

2020

## Effects of Intimate Partner Violence on Academic Motivation Among Emerging Adult Women

Cristela Maria Thorne Mitchell  
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# Walden University

College of Social and Behavioral Sciences

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Cristela Maria Thorne Mitchell

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2020

Abstract

Effects of Intimate Partner Violence on Academic Motivation

Among Emerging Adult Women

by

Cristela Maria Thorne Mitchell

MS, Columbia University School of Social Work, 1985

BA, Manhattan College, 1982

Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Philosophy

General Educational Psychology

Walden University

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## Abstract

For women who are victims of intimate partner violence (IPV), one avenue to gaining independence from their partners is enhanced employment opportunities from obtaining a college degree. The purpose of this study was to investigate the relationship between IPV and academic motivation among emerging adult women, and whether depressive symptoms mediate the relationship. Bandura's social learning theory, Deci and Ryan's theory of self-determination, and Seligman's theory of learned helplessness were the theoretical frameworks of the study. The study sample consisted of 225 women 19-29 years of age who were enrolled in higher education and who had experienced violence from an intimate partner within the past 12 months. An online survey was administered to collect data on IPV, depressive symptoms, and academic motivation using the Revised Conflict Tactics Scales (CTS2), the Modified Beck Depression Inventory (MBDI) scales, and the Academic Motivation Scale—College Version (AMS-C). The study data were analyzed using multiple regression analysis. The results indicated that physical assault and psychological aggression were not statistically significant as predictors of depressive symptoms. However, there was significant indirect effect on MBDI scores on IPV and on academic motivation, suggesting that depressive symptoms mediate the correlations between depressive symptoms, psychological aggression, physical assault, and amotivation. Future research studies could be conducted on this topic using other CTS2 and AMS-C subscales with MBDI scores. The findings of this study may contribute to social change by inviting interest among educators, scholars, and mental health professionals in replicating it with a larger sample size.

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## Dedication

This work is dedicated to all young women who experienced intimate partner violence in their relationships and did not have the support, resources, strength, or knowledge to get out of their situation but aspired to obtain higher education and economic independence. It is my hope that this study will offer some insight for clinicians, educators, school administrators, law enforcement personnel, and health care professionals to collaborate and develop more avenues, tools, or resources that can support young emerging adults who may be in perilous relationships.

## Acknowledgments

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## Chapter 1: Introduction to the Study

### **Introduction**

This dissertation study was an investigation of what, if any, effect violence in intimate relationships has on academic motivation among emerging adult women. Much research has been done on the economic impact of battering on the victimized woman, with regard to welfare, housing, employment, and even education (Littman, 2012), yet almost no researcher has considered how exposure to and victimization from intimate partner violence (IPV) can affect academic motivation among young emerging adult women, leaving a gap in the literature. Understanding the effect of IPV on young women could assist behavioral health professionals within outpatient programs as well as vocational or career and college counselors in identifying challenges for emerging young adult women seeking to complete their academic goals, as well as in developing interventions specifically tailored to encourage, support and motivate this population. Such a program could deliver positive social change by promoting heightened awareness among professionals and encouraging supportive and motivational interactions with emerging adult women.

This chapter covers the background of the topic and lays a foundation for the study. It highlights the gap in the literature that this study addressed. The problem statement, purpose of the study, research questions, and nature of the study are also provided. This chapter concludes with the limitations of the study, the significance of the study, a discussion of professional applications, and the study's implication for positive social change.

## Background

Intimate partner physical and assaultive violence remains a societal problem (Giustina, 2009, 2013). According to the National Crime Victimization Survey (NCVS, 2014), it is estimated that between 960,000 and 3 million women are physically abused by their husbands or boyfriends yearly; statistics suggest that 1 in every 3 women has this experience. This serious yet preventable public health problem affects many Americans on a daily basis (San Francisco Domestic Violence [SFDV], 2011). The social problem of intimate partner violence (IPV) is primarily a crime against women and remains a significant problem in the United States (Rennison, 2001; Tjaden & Thoennes, 2000). Women generally are at risk for domestic violence, but at particularly great risk are young adult females who were exposed to violence in childhood, because they are more likely to become victims of IPV (Carpenter & Stacks, 2009; Futures Without Violence, 2013; Israel & Stover, 2009). However, it should be noted that a national survey has also indicated that 835,000 men in the United States are assaulted by an intimate partner (National Coalition for Men [NCFM], 2009). IPV, otherwise known as *domestic violence*, does not discriminate. It can happen to anyone regardless of age, race, gender, ethnicity, or socioeconomic status. The research for this study focused on emerging adult women.

Emerging adulthood is a period that extends from the late teen years to the late 20s and stretches to 30 in some situations (Arnett, 2007; Arnett & Fishel, 2013). This period involves identity formation, conceptualized as the process whereby emerging adults gain a sense of self, understand their values, and develop a sense of academic competence, which is of paramount importance to academic motivation (Matsushima &

Ozaki, 2015; Wigfield & Wagner, 2005). It is also a stage when romantic relationships can become more serious and intimate at the same time that individuals seek higher education before beginning a career, establishing financial independence, and starting a family (O'Brien, Cohen, Pooley, & Taylor, 2013). For young emerging adult women, IPV creates problems that can exacerbate conditions of poverty, can negatively affect health, and can interrupt or diminish goals and aspirations, keeping them trapped in abusive relationships (Goodman, Smyth, Borges, & Singer, 2009; Littwin, 2012).

A consequence of exposure to violence early in life and continuing into the preadolescent and adolescent years is psychosocial problems (e.g., sleep disturbance, enuresis, withdrawal, emotionality, and poor academic performance; Garrido, Culhane, Petrenko, & Taussig, 2011; Insana, Foley, Downs, Kolko, & McNeils, 2014). Another consequence of exposure to violence in adolescence in particular is imitation of destructive anger-expression styles, which increases the likelihood of individuals perpetrating or becoming victims of violence and places them at risk for dating violence in their own relationships (Clarey, Hokoda, & Ulloa, 2010; Morris, Mrug, & Windle, 2015; Wolfe & Foshee, 2003).

Major symptoms of depression include marked diminished interest or pleasure in things and activities, lack of motivation to do or complete tasks, and a sense of hopelessness; these symptoms may also appear when IPV is present (Avokian & Markou, 2012). Depression was found to be one of the internalizing disorders among young adolescent girls exposed to violence (Esfandyari, Baharudin, & Nowzari, 2009). Exposure to interparental conflict (IPC) or IPV influences young females to be insecure and have low self-esteem (Kemp, Signal, Botros, Taylor, & Prentice, 2014). Later into



adulthood, they may develop mental health issues, including depressive symptoms (Chang et al., 2010). Hetzel-Riggins and Meads (2011) examined school-aged children exposed to IPV and found a high correlation to dissociation, sleep disturbance, and depressive moods.

Among women who are victims of IPV, high levels of depressive symptoms have been associated with poverty, homelessness, and hopelessness (Belle & Doucet, 2003). Loss or lack of material resources (e.g., unemployment, residing in temporary housing) is associated with depressed mood among low-income young adult women (Ennis, Hobfoll, & Schroder, 2000). Educated women, with post high school education, have been found to have greater financial security compared to women who are not educated (Kreager, Felson, Warner, & Wenger, 2013).

In his study on academic success as a compensatory mechanism for individuals who have experienced adversities and life disadvantages, Novotny (2011) looked at a diverse population of students who displayed academic resilience. He indicated that an academic environment can be one that allows a student to escape from an adverse environment; in this way, it may be a vehicle to change the student's view of the world in a positive way. Novotny further indicated that academic resilience offers a sense of one's own competence and an opportunity to experience success. Novotny recommended further research on what promotes academic motivation among diverse groups of women who have experienced conditions of adversity, to determine what lies behind success or lack thereof. Considering the population of emerging adult women who have been exposed to and are victims of IPV while working toward a goal of educational attainment, and in concert with Novotny's recommendation, I identified the need to

conduct a study on the relationship between the independent variable of exposure to IPV and the dependent variable of academic motivation. Simultaneously, the study assessed for depression as a mediating variable. By conducting this quantitative study, I aimed to fill that gap by examining specifically how, if at all, IPV in relationships affects academic motivation in emerging adult women.

### **Problem Statement**

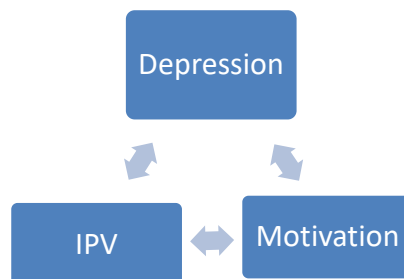
A primary mental health response of women being abused by an intimate partner is depression or major depressive symptoms (Campbell & Soeken, 1999; Cascardi, O’Leary & Schlee, 1999; Devries et al., 2013). Among the symptoms of depression is a sense of hopelessness and loss of motivation (Clements & Sawhney, 2000). In a cross-sectional study of causality, Devries et al. (2013) found that women exposed to IPV were at an increased risk of subsequent depression, and women who were depressed were more likely to be at risk for IPV because they were more accepting of partners with characteristics that predisposed them to use violence.

Women who are victims of IPV often struggle to secure and maintain safety or gain some independence from their abuser (Adams et al., 2013; Moe & Bell, 2004). One avenue of empowerment for women who are victims of IPV is being involved in gainful activity, such as having full-time employment or being enrolled in higher education, which affords women better bargaining power for themselves to establish some independence (Antai, 2011; Hammond et al., 2014; Vyas & Watts, 2009;). If, however, women who have experienced IPV are depressed, they may lack motivation (Cascardi et al., 1999; 2000). According to Goodman et al. (2009) and Novotny (2011), few studies have examined the multifaceted psychosocial and psychological impact of depression on

women who are exposed to IPV. The problem that this research study addressed is that it is unknown whether there is a relationship between IPV exposure and academic motivation among emerging adult women; moreover, it is unknown whether depressive symptoms mediate this relationship.

