Data Analysis

Data were compiled and analyzed using SPSS Version 24.0 for Windows. I analyzed sample demographics and categorical variables by tabulating frequencies and percentages. I used descriptive statistics, such as mean and standard deviation, to assess the continuous variables (Howell, 2010). Data were screened for accuracy, missing responses, and outlying responses. Outliers were interpreted via calculation of standardized values, or *z*-scores. Z-scores falling outside of the range $\pm$ 3.29 are

considered outliers (Tabachnick & Fidell, 2012). I also screened continuous variables to make sure they met the assumptions of the planned statistical analyses. A description of these procedures is in the section on Between-Group ANOVA.

Reliability

I conducted Cronbach's alpha test of internal consistency and reliability on each survey subscale. Cronbach's alpha provides mean correlation coefficients between each pair of items and the corresponding items in the subscale (Brace, Kemp, & Snelgar, 2006). Cronbach's alpha coefficients were evaluated using guidelines outlined by George and Mallery (2010), where $\alpha > .9$ *Excellent*, $\alpha > .8$ *Good*, $\alpha > .7$ *Acceptable*, $\alpha > .6$ *Questionable*, $\alpha > .5$ *Poor*, and $\alpha \leq .5$ *Unacceptable*.

Between-Group ANOVA

I used an ANOVA, where there was only one dependent variable, or a MANOVA, where there was more than one dependent variable, as the primary statistical analysis for each hypothesis to test all research questions and hypotheses related to between-group differences based on adult attachment styles. ANOVA and MANOVA are useful statistical techniques that researchers can effectively use to examine the differences between two or more group means where there is either one or more than one continuous dependent variable. Each compares variability accounted for by between-group variables with within-group variability (Tabachnick & Fidell, 2012). The continuous dependent variables corresponded to experiences of dating aggression (victimization, perpetration), situational triggers (provocation, frustrations), and goals.

The independent grouping variables corresponded to attachment styles—secure, fearful, preoccupied, dismissing. Individuals were assigned to these groups by using the ECR-R.

Prior to running the ANOVA, I assessed the assumptions of normality and homogeneity of variance. Normality ensures that the continuous dependent variables are following a bell-shaped distribution. I assessed the assumption of normality using evaluations of skewness and kurtosis. Homogeneity of variance checks that the data for the two groups on the independent variable (attachment style) have equal variance. I assessed the assumption for homogeneity of variance with Levene's test. The degree of the differences between the group means was measured by the *F* value, which then was evaluated to determine statistical significance (Johnson & Bhattacharyya, 2006; Wetcher-Hendricks, 2011; Yin, 2009). A large *F* value represents that the factor accounts for a higher amount of the variability in the dependent measure than would be expected by chance (Johnson & Bhattacharyya, 2006). Alpha for rejection of the null hypothesis was set at .05. I also assessed assumptions for each MANOVA as part of conducting the analysis itself, check for multivariate outliers, linearity, multicollinearity, and equality of covariance matrices.

Threats to Validity

Biases tend to influence the quality of the research results that need to be critically analyzed for effectiveness (Yin, 2009). My choices of methods to recruit participants and for selecting measurement instruments were guided by my goal of reducing any researcher or measurement bias. Because the participants volunteered to take part in the

study, selection bias was possible. I chose measurement instruments based on their conceptual relationships to the variables under study, as well as their demonstrated reliability and validity. However, when administering several questionnaires in sequence, there always is the risk of possible carryover effects from exposure to the previous items. Further, the possibility exists that respondents may guess the purpose of the study or the hypotheses. An additional risk is that respondents may not answer truthfully, such as under- or overreporting experiences with dating aggression and other behaviors of interest. Generalization of findings was limited in that respondents were drawn from students from a sample of colleges and universities located within one limited geographic area in the United States.

Ethical Considerations

The six main ethical issues I considered throughout the current study were informed consent, voluntary participation, confidentiality, anonymity, communication of the results, and the potential for harm. Ethical areas are interdependent and overlap each other as well (Rolfe, 2006; Steinke, 2004). However, as the researcher, I took note of all of these ethical issues and made sure they were reduced and prevented as much as practically possible while conducting the current study.

Informed Consent and Voluntary Participation

Informed consent is an important component of the current study, and it is important in any research, as it is considered an integral part of the research process. Researchers use the consent form to educate the research participants regarding the study

to help them make an informed decision concerning their participation in the study. The research participants also provided their voluntary informed consent freely and without any force or coercion. For the current study, I implemented some practical steps to ensure that all the participants were readily educated about the study so that they could make an informed decision (Rolfe, 2006; Steinke, 2004).

Confidentiality and Anonymity

Confidentiality is an important component that requires focused attention within the research process (Rolfe, 2006; Steinke, 2004). I carefully considered confidentiality in the study for the quantitative phase. The quantitative sample included a purposeful selection of samples based on their knowledge of the central phenomenon. The selection ensured the confidentiality and privacy of the participants. There was no identifying information on the online survey and all participants were completely anomous. I only approached potential participants, as suggested by Creswell (2009), Rolfe (2006), and Steinke (2004).

In accordance with IRB and federal guidelines, I safeguarded all data and information to protect confidentiality. The safeguard measure for data storage was a locked file in my residence where the data will be retained securely for a period of 5 years after the research is completed. Electronic data files are password protected. Upon expiration of the 5-year retention period, I will permanently destroy all research-related information pertaining to this study in my possession.

Communication of Results

Communication of results of research are disseminated in various forms. The highest level of communicating the results of research is in a peer-reviewed professional journal, while some research is never communicated in the published version. I do plan to discuss my findings with the colleges and universities that allowed for the research and discuss possible ways in which my research can help develop strategies to combat electronically-mediated dating aggression among college students.

Potential for Harm

My research presented a moderate risk for potential harm of individuals that participated in my study as they may have experienced emotional discomfort when responding to questions on the survey instruments. However, the informed consent form provided information about resources if this should happen (The Dating Abuse Stops Here, a 24/7 confidential support service which can be contacted at 1-800-799-7233). The risk from disclosure of information from perpetrators and victims was minimized because respondents remained anonymous and no identifying information was collected from the participants.

Summary

In this chapter, I outlined the quantitative design, as well as the rationale for the use of this research model. In addition, a population and subsequent sample of interest were delineated, and procedures for the gathering of participant responses were specified. I also examined the statistical procedures used in addressing the hypotheses and included

a rationale for such analyses. Finally, I addressed threats to validity and ethical concerns, and outlined precautions to minimize any risk to participants. Chapter 4 includes the results of statistical analyses to evaluate the research questions and hypotheses for this study.

Chapter 4: Results

The purpose of this quantitative study was to examine the relationship between electronically-mediated dating aggression in current relationships, either as perpetrator or victim, and attachment style (secure, fearful, preoccupied, dismissing) among college-age young adults. The purpose of this study was to expand work by Piitz and Fritz (2009) to examine the patterns and goals of electronically-mediated dating aggression (i.e., stalking; relational aggression; monitoring; controlling or domineering; and verbal or emotional aggression) experienced by young emerging adults (see Arnett, 1998) in current relationships. Similar to findings of Bookwala and Zdaniuk (1998) regarding adult attachment style and relational aggression, I expected that undergraduate college students who scored higher on insecure attachment would report higher incidences of relational aggression via electronic media than those with secure attachment styles. My study was the only one that addressed electronic media use in dating aggression among college students with various adult attachment styles. Although there was a substantial amount of research completed that had a primary focus on adolescents and their use of electronic media and how it relates to dating aggression, my study expanded the work of Piitz and Fritz through examination of the patterns and goals of electronically-mediated dating aggression experienced by college students in current dating relationships.

This chapter presents the findings of the data analyses. Descriptive statistics were used to describe the characteristics of the participants, and I also evaluated assumptions for planned inferential analyses. The Cronbach's alphas are reported for the scales. I used

one-way MANOVAs and ANOVAs to test the research hypotheses. Significance was evaluated at the conventional level, $\alpha = .05$.

Data Collection

My sample was drawn from the pool of first-year college students between the ages of 18 and 25 from two 4-year universities in the Northeast corridor of the United States. Four groups emerged who differed on the independent variable, attachment style (secure, fearful, preoccupied, dismissing). The data were collected between January 2017 and December 2017. I had to repeat the recruitment of the first-year participants over the course of three semesters. Initially, I was approved to do research at one university but had to add an additional university with IRB approval. The additional university was needed to recruit the required number of participants. I had to connect with community partners and place flyers on bulletin boards to invite first-year students to participate in the study.

Participant Demographics

A total of 328 surveys were collected from first-year college students. Of these, 300 participants completed all requirements of the online self-report survey, 11 participants did not meet all inclusion criteria for the study, and 17 participants started but did not finish the online survey. There were no missing data among the final participants because I set up the online survey so that the participant had to complete each question before proceeding to the next. Completed returns from 300 participants were included for analyses.

Frequencies and percentages were used to describe the characteristics of the research sample. Table 1 presents a summary of participant demographics. Slightly more than half were males, and there was good representation across racial/ethnic groups. Most of the participants were part-time students, and most lived off campus.

Table 1

Demographics of the Research Sample

Variable	*n*	*%*
Gender		
Female	134	44.67
Male	166	55.33
Ethnicity		
American Indian or Alaska Native	43	14.33
Asian or Asian American	15	5.00
Black or African American	69	23.00
Hawaiian or Other Pacific Islander	24	8.00
Hispanic or Latino	77	25.67
Non-Hispanic White	68	22.67
Other	4	1.33
Enrollment status		
Full-time student	74	24.67
Part-time student	226	75.33
Living status		
Off Campus living alone	49	16.33
Off campus with roommate	6	2.00

(Table continues)

Variable	*n*	%
Off campus with significant others	114	38.00
On campus living alone	29	9.67
On campus with roommate	49	16.33
Parental home	53	17.67
What sexual orientation do you most identify with?		
Heterosexual	300	100.00
What is your current relationship status?		
Dating casually seeing different people at the same time	22	7.33
Dating exclusively	215	71.67
Engaged	53	17.67
Married	10	3.33
Where did you meet your current partner?		
Offline	185	61.67
Online	115	38.33
How long have you been in a relationship with your current partner?		
less than 6 months	100	33.33
6 months to 1 year	87	29.00

(Table Continues)

Variable	*n*	%
2 years or more	50	16.67
How committed do you feel to keeping your relationship with your current partner?		
Committed Completely	85	28.33
Committed	71	23.67
Committed somewhat	85	28.33
Neutral	47	15.67
Not committed at all	12	4.00

All participants identified themselves as heterosexual. Most participants were dating exclusively. Two thirds (185) of participants met their significant other offline. The length of relationships was distributed among groups from less than 6 months to 2 or more years. A little more than half were committed or committed completely to their relationships.

Data Analysis

The numerical data were collected and transferred into data files in Excel and SPSS Version 24.0 for Windows. Once the data were uploaded into SPSS, the variables and categorical information were coded.

Internal Reliability Checks

Cronbach's alpha values were examined for the series of items composing the scales. The value of the coefficients was interpreted through incremental thresholds

described by George and Mallery (2016), in which $\alpha \geq .9$ Excellent, $.9 < \alpha \geq .8$ Good, $.8 < \alpha \geq .7$ Acceptable, $.7 < \alpha \geq .6$ Questionable, $.6 < \alpha \geq .5$ Poor, and $\alpha < .5$ Unacceptable. The results for all the scales met the acceptable threshold, $< \alpha \geq .7$, as generally recognized in the social sciences. The Cronbach's alpha statistics are reported in Table 2.

Table 2

Internal Consistency for Scales

Scale	No. of Items	α
Anxiety (ECR)	18	.870
Avoidance (ECR)	18	.778
Victimization (PEAQ)	29	.964
Perpetration (PEAQ)	29	.967
Frustrations (STARS)	10	.841
Provocation (STARS)	12	.871
Goals of dating aggression (PATS)	42	.986

Data Cleaning

The data were double checked for accuracy for entries in the Excel and SPSS data files. No errors were found. There were no missing values because the online survey was constructed so that each question had to be answered before the next question was presented.

Classification for Independent Variable

The ECR-R was used to measure anxiety and avoidance scores. The composite scores were calculated by computing a mean rating of the respective 18 survey items that composed anxiety and avoidance. The participants were then sorted into high and low groupings by using the median as a point of reference. The median for anxiety scores was 3.50, and the median for avoidance scores was 4.00. Cases with scores falling at the median were randomly assigned to either the low or high group. There was no constraint that half would go into one group while the other half would go into the other. Table 3 presents the numbers of participants who fell into each of the classifications for adult attachment style.

Table 3

Classifications for Adult Attachment Style

Adult attachment style	*n*	%
Secure (low anxiety, low avoidance)	58	19.3
Fearful (high anxiety, low avoidance)	90	30.0
Preoccupied (low anxiety, high avoidance)	91	30.3
Dismissing (high anxiety, high avoidance)	61	20.3

Dependent Variables

Victimization and perpetration. The PEAQ was used to measure separate victimization and perpetration scores. The scores were calculated by computing the sum of the individual's ratings on the scale items, and then dividing the sum by the number of

items (29 per subscale) for the individual's scale score. Victimization scores ranged from 1.00 to 5.07, with *M* = 2.60 and *SD* = 1.17. Perpetration scores ranged from 1.00 to 4.90, with *M* = 2.44 and *SD* = 1.17. A Pearson product-moment correlation coefficient was computed to assess the relationship between victimization and perpetration. There was a positive correlation between the two variables, (*r(298)=.752*).

Frustrations and provocation. The STARS was used to measure frustrations and provocation scores. The scores were calculated by computing a mean of each individual's ratings for the respective survey items that composed frustrations (10 items) and provocation (12 items). Frustrations scores ranged from 1.00 to 5.00, with *M* = 3.15 and *SD* = 0.86. Provocation scores ranged from 1.42 to 5.00, with *M* = 3.34 and *SD* = 0.82.

Goals of dating aggression. The PATS was used to measure goals of dating aggression. The composite score was computed through the mean rating of the 42 items that composed the scale. Goals of dating aggression scores ranged from 1.07 to 7.57, with *M* = 4.03 and *SD* = 1.92. Table 4 presents the descriptive statistics for the scales.

Table 4

Descriptive Statistics for the Dependent Variables

Variable	M	SD	Skewness	Kurtosis
Victimization (PEAQ)	2.60	1.17	.38	-.88
Perpetration (PEAQ)	2.44	1.17	.55	-.94
Frustrations (STARS)	3.15	0.86	-.25	-.18
Provocation (STARS)	3.34	0.05	-.36	-.04
Goals of dating aggression (PATS)	4.03	1.92	.15	-.91

Data Screening

Outliers. I used the SPSS Explore function to produce the plots of the distribution of computed scores on the dependent measures. I checked for outliers by examining box plots for distributions of the scores for the dependent variables: histogram, Q-Q plots, and box plots (see Appendix D). I also checked the skewness and kurtosis values (see Table 4) and the Shapiro-Wilk test of normality, the test was statistically significant. No outliers were observed for the scores for the PEAQ Victimization, PEAQ Perpetration, STARS Frustration scale. Examination of the Q-Q plots, histograms, or kurtosis and skewness values did not alert me to any major departures from normality (Mertler & Vannatta, 2005).

There were a few outliers in the distributions of scores for the STARS Provocation and PATS composite scales, and these fell above the mean (see Q-Q plots, box plots, and histograms in Appendix E

). Because I had no reason to believe that these more extreme scores were due to measurement errors, I chose to look at them as representing more extreme members of the target population. I used the Winsorizing method (Clark, 1995) to keep the cases but to modify the scores' values to fall within the acceptable range. I changed the value of each outlier to the next lower (or higher) value that was not an outlier. Four values had to be changed that were outliers. I used these corrected distributions for all further analyses. Table 4 presents the descriptive statistics of each of the dependent variables, following any Winsorizing procedures.

There were a few outliers in the distribution of scores for PATS Goals of Dating Aggression subscales (see histograms in Appendix E). Because the distributions of the goals of dating aggression were so deviated from the normal distribution, I determined that I should transform each to a categorical variable from a continuous variable. I did so use a median split. Table 5 presents the descriptive statistics of each goal of dating aggression.

Table 5

Frequencies of Participants for Low or High Group for Each Subscale of the PATS

Goal of Dating Aggression	Mdn	Low n	High n
Stalking	4.06	149	151
Relational Aggression	3.55	135	165
Monitoring	3.26	147	153
Controlling/Domineering	3.87	153	147
Verbal Aggression	3.97	153	147

Evaluating Univariate and Multivariate Assumptions for the Inferential Analyses

Prior to running and interpreting the proposed ANOVAs and MANOVAs, the appropriate univariate and multivariate assumptions were tested. The assumption of univariate normality was assessed with the Shapiro-Wilk test and a Q-Q plot for each dependent variable. The univariate homogeneity of variance assumption was tested with a Levene's test. Mahalanobis distances were used to examine multivariate outliers. Variance inflation factors were used to examine multicollinearity (VIF values of less than 10 indicate no evidence for multicollinearity; Stevens, 2009). The Box's *M* test was used to evaluate equality of covariance. Results of these evaluations are reported for the tests of each research hypothesis.

Scores for the PEAQ Scales

Normality. The histograms for the victimization and perpetration subscales of the PEAQ did not appear to be heavily skewed in any direction (see Appendix D). The Q-Q scatterplots for normality did not deviate greatly from the trend lines (see AppendixD). In addition, the skewness and kurtosis were examined. George and Mallory (2010) stated that to meet the criteria for normality: skewness should be less than an absolute value of 2 and kurtosis less than an absolute value of 2. The skewness and kurtosis values for victimization and perpetration fell within the acceptable ranges for normality (see Table 6). The results of the Shapiro-Wilk test for normality were significant for victimization ($p < .001$) and perpetration ($p < .001$), suggesting that the data were not normal. However, Stevens (2009) suggested that sample sizes greater than 30 or more tend to approximate towards normality, even if the distribution appears to deviate from normality. Also, values for skewness and kurtosis for these variables did not suggest meaningful deviation from normal distribution of the scores.

Table 6

Skewness and Kurtosis for Victimization and Perpetration

Variable	Skewness	Kurtosis
Victimization (PEAQ)	0.38	-0.88
Perpetration (PEAQ)	0.55	-0.94

Univariate homogeneity. Levene's test was used to test the assumption of equal variances for each of the dependent variables. Separate Levene's tests for the PEAQ subscales indicated that there were some violations of this assumption for victimization scores (p = .025), but not for perpetration scores (p = .321).

Multivariate assumptions. Mahalanobis distances were used to examine multivariate outliers. After comparing the Mahalanobis distances to the criterion chi-square value, no multivariate outliers were found. Variance inflation factors were used to examine multicollinearity. Due to the VIF values being less than 10, there was no evidence for multicollinearity (Stevens, 2009). The findings for Box's M test for equality of covariance were not statistically significant (p = .220); therefore, the Wilks' Lambda test statistic will have to be reported for the MANOVA.

STARS

Normality. The histograms for the frustrations and provocation subscale scores for the STARS did not appear to be heavily skewed in any direction (see Appendix G). The Q-Q scatterplots for normality did not deviate greatly from the trend lines (see Appendix G). The skewness and kurtosis values for frustrations and provocation fell within the acceptable ranges for normality (see Table 7). The results of the Shapiro-Wilk test for normality were significant for frustrations (p < .001) and provocation (p < .001), suggesting that the data were not normal. However, Stevens (2009) suggests that sampling distribution of the means sizes greater than 30 or more tend to approximate towards normality, even if the distribution appears to deviate from normality.

Table 7

Skewness and Kurtosis for Frustrations and Provocation

Variable	Skewness	Kurtosis
Frustrations (STARS)	-0.25	-0.18
Provocation (STARS)	-0.39	-0.04

Univariate homogeneity. Levene's test was used to test the assumption of equal variances. Findings of Levene's tests were not significant for frustrations *(p* = .250) but were significant for provocation ($p < .001$).

Multivariate assumptions. After examination of the Mahalanobis distances, no multivariate outliers were identified. Due to the VIF values being less than 10, there was no evidence for multicollinearity (Stevens, 2009). The findings for Box's M test for equality of covariance were statistically significant ($p < .001$); therefore, the Pillai's Trace test statistic will report for the MANOVA.

PATS

Normality. Examination of the histograms, Q-Q scatterplots, and skewness and kurtosis values for each of the subscale scores (see Appendix E) suggested that these scores may not reliably meet the assumption of normality. Although the skewness and kurtosis values were not extreme, the Q-Q scatterplot for normality did deviate greatly from the trend lines (see Appendix E).

Frequency and Nature of Electronically-Mediated Aggressive Behaviors

This study is one of the few to examine electronically-mediated dating aggression among first year college students. Before testing the research hypotheses, I wanted to examine what these students were reporting as the most frequent types of aggressive behaviors. Table 8 presents the nature and frequency of the most common behaviors, as self-reported on the PEAQ and the PATS surveys. As will be noted, even the most frequently reported behaviors appeared to occur at relatively low moderate levels of occurrence.

Table 8

Most Frequently Reported Forms of Perpetration and Victimization Behaviors Using Electronic Means on the PEAQ and PATS

Scale	P/V	Item	Mean (SD)
PEAQ	P	Intrusively message my partner when I am mad at him/her	2.47 (2.06
	V	My partner intrusively messages me when he/she is mad at me.	2.03 (1.57)
	P	I use messaging to start arguments with my partner	2.33 (1.85)
	V	My partner uses messaging to start arguments with me	2.25 (1.48)
	P	I post comments online that will upset or annoy my partner.	2.07 (1.62)
	V	My partner posts comments online that will upset or annoy me.	2.09 (1.73)
	V	My partner sends me picture messages to make me jealous.	2.05 (1.83)
	P	I monitor where my partner is and who he/she is with through messaging	2.07 (1.63)
	V	My partner monitors where I am and who I am with through messaging.	2.01 (1.80)
PATS	All V	Contacted me on my SNS when I did not want them to.	4.91 (2.60)
		Got angry at me for talking to a particular person through SNS.	4.89 (2.74)
		Feelings on purpose.	4.85 (3.29)
		Monitored by SNS.	4.80 (3.09)
		Told me I could not talk to someone of the opposite sex on my SNS.	4.67 (2.78)

Notes. N = 300. PEAQ = Partner Electronic Aggression Questionnaire

PATS = Partner Aggression Technology Scale

[1] P/V: Perpetrator or Victim behavior

[2] Items from the PEAQ with means above 2.0 on scale of 0 (Never) to 6 (More than 20 times during past 6 months. Rating of 2 = Twice and Rating of 3 = 3-5 times.

[3] Items from the PATS with mean above 4.5 on a scale from 1 (Not at all) to 10 (Extremely), with 5 = Moderate.

Hypotheses Testing

Research Question 1

Are there between-group differences among first-year college students with different adult attachment styles (secure, preoccupied, fearful, dismissing) on reported experiences of dating aggression using electronic media?

H_o1: There are no between-group differences for first-year college students who differ in adult attachment style (as measured by the Experiences in Close Relationships Scale Revised [ECR-R]) on experiences of dating aggression using electronic media (as measured by the Partner Electronic Aggression Questionnaire [PEAQ]).

H_a1a: There are between-group differences for first-year college students who differ in adult attachment style (as measured by the ECR-R) on experiences of electronically-mediated dating aggression using electronic media (as measured by the PEAQ).

H_a1b: First-year college students with fearful insecure attachment style (as measured by the ECR-R) report more experiences as perpetrators of electronically-mediated dating aggression (as measured by the PEAQ), while those with preoccupied attachment style report more experiences as victims of electronically-mediated dating aggression.

Table 9

Means and Standard Deviations for Victimization by Anxiety and Avoidance Levels

Dating Aggression	Attachment Style	*M*	*SD*	*n*
Victimization	Secure	2.63	1.32	58
	Fearful	2.43	1.18	90
	Preoccupied	2.77	1.03	91
	Dismissing	2.58	1.16	61
Perpetration	Secure	2.46	1.13	58
	Fearful	2.39	1.17	90
	Preoccupied	2.49	1.12	91
	Dismissing	2.46	1.17	61

To address research question 1, a MANOVA was conducted to determine whether there were significant differences on reported experiences of dating aggression using electronic media between attachment style groups. A MANOVA allowed me to test the hypotheses regarding the effect of the independent variable. In this research question, the reported experiences correspond to victimization and perpetration. Results of the multivariate *F* tests for victimization and perpetration were not significant by attachment style, $F(6, 590) = 1.01$, $p = .419$, partial $\eta^2 = .010$. Thus, there were no statistically significant differences

among attachment groups on experiences of victimization or perpetration of dating aggression.

RQs 2 and 3 focused on those students who did report some experiences with dating aggression using electronic means. Students whose mean ratings were equal to or greater than 1 on both of the PEAQ scales (victimization and perpetration) were identified for these analyses. Of the total of 300 respondents, only 17 had reported no experiences with the problem, either as victim or perpetrator. Thus, the remaining 283 students' data were used for assessment of RQs 2 and 3.

Research Question 2

Among first-year college students who report experiences with dating aggression using electronic media, are there between-group differences among college students with different adult attachment styles (secure, fearful, preoccupied, dismissing) on situational triggers (e.g., major disagreements, not feeling comforted when feeling down) for dating aggression using electronic media?

H_o2: Among first-year college students who report experiences with dating aggression (as measured by the PEAQ; PEAQ > 0), there are no between-group differences in situational triggers for dating aggression using electronic means, as measured by the Situational Triggers of Aggressive Responses (STARS) scale.

H_a2: Among first-year college students who report experiences with dating aggression (as measured by the PEAQ; PEAQ > 0), there are between-group differences

among students with different adult attachment styles on situational triggers for dating aggression using electronic means, as measured by the STARS scale.

A one-way MANOVA was conducted to look at overall differences between attachment style groups in situational triggers for dating aggression using electronic media. In this research question, the situational triggers correspond to frustrations and provocations. Table 10 presents the means for the four attachment style groups for each of the subscales of the PEAQ: frustration and provocation

Table 10

Means and Standard Deviations for Attachment Style Groups for Subscales for Situational Triggers (PEAQ Scale): Frustrations and Provocation

Situational Trigger	Attachment Style	*M*	*SD*	*n*
Frustrations	Secure	2.94	0.93	58
	Fearful	3.02	0.77	90
	Preoccupied	3.38	0.80	91
	Dismissing	3.23	0.92	61
Provocation	Secure	3.02	0.85	57
	Fearful	3.31	0.61	90
	Preoccupied	3.52	0.92	91
	Dismissing	3.44	0.83	61

Results of the one-way MANOVA indicated a statistically significant between-group difference for attachment style on situational triggers for dating aggression using See table 11 to see the significant results electronic media ($p < .003$, $F(6, 564) = 3.37$). Follow up univariate ANOVAs were performed for the STARS' subscales for frustration and provocation as situational triggers. The findings of the ANOVAs showed statistically significant between group differences by attachment style for frustration ($p = .003$), but

not for provocation. The findings of the MANOVA and univariate ANOVAs are presented in Tables 11 and 12.

Table 11

MANOVA for Situational Triggers by Attachment Style

Variable	*Wilks' Lambda*	*F(6,564)*	*p*
Attachment style	0.94	3.37	.003

Table 12

Univariate ANOVAs for Frustrations and Provocation by Attachment Style

Variable	*df*	*MS*	*F*	*p*	η_p^2
Frustrations					
Attachment style	3	3.68	5.24	.004	.05
Error	279	0.71			
Total	282				
Provocations					
Attachment style	3	.834	1.20	.309	.012
Error	279	0.64		.	
Total	282				

Post-hoc tests (Tukey HSD) for frustrations indicated that there were signifiant pairwise comparisons for the following: those with preoccupied adult attachment style were significantly higher on the situational frustration scale than those with secure (p = .019) or fearful (p = .014) adult attachment styles. Those with dismissing attachment styles did not differ significantly from any other group on situational frustration. Results of the post-hoc test significance are presented in Table 13.

Table 13

Post Hoc Pairwise Comparisons for Situational Frustration (PEAQ) Scores

Attachment Style		Mean Difference	SE	P	t
Source	Fearful	-.03	.148	.998	-0.20
	Preoccupied	-.42	.144	.019	-2.92
	Dismissing	-.32	.160	.192	-2.00
Fearful					
	Secure	.03	.148	.998	0.20
	Preoccupied	-.40	.131	.014	-3.05
	Dismissing	-.30	.148	.198	-2.02
Preoccupied					
	Secure	.42	.144	.019	2.92
	Fearful	-.40	.131	.014	-3.05
	Dismissing	-.10	.143	.890	-0.00
Dismissing					
	Secure	.32	.160	.192	2.00
	Fearful	.29	.148	.198	1.96
	Preoccupied	-.10	.143	.889	-0.69

Research Question 3

Among first-year college students who report experiences with dating aggression using electronic media, are there between-group differences among those with different adult attachment styles on goals of relational aggression (e.g., stalking, monitoring, controlling/domineering, verbal/emotional aggression) for dating aggression using electronic media they have experienced?

H_o3: Among first-year college students who report experiences with dating aggression (as measured by the PEAQ; PEAQ > 0), there are no between-group differences among students with different adult attachment styles on goals of relational aggression (e.g., stalking, monitoring, controlling/domineering, verbal/emotional aggression), as measured by the Partner Aggression Technology Scale (PATS), for dating aggression using electronic media they have experienced.

H_a3: Among first-year college students who report experiences with dating aggression (as measured by the PEAQ; PEAQ > 0), there are between-group differences among students with different adult attachment styles on goals of relational aggression (e.g., stalking, monitoring, controlling/domineering, verbal/emotional aggression), as measured by the PATS, for dating aggression using electronic media they have experienced.

Co-classifications of attachment style with subscale score group for the PATS are presented in Table 14. I performed a chi-square to examine whether there was an overall association between attachment style and goals of dating aggressions. No significant association was observed (see Table 15).

Table 14

Incidences Low/High Groups of PATS' Goals of Dating Aggression Subscales

Subscale	Secure	Fearful	Preoccupied	Dismissing	Total
Stalking					
Low	25	46	49	29	149
High	32	41	46	32	151
Relational Aggressions					
Low	22	38	50	25	135
High	35	49	45	36	165
Monitoring					
Low	29	38	50	30	147
High	28	49	45	31	153
Controlling/Domineering					
Low	30	41	54	28	153
High	27	46	41	33	147
Verbal Aggression					
Low	30	41	54	28	153
High	27	46	41	33	147

Table 15

Chi-Square Analyses for Associations Between Attachment Style and Level of Endorsements of Each Goal of Dating Aggression on the PATS

Goals of Dating Aggression	x^2	*P*
Stalking	1.37	.711
Relational Aggression	3.64	.303
Monitoring	1.57	.667
Controlling/Domineering	2.52	.473
Verbal Aggression	2.52	.473

Note. df for all 2 X 4 Chi square analyses was 3.

In sum, no significant relationships between adult attachment style and goals of dating aggression were noted.

Summary

The purpose of this quantitative study was to examine experiences of electronically-mediated dating aggression in current relationships, either as perpetrator or victim, among college age young adults who vary on attachment style (i.e., secure; high fearful and/or high preoccupied or both). This chapter presented the findings of the data analysis.

Three key research questions were examined in this study with respect to adult attachment styles as predictors of experiences with electronically-mediated dating aggression among this sample. Findings were as follows.

RQ1: There were no statistically significant differences among adult attachment style groups on scores from the PEAQ which measured frequencies of

engaging in perpetration or experiences as victims of types on electronically-mediated aggressive behaviors within their dating relationships.

RQ2: There were 283 students who reported experiences of either provocation or victimization related to dating aggression. Adult attachment styles were related to reacting to situational triggers for frustration, $F(3, 283) = 5.24$, $p = .004$, $\eta^2 = .05$, as measured by the STARS. The preoccupied group showed the highest scores for situational frustration, being significantly higher than that those with secure or fearful attachment styles. However, the effect size indicates that there was a very small proportion of variance accounted for in the dependent variable.

RQ3: Among the 283 students who reported experiences of either provocation or victimization related to dating aggression, there were no statistically significant differences among adult attachment style groups on the PATS for goals for goals for relational aggression using electronic media.

Chapter 5 will be a discussion of the findings of this study and how this study relates to previous and future research in this area.

Chapter 5: Conclusions and Recommendations

The present study extended the literature on electronic media use and dating aggression among young adult college students by addressing of the relationship between electronically-mediated dating aggression in current relationships, either as perpetrator or victim, and attachment style. I examined patterns of dating aggression and goals of electronically-mediated dating aggression among the attachment groups. I answered the research questions by collecting 300 responses from a sample of eligible first-year students, 18 to 25 years old and in a current relationship, recruited from two universities in the Northeastern United States.

Interpretation of Findings

Results provided limited support for the relationship between adult attachment style and dating aggression using electronically-mediated means. Three research questions concerning adult attachment styles as predictors of experiences with electronically-mediated dating aggression among this sample were used to guide the study. The results did not turn out the way I expected. Findings were as follows:

RQ1: Unlike previous research that indicated differences between attachment style groups among adolescents, my research showed no statistically significant differences among adult attachment style among groups who reported experiences of dating aggression using electronic media.

RQ2: The only significant finding for this study was related to the higher risk of frustration in response to situational triggers among those with preoccupied adult

attachment style, as compared with other attachment style groups. This finding is consistent with descriptions of those with preoccupied attachment style as more sensitive and reactive to interpersonal situations, such as those in which there are significant disagreements or the individual is not feeling comforted when feeling down. Individuals with anxious attachment styles often have difficulty forgiving themselves, other people, and situations; get caught up in ruminating; and experience and hold onto higher levels of anger than others in the same position (Burnette, Davis, Green, Worthington, & Bradfield, 2009; Kidd & Sheffield, 2005; Webb, Call, Chickering, Colburn, & Heisler, 2006).

RQ3: There were no statistically significant differences among adult attachment style groups on goals for relational aggression using electronic media.

Characteristics of the Sample

Incidence of electronic aggression. A concern I had was whether my sample's experiences with electronically-mediated dating aggression were representative of college students. The incidence of electronic aggression is difficult to evaluate as few studies have addressed this type of electronic aggression. Preddy (2015) reported that approximately 53.4% of the college sample of 268 volunteers (from all years of college study) described some form of electronic aggression represented in PEAQ items in their dating relationships for the previous 6 months. College students of any level participated in the study. Only first-year college students participated in my study. In my sample, 283 (94.3%) of the 300 students reported at least one experience with electronic dating

aggression during the previous 6 months, as the perpetrator and/or the victim in items presented on the PEAQ. When I checked for those who only experienced it as the victim and did not report any perpetrator behaviors, only 32 (10.7%) of the 300 students in items presented on the PEAQ. Perhaps there was something about my recruitment methods or other aspects of my procedures that attracted a different type of sample. My results with first-year students were more similar to those reported by Reed et al. (2015) who studied a sample of college students between the ages of 17 and 22 who were enrolled in an introductory psychology class at a university. Reed et al. found that 88.2% of participants had experienced dating aggression within the past year. These findings may suggest higher levels of electronically-mediated dating aggression among this age group and/or college grade level.

Distribution of adult attachment styles. A second concern was whether my sample was representative of the distribution across adult attachment style groups that would have been expected for this age group or developmental stage. The percentage of individuals in the secure attachment style group was low (19.3%) in my study, which meant higher rates of insecure groups. Gleeson and Fitzgerald (2014) used median scores on the ECR of their Irish student sample (44 for anxiety score, 43 for avoidance) for classification. Gleeson and Fitzgerald reported 30.4% with secure, 16.3% with avoidant-dismissing, 35.2% with avoidant-fearful, and 18.1% with anxious-preoccupied attachment styles. However, Gleeson and Fitzgerald's sample ranged in age from 18-39 and varied across undergraduate levels, including those who were no longer in the

emerging adult development stage. My study included only 18 to 25-year olds who were within the specific development stage. Gleeson and Fitzgerald's sample were further limited because they looked only at one particular ethnic group of students.

Using a different way to operationally define attachment styles among Canadian college students (first to third year), Lapsley and Edgerton (2002) reported distributions of 46% secure, 24% fearful, 13% preoccupied, and 17% dismissing. Lapsley and Edgerton also cited reports by Bartholomew and Horowitz at 47% secure, 21% fearful, 14% preoccupied, and 18% dismissing. In comparison to these studies, my secure percentage (19.3%) was substantially lower. The distribution for my sample of only first-year students either suggests unique attachment styles for that specific time of transition into college or that my sample may not be representative of the first-year college student population. More research is needed to identify the normative distribution of adult attachment styles among this population of emerging adult students in research.

Emerging adulthood and relational commitment. My sample's experiences with committed relationships appeared to be unusual compared with Arnett's (1988) theoretical discussions of relational commitment among emerging adults, as well as reports from previous studies. More than half of the 300 first-year college students in my study were in a committed relationship for longer than 1 year. My percentage fell between rates as low as 31% among first-year students (Reed et al., 2016), and 91.4% of first- to fourth-year students (Preddy, 2015) who reported that they were in exclusive dating relationships.

Theoretical Framework's Interpretation

I incorporated two theories, emerging adulthood and attachment style, as the basis for the factors I chose to study as predictors of dating aggression. Arnett (1998) proposed that individuals between 18 and 25 years of age have a distinctive developmental task of establishing an identity that is very specific to their age group. Arnett suggested that individuals in this age group are evolving and transitioning their skills, qualities, and capacities of their character to move into adulthood. Shaver et al. (1998) observed that the same attachment styles seen in infants and young children were also present in adult interpersonal functioning, including romantic relationships. Shaver et al. suggested that specific characteristics of secure or insecure attachment styles apply to adults, especially this group of emerging adults.

My research showed a significant group difference among dismissing, fearful, and preoccupied insecure adult attachment groups on reaction to situational frustration. Perhaps this was an outlier finding. On the other hand, it may be suggestive of a risk factor for electronically-mediated dating aggression. In addressing a gap in the literature, my study showed that there is a need for further research regarding how dating aggression, including electronically-mediated aggression, occurs and how it relates to attachment styles. I wanted to expand on the work by Piitz and Fritz (2009) by examining the patterns and goals of electronically-mediated dating aggression experienced by young, emerging adults in current relationships. Although my study expanded on the research done by Piitz and Fritz, I did not find significant differences between goals of

dating aggression and adult attachment styles. Further research is necessary in this area. Previous studies showed that the secure attachment group presented higher on situational triggers (Piitz & Fritz, 2009).

Limitations and Recommendations

Some of the limitations of this study included those that were anticipated and discussed in Chapter 1. I used a convenience sample by recruiting participants from a limited geographic area and including only first-year college students from two universities. These factors limit the generalization of results to other first-year college students. I used self-report survey measures, which are widely used to assess dating aggression behaviors (Fraley, Hudson, Heffernan, & Segal, 2015).

Future researchers should consider collecting data from other sources that include but are not limited to: partners, peers, or parents. After starting the study, I questioned the validity and reliability of the PEAQ. Additionally, I wondered whether to use the long form and its scoring rather than the revised version of the long form. The Cronbach's alpha for the PEAQ scores among my sample also suggested that results should be treated with caution.

Only 19.3% of my sample fell into the secure group out of a total sample of 300. The sample size may have had a significant impact on my ability to observe relationships between adult attachment styles and electronically-mediated dating aggression among this group. Additionally, I used classification rather than continuous modeling for adult attachment styles. I used the 2x4 classification, which helped to understand where

participants fell in each group. Sometimes the method may influence outcomes (Fraley et al., 2015).

I used self-report online survey measures. This method may produce results that differ from data collected in more personal settings or through paper-and-pencil surveys. Paper-and-pencil methods are still useful in many different ways. Using an online survey is a convenient method to collect data especially with college students (Fraley et al., 2015). Reed et al. (2015) used paper-and-pencil surveys, which they noted was a possible reason why they did not have as many college students as desired participating in their study.

My participants answered questions from four instruments compared to other studies that included only two instruments. It is difficult to know if possible, carryover effects or fatigue might have influenced responses. Using one instrument instead of four different instruments could have been more beneficial to the participants because they could focus on various questions for the study. For example, one alternative measure could be the Full Digital Dating Abuse Measure, which was used by Reed et al. (2015).

Implications for Future Research

Due to a lack of emotional stability, young adults often fall prey to forms of dating aggression. The use of electronic media presents a notable risk of dating aggression among young adults during their early college years (Subrahmanyam & Greenfield, 2008). Further research is needed to expand information on prevention and intervention activities. Developing a fuller understanding of the context of electronically-

mediated dating aggression and attachment style may allow researchers to have a better understanding of how these behaviors are used among this population.

Additionally, researchers may identify risk factors related to perpetration and victimization in this population. This information could be used to understand, identify, and target couples for interventions when individuals are using aggressive strategies within their relationships. If researchers and clinicians gather additional information, the consequences associated with electronic aggression, perpetration, and victimization may be better understood.

Recommendations for Design Options

Future research should include larger samples of early adult participants to ensure adequate representation of the various attachment groups, including secure. My study had comparatively lower numbers of first-year college students with secure attachment styles. Making it difficult to compare their data with those in other attachment style groups. Consideration should be given to different instruments, both for reliability and validity, and length. There were definite drawbacks to the measures I selected. For example, items on the PEAQ were lower in internal consistency for my sample than had been reported elsewhere. The PATS only examined responses from the victim's perspective. Additionally, the scoring for this instrument was not clear cut, as the same items were used in multiple goals. There should be additional sampling groups of college students, such as those in other years of study and those from different adult development stages.

Recommendations for Research Questions

There is possibly an opportunity to look at how attachment anxiety may contribute to the likelihood to perpetrate electronic intrusion by examining the cycle of anxiety (Reed et al., 2015). It is likely that for most college students with high levels of anxiety attachment behaviors are not intended to harm their partner but often motivated by a desire to increase intimacy and ensure fidelity. While the motive may not be to cause emotional distress in their partners, these behaviors can nonetheless have that effect. If these behaviors become a repeated pattern, the behaviors may function to exert control over a partner and cause discomfort and fear in the victim. Recent research has suggested that Facebook use decreases well-being and life satisfaction among young adults both in the short term and over time (Kross et al., 2013). If social networking decreases well-being for young adults in general, fearful attached individuals maybe even more at risk for adverse mental health outcomes. These individuals should be aware of how social media acts as a trigger for their anxiety and taught methods for calming this anxiety that does not involve electronic intrusion.

Social media use could be a significant point of intervention for teaching healthy dating relationship behaviors and treatment for anxiety for college students broadly, but especially for more fearful college women and men. Social networking sites are continually changing. More sites are becoming available that will aid in creating more cycles of electronically-mediated dating aggression among college students. There is a strong need for further research in this area.

Social Significance

Participation in my research helped raise students' awareness of electronically-mediated dating aggression. Behaviors they may have witnessed among their peers, and their own experiences, perhaps as aggressors, victims, or both. The heightened awareness can serve to motivate and guide their own dating choices and behaviors positively.

My research also anticipated benefits for expanding this research in society. There is a gap in our awareness and understanding of the experiences of electronically-mediated dating aggression among the first year, traditionally aged college students. Stakeholders, from college administrators and counselors to parents and peers, are interested in combatting dating aggression and in protecting those for whom this may be a reality. My research provided some initial information on the frequency and types of electronically-mediated dating aggression that reports among the sample of students in this study. Further, this research explored possible risk factors, adult attachment styles, for electronically-mediated dating aggression. Identifying risk factors can be useful in applications, such as preventive screenings or risk-targeted interventions.

This information is essential for various stakeholders who work with young adult college students to identify relevant risk factors that contribute to electronically-mediated dating aggression. With multiple methods of electronic media on the rise among this population, presentation and intervention activities must be implemented in university settings. These programs will possibly not eliminate but may help to bring awareness and prevention to electronically-mediated dating aggression among college students.

Summary

In sum, this exploratory study highlighted a pressing social problem: the use of electronic media in dating aggression among first-year college students. The literature review can be a useful tool in further understanding the harmful impact of electronically-mediated dating aggression in romantic relationships in college-aged students. Although there were clear-cut limitations in this study, the data add to the emerging information on the experiences of electronically-mediated dating aggression, in particular, among emerging adults in their first year of college. The relatively high proportion of the students in my sample who identified with insecure attachment styles and the high rates of experiences with electronically-mediated dating aggression may indicate an even more significant unique risk factor among college students. Further research can help to identify couples who may be at risk of dating aggression through social media. This information can be used to guide the development and implementation of targeted interventions.