### **Purpose of the Study**

The purpose of this quantitative correlational study of emerging adult women (aged 19-29) was to investigate relationships between IPV exposure, academic motivation, and depressive symptoms (see Figure 1). Depressive symptoms were examined as a potential mediating variable of the relationship between IPV and academic motivation. Two dimensions of exposure to IPV during the past year were measured using the Physical Assault and Psychological Aggression scales of the revised Conflict Tactics Scales (CTS2; Straus et al., 2003). Depressive symptoms were assessed using the Modified Beck Depression Inventory (MBDI). Academic motivation was assessed using two scales of the Academic Motivation Scale—College Version (AMS-C; Stover, Iglesia, Boubeta, & Liporace, 2012): the Extrinsic Motivation/Introjected Regulation scale and the Amotivation scale.



*Figure 1.* Diagram of relationship between variables.

## Research Questions and Hypotheses

Based upon a review of the relevant literature (see Chapter 2), exposure to IPV among emerging adult women is predicted to lead to increased depressive symptoms and to lower levels of academic motivation. It is also predicted that depressive symptoms mediate the relationship between IPV and academic motivation (see Figure 1). Therefore, this study was guided by the following research questions.

RQ1: Is there a relationship between exposure to intimate partner violence (IPV) and depressive symptoms among emerging adult women?

To investigate the first research question, multiple regression analysis was used to examine the following pair of null and alternative hypotheses. The explanatory variables were two dimensions of exposure to IPV, and the behavioral response variable was depressive symptoms.

Ho1: Among emerging adult women, there is no relationship between exposure to IPV (as measured by the Physical Assault and Psychological Aggression scores of the Conflict Tactics Scales 2 [CTS2]) and depressive symptoms (as measured by the Modified Beck Depression Inventory [MBDI]).

Ha1: Among emerging adult women, there is a relationship between exposure to IPV (as measured by the Physical Assault and Psychological Aggression scores of the [CTS2]) and depressive symptoms (as measured by the [MBDI]).

RQ2: Does exposure to IPV in an intimate relationship predict levels of academic motivation?

To investigate the second research question, multiple regression analysis was used to examine the following two pairs of null and alternative hypotheses. The explanatory variables were two dimensions of exposure to IPV and the behavioral response variables with two dimensions of academic motivation. Each dimension of academic motivation was examined in a separate regression analysis. Therefore, there were two pairs of null and alternative hypotheses for RQ2, one for each dimension of academic motivation.

Ho2: Exposure to IPV in an intimate relationship (as measured by [CTS2] Physical Assault scores and Psychological Aggression scores does not predict levels of academic amotivation as measured by the Academic Motivation Scale—College Version [AMS-C]) Amotivation subscale.

Ha2: Exposure to IPV in an intimate relationship (as measured by [CTS2] Physical Assault scores and Psychological Aggression scores does predict levels of academic amotivation as measured by [AMS-C]) Amotivation subscale.

Ho3: Exposure to IPV in intimate relationship (as measured by [CTS2] Physical Assault scores and Psychological Aggression scores does not predict levels of academic extrinsic motivation (as measured by the [AMS-C] Extrinsic Motivation/Introjected Regulation [EMIN]) subscale.

Ha3: Exposure to IPV in an intimate relationship (as measured by [CTS2] Physical Assault and Psychological Aggression scores does predict levels

of academic extrinsic motivation as measured by the [AMS-C] [EMIN]) subscale.

RQ3: Do depressive symptoms mediate the relationship between IPV exposure and academic motivation?

Depressive symptoms were examined as a potential mediator of the relationship between IPV exposure and academic motivation, by testing the following pairs of null and alternative hypotheses. Each test of the mediating role of depression involved the mediator variable (depressive symptoms), a dependent variable (one of the two academic motivation dimensions), and one independent variable (one of the two IPV exposure dimensions). Because there are two dimensions of IPV exposure and two dimensions of academic motivation, four tests for mediation effects were performed. Therefore, there were four pairs of null and alternative hypotheses for RQ3, one for each test of mediation effects.

Ho4: Depressive symptoms as measured by MBDI do not mediate the relationship between CTS2 Physical Assault scale scores and AMS-C Amotivation subscale scores.

Ha4: Depressive symptoms as measured by MBDI do mediate the relationship between CTS2 Physical Assault scale scores and AMS-C Amotivation subscale scores.

Ho5: Depressive symptoms as measured by the MBDI do not mediate the relationship between CTS2 Physical Assault scale scores and AMS-C Extrinsic Motivation/Introjected Regulation subscale scores.

- Ha5: Depressive symptoms as measured by the MBDI do mediate the relationship between CTS2 Physical Assault Scale scores and AMS-C Extrinsic Motivation/Introjected Regulation subscale scores.
- Ho6: Depressive symptoms as measured by the MBDI do not mediate the relationship between CTS2 Psychological Aggression scores and AMS-C Amotivation subscale scores.
- Ha6: Depressive symptoms as measured by the MBDI do mediate the relationship between CTS2 Psychological Aggression scores and AMS-C Amotivation subscale scores.
- Ho7: Depressive symptoms as measured by the MBDI do not mediate the relationship between CTS2 Psychological Aggression scale scores and AMS-C Extrinsic Motivation/Introjected Regulation subscale scores
- Ha7: Depressive symptoms as measured by the MBDI do mediate the relationship between CTS2 Psychological Aggression scale scores and AMS-C Extrinsic Motivation/Introjected Regulation subscale scores.

### **Theoretical Frameworks for the Study**

#### **Social Learning Theory**

Social learning theory indicates that individuals learn behaviors through observation of others engaged in these behaviors. Albert Bandura (1977, as cited in Wolfe et al., 2003) was the originator of social learning theory, later renamed social cognitive theory. Bandura contended that exposure to violence in the immediate environment contributes to cognitions that buffer or dissuade individuals from engaging in aggressive behavior.

Cognitive processes play a role in Bandura's theory. Bandura demonstrated in a study that individuals can learn various behaviors without directly experiencing reinforcements. Learning, Bandura suggested, can occur through *vicarious reinforcement*, in a process of observing how other people behave and seeing the consequences of their behavior (Bushman & Huesmann, 2006).

Bandura's theory provides a framework for understanding how interrelated societal aspects of the environment can influence the development of a young person throughout life stages (Harris, 2014). Another theory supporting this research study in explaining what drives an individual to accomplish a goal was the theory of self-determination.

### **Theory of Self-Determination**

Psychologists Deci and Ryan (2011/1985) developed the theory of self-determination (SDT), which is a theory of motivation that holds that people are driven by a need to grow and/or gain fulfillment (Deci, Ryan, & Geban, 2011). Deci and Ryan (2011, as cited in Sikhwari, 2014) posited that SDT is contingent on competence, relatedness, and autonomy, all of which influence motivation.

Several kinds of motivation are identified by this theory. The first is *autonomous motivation*, which is useful when considering how a person's motivation arise. The second is *intrinsic motivation*, which occurs when a person does something purely because of the interest, pleasure, or satisfaction that he or she derives from it. A third kind of motivation is *extrinsic motivation*, which arises when an activity will yield a reward or benefit upon completion (Deci et al., 2011; Sikhwari, 2014). The fourth is *controlled motivation*, which is useful in understanding how one person can exert control



over another. Controlled motivation may directly involve external regulation of behavior, whereby one's behavior is a function of external contingencies of reward or punishment. In this study, academic motivation was considered an extrinsic motivation for emerging adult women who were in violent intimate relationships.

In the current study, I applied Bandura's social learning theory, in concert with Deci and Ryan's self-determination theory and Seligman's learned helplessness theory, to the consideration of how exposure to environmental influences can affect motivation.

### **Theory of Learned Helplessness**

The theory of learned helplessness initially evolved from a series of laboratory tests in which Seligman sought to determine what would happen when an animal was allowed a space to escape an impending shock after the sound of a bell. As the animals became conditioned to the sound of the bell and the shock that followed, they never jumped over a little fence to escape; instead, they remained in the space where they were administered the shock treatment. They learned that trying to escape was futile, and subsequently, they learned to be helpless (Namade et al., 2007; Seligman & Maier, 1967).

Seligman applied the learned helplessness theory to humans who were suffering from depression, but this work was not without some controversy (Garber & Seligman, 1980; Seligman, 1974, 1975; Thornton & Jacobs, 1971). Attributional theory, which explains why and how things happen, helps in understanding how individuals who experience a series of setbacks about which they are unable to do anything learn that they have no control over events in their own lives (Seligman, 1975). This theory supported

the research question related to depressive symptoms as a mediating variable between IPV exposure and academic motivation.

### **Nature of the Study**

In this proposed quantitative study, I sought to examine the association between the independent variable of IPV and the dependent variable of academic motivation among emerging adult women. The participants in this study were young women 19-29 years of age who resided in the 48 contiguous states of the United States and might have been in an abusive relationship with an intimate partner within the past year. Participants were recruited via Centiment, LLC (a global expert in research marketing and data collection with over 11 million panelists) to ensure a diverse population of females reflecting various ethnicities in the United States. Participants had been within the past 2 years or were at the time of the survey in an IPV relationship of at least 6-12 months duration.

Questions were asked of the participants regarding their experience with the independent variable (IPV) using the CTS2. Participants were also asked questions regarding the dependent variable of academic motivation using the AMS-C. The mediating variable of depressive symptoms was assessed by using the MBDI scale. A more detailed explanation of the research design and objectives is provided in Chapter 3.

### **Definition of Terms**

*Academic motivation* is defined as the internal process in an individual that spurs him or her to set an academic goal, plan toward achieving the goal, and strive with passion toward actualization of the goal. There are three types of motivation, according to self-determination theorists Deci and Ryan (1985). *Intrinsic motivation* is self-determined

and motivated. *Extrinsic motivation* is self-rewarded motivation. *Amotivation* is the absence of intent or drive to pursue an activity (Deci & Ryan, 1985, 2000).

*Emerging adulthood* is the period that extends from the late teens to late 20s (Arnett, 2000).

*Intimate partner violence (IPV)*, also known as *domestic violence* or *spousal abuse*, is violence committed by a spouse or girlfriend/boyfriend in heterosexual or same-sex couples. IPV can be verbal, physical, sexual, emotional, or psychological (CDC, 2010).

*Depressive symptoms* include feelings of sadness, tearfulness, emptiness, or hopelessness; loss of interest or pleasure in most or all normal activities; sleep disturbances including insomnia; reduced appetite; and trouble with making decisions, thinking, and concentrating. These symptoms may occur most of the day on a routine basis (Gurka, et al., 2016). The severity of depressive symptoms is reflected by scores on the Modified Beck Depression Inventory (MBDI). An MBDI score of 13 or lower indicates minimal depression, whereas a score above 63 indicates severe depression (Galit & Overholser, 2000).

### **Assumptions**

It was assumed that the willingness of the participants who volunteered for this study would not bias the results of this research, and that participants would answer all questions on each of the surveys honestly and to the best of their understanding and ability. Another assumption was that participants would be able to accurately recall events from their past as they related to the survey questions. Likewise, the survey instruments (CTS2 physical and psychological scales, AMS-C, and MBDI) were assumed

to be appropriate measures for the variables designated for this study. Another assumption of this study was that the questionnaire would elicit the desired data that would support the research questions, and that the findings would be significant. It was also assumed that all participants would be fluent in English and would be able to complete the survey that was given. Furthermore, it was assumed that participants' violence experience had begun years prior to the study. Finally, it was assumed that participants in this study were from diverse cultural, socioeconomic, religious, and educational backgrounds.

These assumptions were necessary for the study because the results of the investigation would offer some insight as to the effect that IPV exposure has on academic motivation in emerging adult females.

### **Scope and Delimitations**

Scope and delimitations impact any study significantly (Creswell, 2009). The scope of a study refers to the parameters under which it operates (Simon & Goes, 2013). The breadth of this study was determined by the goal of learning to what degree, if any, academic motivation was affected among emerging adult women enrolled in higher education who had experienced IPV in their own relationships. The study examined a potential intervening variable, namely depression, as a mediator to motivation.

Delimitations help to define the boundaries of a study. For this study, delimitations included the 48 contiguous states of the United States, where participants were chosen based on age, experience with IPV, and academic enrollment.

An internal validity issue could have been the maturation level of participants, which was controlled for by surveying the age of participants. For this study, participants

were within the age range of 19 to 29 years, were enrolled in some form of higher education (part-time/full-time, online or brick and mortar, university or community college), and had IPV exposure within the past year.

A conceptual framework related to the area of study that was not investigated in this study was the theory of adaptation, which was developed by Callista Roy in 1971. Roy's theory involves two paradigm models in which people either cope or adapt based on cognitive processes (Roy, 2014). Instead, the framework for this study enfolded a combination of Bandura's social learning theory, as I looked at exposure to violence; Deci and Ryan's self-determination, as I examined emerging adult women who were enrolled in a level of higher education; and Seligman's learned helplessness theory, as I sought to examine depression as a mediating variable. The rationale for this combination of theories as a framework is explained further in Chapter 2.

### **Limitations**

One limitation of this study was its focus on young emerging adult women only; the findings are not generalizable or representative of young adult male populations. A second limitation may have been that there were other mediating variables linked to exposure to IPV, such as alcohol or drug use, or a history of mental illness, child maltreatment and abuse, and childhood trauma, that was not examined in the proposed study. Because this study had a correlational design, caution was necessary when drawing conclusions regarding causal relationships among variables.

A final limitation, as indicated in another section, was the fact that this study heavily relied on participants' ability to recall events from their past that might elicit negative emotions.

Although web-based survey methods have some limitations, a web-based survey offered some advantages over traditional mail surveys. Response time was greatly reduced, and the cost associated with mailing using envelopes and stamps was eliminated. Web-based delivery also allowed participants the freedom to respond as honestly as possible without concern that they were being judged.

### **Significance of the Study**

The current literature indicates that dating violence among young adolescents and emerging adults has become an increasing public concern (Murphy, 2011). Researchers have examined the correlations between IPV exposure and parental maltreatment on romantic relationships among adolescents and emerging adults (Gover, Jennings, Tomsich, Park, & Rennison, 2011; Simons, Burt, & Simons, 2008; Tyler et al., 2011). Trauma and depression have been reported as consequences of IPV for many victims (Warshaw, Sullivan, & Rivera, 2013). However, studies examining the impact of IPV exposure on academic motivation for emerging adult women, with depression as a mediating variable, proved more difficult to find. The current study was conducted to narrow a gap in literature by studying the effect of IPV exposure on academic motivation for emerging adult women.

Insight from this proposed study may assist future scholars, therapists and educators in developing innovative programming to assist emerging adult women striving to attain academic goals and independence. This research also has the potential to contribute to a deeper understanding of how exposure to violence as a young person can have effects throughout various developmental stages of an individual's life (Garrido, Culhane, Petrenko, & Taussig, 2011; Clarey et al., 2010).

### **Professional Application**

This research study may provide added insight to the current body of literature on IPV exposure by examining its potential association to low academic motivation as a result of depression among emerging adult women. In the arena of education, school counselors, psychologists, social workers, and educators dealing with individuals displaying low schoolwork engagement, low performance, or low motivation may be encouraged to work with and teach skills that empower individuals to approach problems with an understanding that they have the ability to make choices and ultimately develop lifelong problem-solving skills.

### **Implications for Positive Social Change**

This study has the potential to contribute a deeper understanding to the existing body of knowledge regarding IPV by informing the scientific community about exposure to IPV and its effect on academic motivation. The study examined depression as a mediator among IPV-exposed emerging adult women and levels of academic motivation.

The study has implications for positive social change. Understanding the significant indirect effect of depressive symptoms of IPV exposure on academic motivation may help behavioral health professionals, administrators, educators and scholars to identify, develop, and support innovative programming to assist emerging adult women in combating the negative impact of IPV exposure in their own relationships. Such programming may promote positive social change by encouraging, empowering, and elevating motivation through education and curtailing repeated patterns of abusive behaviors.

### **Summary and Transition**

In summary, this chapter presented the research literature available on this topic. It also highlighted the gap in the literature that this study addressed. In addition, I discussed the problem statement for this research, including the purpose of the study, research questions and hypotheses, nature of the study, theoretical framework for the study, and definitions, assumptions, delimitations, and limitations.

Chapter 2 provides an extensive review of relevant literature related to IPV exposure and its association with academic motivation. Chapter 3 introduces and describes the methodology used in the study, measures for data collection, as well as the rationale for using test instruments that had been tested for reliability and validity. Chapter 4 presents the demographic characteristics of the sample and summarizes the data collection process as well as the results of the analysis. In Chapter 5, I interpret the findings and discuss the limitations of the study. Additionally, I present recommendations for future research and the study's implications for social change.



## Chapter 2: Literature Review

### Introduction

A primary mental health response of women being abused by an intimate partner is depression or major depressive symptoms (Campbell & Soeken, 1999; Cascardi, O’Leary, & Schlee, 1999; Devries, et al., 2013). IPV victims are at greater risk for psychological distress following an abusive episode (Bell & Naugle, 2008). Among the symptoms of psychological distress are feelings of depression, which may promote a sense of hopelessness and lack of motivation (Clements & Sawhney, 2000).

Women who are victims of IPV over a period of time may struggle to escape, find and secure safety, or gain some independence from their abuser (Adams, et al., 2013; Moe & Bell, 2004). One means of empowerment for such women is being involved in gainful activity such as full-time employment or enrollment in higher education, which affords them some economic and social support to better bargain for themselves, establish some independence, and increase their self-esteem (Antai, 2011; Brush, 2003; Hammond, et al, 2014; Vyas & Watts, 2009). If, however, women who have witnessed violence and have experienced IPV in an intimate relationship are depressed, they may experience an array of psychological problems such as posttraumatic stress, low self-esteem, helplessness, loss of hope, and lack of motivation (Cascardi et al., 1999; 2000; Golding, 1999; O’Leary, 1996).

This chapter presents a review of the current literature on IPV as it applies to this study. The purpose of this literature review is to examine the literature on exposure to conflict as well as IPV in romantic relationships for emerging adult women, in an attempt to demonstrate a research gap that exists on the effect that the independent variable (IPV)

has on the dependent variable (academic motivation) with depressive symptoms as a mediating variable for outcome.

A synopsis of the historical outlook on exposure to conflict and IPV begins this literature review. It is followed by an examination of research citing factors relevant to the consequences of IPV exposures. In addition, Chapter 2 addresses research on behaviors, academic performance, and mental health challenges.

Although numerous studies have been conducted on IPV and variables such as homelessness, child neglect and maltreatment, perpetration, victimization, and interparental conflict exposure, systematic literature searches failed to locate any studies that explored the association of the selected variable of IPV with academic motivation. As I explain in detail later in this chapter, studies on the multifaceted psychosocial/psychological effect of exposure to IPV in intimate relationships on academic motivation among emerging adult women were not located, leaving an area in the literature to be filled. Depressive symptoms were explored as a potential mediator. This study was conducted to fill this gap in the literature.

### **Literature Search Strategy**

The databases that I used to access the current body of literature were provided primarily by the online library of Walden University. These databases included EBSCOhost, Academic Search Complete/Premier, PsycINFO, PsycARTICLES, SocIndex, ProQuest Dissertations, Mental Measurement Yearbook, ERIC, Medline, and Education Research Complete. Other resources that I used included Google Scholar and the Internet to obtain statistical research information from the CDC, World Health

Organization (WHO), National Center on Domestic Violence, Trauma, and Mental Health; and National Institutes of Health (NIH).

Key words that generated sources in my literature search were *intimate partner violence, domestic violence, interparental conflict, victims of domestic violence, academic performance, motivation, witness, and economic empowerment*. I accessed over 1,000 articles in a 3-year period and reviewed well over 200 articles that were published within a 5-year period.

### **Dimensions of Intimate Partner Violence**

IPV, which is also known as *domestic violence, spousal abuse, woman battery, and family violence*, is violence committed by a spouse, ex-spouse, or current or former girlfriend, boyfriend, or lover (CDC, 2014). IPV affects people of all socioeconomic statuses and cuts across ethnic and cultural boundaries in both developed and developing countries (Jayasinghe et al., 2009). IPV is a global problem of wide scope that disproportionately victimizes women (World Health Organization [WHO], 2013). IPV may involve acts of physical aggression, forced sexual intercourse, acts of verbal aggression, and/or acts that are psychological in nature, such as coercion, verbal and nonverbal threats, and stalking (WHO, 2013).