References

Ainsworth, M. D. S. (1973). The development of infant-mother attachment. In B. Cardwell & H. Ricciuti (Eds.), *Review of child development research* (Vol. 3, pp. 1-94). Chicago, IL: University of Chicago Press.

Ainsworth, M. D. S. (1991). Attachments and other affectional bonds across the life cycle. In C.M. Parkes, J. Stevenson-Hinde, & P. Marris (Eds.), *Attachment across the life cycle* (pp. 33-51). London, United Kingdom: Routledge.

Alatupa, S., Pulkki-Råback, L., Hintsanen, M., Mullola, S., Lipsanen, J., & Keltikangas-Järvinen, L. (2011). Childhood disruptive behavior and school performance across comprehensive school: A prospective cohort study. *Psychology*, *2*(6), 542-551. doi:10.4236/psych.2011.26084

Aldorando, E., & Strauss, M. A. (1994). Screening for physical violence in couple therapy: Methodological, practical, and ethical considerations. *Family Process*, *33*, 425-437. doi:10.1111/j.1545-5300.1994.00425.x

Ali, P. Z., Dhingra, K., & McGarry, J. (2016). A literature review of intimate partner violence and its classifications. *Aggression and Violence Behavior, 31*, 16-25. doi:10.1016/j.avb.2016.06.008

Anderson, C. A. et al. (2017). Media violence and other aggression risk factors in seven nations. *Personality and Social Psychology Bulletin*, *43*(7), 986-998. doi:10.1177.0146167217703064

Anderson, C. A., & Bushmann, B. J. (2002). Human aggression. *Annual Review of*

Psychology, 53, 27-51.

Anderson, C. A., & Dill, K. E. (2000). Video games and aggressive thoughts, feelings, and behavior in the laboratory and in life. *Journal of Personality and Social Psychology, 78,* 772-790. doi:10.1037/0003

Anderson, C. A., & Huesmann, R. L. (2003). *Human aggression: A social cognitive view*. *The Sage handbook of social psychology*. Thousand Oaks, CA: Sage Publications, Inc.

Antonius, R. (2003). *Interpreting quantitative data with SPSS*. London, England: Sage Publications Ltd. doi:10.4135/9781849209328

Archer, J. (2000). Sex differences in aggression between heterosexual partners: A meta-analytic review. *Psychological Bulletin, 126,* 651-680. doi:10.4135/9781849209

Archer, J., & Coyne, S. M. (2005). An integrated review of indirect, relational, and social aggression. *Personality and Social Psychology Review, 9*(3), 212-230. doi:10.1002/ab.20283

Arnett, J. J. (1998). Learning to stand alone: The contemporary American transition to adulthood in cultural and historical context. *Human Development, 41,* 295-315. doi:10.1037/0003

Arnett, J. J. (2000). Emerging adulthood: A theory of development from the late teens through the twenties. *American Psychologist, 55*(5), 469-480. doi:10.1037/0003-066X.63.7.602

Attewell, V., & Fritz, P. A. T. (2010). *Dating relationships and use of communication*

technology while under the influence of alcohol. Unpublished doctoral dissertation). University of Windsor, Windsor, Canada.

Barnish, M. (2004). Domestic violence: A literature review. Retrieved from http://webarchive.nationalarchives.gov.uk/+/http:/www.justice.gov.uk/inspectorates/hmi-probation/docs/thematic-dv-literaturereview-rps.pdf

Baron, R. B., & Richardson, D. (1994). *Human aggression*. New York, NY: Plenum.

Bennett, D. C., Guran, E. L., Ramos, M. C., & Margolin, G. (2011). College students' electronic victimization in friendships and dating relationships: Anticipated distress and associations with risky behaviors. *Violence and Victims, 26*(4), 410-429. doi:10.1891/0886-6708.26.4.410

Berger, A., Wildsmith, E., Manlove, J., & Steward-Streng, N. (2012). Relationship violence among young adult couples. *Child Trends Research Brief.* https://pdfs.semanticscholar.org/c042/b3c3f167b668d262e1ccae5a4948f79a8371.pdf

Berkowitz L. (1989). Frustration-aggression hypothesis: Examination and reformulation. *Psychological Bullying, 106,* 59-73. doi:10.1037/0003

Berkowitz, L. (1993). Pain and aggression: Some findings and implications. *Motivation Emotions 17,* 277-93. doi:10.1037/06506

Bernard, H. R., & Ryan, G. W. (Eds.). (2010). *Analyzing qualitative data: Systematic approaches*. Thousand Oaks, CA: Sage.

Bhat, C. S. (2008). Cyber bullying: Overview and strategies for school counselors,

guidance officers, and all school personnel. *Australian Journal of Guidance and Counseling, 18,* 53-66. doi:10.1375/ajgc.18.1.53

Billedo, C. J., Kerkhof, P., & Finkenauer, C. (2015). The use of social networking sites for relationship maintenance in long-distance and geographically close romantic relationships. *Cyberpsycholgy, Behavior, and Social Networking, 18*(3). doi:10.1089/cyber.2014.0469

Blais, J. J., Craig, W. M., Pepler, D., & Connolly, J. (2008). Adolescents online: The importance of internet activity choices to salient relationships. *Journal of Youth and Adolescence, 37,* 522-536. doi:10.1007/s10964-007-9262-7

Blatt, S., & Zuroff, D. (1992). Interpersonal relatedness and self-definition: Two prototypes for depression. *Clinical Psychology Review, 12,* 527-562. doi:10.1037/0012-1649.39.3.470

Bogdanos, M. (2105). Signs of emotional abuse. Retrieved from PsychCentral: http://psychcentral.com/blog/archives/2013/02/20/signs-of-emotional-abuse/

Bookwala, J., & Zdaniuk, B. (1998). Adult attachment styles and aggressive behavior within dating relationships. *Journal of Social and Personal Relationships, 15*(2), 175-190. doi:10.1177/0265407598152003

Bordens, K. S., & Abbott, B. B. (2008). *Research design and methods: A process approach* (7th ed.). Boston, MA: McGraw-Hill.

Borrajo, E., Gamez-Guadix, M., & Calvete, E. (2015). Cyber-dating abuse: Prevalence, context, and relationship with offline dating aggression. Psychological Reports:

Relationships & Communication, 116, 565-585. doi:10.2466/21.16.Pro.116k22w4

Bowlby J. (1969). *Attachment and loss: Vol. 1. Loss*. New York, NY: Basic Books.

Brace, N., Kemp, R., & Snelgar, R. (2006). *SPSS for psychologists* (3rd ed.). Mahwah, NJ: Lawrence Erlbaum Associates.

Breiding, M. J., Basile, K. C., Smith, S. G., Black, M. C., & Mahendra, R. R. (2015). *Intimate partner violence surveillance: Uniform definitions and recommended data elements,* version 2.0. Atlanta, GA: National Center for Injury Prevention and Control. Centers for Disease Control and Prevention.

Brendgen, M., Viatro, F., Tremblay, R. E., & Lavoie, F. (2001). Reactive and proactive aggression: Predictions to physical violence in different contexts and moderating effects of parental monitoring and caregiving behavior. *Journal of Abnormal Child Psychology*, *29*(4), 293-304.

Brennan, K.A., Clark, C.L., & Shaver, P.R. (1998). Self-report measurement of adult romantic attachment: An integrative overview. In J. A. Simpson & W. S. Rholes (Eds.), *Attachment theory and close relationships* (pp. 46-76). New York, New York: Guilford Press.

Brown, J. D. (2006). Emerging adults in a media-saturated world. In J. J. Arnett & J. L. Tanner (Eds.), *Emerging adults in America: Coming of age of the 21st century* (pp. 219-234). Washington, DC: American Psychological Association. doi:10.1037/11381-012

Burke L. K., & Follingstad, D. R. (1999). Violence in lesbian and gay relationships: Theory, prevalence, and correlational factors. *Clinical Psychology Review, 19,* 487–512.

Burnette, J.L., Davis, D.E., Green, J.D., Worthington, E.J., & Bradfield, E. (2009). Insecure attachment and depressive symptoms: The mediating role of rumination, empathy, and forgiveness. *Personality and Individual Differences,* 46(3), 276-280. doi:10.1016/j.paid.2008.10.016.

Bushman, B. J. (1998). Priming effects of violence media on the accessibility of aggressive constructs in memory. *Journal of Personality and Social Psychology Bulletin, 24*, 537-545. doi:10.1177/0146167298245009.

Bushman B. J., & Anderson, C. A. (2001). Is it time to pull the plug on the hostile versus instrumental aggression dichotomy? Psychology Review *108,* 273–79.

Callahan, M. R., Tolman, R. M., & Saunders, D. G. (2003). Adolescent dating violence victimization and psychological well-being. *Journal of Adolescent Research, 18,* 664-681. doi:10.1177/0743558403254784

Campbell, J. C., Webster, J., & Koziol-McLain, C. R. (2013). Risk factors for femicide in abusive relationships: Results from a multi-state case control study. *American Journal of Public Health, 93*(7), 1089-1097. doi:10.2105/AJPH.*93.7*.1089

Capaldi, D. M., & Crosby, L. (1997). Observed and reported psychological and physical aggression in young, at-risk couples. *Social Development, 6,* 184–206.

Carr, J. L., & VanDeusen, K. M. (2002). The relationship between family of origin violence and dating violence in college men. *Journal of Interpersonal Violence*, *17*, 630-646.

Centers for Disease Control and Prevention. (2015). Intimate partner violence: Definitions. Retrieved from http://www.cdc.gov/violenceprevention/intimatepartnerviolence/definitions.html

Centers for Disease Control and Prevention: Division of Violence Prevention. (2010). NISVS: An overview of 2010 findings on victimization by sexual orientation. Retrieved from http://www.cdc.gov/violenceprevention/pdf/nisvs_report2010-a.pdf

Chan, K. L., Straus, M. A., Brownridege, D. A., Tiwari, A., & Leung, W. C. (2008). Prevalence of dating partner violence and suicidal ideation among male and female university students worldwide. *Midwifery Women's Health*, *53*(6), 529-537. doi:10.1016/j.jmwh.2008.04.016.

Chauvin, C. (2011). *Threatening communications and behavior: Perspectives on the pursuit of public figures*. Washington, DC: The National Academy of Sciences Presses, 1-117.

Chickering, A. W. (1969). *Education and identity*. San Francisco, CA: Jossey-Bass.

Coble, C. (2015). Domestic violence: What kind of relationship is domestic? Retrieved from http://blogs.findlaw.com/law_and_life/2015/03/domestic-violence-what-kind-of-relationship-is-domestic.html

Cohen, J. (1988). Statistical power analysis for the behavioral sciences (2nd ed.). New Jersey: Lawrence Erlbaum Associates. Retrieved from http://courses.csusm.edu/psyc393md/2011-Fall-41892/readings/StatisticalPower/Cohen(1992)StatisticalPower.pdf.

Coie, J. K. & Dodge, K. A. (1998). Aggression and antisocial behavior. In W. Damon (Editor in Chief) and N. Eisenberg (Vol. Ed.*), Handbook of child psychology*, (5th ed. Vol. 3, 145-198). Social, emotional, and personality development. NY, NY: John Wiley & Sons.

Committee on Divisions and the American Psychological Association Relations. (2001). Intimate partner abuse and relationship violence. Retrieved from https://www.apa.org/about/division/activities/partner-abuse.pdf

Connolly, J., & Josephson, W. (2007). Aggression in adolescent dating relationships: Predictors and prevention. *The Prevention Researcher, 14,* 3-5.

Cooper, D. R., & Schindler, P. S. (2006). *Business research methods*. Boston, MA : McGraw-Hill Irwin.

Creswell, J. W. (2009). *Research design: Qualitative, quantitative and mixed methods sapproaches.*, London, UK: Sage Publication Ltd.

Creswell, J. W. (2012). *Qualitative inquiry and research design: Choosing among five approaches*. Sage. Thousand Oaks, CA:. Sage.

Crick, N. R., & Dodge, K. A. (1994). A review and reformulation of social information processing mechanisms in children's adjustment. *Psychological Bulletin, 115,* 74–

101. doi:10.1037/0033—2909.115.1.74

David-Ferdon, C., & Hertz, M. F. (2009). *Electronic media and youth violence: A CDC issue brief for researchers.* Atlanta, GA: Centers for Disease Control. doi:10.1080/ 01639620701457816

Dasgupta, S. D. (2002). A framework for understanding women's use of nonlethal violence in intimate heterosexual relationships. *Violence Against Women*, *8*, 1364-1389. doi:10.1037/0003

DeCoster, J., Gallucci, M., & Iselin, A.M.R (2011). Best practices for using median splits, artificial categorization, and their continuous alternatives. *Journal of Experimental Psychopathology*, 2, 197-209. doi:10.5127/jep.008310

DeKeseredy, W. S., Schwartz, M. D., Harris, B., Woodlock, D., Nolan, J., & Hall-Sanchez, A. (2019). Technology-facilitated stalking and unwanted sexual messages/images in a college campus community: the role of negative peer support. *Sage open*, *9*(1), doi: 10.1177/2158244019828231

DeWall, C. N., Anderson, C. A., & Bushman, B. J. (2011). The general aggression model: Theoretical extensions to violence. *Psychology of Violence, 1*, 245-258.

Dowd, L. (2001). Female perpetrators of partner aggression: Relevant issues and treatment. *Journal of Aggression, Maltreatment, and Trauma, 5*, 73-104.

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. doi:10.1111/j.1744-6171.2010.00235.x

Durant, R., Champion, H., Wolfson, M., Omli, M., McCoy, T., D'Agostino, R. B., & Mitra, A. (2007). Date fighting experiences among college students: Are they associated with other health risk behaviors? *Journal of American College Health, 55*(5), 291-296.

Dutton, D. G., Saunders, K., Starsomski, A., & Bartholomew, K. (1994). Intimacy, anger and insecure attachment as precursors of abuse in intimate relationships. *Journal of Applied Social Psychology*, *24*, 1367-1386.

Dutton, D. G., & White, K. (2012). Attachment insecurity and intimate partner violence. *Aggression and Violent Behavior: A Review Journal*, *17*, 475-481.

Eckhardt, C., & Jamison, T. R. (2002). Articulated thoughts of male dating violence perpetrators during anger arousal. *Cognitive Therapy and Research, 26,* 289-308.

Edwards, K. M., Mattingly, M. J., Dixon, K., & Banyard, V. C. (2014). Community matters: Intimately partner violence among rural young adults. *American Journal of Community Psychology. 53*, 198-207. doi:10.1007/s10464-014-9633-7

Erikson, E. H. (1968). *Identity: Youth and crisis.* New York, NY: Norton.

Felmlee, D., & Faris, R. (2016). Toxic ties: Networks of friendship, dating, and cyber victimization. *Social Psychology Quarterly*, *79*(3), 243-262. doi: 10.1177/0190272516656585

Felson, R. B. (1992). Explanations of the relationship between stress and interpersonal aggression and violence. *The Sociological Quarterly, 33*(1), 1-16. doi:10.1111/j.1533-8525.1992.tb00360.x

Finn, P. (1995). *Preventing alcohol-related problems on campus: Acquaintance rape: A guide for program coordinators*. The Higher Education Center for Alcohol and Other Drug Prevention. Retrieved from https://safesupportivelearning.ed.gov/sites/default/files/hec/product/acqrape.pdf

Fonagy, P. (2007). Metallizing and borderline personality disorder. *Journal of Mental Health 16*(1), 83-101.

Fox, J., & Andergg, C. (2014). Romantic relationship stages and social networking sties: Uncertainty reduction strategies and perceived relational norms on Facebook. *Cyberpsychology, Behavior, and Social Networking, 17*(1), 685-691. doi:10.1089/cyber.2014.0232

Fraley, R. C., Hudson, N. W., Heffernan, M. E., & Segal, N. (2015). Are adult attachment styles categorical or dimensional? A taxometric analysis of general and relationship-specific attachment orientations. *Journal of Personality and Social Psychology, 109*(2), 354-368. doi:10.1037/pspp0000027

Fraley, R. C., Waller, N. G., & Brennan, K. A. (2000). An item-response theory analysis of self-report measures of adult attachment. *Journal of Personality and Social Psychology, 78,* 350-365.

Geen, R. G. (2001). *Human aggression* (2nd ed.). Philadelphia, PA: Open University Press.

George, D., & Mallery, P. (2010). *SPSS for Windows step by step: A simple guide and reference, 18.0 update* (11th ed.). Boston, MA: Allyn and Bacon.

Gleeson, G. and Fitzgerald, A. (2014) Exploring the Association between Adult Attachment Styles in Romantic Relationships, Perceptions of Parents from Childhood and Relationship Satisfaction. *Health*, *6*, 1643-1661. doi:10.4236/health.2014.613196.

Graham, K., & Livingston, M. (2011). The relationship between alcohol and violence: Population, contextual and individual research approaches. *Drug and Alcohol Review, 30*(5), 453-457. doi:10.1111/j.1465-3362.2011.00340.x

Greenless, G. T. (2012). Drawing the necessary line: A review of dating domestic violence statutes around the United States. *Family Court Review, 50*(4), 679-692. doi:10.1111/j.1744-1617.2012.01486.x

Gross, E. (2004). Adolescent internet use: What we expect, what teens report. *Applied Developmental Psychology*, *25*, 633–649. doi:10.1016/ j.appdev.2004.09.005

Hamberger, L.K., & Larsen, S.E. (2015). Men's and women's experience of intimate partner violence: A review of ten years of comparative studies in clinical samples; Part 1. *Journal of Family Violence*, *30*(6), 699-717. doi:10.1007/s10896-015-9732-8

Hancock, K., Keast, H., & Ellis, W. (2017). The impact of cyber dating abuse on self-esteem: The mediating role of emotional distress. *Cyberpsychology: Journal of Psychosocial Research on Cyberspace*, *11*(2), article 2. http://dx.doi.org/10.5817/CP2017-2-2

Hewitt, L. (2011). Framing across differences, building solidarities: Lessons from women's rights activism in transnational spaces. *Journal for and About Social Movements, 3*(2), 65-99. doi:10.1111/socf.12054

Hinduja, S., & Patchin, J. W. (2007). Offline consequences of online victimization: School violence and delinquency. *Journal of School Violence, 6*(3), 89-112. doi:10.1300/ J202v06n03_06

Hoff, S. M. (2015). Self-protective behaviors and campus threat assessment. Lincoln, NE. Retrieved from http://digitalcommons.unl.edu/cgi/viewcontent.cgi?article=1079&context=psychdiss .

Howell, D. C. (2010). *Statistical methods for psychology* (7th ed.). Belmont, CA: Wadsworth Cengage Learning.

Huesmann, L.R. (1982). Television violence and aggressive behavior. In D. Pearl, L. Bouthilet, & J. Lazar (Eds.), *Television and behavior: Ten years of scientific progress and implications for the eighties: Vol. 2. Technical Reviews,* (pp. 126-137). Washington, DC: U.S. Government Printing Office.

Huesmann, L. R. (1986). Psychological processes promoting the relation between exposure to media violence and aggressive behavior by the viewer. *Journal of Social Issues, 42,* 125-139.

Huesmann, L. R. (1988). An information processing model for the development of aggression. *Aggressive Behavior, 14,* 13-24.

Huesmann, L. R. (1998). The role of social information processing and cognitive schemas in the acquisition and maintenance of habitual aggressive behavior. *Human Aggression, 24,* 73-109.

Huesmann, L. R. (2010). Nailing the coffin shut on doubts that violent video games stimulate aggression. *Psychological Bulletin, 136,* 179-181.

Huesmann, L. R. (2014). An information processing model for the development of aggression. *Aggressive Behavior*, *14*, 13–24. doi:10.1037/0012-1649.39.2.201

Huesmann, L. R., & Eron, L. D. (1986). *Television and the aggressive child: A cross-national comparison*. Hillsdale, NJ: Erlbaum.

Huesmann, L. R., Moise-Titus, J., Podolski, C. L., & Eron, L. D. (2003). Longitudinal relations between children's exposure to tv violence and their aggressive and violent behavior in young adulthood: 1977-1992. *Developmental Psychology, 39* (2), 201-221. doi:10.1037/0012-1649.39.2.201

Isariyawongse, B. K. (2001). Domination in male-female relationships. University of Pennsylvania. Retrieved from http://ccat.sas.upenn.edu/plc/communication/brandon.htm

Jamison, T., & Ganong, L. (2011). We're not living together: Stay over relationships among college-educated emerging adults. *Journal of Social and Personal Relationships*, *28*, 536-557. doi:10.1177/0265407510384897

Jankowski, M. K., Leitenberg, H., Henning, K., & Coffey, P. (2001). Intergenerational transmission of dating aggression as a function of witnessing only same sex

parents vs. opposite sex parents vs. both parents as perpetrators of domestic violence. *Journal of Family Violence, 14*(3), 267-279. doi:10.1023/A:10228144166666

Jennings, W.G., Okeem, C., Piquero, A.R., & Sellers, C.S. (2017). Dating and inteimate partner violence among young persons ages 15-30; Evidence from a systematic review. *Aggression and Violent Behavior, 33*, 107-125. doi:10.1016/j.avb.2017.01.007

Johnson, B. (2001). Toward a new classification of nonexperimental quantitative research. *Educational Research, 30*(2), 3-13. doi:10.3102/A:10228144166666

Johnson, R. A., & Bhattacharyya, G. K. (2006). *Statistics: principles and methods*, (5th ed.)., Hoboken, N. J.: John Wiley & Sons.

Jouriles, E. N., Rosenfield, D., McDonald, R., Vu, N. L., Rancher, C., & Mueller, V. (2018). Children exposed to intimate partner violence: Conduct problems, interventions, and partner contact with the child. *Journal of Clinical Child & Adolescent Psychology*, *47*(3), 397-409. doi:10.3102/A:10228144166666

Kaukinen, C. (2014). Dating violence among college students: The risk and protective factors. *Trauma, Violence, and Abuse*, *1*(14), 1-14. doi:10.1177/1524838014521321

Kaestle, C. E., Morisky, D. E., & Wiley, D. J. (2002). Sexual intercourse and the age difference between adolescent females and their romantic partners. *Perspectives on Sexual and Reproductive Health, 34(6)*, 304-309.