In the United States alone, the costs of IPV against women exceeded an estimated \$8.3 billion in 2003 (CDC National Center for Injury Prevention and Control [NCIPC], 2014). These costs included nearly \$4.1 billion in direct costs for medical and mental health care and nearly \$1.8 billion in the indirect costs of lost productivity at work. The high costs of IPV derive in part from emergency room visits, doctor appointments,

hospitalizations, and alcohol and drug treatment (Bhandari, Sprague, Dosanjh, Wu, & Schemitsch, 2010; Cunningham, 2010).

The effects of physical violence by intimate partners may include health challenges such as traumatic brain injury, pelvic pain and discomfort, asthma, HIV/AIDS, and cardiovascular diseases (CDC NCIPC, 2014). At the heart of mental health challenges among women victims are anxiety, stress, social isolation, and depression (Goodman et al., 2009).

A national survey on children exposed to IPV indicated that 1 in 4 children are exposed to some form of family violence in their lifetime (Office of Juvenile and Justice and Delinquency Prevention [OJJDP], CDC, 2011). Researchers have estimated that one third of teenage girls who witness interparental conflict in their home become victims in dating relationships (Family Violence Prevention Fund, 2009). Children are exposed and are witness to IPV in their homes at a rate that is rapidly increasing National Center on Domestic Violence, Trauma and Mental Health (NCDVTMH, 2012), with 1 in 15 children estimated to be exposed to a form of family violence annually (Hamby, Filkelhor, Turner, & Ormrod, 2011; Kitzman et al., 2003). Exposure to IPV is distressing to children and is associated with a host of mental health and behavioral issues that may have implications later in life (National Survey of Children Exposed to Violence [NatScev], 2014).

In conducting a review of the literature, it was important to describe the constructs of the theoretical background supporting this study.

## **Theoretical Foundation**

Before reviewing evidence regarding witnessing conflict between parents and/or being exposed to IPV, it is helpful to lay out a theoretical basis for understanding the negative impact that IPC and IPV may have on emerging adults. Three different theoretical perspectives are considered. Social learning theory (Bandura, 1977) sheds light on how the impact of exposure to conflict and violence within families can be understood from the perspective that emotional and behavioral responses of adults may reflect experiences to which individuals were exposed during childhood. The theory of self-determination (Deci et al., 2011) offers a useful perspective for this study, in view of its relevance to understanding motivational factors. The theory of learned helplessness (Seligman & Maier, 1967) is useful in understanding why a person's motivation may be negatively and severely impacted by traumatic experience.

### **Social Learning Theory**

Social learning theory indicates that behaviors are learned through observation of others engaged in behavior. Bandura (1977; as cited in Wolfe et al., 2003) was the originator of social learning theory, renamed social cognitive theory. Bandura's theory provides a framework for understanding how interrelated societal aspects of the environment can influence the development of a young person throughout life stages (Harris, 2014).

In his theory, Bandura (1977) contended that earlier exposure in the home or immediate environment contributes to cognitions that buffer or dissuade individuals from engaging in aggressive behavior. Cognitive processes played a role in Bandura's theory, as he demonstrated in a study that individuals can learn various behaviors without

directly experiencing reinforcements (i.e., through vicarious reinforcement) by the process of observing how other people behave and seeing the consequences of their behavior (Bushman & Huesmann, 2006). Bandura (1986) also depicted self-efficacy as a construct that predicts outcomes.

### **Theory of Self-Determination**

Psychologists Deci and Ryan (1985) developed self-determination theory (SDT), a theory of motivation that holds that people are driven by a need to grow and/or gain fulfillment (Deci et al., 2011). Deci and Ryan (2011, as cited in Sikhwari, 2014) hypothesize that SDT is contingent on competence, relatedness, and autonomy, all of which influence motivation.

Several kinds of motivation are identified by this theory. The first is autonomous motivation, which is useful when considering how a person's motivations arise. The second is intrinsic motivation, which occurs when a person does something purely because of the interest, pleasure, or satisfaction that he or she derives from it. A third kind of motivation is extrinsic motivation, which arises when an activity will yield a reward or benefit upon completion (Sikhwari, 2014; Deci, et al., 2011). The fourth type is controlled motivation, which is useful in understanding how one person can exert control over another. Controlled motivation may directly involve external regulation of behavior, whereby one's behavior is a function of external contingencies of reward or punishment. Regulation of action may be partially internalized, in which case it is termed *introjected regulation* (Deci & Ryan, 2008).

Relatedness is a fundamental ingredient of motivation and refers to connectedness and a sense of belonging with others (Martin & Dowson, 2009). Supportive tools,

autonomy, competence, and positive interpersonal relations lead to greater encouragement and motivation to accomplish a goal (Ryan, LaGuardia, Solky-Butzel, Chirkov, & Kim, 2005, as cited in Harnett, 2015).

An important factor in academic motivation is self-concept, which is how a person perceives him- or herself relative to intellectual or academic skills (Cockley, 2000; Sikhwari, 2014). A sense of competence or the need to feel capable of achieving a plan or goal is critical in the theory of self-determination (Patrick & Williams, 2012). The extent to which individuals express self-determined extrinsic motivation or intrinsic motivation depends on whether their innate needs for autonomy, competence, and relatedness are met by factors within the learning environment (Ryan & Deci, 2000).

As applied to this study, SDT suggests that academic motivation can be either intrinsic or extrinsic as it relates to emerging adult women who have been or currently are in an IPV relationship but strive to accomplish the goal of obtaining higher education for her future.

In the current study, I considered how Bandura's social learning theories, in concert with Deci and Ryan's self-determination theory and Seligman's learned helplessness, could guide research on a psychosocial/psychological problem as I sought to determine how exposure to IPV (physical and/or psychological) affects academic motivation.

### **Theory of Learned Helplessness**

The theory of learned helplessness evolved initially from a series of research studies conducted on laboratory animals in the late 1960s by Seligman and Maier (Overmier & Seligman, 1967; Seligman & Maier, 1967). The experimenters explored

learning in animals by shocking animals repeatedly while they were in an inescapable box, teaching the animals that shock termination was not dependent on their response. Seligman applied learned helplessness theory to humans who were suffering from depression, but this application was not without controversy (Garber & Seligman, 1980; Seligman 1974, 1975; Thornton & Jacobs, 1971). Applying attributional theory to learned helplessness, which explains why things happen, specifically demonstrates how individuals who experience a series of setbacks about which they are unable to do anything learn that they have no control over events in their own lives (Seligman 1975).

Research findings suggest that victims may stay with or return to their abusers despite suffering psychological, emotional, and physical abuse (Ellsberg, Winkvist, Pena, & Stendlund, 2001; Hare, 2010; Sabina & Tindale, 2008). Researchers have viewed the decision to stay with an abusive partner as an indicator of psychological pathology (Ellsberg, et al, 2001). Other research findings suggest that a woman's response to abuse is influenced by the severity of the abuse (physical or verbal), the circumstances of the abuse, and her assessment of available options (Ellsberg, et al., 2001; Hare, 2010). A woman's available options may be restricted by factors outside of her control, which must be taken into consideration in understanding her response to IPV (Ellsberg et al., 2001; Fisher & Stylianou, 2016).

### **Consequences of Childhood Exposure to Violence**

Early exposure to violence causes distress and is associated with a host of mental health symptoms in childhood and later in life (Hamby et al., 2011). Children who witnessed violence between their parents experience a wide variety of social adjustment and emotional challenges (Fantuzzo & Fusco, 2007; Margolin & Gordis, 2004).



Preschool-age children who are exposed to violence in their home may display regressive symptoms such as increased bedwetting, disturbed sleep, and more commonly, decreased verbalization (Margolin & Gordis, 2000; Osofsky, 1995). School-age children are environmentally influenced by their relationships with parents, teachers, peers, and others in the community. School-age children require a more complex level of cognitive competence with an ability to regulate emotions (Margolis & Gordis, 2004).

Early research studies focused on violence experienced by children and adolescents from the perspective of battered women syndrome and child maltreatment and abuse (Jaffe, Wolfe, & Wilson, 1983; Wolfe, Jaffe, Wilson, & Zak, 1986). Other research focused on physical abuse of children living in homes where violence was continual. Such children may see, hear, and intervene in violent interactions between adults, placing themselves at great risk of being harmed by the perpetrator (Fantuzzo et al., 1997; Kitzman, Gaylord, Holt, & Kenny, 2003).

In recent years, emphasis has been placed on children who witnessed marital conflict between parents because witnessing parental conflict can disrupt children's socialization skills and have a traumatic impact on their psychological well-being (Kitzman, et al., 2003; McGee & Wolfe, 1991; Somer & Braunstein, 1999). Exposure to IPV in early childhood has been assessed to have similar outcomes to those seen in children with dual exposure—that is, those who were direct victims of abuse and witnessed the abuse of a parent (Moylan et al., 2010).

Researchers found a “double whammy” effect of child abuse/maltreatment and witnessing interparental conflict. The term *double whammy* was coined in the world of sports to refer to a double blow or setback. Moylan et al. (2010) described a “double

whammy” in their study of interparental conflict and child abuse/maltreatment while assessing for internalizing and externalizing behaviors. The “double whammy” in their study referred to an individual who was abused or maltreated as a child and witnessed the physical and emotional abuse of a parent/guardian. The findings of the study indicated that such children displayed behavioral problems in school and at home, in addition to experiencing anxiety, angry outbursts, and other mental distress symptoms (Moylan et al., 2010).

In a study of 110 children between the ages of 8 and 12 years Sternberg, et al. (1993) analyzed three groups. The first group consisted of victims of child abuse only. The second group contained children who had been exposed to or had witnessed violence only. The third group consisted of individuals who were both victims of child abuse and witnesses of abuse. The researchers found that those in the victims-of-child-abuse-only group and those who were in the exposed-only group were no less likely to experience levels of depression and internalizing and externalizing behaviors than those who were victims of a “double whammy” effect.

In a research study on gender, Moylan et al. (2010) reported findings suggesting that boys were at risk for externalizing behaviors such as fighting, delinquency, aggression, rule breaking, and violence perpetration, while girls were at an increased risk for internalizing problems, manifested as anxiety, low self-esteem, fear, phobias, lack of interest, depression, low motivation, and poor school performance (Bayarri, et al., 2011; Fletcher, 2010; Fantuzzo & Mohr, 1999; Garrido, et al., 2011).

Consistently, research findings on IPV have suggested that physical violence exposure and/or witnessing violence during childhood predicts IPV in adulthood (CDC

NCIPC, 2014; White & Widom, 2003). Links between early victimization and adult victimization and perpetration of IPV have been established in the literature (Guerra, Huesmann & Spinder, 2003; Hoyt, Ryan & Cauce, 1999; Murphy, 2011). Likewise, it has been established that exposure to violence increases internalizing challenges manifested as low motivation, low self-esteem, and poor school performance (Bayarri, et al., 2011).

A consequence of witnessing IPC among school age girls is internalizing behavior such as withdrawal, anxiety, and enuresis, because the exposure shapes a child's social and emotional development (Bayarri, Ezpeleta, and Granero, 2011; Esfandyari, Baharundin, & Nowzri, 2009). School age children may be easily distracted by intrusive thoughts due to the trauma of exposure to violence, and they may become regressive in behaviors (Osofsky, Osofsky, Weems, Hansel & King, 2014; Osofsky, 1999; 1995). However, there is one protective resource to enable a child to cope with exposure to violence, that is there needs to be a strong bond with a trustworthy, competent, caring adult, most often a parent, to successfully navigate through developmental stages (Hamblen & Barnett, 2011). The next section that will be discussed is adolescence stage of development as it relates to exposure to IPV and continuing into young adulthood.

### **Consequences of IPV Exposure During Adolescence and Young Adulthood**

Adolescence is the stage in development where girls, in particular, gain educational experience and form career aspirations that could set the stage for economic attainment in adulthood (Adams, Greeson, Kennedy, & Tolman, 2013; Furman & Shaffer, 2003). It is also a stage when adolescence begin forming romantic relationships and assessing what they want in long-term romantic partner in terms of behaviors or traits

(Halpern-Meehin et al, 2013; Lohman, Nepl, Senia & Schofield 2013). Females between 16-24 years of age are reportedly at the greatest risk for dating violence and sexual assault (Dutton, James, Langhorne & Kelly, 2015).

A consequence of adolescent exposure to IPV is the risk of violence transmission from one generation to another (Family Violence Prevention Fund, 2009; Lohman et al 2013; O'Keef, 1998). Adolescents in dating relationships may respond to anger in a way they observed and learned from their parents (Clarey, Hokoda &Ulloa, 2010). Clarey, et al 2010; Riggs and O'Leary (1996) posit that violence in the family of origin contributes to the acceptability of violence as a response to conflict. Studies that focused on females who witness IPV at a young age concluded that females are more likely to become victims of IPV (Amstadter, Elwood, Begle, Gudmundsdottir, Smith, Resnick, Hanson, Saunder, & Kilpatrick, 2011). Consistent with the social learning, and learned helplessness theories, observed behaviors in an environment such as home, may be imitated later by adolescents in their own intimate relationships (Hamby, et al 2011).

Researchers also focused on women who faced victimization in romantic relationships as adolescents and found there is a link to diminished educational achievement and earnings in adulthood (MacMillan and Hagan, 2004). The next section will discuss academic motivation and attainment as emerging adults.

### **Motivation and Academic Attainment in Young Emerging Adults**

Although there is research on academic motivation with college and university population, no findings addressed the effect of IPV exposure on academic motivation in young adult women, mediating for depression. In an earlier study on motivation researchers examined two groups of mature females. The first group were women with

children, who were returned to school to complete courses and graduate. A second group were mature married, single and widowed women who had life circumstances and had to discontinue but were motivated to ameliorate their situation by returning to complete a degree (Scott, Burns & Cooney 1998). Motivation was the same for both groups. However, when controlled for variables such as personal life challenges there were notable differences between the groups. Two instruments used were Compensatory Role Questionnaire and Autonomous Self- Development scale. Data obtained using these instruments indicated reason for returning to obtain an education was to ameliorate their situation and to escape.

A more recent research finding on the relationship between identity and academic motivation in Japan, suggested Japanese students at a university with a strong sense of identity, had positive attitudes toward university courses, a sense of purpose, and high motivation (Matsushima & Ozaki, 2015). Low motivation or lack thereof is one significant factor that can affect academic achievement and motivation (Sikhwari, 2014).

### **Self-Empowerment, Motivation, and Depressive Symptoms**

Gainful employment and higher education may help a victim to achieve some economic independence from their abuser (Moe & Bell, 2004; Sikhwari, 2014).

Financial resources are critical for women who are victims of IPV, because they enable them to make some independent decisions about their health and about their children's schooling (Krug, Dahlberg, Mercy, Zwi, & Lozano, 2002; Vyas & Watts, 2009).

Employment is one means for accessing financial support, and obtaining an education is another vehicle (World Health Organization [WHO], 2012). Education attainment is increasingly important because it helps to determine future quality of life (Lacour, &

Tissington, 2011). Welles (2010) findings suggests factors that contribute to academic attainment of college students has great implications in society, because those who fail to attain education have fewer career opportunities.

In a study on turning points for women fallen victim to intimate partner violence, Chang et al, (2010) found that there was an association between self-empowerment or help seeking behaviors and turning points. How women perceived themselves, their partners, and/or their situation greatly motivates them to consider change or alter their situation. Education is a vehicle by which victims of IPV can alter their situation by attaining gainful employment and some independence (Moe & Bell, 2004). Social interactions with peers while at school, or with co-workers while at a place of employment can help empower a woman in an abusive relationship, but it can have negative impact on the woman if the abusive partner perceives her as having power (Vyas & Watts, 2009).

A person's ability to achieve educational and occupational goals depends in part on their level of motivation. Lack of motivation is symptomatic of individuals experiencing depressive mood. A depressive mood can weaken the interest or importance of a goal (Miceli and Castelfranchi, 2000). Women victims of IPV are at risk for psychological problems, the most common of which is depression (Bonomi, Thompson, Anderson, Reid, Carrell, Dimer, & Rivara, 2006; Clements, and Sawhney, 2000). Depression amongst victims of IPV is common and is associated with severity and consistency of the abuse (Golding, 1999). Some studies on women exposed to IPV show significant levels of clinical depression with accompanying thoughts of suicide, and suicidal attempts (Cascardi et al., 1999).

Similarly, studies show depressive symptoms play a role in maintenance of abusive relationship (Clements & Sawhney, 2000), because the depressed victim may lack the resources or employment stability to change their situation (Chang et al., 2010). Across various studies of women who were victims of IPV, there are common findings of an association between IPV and depressive symptoms (Dillon, Hussain, Loxton, & Rahman, 2013). Depending on how many types of abuse (physical, sexual or psychological) and the severity of it increases the probability of depressive symptoms (Dillon et al., 2013). In another study researchers found psychological IPV to be as detrimental on women's wellbeing as physical IPV in relations to depressive symptoms. (Pico-Alfonso, Linares, Navarro, Blasco, Echeburua & Martinez, 2006).

### **Research Studies Relevant to the Gap in the Literature**

Table 1 summarizes all studies that examined exposure to violence in relation to academic performance that I located based on a series of systematic literature searches, using the search strategies described at the beginning of this chapter. For the purpose of selecting studies to include in the table, I attempted to locate studies that reported data on academic achievement, academic motivation, academic grades, or school attendance while also assessing exposure to violence at home, in dating/ intimate relationships, or in the broader social environment. All studies that met these criteria were included in the table. In constructing the table, any study that met the aforementioned criteria was irrespective of whether it was children, adolescents, or adults. However, as can be seen from inspecting Table 1, there were no studies about adults on academic motivation and exposure to violence.

The studies in Table 1 are ordered by authors' names and year of publication.

Table 1

*Studies on the Effect of Violence Exposure on School Performance*

Author(s) and year of publication	Population sample size	Explanatory variable	Behavioral response variable(s)	Instrument(s)	Findings
Holt, Finkelhor, & Kantor (2006)	689 fifth-grade students from 22 elementary schools in urban community	Multiple victimizations. Violence at home, at school, and in neighborhood	Psychological distress and poor school performance	Juvenile Victimization questionnaire; 21-item psychological scale from a youth report to assess academics & psychological functioning & University of Illinois Bullying Scale (UIBS)	Examined victimization across multiple areas and found increased mental distress and low academic performance
Jayasinghe et al. (2009)	828-child study in a Sri Lanka underprivileged school district; students in Grades 9-11 and their mothers	Interparental conflict	Behavior, psychological status, school attendance, PTSD, academic achievement	Child Behavioral Checklist/ Strength and Difficulty Questionnaire (SDQ), and Acceptance and Action Questionnaire (AAQ)	A significant association between IPV, behavior, and psychological status. Exposure negatively affects performance and attendance
Muro & Meen (2010)	104 Mexican immigrants attending adult classes on the U.S.-Mexico border who met the criteria of IPV exposure. It was the poorest community in El Paso, TX.	Intimate partner violence	Adult education program, English as a second language (ESL), General Education Diploma (GED), certification program	A questionnaire was used for the women (translated). A similar instrument like Conflict Tactics Scales (CTS).	The women felt guilty about attending school; they did not receive much support from family or common-law husbands. Some did not complete certification.
Thompson & Massat (2005)	110 sixth-grade children age 11-13 in Chicago inner-city public schools	Frequency of IPV exposure and other violence	Behavior problems, PTSD, academic achievement	CTS, extended childhood Post Traumatic Stress Scale (PTSDR), and child behavioral checklist, Iowa Test for Basic Skills (ITBS)	At the inner-city PS, the findings suggest that children were exposed to various kinds of violence. Witnessing one type of violence increased the likelihood of higher recorded levels of other violence and PTSD.