Kellerman, I., Margolin, G., Borofsky, L. A., Baucom, B. R., & Iturralde, E. (2013). Electronic aggression among emerging adults: Motivations and contextual factors. *Emerging Adulthood, 1*(4), 293-304. doi:10.1177/2167696813490159

Kelly, R. J., & Bagley, E. J. (2017). Dating aggression and sleep problems in emerging adulthood. *Emerging Adulthood, 5*(1) 42-52. doi:10.1177/2167696816644368

Keniston, K. (1971). *Youth and dissent: The rise of a new opposition.* New York, NY: Harcourt Brace Jovanovich.

Kidd, T., & Sheffield, D. (2005). Attachment style and symptom reporting: Examining the mediating effects of anger and social support. *British Journal of Health Psychology*, *10*(4), 531-541. doi:10.111/j.2044-8287.2005.tb00485.x

Kline, P. (1999). The handbook of psychological testing (2nd ed.). London: Routledge.

Knight-McCord, J., et al. (2016). What social media sites do college students use most? Journal of Undergraduate Ethnic Minority Psychology, *2*, 21-26. http://www.juempsychology.com/wp-content/uploads/2016/05/Knight-McCord_et-al_JUEMP_2016.pdf

Kothari, C. R. (2011). *Research methodology: Methods and techniques*. New Age International. Retrieved from http://www.suza.ac.tz/saris/download/132376585119680689-Research-MethodologyMethods-and-Techniques-by-CR-Kothari.pdf%202.pdf

Kowalski, R. M., & Limber, S. P. (2007). Electronic bullying among middle school students. *Journal of Adolescent Health, 41*, 22-30. doi:10.1016/j.jadohealth-

.2007.08.017

Lapsley, D. K., & Edgerton, J. (2002). Separation-individuation, adult attachment style, and college adjustment. *Journal of Counseling & Development, 80,* 484-492. (need doi)

Lapsley, D.K., Varshney, N.M., & Aalsma, M.C. (2000). Pathological attachment and attachment style in late adolescence. *Journal of Adolescence, 23*, 137-155.

Lawrence, C. (2006). Measuring individual responses to aggression-triggering events: Development of the situational triggers of aggressive responses (STARS) scale. *Aggressive Behavior, 32*, 241-252. doi:10.1002/ab.20122

Leisring, P. A., & Giumetti, G. W. (2014). Sticks and stones may break my bones, but abusive text messages can also hurt: Development and validation of the Cyber Psychological Abuse (CPA) Scale. *Partner Abuse, 5,* 323-341.

Levinson, D. J. (1978). *The seasons of man's life*. Chicago, IL: Ballantine Books.

Levy, K. N., Ellison, W. D., Scott, L. N., & Bernecker, S. L. (2011). *Attachment style in psychotherapy relationships*. Oxford University Press. doi:10.1002/jclp.20756

Lewis, S. F., & Fremouw, W. (2001). Dating violence: A critical review of the literature. *Clinical Psychology Review, 21*(1), 105-127. doi:10.1037/1099-9809.14.1.1

Li, Q. (2007). New bottle but old wine: Research on cyberbullying in schools. *Computers and Human Behavior*, *23*(4), 1777-1791. doi:10.1016/j.chb.2005.10.00

Littleton, H. (2014). Interpersonal violence on college campuses: Understanding risk factors and working to find solutions. *Trauma, Violence, and Abuse, 1*(14), 1-14.

doi:10.1177/1524838014521030

Love, H. A., Spencer, C. M., May, M. A., Mendez, M., & Stith, S. M. (2018). Perpetrator risk markers for intimate terrorism and situational couple violence: A meta-analysis. *Trauma, Violence, & Abuse.* doi: 10.1177/1524838018801331

Machado, C., Martins, C., & Caridade, S. (2014). Violence in intimate relationships : A comparison between married and dating couples. *Journal of Criminology*. doi:10.1155/2014/897093

Machimbarrena, J., & Calvete, E. (2018). Internet risks: An overview of victimization in cyberbullying cyber dating abuse, sexting, online grooming, and problematic internet use. *International Journal of Environmental Research and Public Health, 15*(11), 2471. doi10.3390/ijerph15112471

Mackey, R. A., Diemer, M. A., & O'Brien, B. A. (2000). Psychological intimacy in the lasting relationships of heterosexual and same-gender couples. *Sex Roles*, *43*, 201-227.

Maestripieri, D. (2012). Are you dominant or subordinate in your romantic relationship? *Psychology Today*. Retrieved from https://www.psychologytoday.com/blog/games-primates-play/201205/are-you-dominant-or-subordinate-in-your-romantic-relationship .

Manson, M. (2012). Vulnerability and avoiding manipulative relationships. Retrieved from http://markmanson.net/manipulative-relationships.

Marganski, A. & Melander, L. (2018). Intimate partner violence victimization in the

cyber and real world: Examining the extent of cyber aggression experiences and its association with in-person dating. *Journal of Interpersonal Violence, 33*(7), 1071-1095. doi:10.1177/0886260515614283

McDermott, R. C., Cheng, H.-L., Lopez, F. G., McKelvey, D., & Bateman, L. S. (2017). Dominance orientations and psychological aggression in college student relationships: A test of an attachment theory-guided model. *Psychology of Violence, 7*(4), 508-520. http://dx.doi.org/10.1037/vio0000061

McDonald, R., & Merrick, M. T. (2013). Above all things, be glad and young: Advancing research on violence in adolescence. *Adolescents and Violence*, *3*(4), 289-296.

Melander, L. A. (2010). College students' perceptions of intimate partner cyber harassment. *Cyberpsychology, Behavior, and Social Networking*, *13*(3), 263-268. doi:10.1089=cyber.2009.0221

Meyrowitz, J. (2005). *No sense of place: The impact of electronic media on social behavior*. Sunderland, UK: Oxford University Press. Retrieved from http://www.lse.ac.uk/media@lse/research/mediaWorkingPapers/pdf/EWP12.pdf

Moffitt, T. E., Caspi, A., Rutter, M., & Silva, P. A. (2000). *Sorting out sex differences in antisocial behavior: Findings from the first two decades of the Dunedin longitudinal study*. Manuscript submitted for publication. Retrieved from http://www.community.nsw.gov.au/__data/assets/pdf_file/0017/321740/aggression_discussionpaper.pdf

Mohr, J. J., & Fassinger, R. E. (2003). Self-acceptance and self-disclosure of sexual orientation in lesbian, gay and bisexual adults: An attachment perspective. *Journal of Counseling Psychology*, *50,* 482– 495.

National Conference of State Legislatures (2019). Domestic violence/domestic abuse definitions and relationships. http://www.ncsl.org/research /human-services/domestic-violence-domestic-abuse-definitions-and-relationships.aspx

National Institute of Justcie (2019). Intimate partner violence. https://www.nij.gov/topics/crime/initmate-partner-violence/Pages/welcom.aspx

Padilla-Walker, L. M., Nelson, L. J., Carroll, J. S., & Jensen, A. C. (2010). More than just a game: Video game and internet use during emerging adulthood. *Journal of Youth and Adolescence, 39,* 103-113. doi:10.1007/s10964-008-9390-8

Patton, D.U., Hong, J.S., Ranney, M., Patel, S., Kelley, C., Eschmann, R., & Washington, T. (2014). Social media as a vector for youth violence: A review of the literature. *Computers in Human Behavior*, *35,* 548-553. doi:10.106/j.chb.2014.02.043

Pentz, M. A. (2004). Form follows function: Designs for prevention effectiveness and diffusion research. *Prevention Science, 5,* 23-29. doi:10.1023/B:PREV.0000013978.00943.30

Pepler, D. J., Jiang, D., Craig, W. M., & Connolly, J. A. (2008). Developmental trajectories of bullying and associated factors. *Child Development, 79*(2), 325-338. doi:10.1111/j.1467-8624.2007.01128.x

Piitz, J., & Fritz, P. A. T. (2008). *Psychological aggression technology scale (PATS).* Windsor, Ontario, Canada: Department of Psychology, University of Windsor.

Piitz, J., & Fritz, P. A. T. (2009). *Cyber-bullying: Its prevalence and relation with partner aggression and psychological functioning.* Unpublished manuscript, Department of Psychology, University of Windsor, Windsor, Canada.

Piitz, J., & Fritz, P. A. T. (2010). *Prevalence and psychological correlates of psychological cyber partner aggression among university students.* Poster presented at the annual meeting of the Association for Behavioral and Cognitive Therapies, San Francisco.

Pittman, M., & Reich, B. (2016). Social media and lonliness: Why an Instagram picture may be worth more than a thousand Twitter words. *Computers in Human Behavior*, *62*, 155-167. doi:10.1016/j.chb.2016.03.084

Prather, E., Dahlen, E. R., Nicholson, B. C., & Bullock-Yowell, E. (2012). Relational aggression in college students' dating relationships. *Journal of Aggression, Maltreatment & Trauma*, *21*(7), 705-720. doi:10.1080/10926771.2012.693151

Preddy, T. M. (2015). *Assessment and investigation of electronic aggression in the romantic relationships of emerging adults*. (Doctoral dissertation), University of Tennessee. Knoxville, TN. Retrieved from http://trace.tennessee.edu/cgi/viewcontent.cgi?article=4846&context=utk_graddis

Raskauskas, J., & Stolz, A. D. (2007). Involvement in traditional and electronic bullying among adolescents. *Developmental Psychology, 43,* 564-575. doi:10.1037/0012-

1649.43.3.564

Reber, A. S., & Reber, E. (2001). *The Penguin dictionary of psychology* (3rd ed.). London, UK: Penguin Books, Ltd. doi:10.1111/j.1540-4560.1976.tb02485

Reebye, P. (2005). Aggression during early years: Infancy and preschool. *Canadian Child Adolescent Psychiatric Review, 14*(1), 16-20. doi:10.5472/MMJ.2011.02013.1

Reed, L.A., Tolman, R.M., & Safyer, P. (2015). Too close for comfort: Attachment insecurity and electronic intrusion in college students' dating relationships. Computers in Huamn Behavior, *50,* 431-438. doi:10.1016/j.chb.2015.03.050.

Reed, L.A., Tolman, R.M., Ward, L.M., & Safyer, P. (2016). Keeping tabs: Attachment anxiety and electronic intrusion in high school dating relationships. *Computers in Human Behavior, 58,* 259-268. doi:10.1016/j.chb.2015.12.019

Reed, L.A., Tolman, R.M., & Ward, L.M. (2016). Snooping and sexting: Digital media as a context for dating aggression and abuse among college students. *Violence Against Women*, *22*(13), 1556-1576. doi:10.1177/1077801216630143.

Rhoades, G. K., Stanley, S. M., Kelmer, G., & Markman, H. J. (2010). Physical aggression in unmarried relationships: The roles of commitment and constraints. *Journal of Family Psychology*, *24*(6), 678-687. doi:10.1037/a0021475

Robinson, J. P., Shaver, P. R., & Wrightsman, L. S. (1991). *Measures of personality and social psychological attitudes*. San Diego, CA: Academic Press.

Rodenhizer, K.A. E., & Edwards, K.M. (2017). The impacts of sexual media exposure on adolescent and emergin adults' dating and sexual violence attitudes and behaviors: A critical review of the literature. Trauma, Violence, & Abuse. doi:10.1177/1524838017717745

Rolfe, G. (2006). Validity, trustworthiness and rigour: Quality and the idea of qualitative research. *Journal of Advanced Nursing, 53*(3), 304-310.

Rosenthal, R. (1986). Media violence, antisocial behavior, and the social consequences of small effects. *Journal of Social Issues, 42*(3), 141-154. doi:10.1111/j.1540-4560.1986.tb00247.x

Rosso, A.M., & Airaldi, C. (2016). Intergenerational transmission of reflective functioning. *Frontiers in Psychology*, 7. doi:10.3389/fpsyg.2016.01903

Saltzman L.E., Fanslow J.L., McMahon PM, Shelley GA. (1999). Intimate Partner Violence Surveillance: Uniform definitions and recommended data elements, Version 1.0. Atlanta (GA): National Center for Injury Prevention and Control, Centers for Disease Control and Prevention.

Saunders, D. G. (2002). Are physical assaults by wives and girlfriends a major social problem? *Violence Against Women, 8*, 1424-1448.

Saxbe, D. E., Margolin, G., Spies, L. A., & Baucom, B. (2012). Does dampened physiological reactivity protect youth in aggressive family environments? *Child Development, 83*, 821-830.

Scott, K., & Straus, M. (2007). Denial, minimization, partner blaming, and intimate aggression in dating partners. *Journal of Interpersonal Violence, 22*(7), 851-871. doi:10.1177/0886260507301227

Seltzer, L. F. (2012). Dominant or submissive? The paradox of power in sexual relationships. Evolution of the Selfself. Retrieved from http://scholarworks.rit.edu/cgi/viewcontent.cgi?article=1033&context=theseshttps://www.psychologytoday.com/blog/evolution-the-self/201206/dominant-or-submissive-the-paradox-power-in-sexual-relationships

Sharpe, D. & Taylor, J. K. (1999). An examination of variables from a social developmental model to explain physical and psychological dating violence. *Canadian Journal of Behavioural Sciences, 31*, 165-175.

Shaver, P., Hazan, C., & Bradshaw, D. (1998). Love as attachment: The integration of three behavioral systems. In R. Sternberg & M. Barnes (Eds.), *The psychology of love* (pp. 68-99). New Haven, CT: Yale University Press.

Shaver, P. R., & Mikulincer, M. (2002). Attachment-related psychodynamics. *Attachment and Human Development, 4,* 133-161.

Shook, N. J., Gerrity, D.A., Jurich, J., & Segrist, A. E. (2000). Courtship violence among college students: A comparison of verbally and physically abusive couples. *Journal of Family Violence, 15*, 1-22.

Shuler, C. A. (2010). Male victims of intimate partner violence in the United States: An examination of the review of literature through the critical theoretical

perspective. *International Journal of Criminal Justice Sciences, 5*(1), 163-173.

Silverman, J. G., Raj, A., Mucci, L. A., & Hathaway, J. E. (2001). Dating violence against adolescent girls and associated substance use, unhealthy weight control, sexual risk behavior, pregnancy, and suicidality. *The Journal of the American Medical Association 286,* 576-577. doi:10.1001/jama.286.5.572

Simmering McDonald, M. G. (2012). *Perceptions of severity and the role of coping in university students' experiences with online parner aggression victimization.* (Doctoral dissertation), University of Windsor. Retrieved from http://scholar.uwindsor.ca/etd/4841.

Smith, P. H, White, J. W., & Holland, L. J. (2003). A longitudinal perspective on dating violence among adolescent and college-age women. *American Journal of Public Health, 93*(7), 1104-1109.

Straus, M. A., & Gozjolko, K. L. (2016). Concordance between partners in "intimate terrorism": A comparison of two typologies. *Aggression and violent behavior, 29,* 55-60. doi:10.1016/j.avb.2016.06.003

Steinke, E. E. (2004). Research ethics, informed consent, and participant recruitment. *Clinical Nurse Specialist, 18*(2), 88-97.

Stephenson, V.L., Wickham, B.M., & Capezza, N.M. (2018). Psychological abuse in the context of social media. *Violence and Gender, 5*(3). doi:10.1089/vio.2017.0061

Stets, J. (1991). Psychological aggression dating relationships: The role of interpersonal control. *Journal of Family Violence, 6,* 97-114. doi:10.1007/BF00978528.

Stith, S. M., Smith, D. B., Penn, C. E., Ward, D. B., & Tritt, D. (2004). Intimate partner physical abuse perpetration and victimization risk factors: A meta-analytic review. *Aggression and Violent Behavior*, *10*, 65-98.

Straus, M. A. (1999). The controversy over domestic violence by women: A methodological, theoretical, and sociology of science analysis. In X. B. Arriaga & S. Oskamp (Eds.), *Violence in Intimate Relationships* (pp. 17-44). Thousand Oaks, CA: Sage.

Straus, M. A. (2005). Women's violence toward men is a serious social problem. In D. R. Loseke, R. J. Gelles & M. M. Cavanaugh (Eds.), *Current Controversies on Family Violence*, (2nd ed., pp. 55-77). Newbury Park, CT: Sage Publications. Retrieved from http://gauss.unh.edu/~mas2/VB33R%20Women's%20Violence%20Toward%20Men.pdf

Straus, M. A. & Sweet, S. (1992). Verbal/symbolic aggression in couples: Incidence rates and relationships to personal characteristics. *Journal of Marriage and the Family, 54*, 346-357.

Subrahmanyam, K., & Greenfield, P. (2008). Communicating online: Adolescent relationships and the media. *The Future of Children*, *18*(1), 1-27. Retrieved from http://www.cdmc.ucla.edu/KS_Media_biblio_files/kaveri_greenfield_2008spring.pdf

Swan, S. C., Gambone, L. J., Caldwell, J. E., Sullivan, T. P., & Snow, D. L. (2008). A review of research on women's use of violence with male intimate partners. *Violence Victim, 23*(3), 301-314l. doi:10.1891/0886-6708.23.3.301

Swan, S. C., & Snow, D. L. (2002). A typology of women's use of violence in intimate relationships. *Violence Against Women, 8,* 286-319.

Tabachnick, B. G., & Fidell, L. S. (2012). *Using multivariate statistics* (6th ed.). Boston, MA: Pearson.

Tourangeau, R., & Yan, T. (2007). Sensitive questions in surveys. *Psychological Bulletin*, *133*(*5*), 859.

Tussey, B. E., Tyler, K. A., & Simons, L. G. (2018). Poor parenting, attachment style, and dating violence perpetration among college students. Journal of Interpersonal Violence, doi:10.1177/0886260518760017

U.S. Department of Justice, Bureau of Justice Statistics (2001). Violence rates among intimate partners differ greatly according to age. Retrieved from http://www.clotheslineproject.org/teendatingviolencefacts.pdf.

Vaccaro, G., & Lavick, J. (2008). Trauma: Frozen moments, frozen lives. Retrieved from www.thebody.com/content/art48754.html

Villanti, A.C., Johnson, A.L., Liakkuvan, V., Jacobs, M.A., Graham, A.L., Rath, J.M. (2017). Social media use and access to digital technology in US young adults in 2016. *Journal of Medical Internet Research*, 19(6). doi:10.2196/jmir.7303

Vogel, D. L., & Wei, M. (2005). Adult attachment and help-seeking intent: The mediating roles of psychological distress and perceived support. *Journal of Counseling Psychology, 52*(3), 347-357. doi:10.1037/0022-0167.52.3.347

Walker, C. M., Sockman, B. J., & Koehn, S. (2011). An exploratory study of cyberbullying with undergraduate university students. *Tech Trends, 55,* 31-38. doi:10.1007/s11528-011-0481-0

Webb, M., Call, S., Chickering, S.A., Colburn, T.A., & Heisler, D. (2006). Dispositional forgiveness and adult attachment styles. *The Journal of Social Psychology,* 146(4), 509-512. doi:10.3200/SOCP.146.4.509-512

Wei, M., Mallinckrodt, B., Larson, L.A., & Zakalik, R. A. (2005). Attachment, depressive symptoms, and validation from self versus others. *Journal of Counseling Psychology, 52*(3), 201-212. doi:10.1037/0022-0167.52.3.368

Wei, M., Russell, D. W., & Zakalik, R. A. (2005). Adult attachment, social self-efficacy, self-disclosure, loneliness, and subsequent depression for freshman college students: A longitudinal study. *Journal of Counseling Psychology, 52*(4), 602-614. doi:10.1037/0022-0167.52.4.602

Wetcher-Hendricks, D. (2011). *Analyzing quantitative data: An introduction for social researchers*. Hoboken, NY, John Wiley & Sons.

Wood, J. T. (1994). *Gendered media: The influence of media on views of gender*. New York, NY: New York University.

Worcester, N. (2002). Women's use of force: Complexities and challenges of taking the issue seriously. *Violence Against Women, 81,* 1390-1415.

Yarkovsky, N., & Fritz, P.A.T (2013). *Attachment style, early sexual intercourse, and dating aggression victimization.* University of Windsor Psychology Publications. Retrieved from http://scholar.uwindsor.ca/cgi/viewcontent.cgi?article=1032&context=psychologypub

Yin, R. K. (2009). *Case study research: Design and methods* (Vol. 5). Thousand Oaks, CA: Sage.. Retrieved from http://www.hampp-ejournals.de/hampp-verlag-services/get?file=/frei/ZfP_1_2012_93

Appendix A: Flyer

Research Participants Needed!
(MUST BE AT LEAST 18 YEARS OLD)

DATING RELATIONSHIPS STUDY

You are invited to participate in a doctoral dissertation study that I am conducting for Walden University which aims to examine experiences among college students, ages 18-25, currently in a dating relationship. You must currently be in an intimate relationship, 18-25 years old, and a current freshman in a college or university. Participation in this survey will be confidential and will require approximately 30-45 minutes. The survey can be completed entirely online.

If you are interested,

Please go directly to the following website to complete the survey.

https://freeonlinesurveys.com/s/vz3ZZGxa

Thank you for your participation!

Appendix B: Demographics

1. What is your age? _____

2. What is your gender?
- Male
- Female

3. Which race or ethnicity do you identify with the most?
- American Indian or Alaska Native
- Hawaiian or Other Pacific Islander
- Asian or Asian American
- Black or African American
- Hispanic or Latino
- Non-Hispanic White
- Other

4. What sexual orientation do you most identify with?

- Heterosexual
- Homosexual
- Bisexual
- Not Sure

5. What is your current year of study?

First (Freshman) Second (Sophomore) Third (Junior) Fourth (Senior)

6. Are you currently enrolled as a:

Part-time student Full-time student

7. What is your current major? _____

8. What is your current living status?
- On campus (Living Alone)
- On campus (With Roommate)
- Parental Home
- Off campus (Living Alone)
- Off campus (With Significant Other)
- Off campus (With Roommate)

9. What is your current relationship status?

- Single
- Dating Causally (Seeing different people at the same time)
- Dating Exclusively (Seeing a single person, short term, long term, or serious)
- Engaged
- Married

10. Where did you meet your current partner?

    Online Offline

11. How long have you been in a relationship with your current partner?

    Less than 6 months
    6 months to 1 year
    1 year to 2 years
    2 years or more

12. On average, how many hours per week do you spend with your partner:
    Online _____ (Includes texting, through Facebook, other social media, etc.)
    By telephone_____ (Speaking, not texting)
    In Person _____ (Physically in the same place)

13. On a scale of 0 to 10 how committed do you feel to keeping your relationship with your current partner?
    0 1 2 3 4 5 6 7 8 9 10

Not Committed At All
Committed Completely

14. On a scale of 0 to 10 how satisfied are you with your relationship with your current partner?

    0 1 2 3 4 5 6 7 8 9 10

Not Committed At All
Committed Completely

15. Do you own a personal computer?

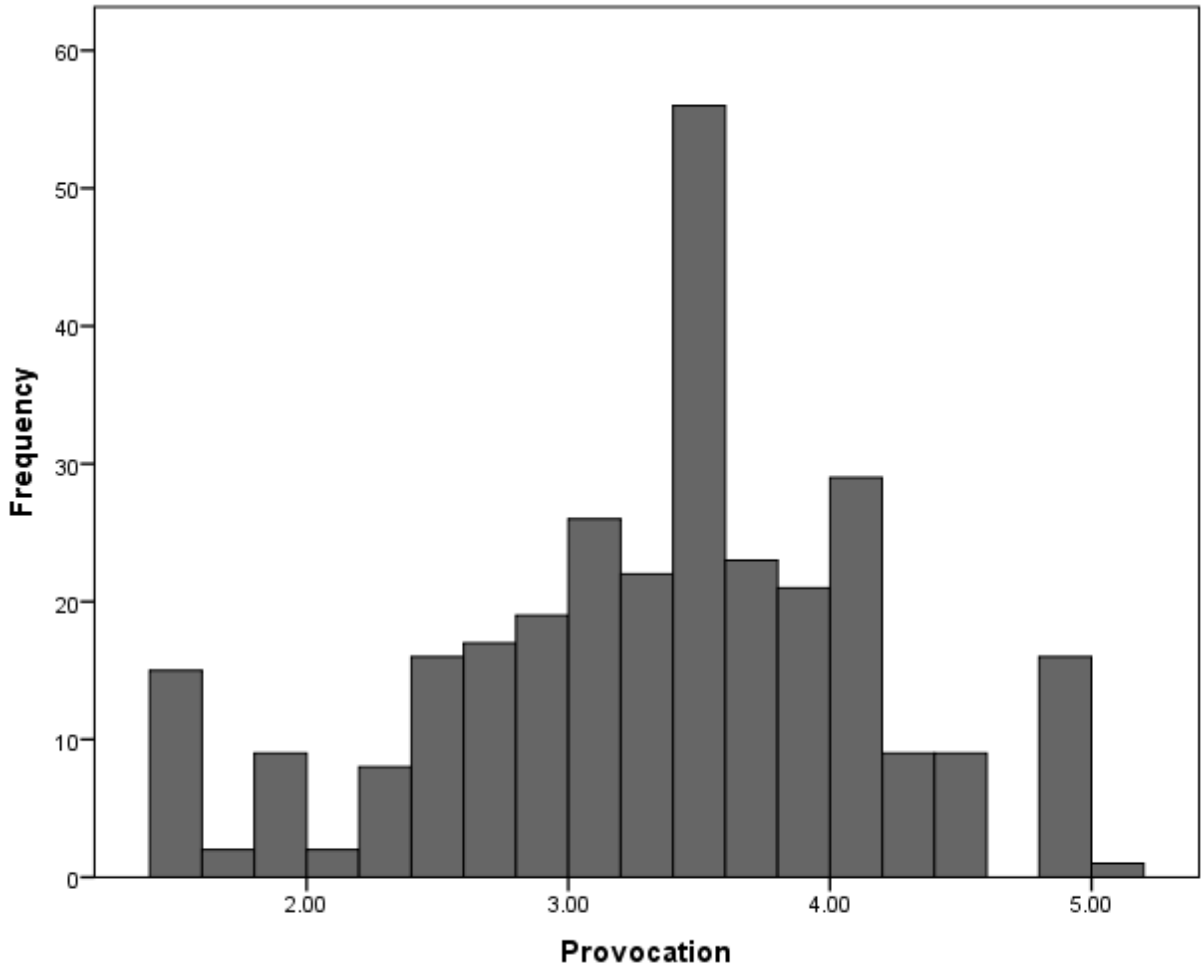
    Yes No

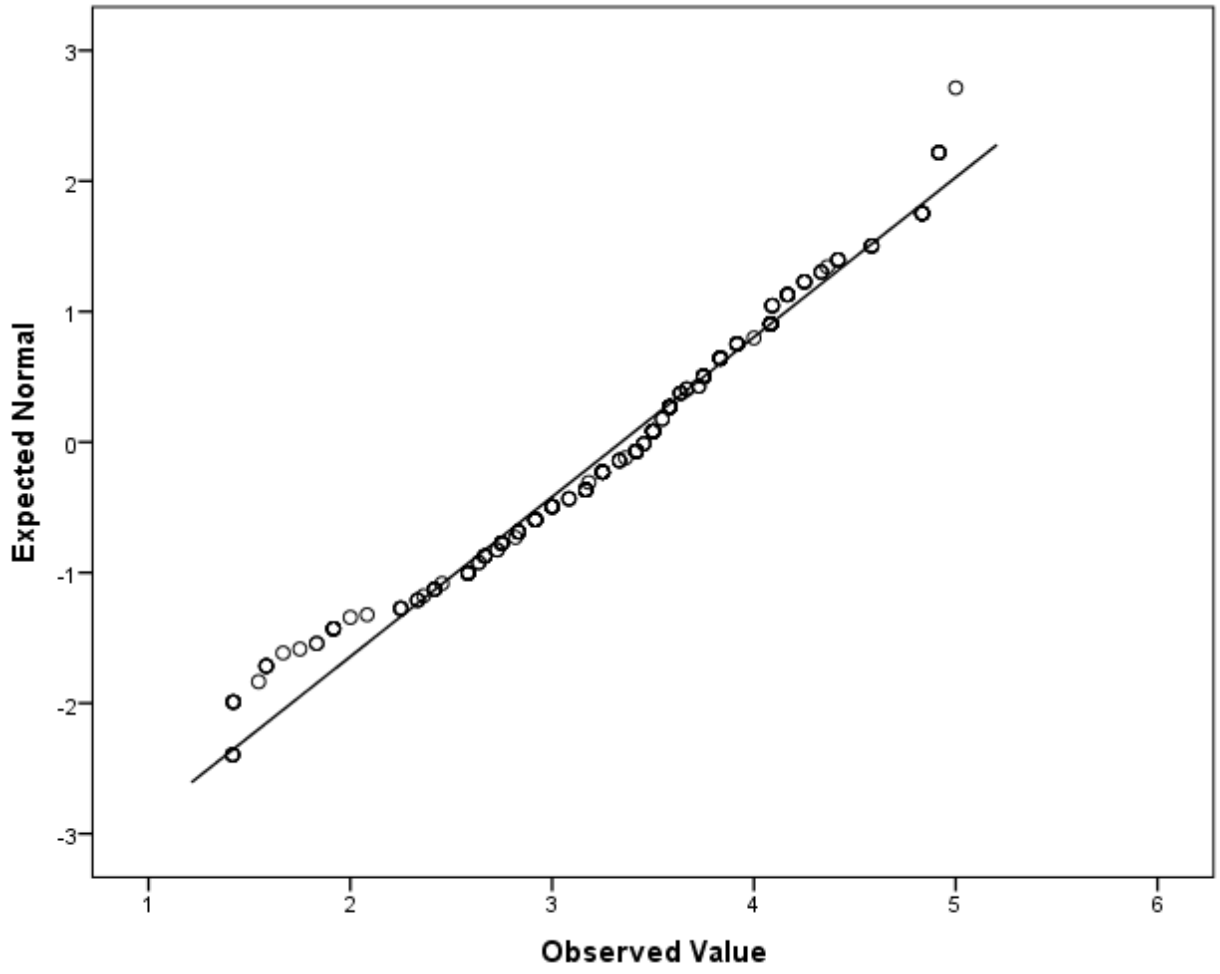
16. Do you have an email account?

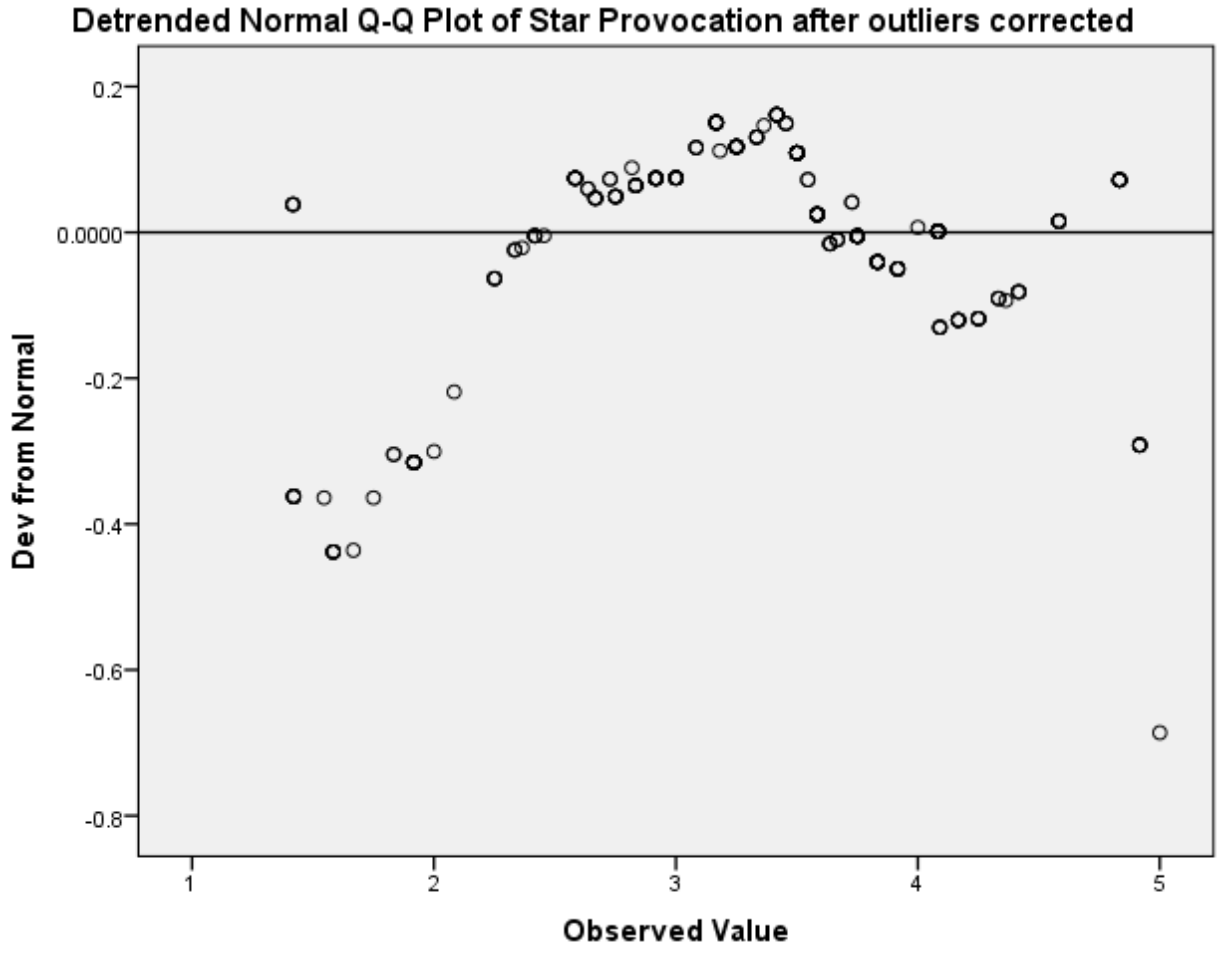
    Yes No

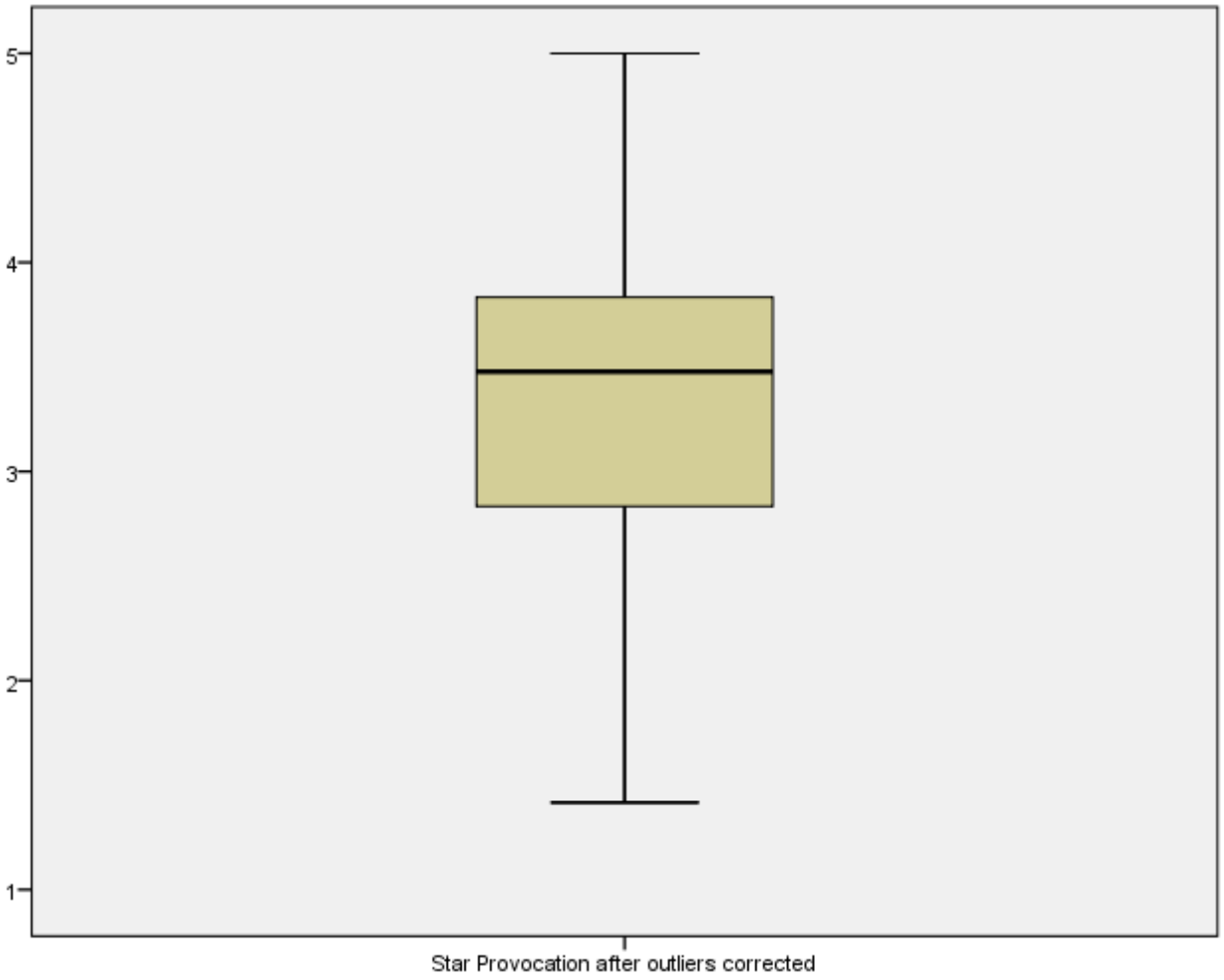
17. Are you a member of social network sites, if so which ones? (Please list all sites that you are a member of)
    _____
    _____
    _____

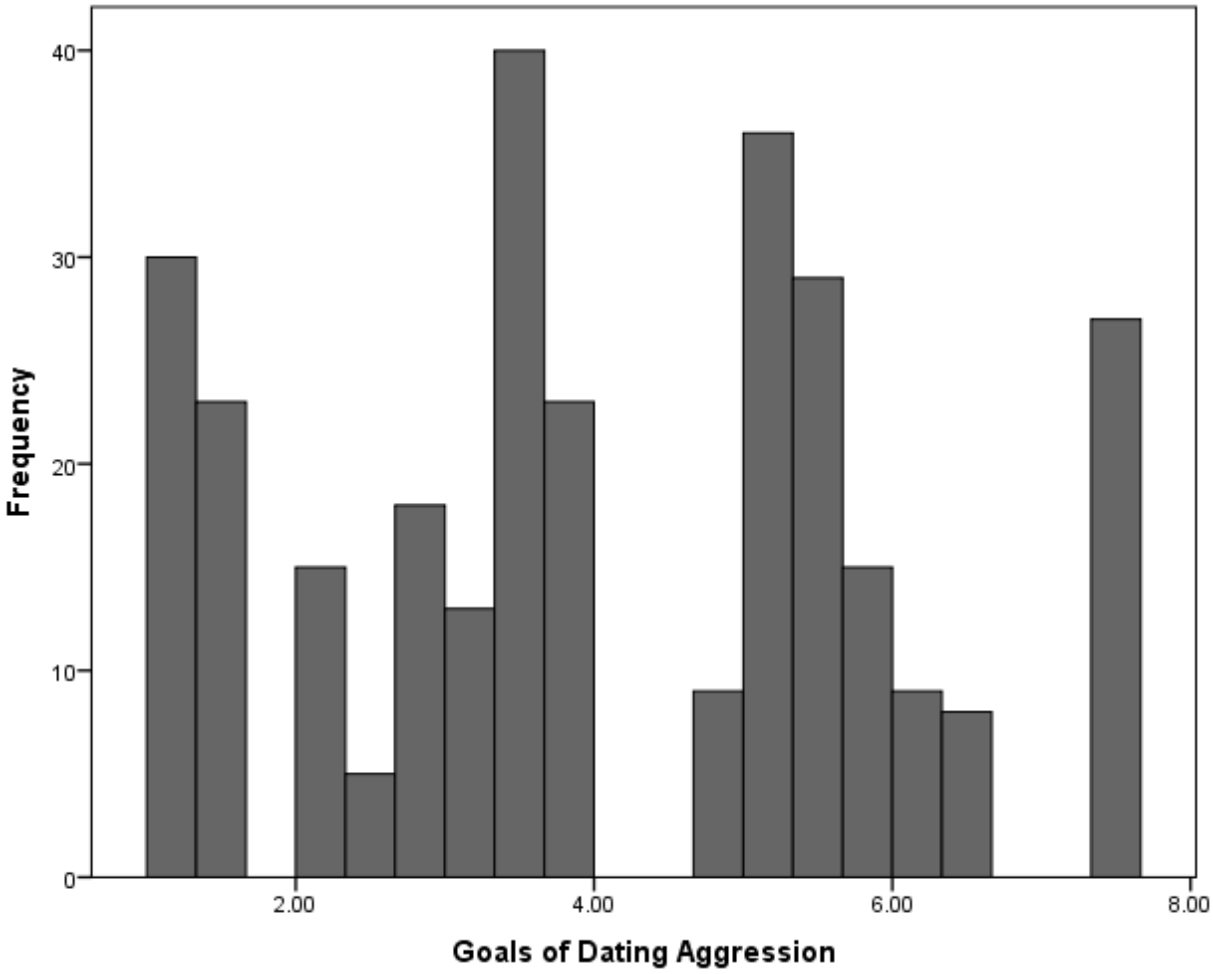
Appendix C: STARS Provocation & PATS Composite