Holt, Finkelhor and Kantor (2006) conducted a survey with 689 fifth graders to investigate simultaneous victimization experiences across parents, peers and communities. The results suggest that youth with multiple victimizations experience more psychological distress and earn lower grades than their peers who did not experience multiple victimizations.

Jayasinghe et al. (2009) examined the influence of IPV exposure on behavior, psychological status and school performance. The study took place in a poor area of Sri Lanka, with a focus on grade school and middle school age children. The study sample consisted of mother-child dyads. There were 828 pairs in the study. They examined the impact on school attendance, performance as well as behavioral problems. They used a child behavioral checklist, Strength and Difficulty Questionnaire and Acceptance and Action Questionnaire along with secondary data. Finding of the study indicated that there is a significant association between IPV, behavior and Psychological status. Exposure to IPV also has negative effect on school performance and attendance. There was no reported difference between boys and girls as the study did not focus on gender difference.

Muro and Mein, (2010) interviewed 187 Mexican immigrants, of which 104 were found to meet the criteria for IPV exposure. The mean age average of the participants was 40.6 years old, of which 21% had no children, the remaining 79% had at least one child. The study was conducted in the poorest community in El Paso Texas, where there is a high concentration of Latinos. Researchers found that many of the women in the study did not have a GED nor a high school diploma. Most experienced multiple levels of victimization rooted in language, gender, educational level, and race amongst other

factors in interpersonal relationships (Muro & Mein, 2010). Most of the women's partners were primarily laborers. Women in the study were fearful about school, some did poorly towards achieving their education goal because they either felt no support from their partner, or they were uncomfortable to share school experiences with members in their family with limited education (Muro & Mein, 2010). One limitation of the study is the inability to generalize the findings to the broader population since it was on a specific immigrant population of women.

Thompson and Massat (2005) performed a cross sectional correlational study of 110 African American inner-city students in Chicago to investigate frequency of family and violence exposure, and the level of post-traumatic stress disorder (PTSD) to academic achievement and behaviors. One assertion from their findings is witnessing of one type of violence increased other violence exposure and PTSD. In their research, Thompson and Massat (2005) examined high school students by focusing on academic trajectory and risk factors at the adolescent stage of development (peer influence, less adult attention), and found a correlation between exposure to violence in family of origin, continued in dating relationships. They accepted violence as a normal part of their relationship (Patton, Woolley, & Hong, 2012).

The studies reflected in table 1 had some common findings: The first is there were internalizing effects (such as low self-esteem and depression) on young people exposed to IPV, especially young girls. The second common finding was poor school performance and other externalizing behaviors among IPV exposed children, and lastly, the older children not only had behavioral and poor school performance problems, they

were likely to display violence and/or exhibited signs of PTSD later on in life (Thomas & Massat, 2005).

### **Summary**

Previous research has shown that children living in homes where IPV is observed are at increased risk for internalizing psychological problems such as depression, anxiety, low-self-esteem, and helplessness (Bayarri et al., 2011; Fletcher, 2010; Esfandyari, Baharudin & Nowzari, 2009).

Researchers also studied children and teenagers who witnessed violence in their home and as a result performed poorly in school or developed sleep disturbed patterns or bed wetting (Jayasinghe et al., (2009). It is plausible based on previously mentioned studies to hypothesize that academic motivation among young emerging adult women (late teens to late twenties) who were exposed to IPV would be affected (Clemens & Sawhney, 2000). (Elwood et al, 2011; McKinney, 2015). Therefore, research was needed to specifically determine if young emerging adult women who experience IPV at a stage in life where preparing for a career, starting a family, or starting an education is important, can be academically motivated. To the knowledge of this researcher, no study had specifically considered the effect exposure to IPV in one's own intimate relationship has on the level of academic motivation amongst emerging adult women. Therein laid the gap in the literature.

In conducting the study, this researcher considered what, if any relationship exists between independent variable of intimate partner violence in personal relationship with that of the dependent variable academic motivation, mediating for depressed symptoms. This researcher examined whether or not exposure to IPV predicted levels of academic

motivation, while simultaneously sought to examine if IPV was associated with depressive symptoms in emerging adult women, and whether depressive symptoms mediated the relationship between IPV exposure and academic motivation.

In light of this literature review, chapter 3 focused on the research design, data collection, methodology and rationale for the study.

### Chapter 3: Research Methodology

The purpose of this study was to examine whether there is a relationship between exposure to IPV in personal relationships and academic motivation in emerging adult women. Thus, the overarching questions in this research study were stated as follows: (a) Is exposure to intimate partner violence (IPV) associated with depressive symptoms or depression among emerging adult women? (b) Does exposure to IPV predict levels of academic motivation? and (c) Do depressive symptoms mediate the relationship between IPV exposure and academic motivation?

In this chapter, I provide a review of the research design associated with this study. The chapter includes sections on the model for the research design and the instruments used. A summary concludes the chapter.

#### **Research Design**

This study used a quantitative correlational survey design. A quantitative survey design in research involves an examination of an association or statistical significance between two or more variables (Creswell, 2009). A quantitative survey approach was appropriate because I sought to examine whether a relationship existed between the dependent variables (two dimensions of academic motivation) among emerging adult women (aged 19-29 years) and the independent variable (exposure to IPV), and a mediating variable (depressive symptoms). Academic motivation was assessed using two scales of the Academic Motivation Scale—College Version (AMS-C), Extrinsic Motivation/Introjected Regulation and Amotivation. Extrinsic Motivation/Introjected Regulation (EMintr) involves acting to improve self-esteem or avoid guilt for not completing a task (Stover et al., 2012), whereas Amotivation is the nonregulated extreme

of the scale characterized by an individual's perception of lack of control over an event, absence of purpose, and incompetence (Stover et al., 2012).

Exposure to IPV during the past year was measured using two of the five Conflict Tactics Scales 2 (CTS2): Physical Assault and Psychological Aggression (Straus et al., 2003). Depressive symptoms were assessed using the Modified Beck Depression Inventory (MBDI).

## **Methodology**

### **Population and Study Inclusion Criteria**

The study focused on emerging adult women between the ages of 19 and 29 years residing in the 48 contiguous states in the United States who had been exposed to IPV or were currently in a relationship in which violence (physical, emotional, or both) had occurred within the last 12 months.

Study participants were recruited from a diverse population of emerging adult females from various ethnic groups who had been exposed to IPV in relationships. All study participants needed to meet the following criteria: (a) female between the ages of 19 and 29 years; (b) experienced IPV from a partner in a romantic or marital relationship during the past 12 months (participants whose response indicated no exposure to partner violence during the past year were not included in the study), and (c) enrolled in higher education, online or brick and mortar. Individuals who agreed to participate were required to fill out questionnaires including a demographic form; the CTS2, which contained questions about interpersonal experiences with conflict; the AMS-C, which contained questions about motivation; and the MBDI, a modified version of the Beck Depression Inventory scale, to assess the potential mediating variable of depression.

## **Participants**

Participants were recruited for this study using Centiment, LLC, a popular survey business program used by researchers to access a host of participants who meet the criteria for a study. I gave specific parameters for the recruitment of participants, and Centiment, LLC, a paid global research data collection organization, targeted panels of females meeting the inclusion criteria. Centiment, LLC had various panels of participants both nationally and globally from which to target. Centiment, LLC hosted the survey I provided and once the last survey had been completed and collected, was paid by

## **Sample Size**

When calculating sample size for this study, I took into consideration the following: the target population, the level of statistical power desired for inferential testing of each study hypothesis, the statistical significance level, and the anticipated effect size. The targeted population was women who had been exposed to violence, had been in an IPV relationship in the recent past (up to 2 years ago), and were attending college. For the purpose of this study, statistical power of 80% was selected for the probability of rejecting a null hypothesis that was false (Moore & McCabe, 2006). The alpha threshold for statistical significance level was set at 0.05. In this study, the effect size was the magnitude of the correlation between the variables (Coe, 2000). According to Cohen (1988), in research literature in the social sciences, correlation coefficients greater than 0.5 are large, correlations of 0.3 are medium sized, and correlations below 0.1 are of small magnitude. For this study, based on the relevant empirical literature, small to medium-sized correlations of 0.2 were assumed. Using G\*Power 3.1 statistical

analysis tool for this correlational study, based upon the above assumptions, a sample size of 244 participants provided adequate statistical power.

### **Procedure for Recruitment and Data Collection**

To gather information about each respondent or participant, a demographic survey was included as part of the data collection for this study (see Appendix A). Personal questions pertaining to characteristics such as age, gender, ethnicity, race, sexual identity, highest level of education completed by parents and self, relationship status (single, cohabitating, or living with a partner), and employment part time or full time while enrolled in school were presented in the demographic survey. The demographic survey data served as a source for additional information and insight related to this study's research questions. An informed consent form was attached to the online survey. Participants were required to read it thoroughly before answering the survey, and if they assented, they proceeded to the study (see Appendix E).

I obtained permission to conduct this study from the Walden University Institutional Review Board (IRB approval # 05-24-18-0142544). A page was attached to the survey on which prospective participants who were attending universities were informed of risks for psychological or emotional harm that could result from their participation in survey. They were informed of their rights to confidentiality, the freedom to withdraw at any time without consequence, and the opportunity to contribute to a body of knowledge that would be invaluable to the field of psychology. At the end of the informational sheet, there was a section for participants to assent by pressing *yes* to agree before they took the online questionnaire. Careful consideration was given to participants in relation to protection and confidentiality, the risks and benefits of



participating in this study, and information on how to contact me with questions or concerns regarding their participation. This consideration was a part of the informed consent process. A color-coding system I used to differentiate the universities without identifying names of the participants.

Centiment, LLC was the vehicle that I used to obtain a readily qualified and convenient sample of participants. To ensure that all participants' information remained protected, access to the study data was only to me. Data from the demographic questionnaire and the combined CTS2 (used with permission from the authors), AMS-C, and MBDI were coded and electronically stored in a password-secured computer.

### **Instrumentation**

#### **Conflict Tactics Scales 2 (CTS2)**

The Revised Conflict Tactics Scales (CTS2; Straus, Hamby, Boney-McCoy, & Sugarman, 1996) was used to assess exposure to IPV during the past year. The CTS2 measures both perpetration by the respondent and victimization of the respondent. In this study, only the scores for victimization were analyzed. The CTS2 is a 39-item self-reporting questionnaire consisting of five scales that measure the extent to which partners in dating, cohabitating, or marital relationships engage in physical and psychological aggression, negotiation, or conflict resolution and sexual coercion (Straus, Hamby, & Warren, 2003). Responses are made on an eight point response scale indicating frequency of behavior during the past year. Each of the 39 items was asked twice, for a total of 78 questions, in pairs with one question about the respondent and the other about the respondent's mate. Consequently, there were two scores for each scale: one for the respondent, and the other about the partner of the respondent. The scale elicits

information about the respondent's own aggression (perpetration) and about the partner's aggression (victimization). Two of the five scales, namely Physical Assault and Psychological Aggression, were used in the current study. Each scale was further divided into two subscales according to the types of aggression that the respondent had been exposed to or perpetrated: Psychological Aggression is subdivided into "minor" and "major," and Physical Assault was subdivided into "minor" and "severe."

The Physical Assault scale had 12 items that asked how often an event occurred, such as "My partner pushed or shoved me," using a response scale ranging from 0 (*never happened*) to 7 (*not in the past year, but it happened*). Frequency of event occurrence was specified by anchors for the response categories, from 1 (*occurred once in the past year*) to 6 (*more than 20 times in the past year*). The Physical Assault scale was scored by adding the midpoints for the response categories chosen by participants, thus indicating the frequency of aggressive events. For Response Categories 0, 1, and 2, the midpoints were the same category number. For Category 3 (3-5 times), the midpoint was 4; for Category 4 (6-10 times), the midpoint was 8; and so forth. So that the total score indicated frequency of exposure during the past year, a response of Category 7 was coded as 0.

The Psychological Aggression scale of the CTS2 had eight items concerning how often an event occurred that used a similar scoring method to that used for physical assault and injury. Items included statements such as "my partner called me fat or ugly" and "my partner shouted or yelled at me." The response scale was the same as for the CTS2 Physical Assault scale, and it was scored in the same way. Scores could range from 0 to 200.

The CTS2 instrument was chosen to measure IPV in this study because it is widely used in studies of IPV capturing various types and levels of abuse (Bonomi, Holt, Thompson, & Martin, 2006, 2014). The CTS2 is widely accepted as a valid tool for identifying the occurrence of IPV and characterizing the experience of women subjected to IPV (Bonomi et al., 2006). Numerous studies have shown that CTS2 scales have excellent internal consistency and high test-retest reliability (Dumfort, Gumpert & Stenback, 2013). Previous studies have validated the CTS2 by showing that responses from respondents and their partners were correlated (Dumfort et al., 2013). Scores on the Psychological Aggression scale of the CTS2 are correlated with other measure of psychological abuse, such as the Multidimensional Measure Emotional Abuse Scale (Ro & Lawrence, 2007). Evidence of construct validity was also supported by positive correlations with the Beck Depression Inventory and the Center for Epidemiologic Studies Depression Scale (BDI and CES-D, respectively; Campbell & Soeken, 1999; Cervantes, Duenas, Valdez, & Kaplan, 2006; Kulwicksi, Ballout, Kilgore, Hammad, & Dervartanian, 2014). The Psychological Aggression scale was strongly correlated with the CES-D (Cervantes et al., 2006).

The results of a psychometric study of online administration of the CTS2 showed consistency between scores on written and online versions of the test and yielded similar test-retest reliability for written and online versions (Brock et al., 2015). As a result of that study, I learned that the CTS2 can be administered online without compromising the integrity of the data. Online administration of questionnaires can offer a level of disclosure that might otherwise not be as forthcoming from participants because of the sensitive nature of the topic (Brock et al., 2015).

### **Academic Motivation Scale—College Version (AMS-C)**

Academic motivation was assessed using the Academic Motivation Scale—College Version (AMS-C). The primary purpose of the AMS-C was to assess overall academic intrinsic or extrinsic motivation and amotivation in young adult students (Vallerand et al., 1992). The AMS-C is based in self-determination theory, which indicates that human beings have a desire for stimulation and learning that is either supported or discouraged within their environment (Deci & Ryan, 1985, 2000). The AMS-C instrument was appropriate for this study because it assessed different aspects of academic motivation among emerging adult women, which may have been correlated to IPV exposure. The AMS-C was designed to assess various types of motivation, specifically in regard to reasons for attending college. AMS-C scales assess intrinsic motivation (the drive to pursue an activity for the pleasure or satisfaction derived from it), extrinsic motivation (pursuing an activity out of a sense of obligation or as a means to an end) with three subscales, and amotivation (the absence of intent or drive to pursue an activity due to not valuing the activity or feeling incompetent or unable to accomplish it; Fairchild, Horst, Finney, & Barron, 2005).

The AMS-C had 28 items, each of which consisted of a possible reason in response to the question “Why are you going to college?” The items were rated on a 7-point scale ranging from 1 = *does not correspond at all* to 7 = *corresponds exactly*. The items were divided into seven subscales that assessed three types of intrinsic motivation, three types of extrinsic motivation, and amotivation (Vallerand et al., 1992). For this study, I used two subscales: Extrinsic Motivation/Introjected Regulation (EMIN) and Amotivation (AMOT). Example items on these scales (which respondents rated in terms

of motivations for attending college) are as follows: “To prove to myself that I am capable of completing my college degree” (Extrinsic Motivation/Introjected Regulation) and “I once had a good reason for going to college; however, now I wonder whether I should” (Amotivation). Each subscale consisted of four items; scores on each subscale ranged from 4 to 28.

Construct validity for the AMS-C has been analyzed in various countries and verified as having adequate psychometric properties (Stover et al., 2012). Vallerand et al. (1992) reported that Cronbach’s coefficient alpha for the subscales ranged from .83 to .86, with the exception of the identified regulation subscale of Extrinsic Motivation, which had an internal consistency of .62. In addition, test–retest reliability over a 1-month period ranged from .71 to .83 for the subscales (Fairchild et al., 2005).

In a sample of 915 college students, subscales of the AMS-C were significantly correlated with other measures of conceptually related constructs (Fairchild et al., 2005). For example, Amotivation was positively correlated with work avoidance as measured by the Attitude Towards Learning (ATL) scale. As predicted, subscales of the AMS-C related to extrinsic and intrinsic motivation were significantly correlated with extrinsic and intrinsic motivation as measured by the Work Preference Inventory (WPI), a 4-point Likert scale for adults and college students; with the Work and Master dimensions of the Work and Family Orientation questionnaire (WOFO); as well as with four out of the five subscales of the ATL scale (Cokley, Bernard, Cunningham, & Motoike 2001; Fairchild et al., 2005).

### **Modified Beck Depression Inventory (MBDI) Scale**

Depressive symptoms were assessed using the Modified Beck Depression Inventory (MBDI). The MBDI is similar to the Beck Depression Inventory-I in that it is a 21-item self-report questionnaire using a 4-point scale ranging from 0 (*no symptoms*) to 3 (*symptoms very intense*) measuring the presence of depression symptoms (Beck, 1987). Each of the items assesses an attitude or symptom related to depression. The total score indicates the level of severity. The MBDI is a widely used instrument to measure depression. In a confirmatory factor analysis study consisting of 576 students, Whitman, Perez, and Ramel (2000) suggested that the revised measure is internally consistent with a coefficient alpha for the scale of .89.

The MBDI scale contains 21 questions, with each answer scored on a scale value of 0-4. It is used to determine depression symptomology. Scores on the MBDI can range from 0–84, with higher scores indicating increased severity of depressive symptoms (Dori & Overholder, 2000). MBDI relates to the original BDI-I test because it retains the theme questions; however, they are phrased in a positive manner to elicit more positive responses. The internal consistency 0.9 and the test-retest reliability ranges 0.73- 0.96 and has remained similar even when used in different samples or modes of administration (Dori & Overholder, 2000). Correlation between BDI-II a newer inventory scale and Beck's BDI-I, has been substantially high (Wang & Gorenstein, 2013). In a study of body image, eating, and exercise, Knepp, Yoza, and Quandt (2015) found that exercise can lead to increased symptoms of depression. The group of college students in the study who scored high on the MBDI questionnaire produced fewer designs and were more likely to choose sedentary activities during their leisure time (Knepp et al., 2015). This

finding supports the notion that college students with increased depression make lifestyle choices that are unhealthy (Lenz, 2004).

The MBDI instrument was used in this study to assess if depressive symptoms were a moderating variable amongst emerging adult women who have been exposed to IPV. The MBDI instrument along with the AMS-C are available on PsycTESTs, and permission for use in research without express written permission was granted along with the test. CTS2 permission to use has been received. (Appendix D)

### **Data Analysis**

The design of this study was a quantitative correlational research. Using this correlational research design, I examined for relationships between exposure to intimate partner violence among emerging adult women and academic motivation, using descriptive analysis for each categorical variable and The Statistical Package for Social Sciences (SPSS) latest version 23 for Windows was employed to perform the multiple regression analysis that was obtained on the study data. Only participants who completed the demographic survey, the CTS2, the AMS-C and the MBDI, scales were used for this study. Data were screened to check for missing values and by examining minimum and maximum values for each variable to check that scores are within their range of allowable values. If data were missing for some (but not all items) on a scale, responses were imputed based on the average of the non-missing items on that scale. Only cases which are completed for all study variables (CTS2, AMS-2, and MBDI scales) was analyzed; cases with missing responses for all items on any of the study variables was excluded from the analyses. Histograms was plotted for each study variable, and skewness and kurtosis values were reported to check whether the variables were normally distributed.

To check for outliers, I examined the box plots for each study variable; box plots highlight any values that are at the extremities of the distribution of data (DeVeaux, Velleman, & Bock, 2014).

I reported descriptive statistics for each of the variables. For categorical variables, I reported frequencies and percentages for each possible response category. For each continuous variable, I have reported the minimum, the maximum, the mean, standard deviations, skewness, and kurtosis. A correlation matrix was reported to show the degree of relationship among the study variables (CTS2 Physical Assault scores, CTS2 Psychological Aggression scores, MBDI scores, AMS-C Amotivation subscale scores, AMS-C Extrinsic motivation /Introjected Regulation (EMIN) subscale scores). I reported the Cronbach alpha coefficients obtained from the study dataset for the study variables.