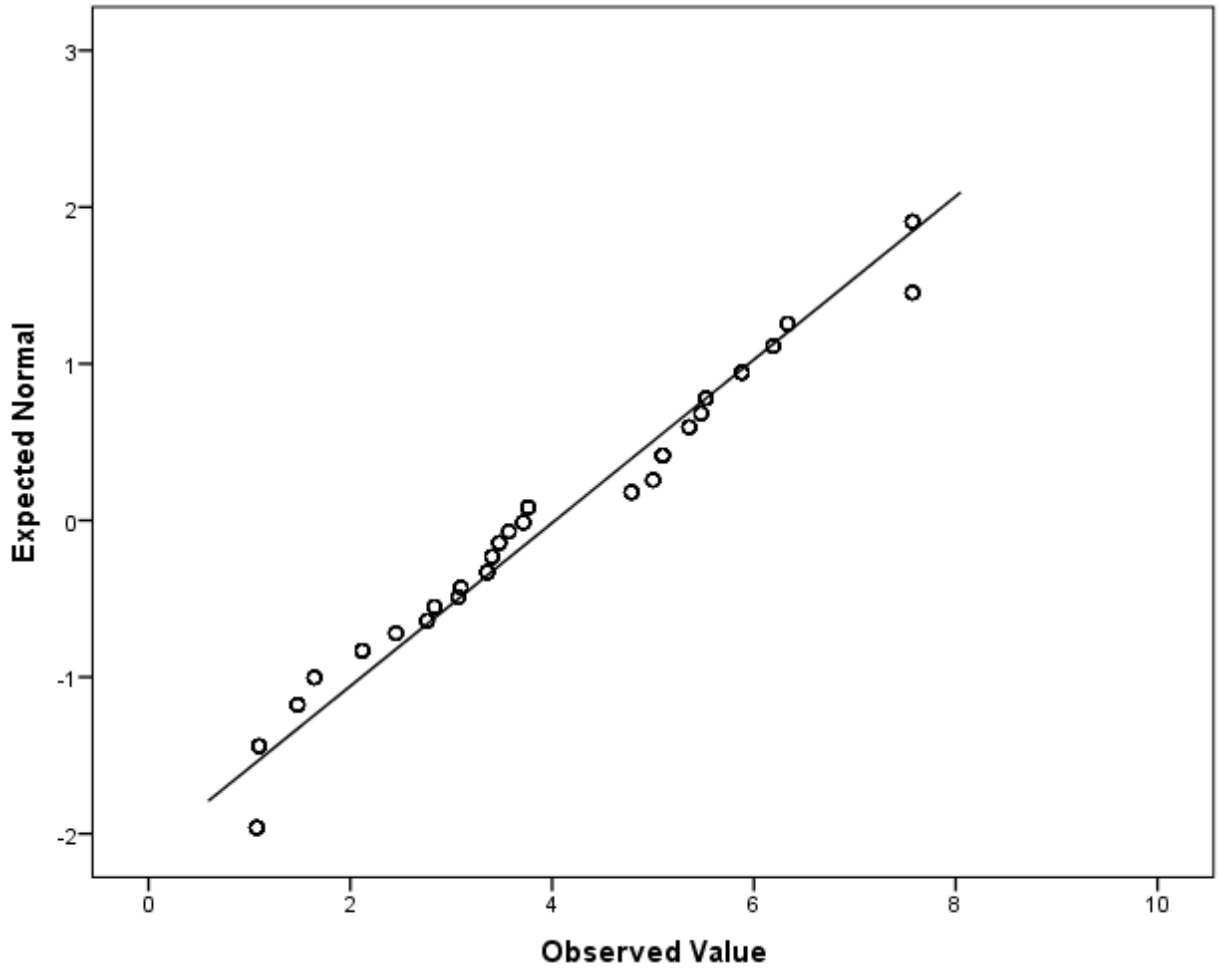


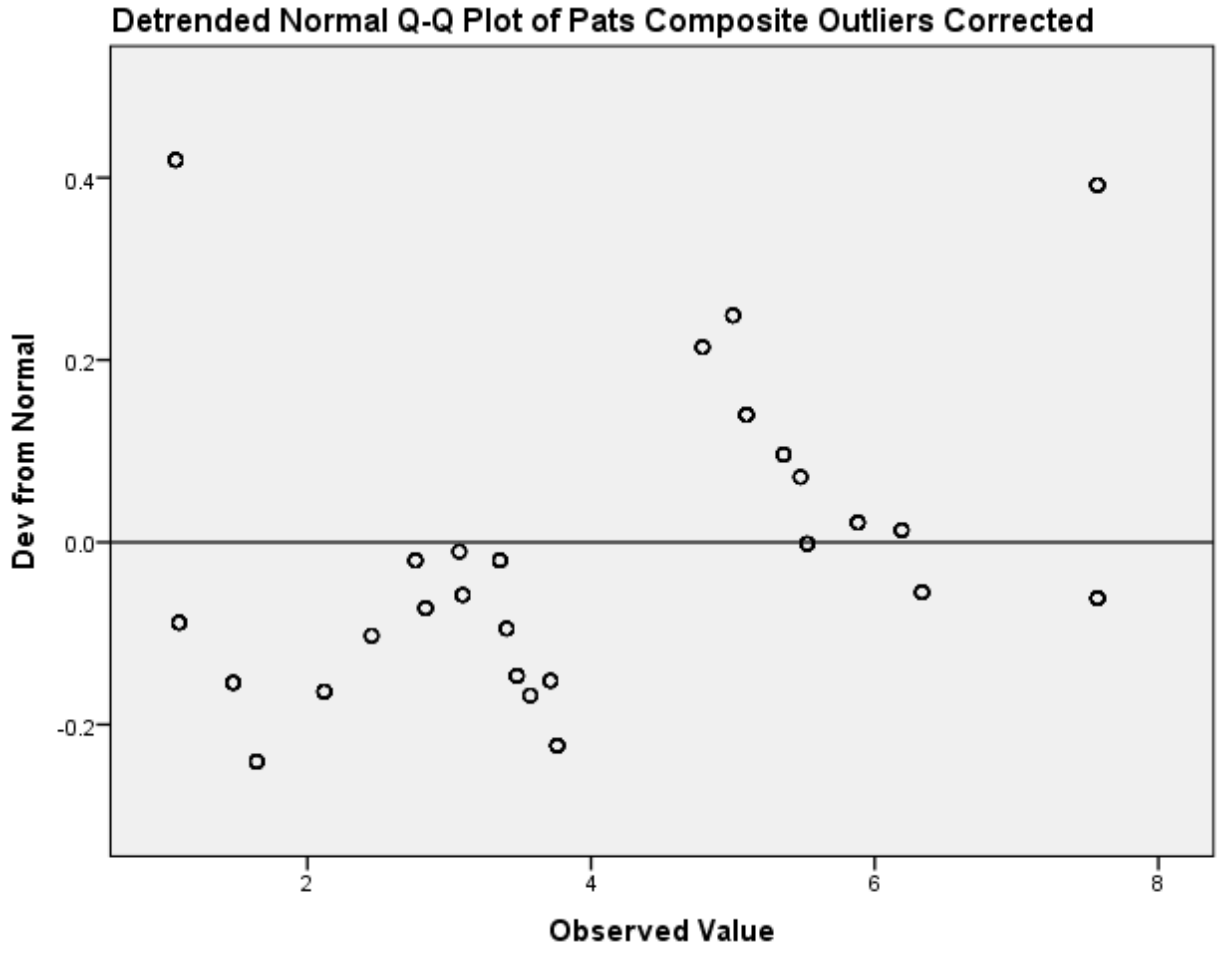

Expected Normal
3
2
1
0
-1
-2
-3
1
2
3
4
5
6
Observed Value

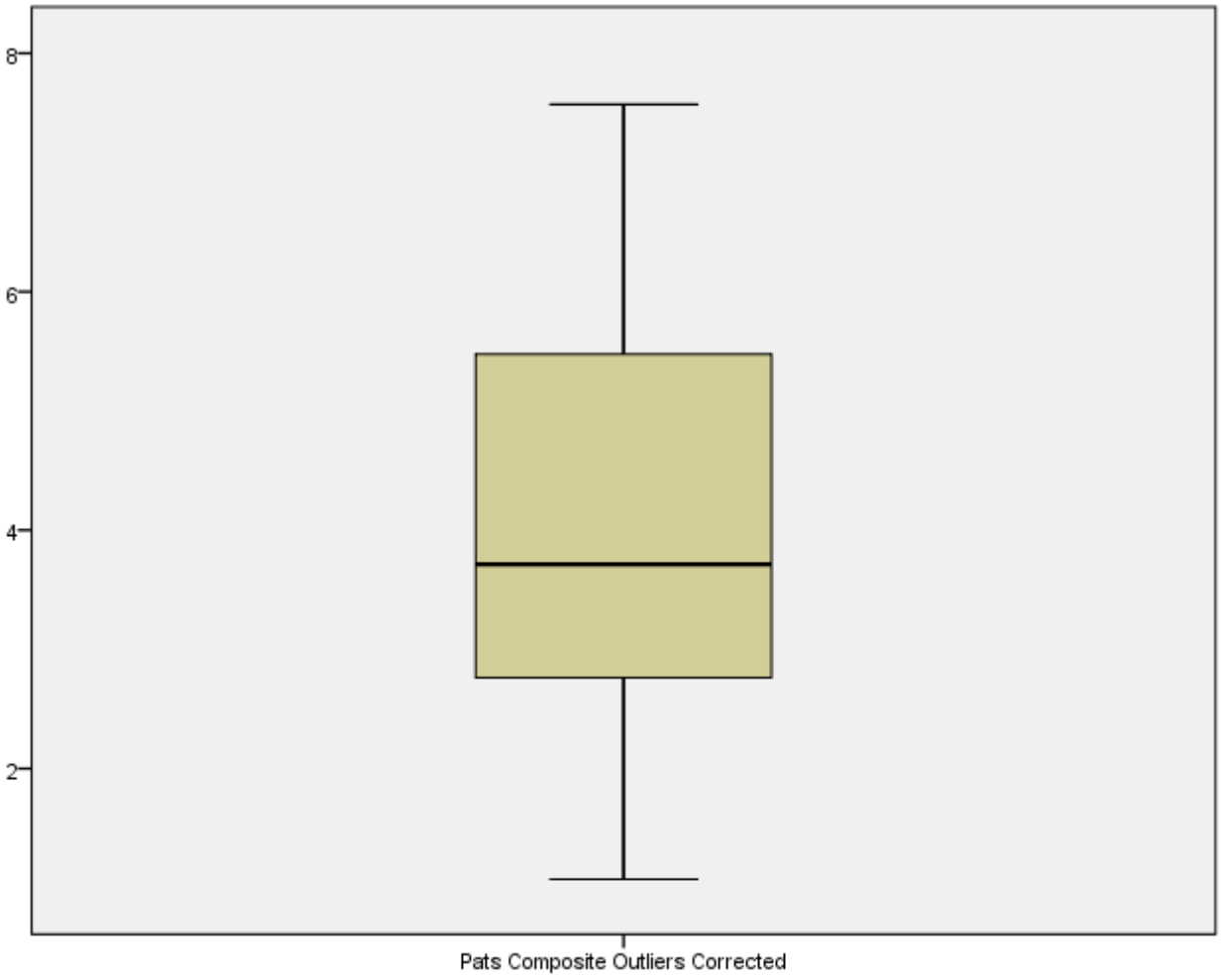

Detrended Normal Q-Q Plot of Star Provocation after outliers corrected
Dev from Normal
0.2
0.0000
-0.2
-0.4
-0.6
-0.8
1
2
3
4
5
Observed Value


5
4
3
2
1
Star Provocation after outliers corrected

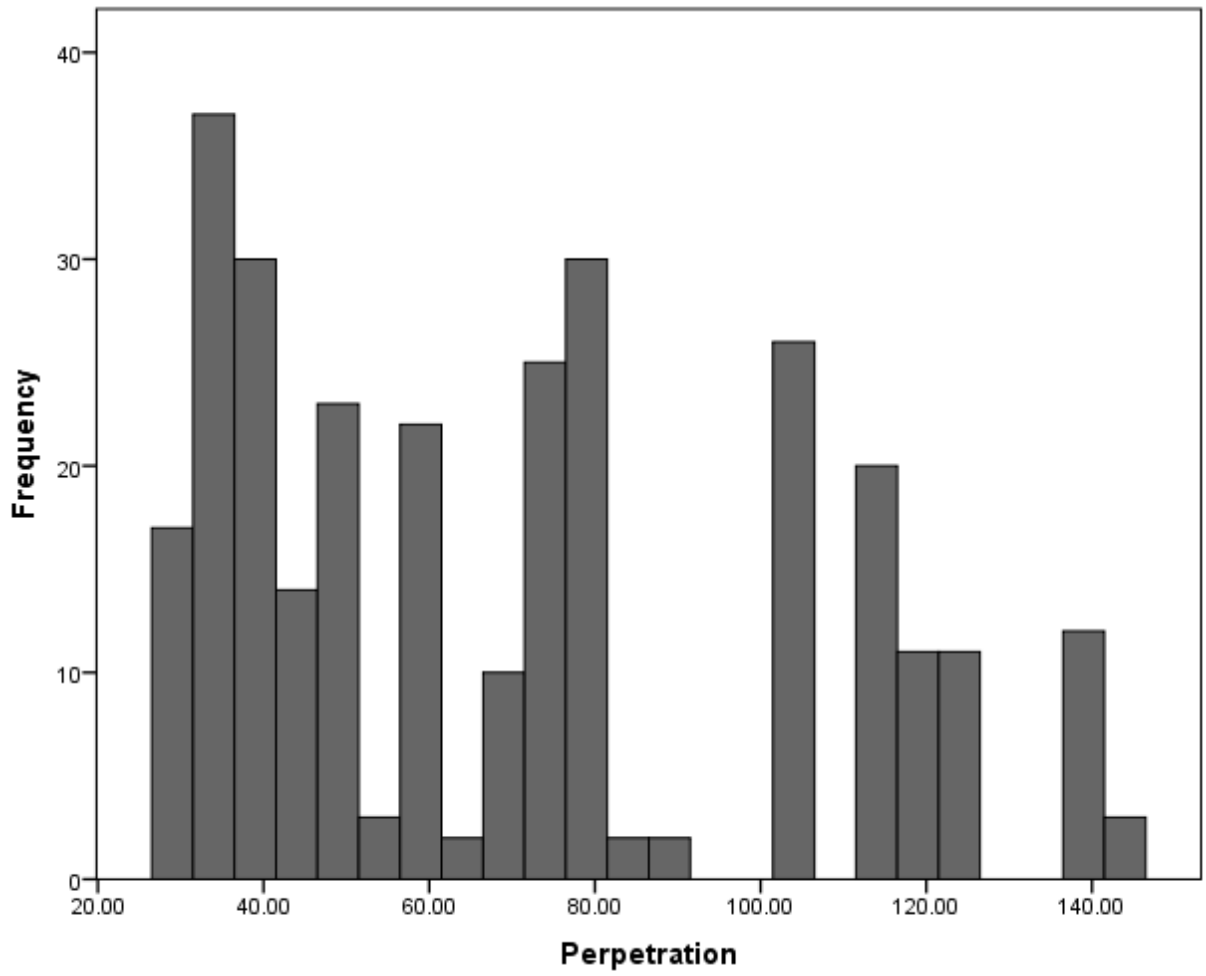

Frequency
40
30
20
10
0
2.00
4.00
6.00
8.00
Goals of Dating Aggression

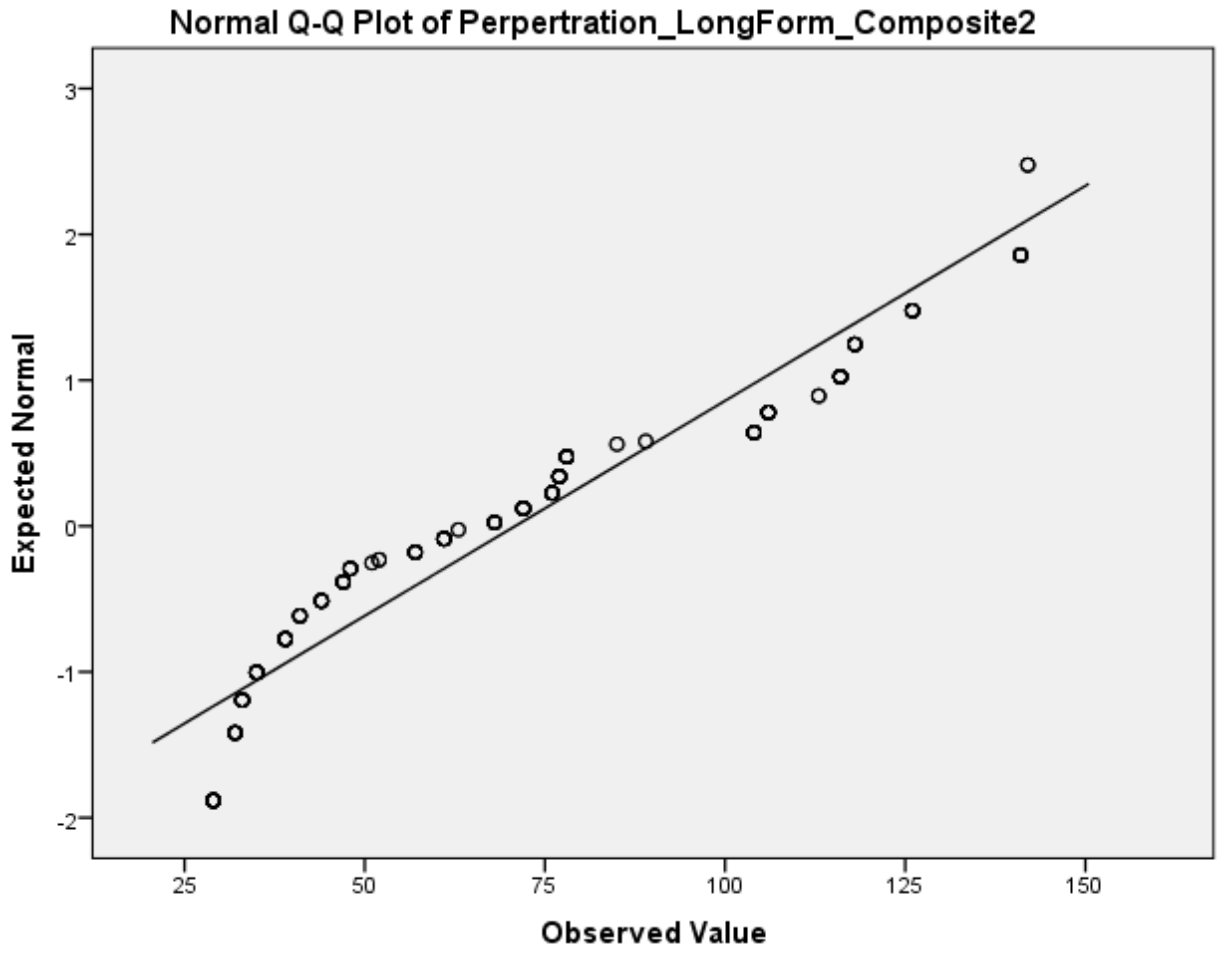

Expected Normal
Observed Value
3
2
1
0
-1
-2
0
2
4
6
8
10

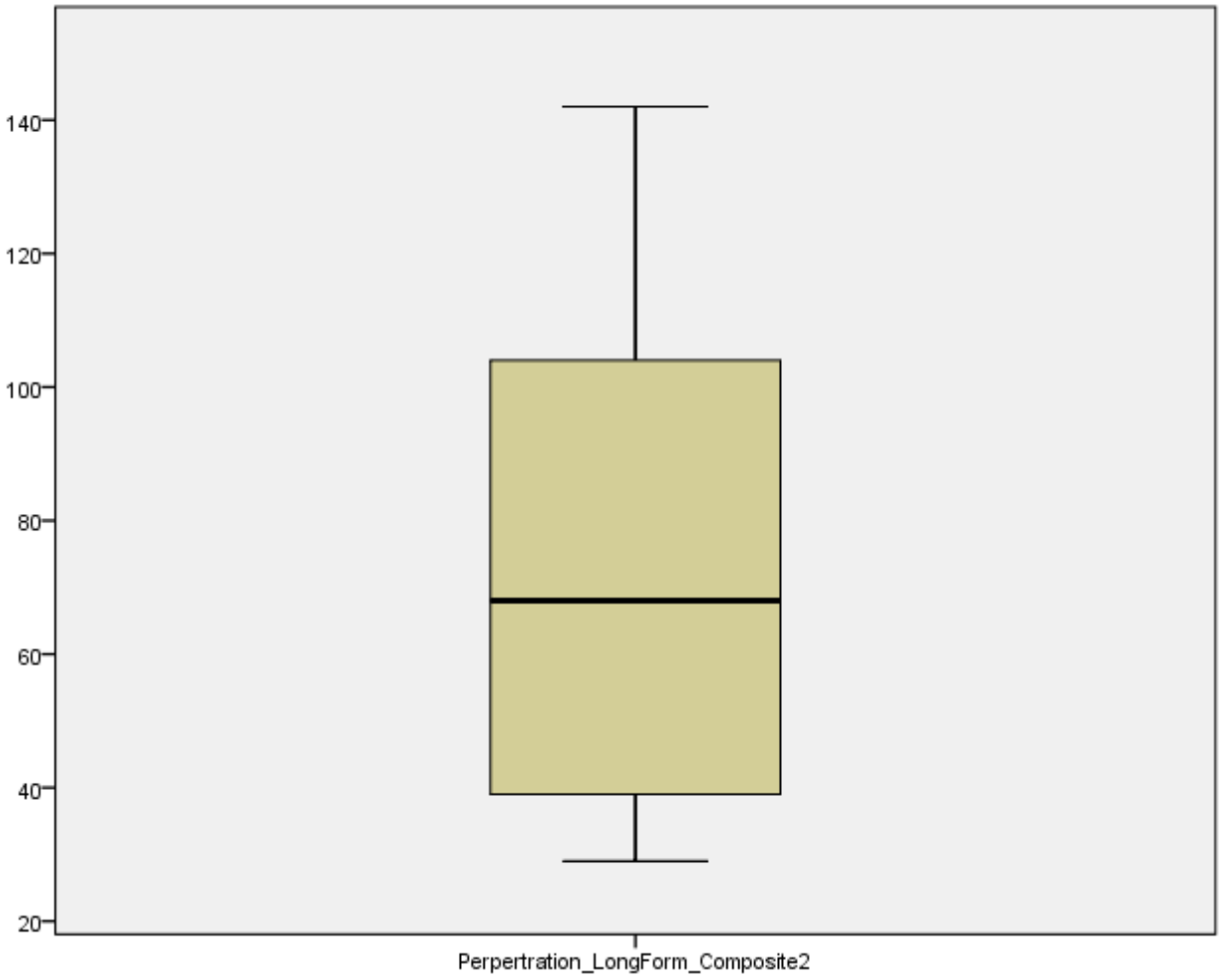

Detrended Normal Q-Q Plot of Pats Composite Outliers Corrected
Dev from Normal
0.4
0.2
0.0
-0.2
2
4
6
8
Observed Value


8
6
4
2
Pats Composite Outliers Corrected

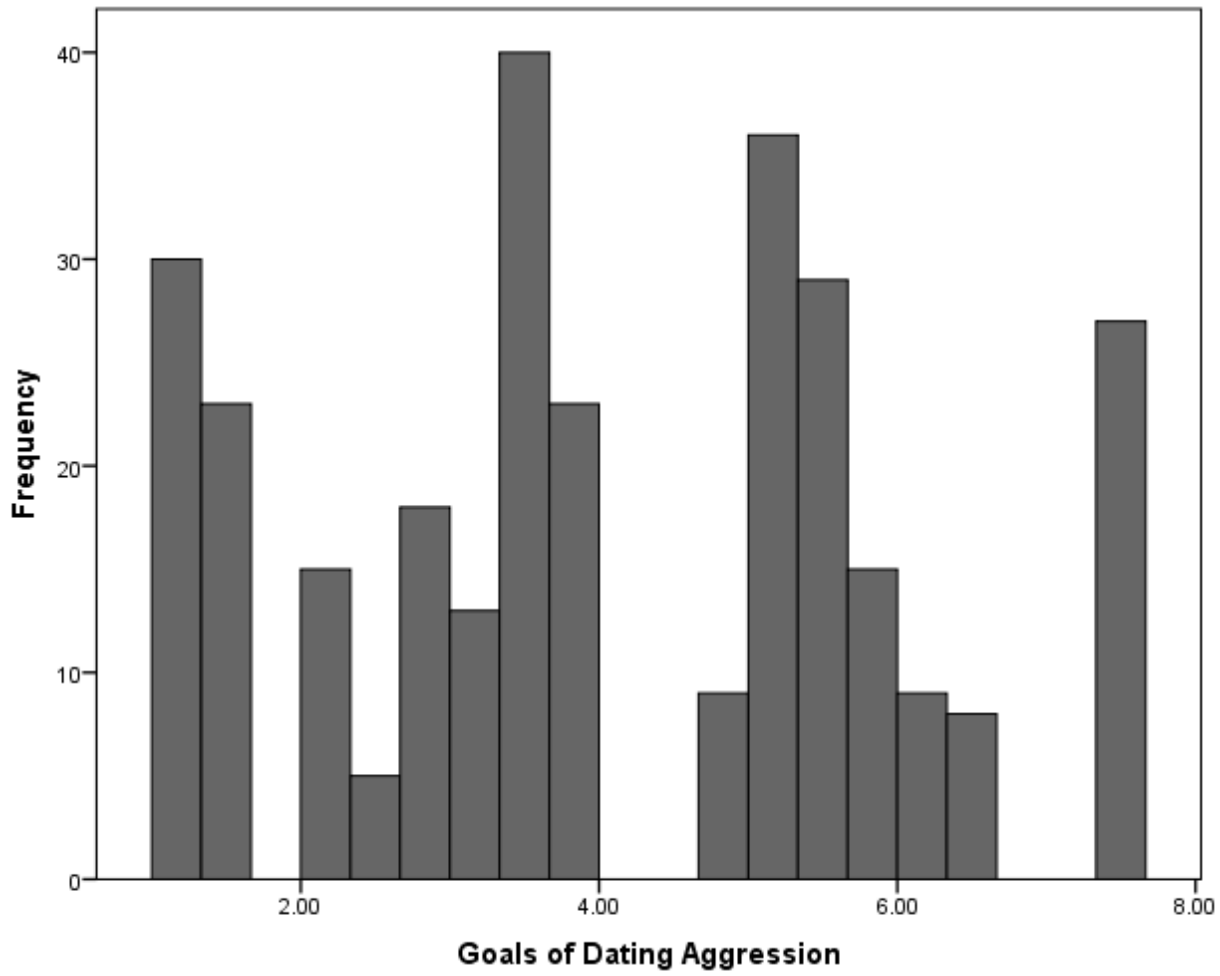
Appendix D: PEAQ Scores

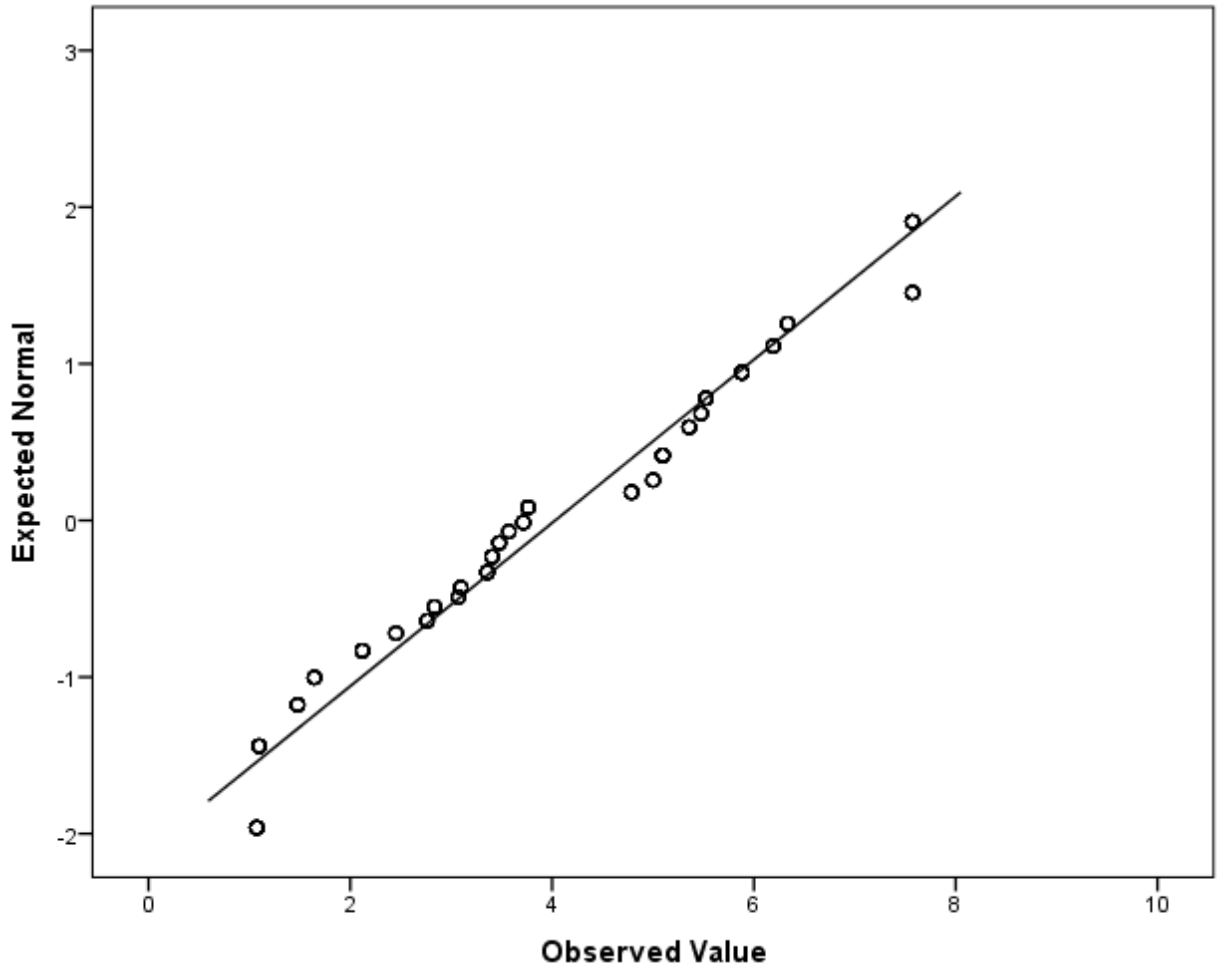


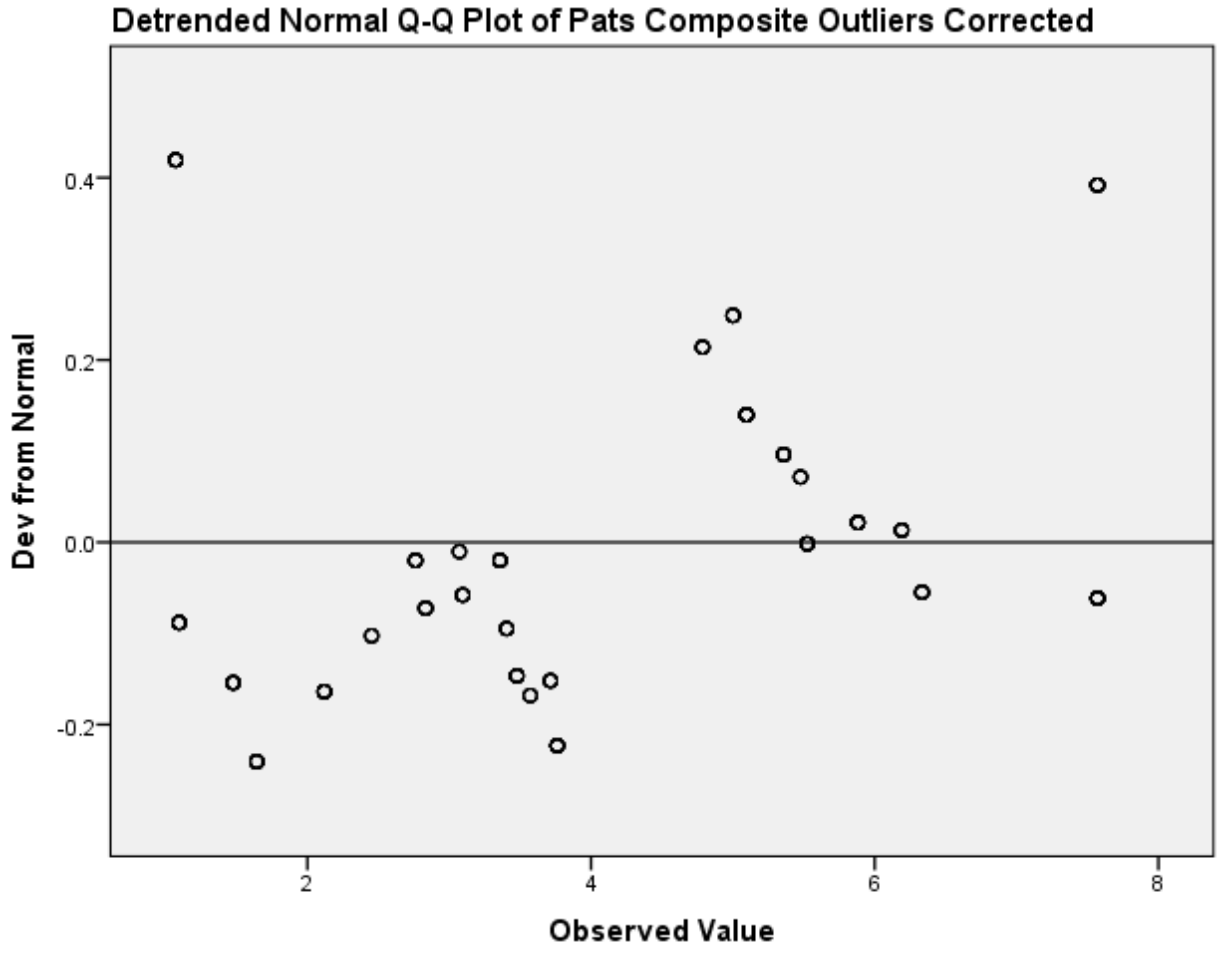

Normal Q-Q Plot of Perpertration_LongForm_Composite2
Expected Normal
Observed Value
3
2
1
0
-1
-2
25
50
75
100
125
150

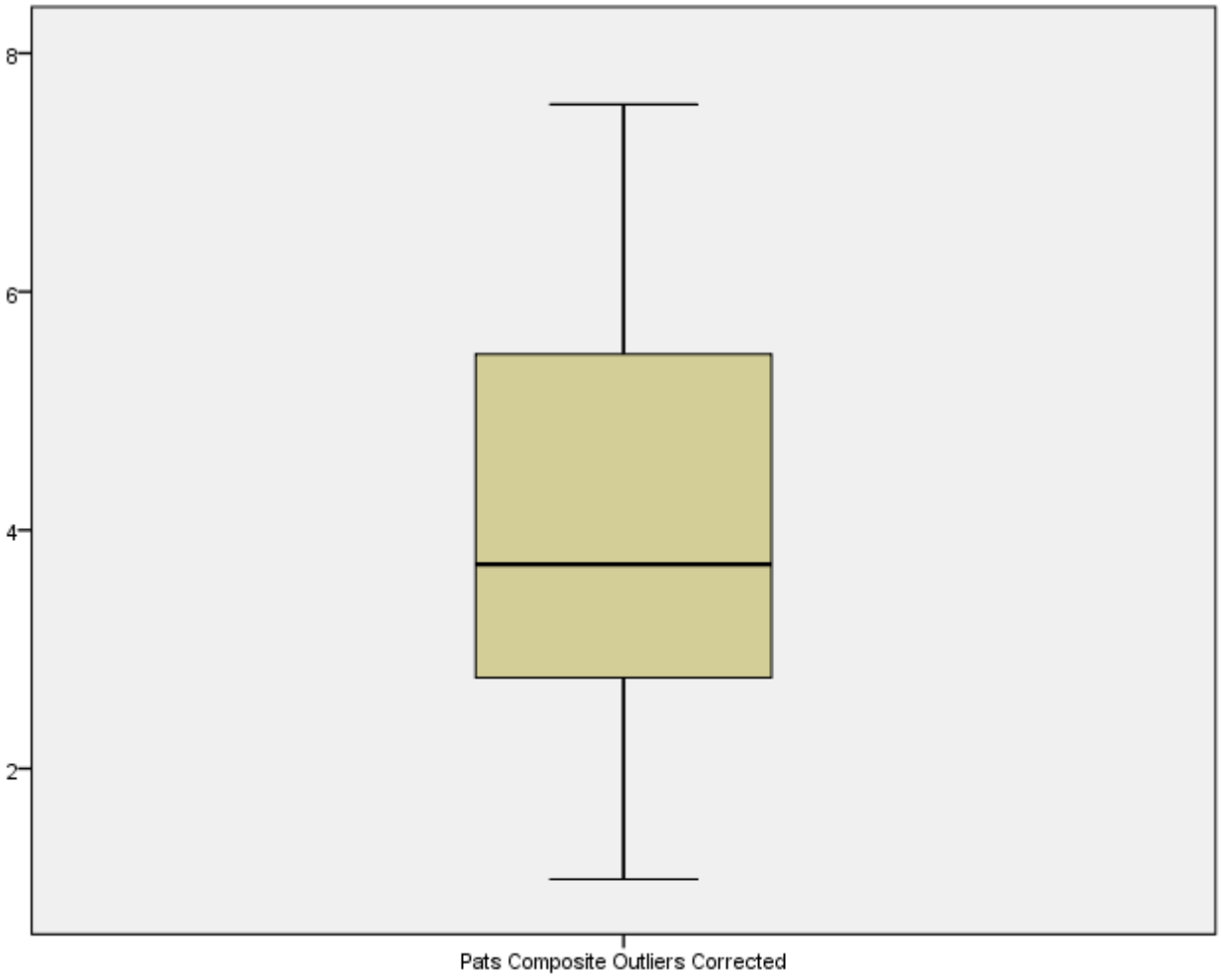

140
120
100
80
60
40
20
Perpertration_LongForm_Composite2

Appendix E: PATS




Expected Normal
Observed Value
3
2
1
0
-1
-2
0
2
4
6
8
10

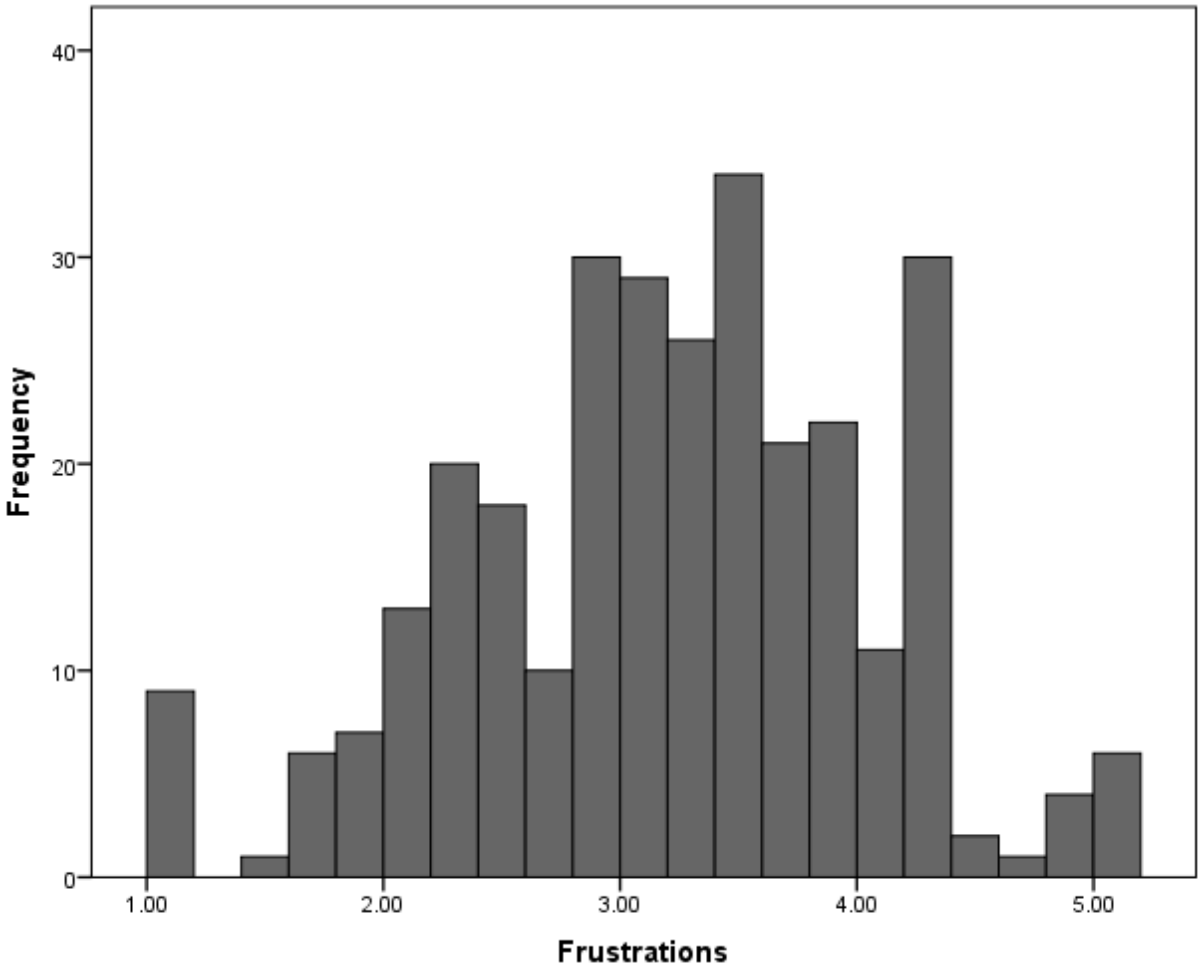

Detrended Normal Q-Q Plot of Pats Composite Outliers Corrected
Dev from Normal
0.4
0.2
0.0
-0.2
2
4
6
8
Observed Value

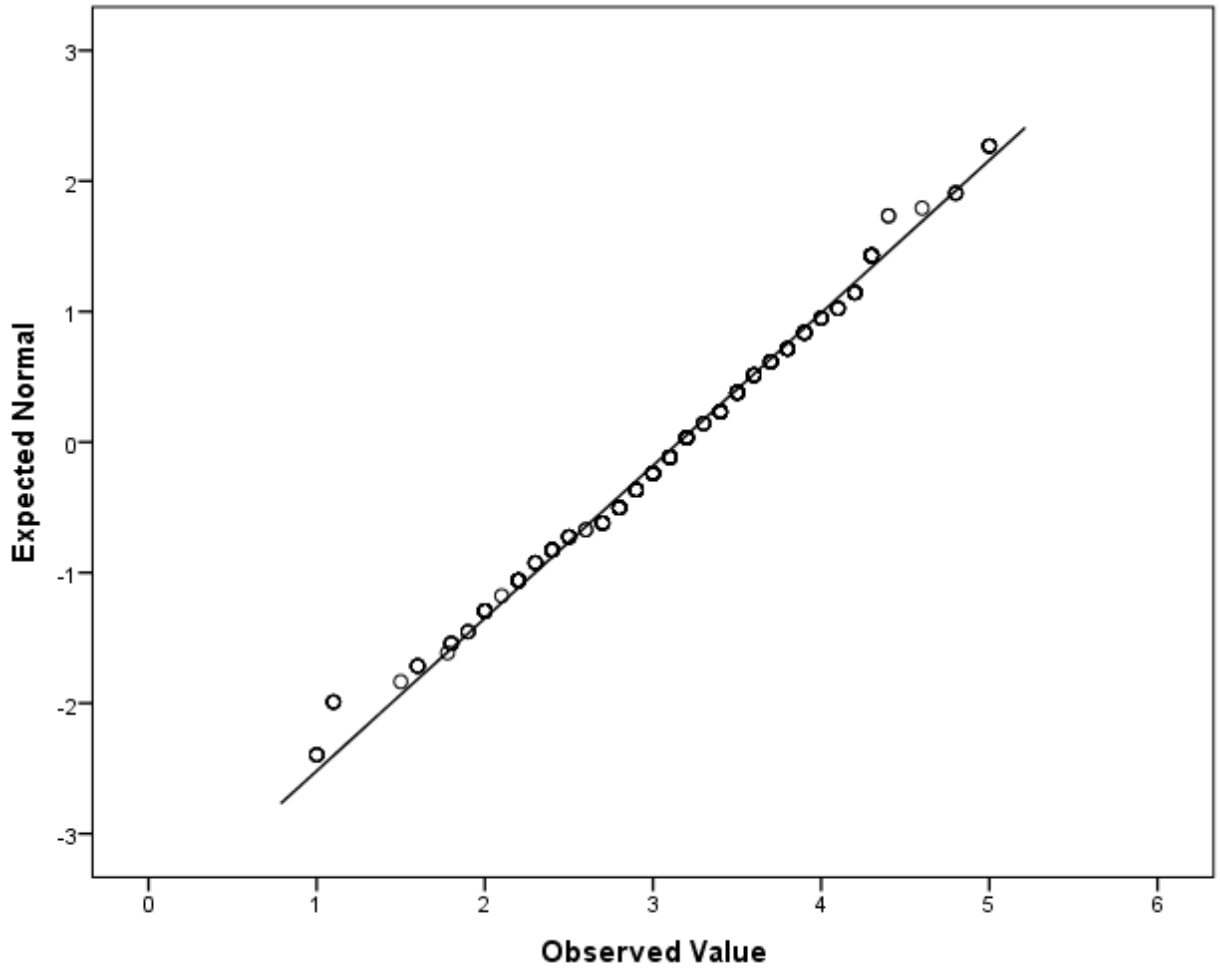

8
6
4
2
Pats Composite Outliers Corrected

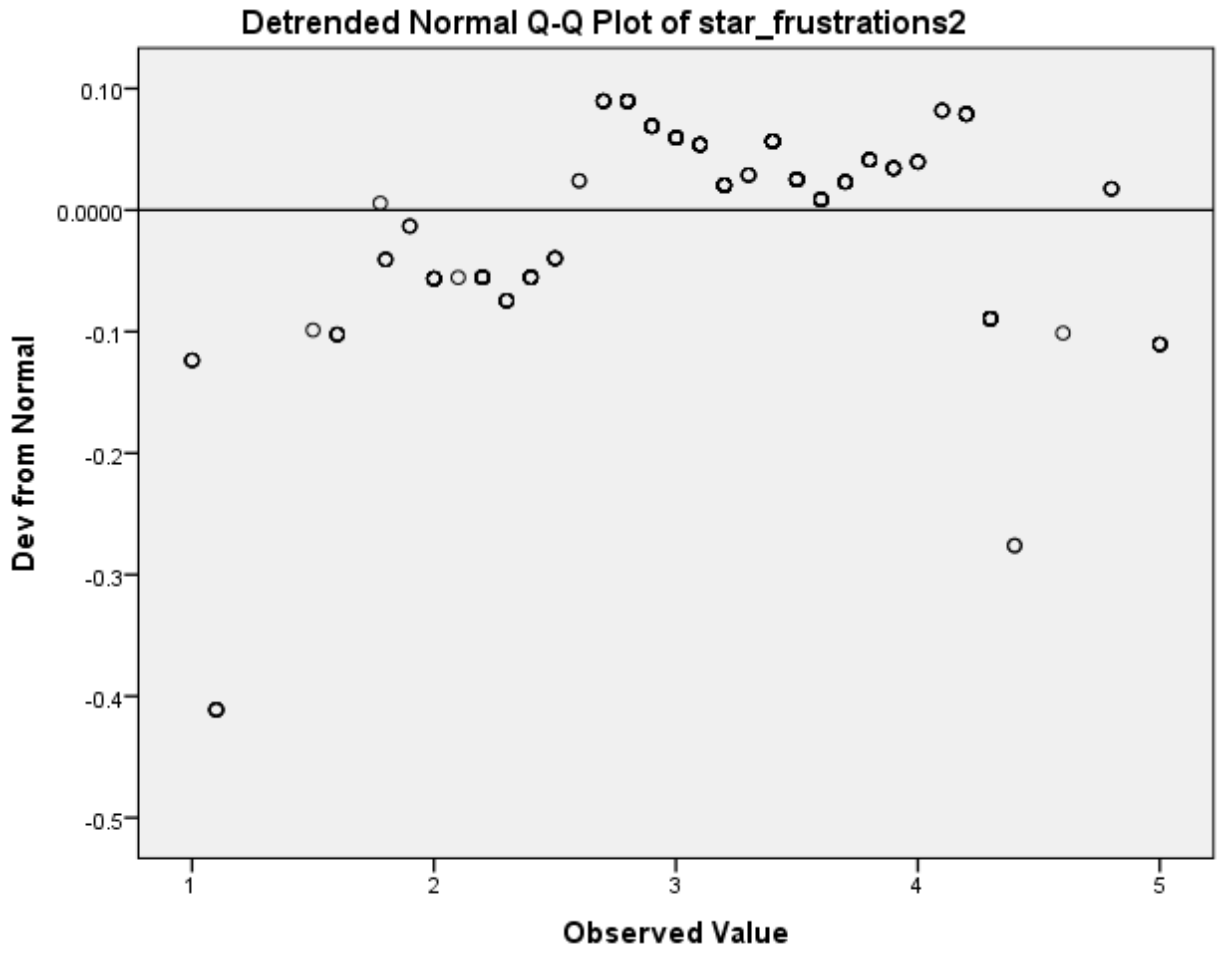
Appendix F: Skewness and Kurtosis for Goals of Dating Aggression

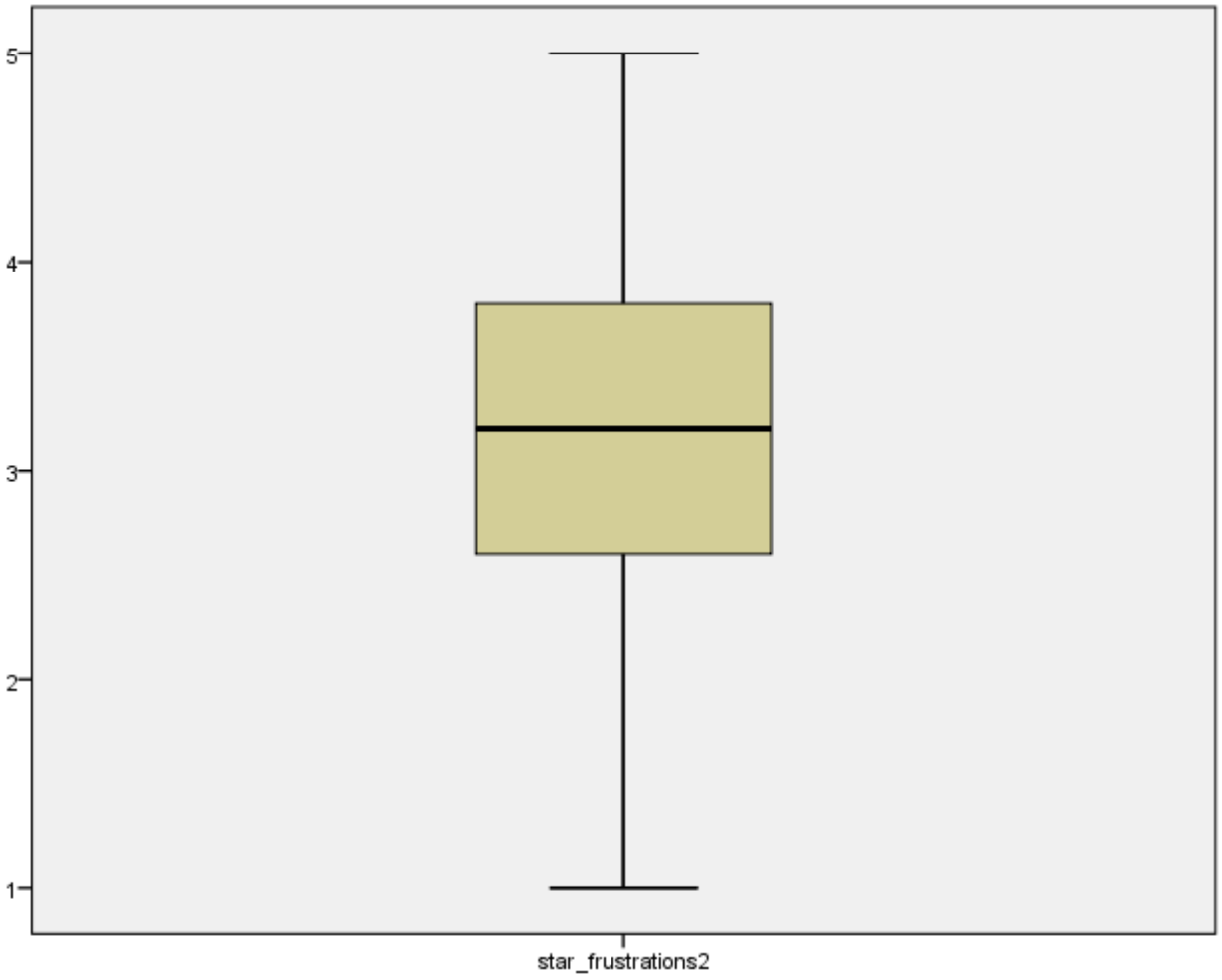
Variable	**Skewness**	**Kurtosis**
Goals of Dating Aggression		
Stalking	.883	1.09
Relational Aggression	.825	.573
Monitoring	.960	1.04
Controlling/Domineering	.853	1.20
Verbal Aggression	.776	1.02

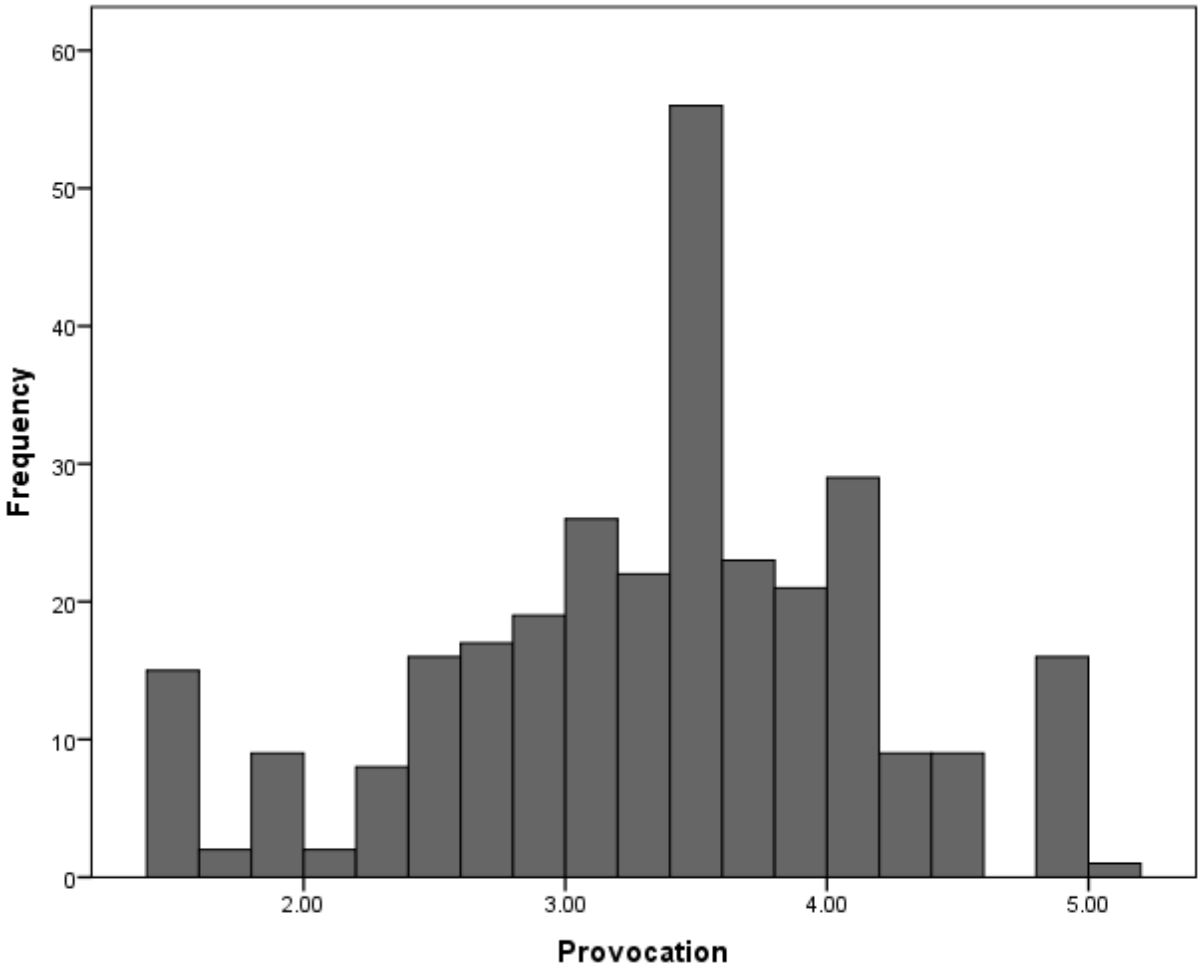
Appendix G: STARS

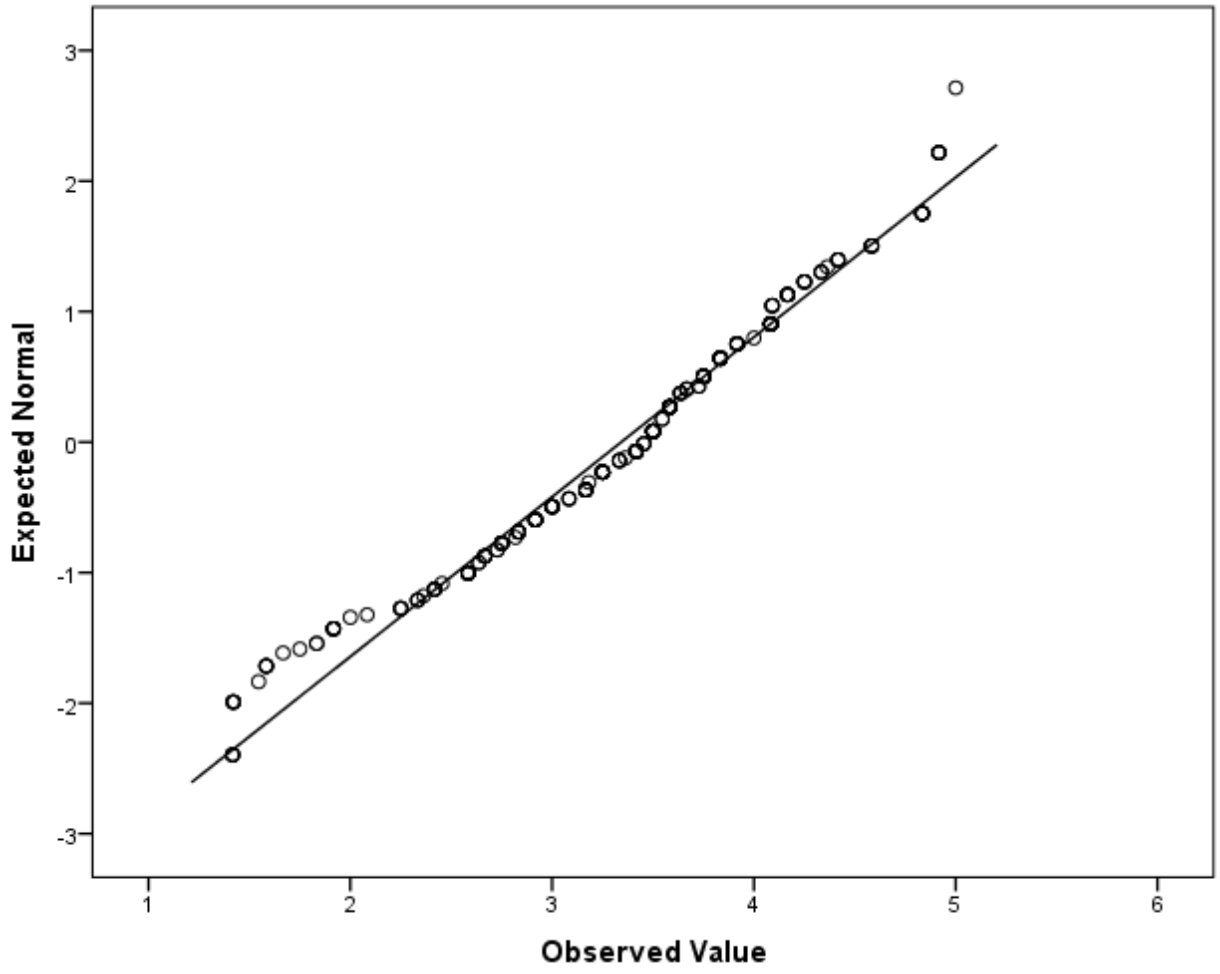


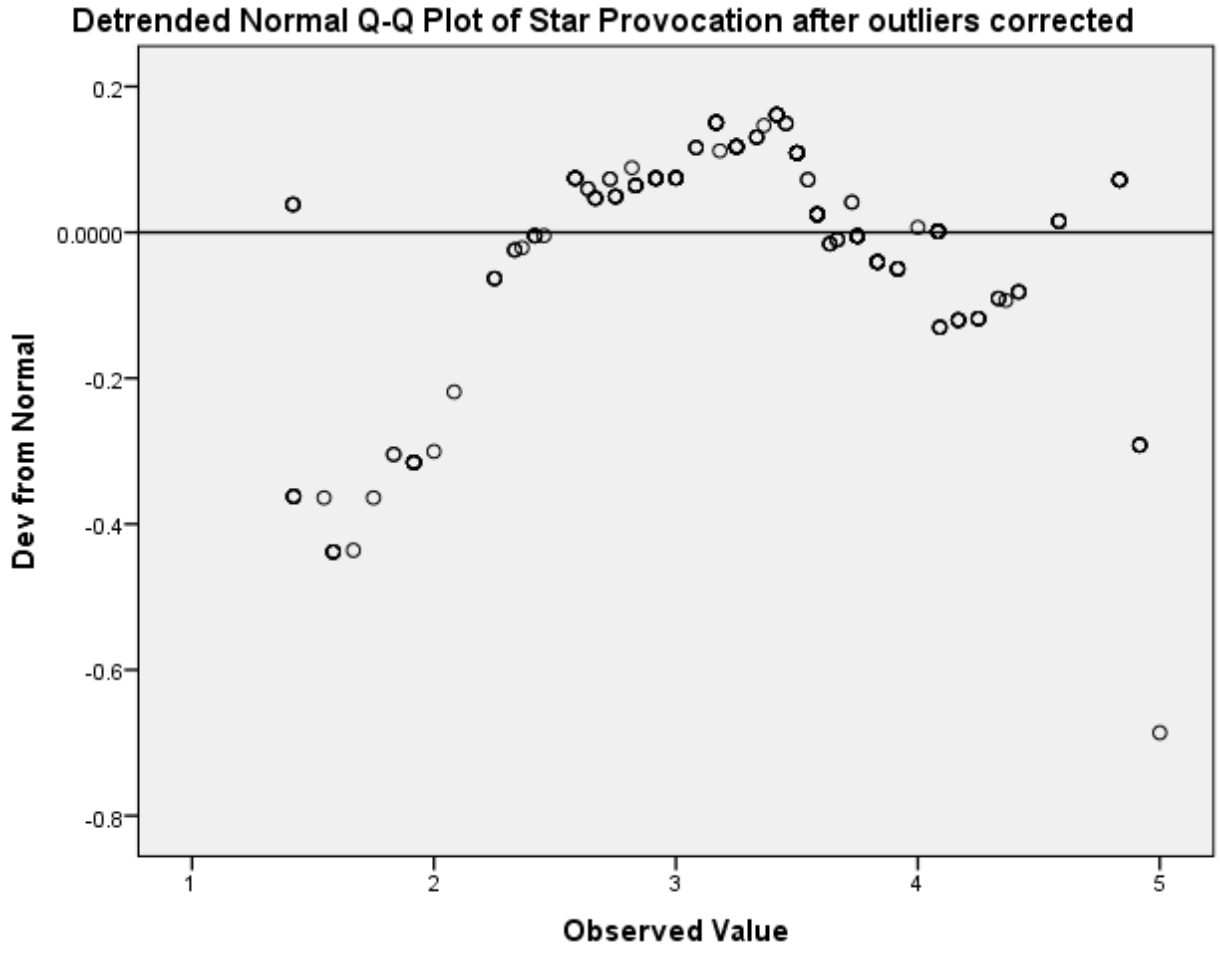

Expected Normal
Observed Value
3
2
1
0
-1
-2
-3
0
1
2
3
4
5
6

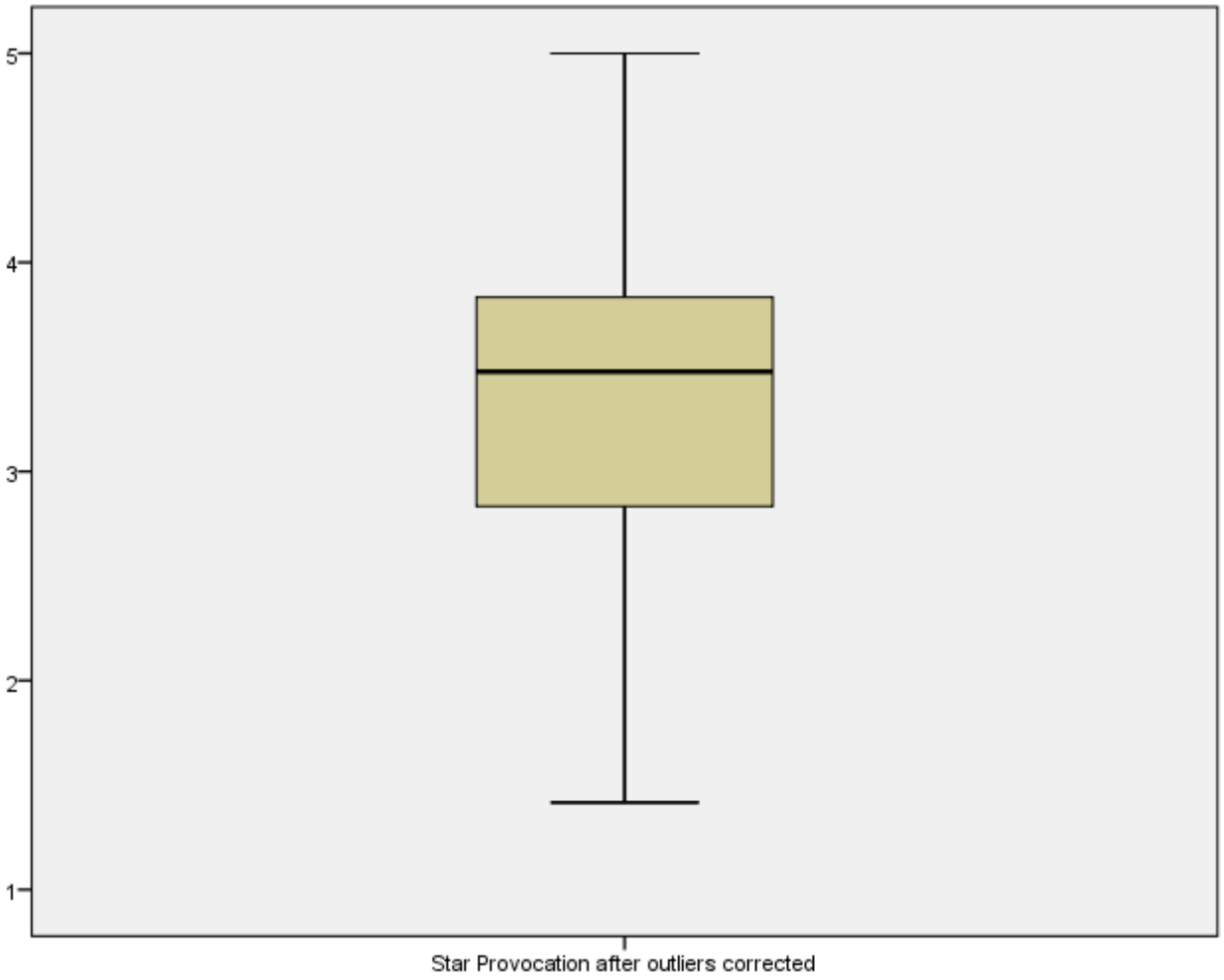

Detrended Normal Q-Q Plot of star_frustrations2
Dev from Normal
0.10
0.0000
-0.1
-0.2
-0.3
-0.4
-0.5
1
2
3
4
5
Observed Value


5
4
3
2
1
star_frustrations2


60
50
40
30
20
10
0
Frequency
2.00
3.00
4.00
5.00
Provocation


Expected Normal
3
2
1
0
-1
-2
-3
1
2
3
4
5
6
Observed Value


Detrended Normal Q-Q Plot of Star Provocation after outliers corrected
Dev from Normal
0.2
0.0000
-0.2
-0.4
-0.6
-0.8
1
2
3
4
5
Observed Value


5
4
3
2
1
Star Provocation after outliers corrected