Research questions were as follows:

RQ1: Is there a relationship between exposure to intimate partner violence (IPV) and depressive symptoms, or depression among emerging adult women?

Ho1: Among emerging adult women, there is no relationship between exposure to IPV (as measured by the physical assault and psychological aggression scores of the Conflict Tactic Scales: CTS2) and depressive symptom (as measured by Modified Beck Depression Inventory: MBDI).

Ha1: Among emerging adult women, there is a relationship between exposure to IPV (as measured by the physical assault and psychological aggression scores of the Conflict Tactic Scales:



CTS2) and depressive symptom (as measured by Modified Beck Depression Inventory: MBDI).

RQ2: Does exposure to IPV in intimate relationship predict levels of academic motivation?

Ho2: Exposure to IPV in intimate relationship as measured by the CTS2 Physical Assault and CTS2 Psychological Aggression scores does not predict levels of academic amotivation as measured by AMS-C Amotivation subscale.

Ha2: Exposure to IPV in intimate relationship as measured by the CTS2 Physical Assault and CTS2 Psychological Aggression scores with levels of does predict levels of academic amotivation, as measured by the AMS-C Amotivation subscale.

Ho3: Exposure to IPV in intimate relationship as measured by the CTS2 Physical Assault and CTS2 Psychological Aggression scores does not predict levels of academic Extrinsic Motivation as measured by the AMS-C Extrinsic Motivation/Introjected Regulation (EMIN) subscale.

Ha3: Exposure to IPV in intimate relationship as measured by the CTS2 Physical assault and CTS2 Psychological Aggression scores does predict levels of academic Extrinsic Motivation, as measured by the AMS-C Extrinsic Motivation/Introjection Regulation (EMIN) subscale.

RQ3: Do depressive symptoms mediate the relationship between IPV exposure and academic motivation?

Ho4: Depressive symptoms as measured by (MBDI) do not mediate the relationship between CTS2 Physical Assault scale scores and AMS-C Amotivation subscale scores.

Ha4: Depressive symptoms as measured by (MBDI) do mediate the relationship between CTS2 Physical Assault scale scores and AMS-C Amotivation subscale scores.

Ho5: Depressive symptoms as measured by (MBDI) do not mediate the relationship between CTS2 Physical Assault scale scores and the AMS-C Extrinsic Motivation/Introjected Regulation (EMIN) subscale scores.

Ha5: Depressive symptoms as measured by (MBDI) do mediate the relationship between CTS2 Physical Assault scale scores and the AMS-C Extrinsic motivation /Introjected Regulation (EMIN) subscale scores.

Ho6: Depressive symptoms as measured by (MBDI) do not mediate the relationship between CTS2 Psychological Aggression scale scores and AMS-C Amotivation subscale scores

Ha6: Depressive symptoms as measured by (MBDI) does mediate the relationship between CTS2 Psychological Aggression scale scores and AMS-C Amotivation subscale scores.

Ho7: Depressive symptoms as measured by (MBDI) do not mediate the relationship between CTS2 Psychological Aggression scale scores and the AMS-C Extrinsic motivation /Introjected Regulation (EMIN) subscale scores.

Ha7: Depressive symptoms as measured by (MBDI) do mediate the relationship between CTS2 Psychological Aggression scale scores and the AMS-C Extrinsic motivation /Introjected Regulation (EMIN) subscale scores.

To test hypotheses 1 through 3, multiple regression analyses was performed to examine the influence of IPV exposure on depressive symptoms and on academic motivation. Multiple regression analysis can be used to test whether there is a linear relationship between several independent variables and a dependent variable when the independent and dependent variables are distributed continuously on quantitative scales (Gravetter & Wallnau, 2014). For hypotheses 1 through 3, the independent variables were exposure to psychological aggression and physical assault and the dependent variable was depressive symptoms (hypothesis 1, academic Amotivation (hypothesis 2), and extrinsic academic motivation (hypothesis 3).

For each regression analysis, I reported the *R-squared* statistic, as a measure of the proportion of variance in the dependent variable explained by the independent variables, along with the *F* statistic and *p*-value for the overall fit of the regression model. For each independent variable, I reported the unstandardized and standardized regression coefficients, which indicated the contribution of each independent variable while controlling for the influence of the others, along with the *p*-value for the significance of

each independent variable. P-values less than 0.05 was regarded as statistically significant.

Linear regression assumes that the variables are related linearly. To check this assumption scatter plots was examined for each dependent variable versus each independent variable. The regression assumption of homoscedasticity was examined inspecting the “thickness” of the data points around the regression line on each scatter plot. If the thickness of the line is reasonably constant across all values of the independent variable, then the assumption of homoscedasticity would be accepted (DeVeaux et al., 2014). The regression assumption of absence of multicollinearity was examined by inspecting variance inflation factors (VIF) for each independent variable obtained from each regression analysis. If the VIF statistics are  $<10$ , then the assumption of absence of multicollinearity will be considered to be valid for the application of the regression analyses to the study dataset (Keith, 2006). Finally, I tested for influential observations in the regression analysis which may’ve distorted or bias the estimated slopes of the regression coefficients, by examining the values of Cook’s distance obtained from each regression analysis. If the absolute value of Cook’s distance for any observation exceeds 1.0 then that observation was considered influential and would’ve been deleted from the analysis (Stevens, 1984)

To test for mediating effects of depressive symptoms in hypotheses 4 through 7, I used the Freedman-Schatzkin test (Meyers, Gamst & Guarino, 2013). This test is preferred to the causal steps approach to meditation described by Baron and Kenny (1986), which is does not provide a significance test for the mediation effect, and also has low statistical power (Meyers, Gamst & Guarino). In the Freedman-Schatzkin test, a

statistic is calculated to test a null hypothesis that the indirect effect of the independent variable on the dependent variable through a potential mediator is zero. The mediator to be tested was depressive symptoms. The independent variables were exposure to IPV either physical assault (hypotheses 4 and 5), or psychological aggression (hypotheses 6 and 7) The dependent variable was either academic amotivation (hypotheses 4 and 6) or extrinsic academic motivation (hypotheses 5 and 7).

The Freedman-Schatzkin test was based upon comparing the regression coefficients for the effect of the independent variable (exposure to IPV) on the dependent variable (academic motivation) from two regression models: a simple regression model, that does not include the mediator variable (depressive symptoms) and a regression model that contains both the independent variable and the mediator variable (Meyers, Gamst & Guarino, 2013). To perform the Freedman-Schatzkin test I first performed the following regression analyses on: 1) simple linear regression analysis of the independent variable on the dependent variable; and 2) multiple linear regression analysis of the independent variable and the mediator variable on the dependent variable. For the Freedman-Schatzkin test, a regression on the relationship between the exposure to IPV and depressive symptoms. Nevertheless, this relationship was examined in the analyses for Research Question 1

The t-statistic for the Freedman-Schatzkin test is calculated using the formula.

$$t = (a-b) / \sqrt{(s_a^2 + s_b^2 - 2 s_a s_b (1-r^2))}$$

Where  $a$  = raw (unstandardized) regression coefficient for the relationship between independent variable and the dependent variable in the simple linear regression

analysis (step 1);  $s_a$  = the standard error of this score;  $b$  = raw (unstandardized) regression coefficient for the relationship between independent variable and the dependent variable in the multiple linear regression analysis (step 2);  $s_b$  = standard error of this score; and  $r$  is the Pearson correlation coefficient for the relationship between the independent variable and the mediator variable. The t-statistics has  $n-2$  degrees of freedom where  $n$  is the number of cases in the regression analyses. I tested each of hypotheses 4 through 7 using the online calculator for the Freedman-Schatzkin test at <http://psych.do/stats/fstest>.

### **Threats to Validity**

Since this study is a correlational design, caution was exercised in drawing conclusions regarding causal relationships among variables. The study design could pose a threat to internal validity as internal validity refers to the potential capability that one variable in the study caused another to occur. Threats to external validity are the magnitude to which the result of this research study sample can be generalized to a larger population. One threat to external validity was the composition of the study and how the sample was chosen. Take for example, the sample consist of emerging adult women who were all enrolled in college at one of the 48 contiguous states in the U.S., who experienced intimate violence, are all of the same economic and ethnic background the results could not be generalized to a larger population.

### **Ethical Considerations**

In accordance with the established guidelines by the Ethical Principle of the American Psychological Association and Code of Conduct (2002) and the IRB at Walden University, I was responsible to secure an agreement for participants volunteering to be part of the study. No names or any other tracking information was elicited.

Although there were no potential physical or psychological harm for participating in this study, there could've been some emotional impact and triggers as they reflect on some traumatic past experiences, and recent unpleasant situations. To minimize the emotional impact participants were informed that this is voluntary, and they are not obligated to complete any part of the study which causes great discomfort. Participants were reassured that there won't be any consequences should they decide not to complete the study. Participants were also offered resources to national helpline should they need to obtain supportive intervention. At the bottom of the Modified Beck Depression Inventory survey (Appendix C) a short list of national helpline numbers was appended. Participants who felt a need for supportive intervention had access to where they could contact someone for help.

A request to the Institutional Review Board (IRB) for approval to conduct this research was obtained (IRB approval # 05-24-18-0142544).

### **Summary**

In this Chapter, the researcher explained the methodology to be used in the proposed study. The purpose of this quantitative correlational study is to determine if there is a relationship between exposure to IPV and academic motivation amongst women between the ages of 19-29. The study also explored whether depression was a mediating variable in academic motivation by testing the research hypotheses through the reliable and valid measures, as well as the required statistical analysis.

## Chapter 4: Results

### Introduction

The objective of this quantitative research study of emerging adult women was to investigate the relationships between IPV exposure, academic motivation, and depressive symptoms. Depressive symptoms were examined as a potential mediating variable of the relationship between IPV and academic motivation. The sample of emerging adult women consisted of individuals between 19 and 29 years of age who were enrolled in higher education full time or part time at an online or brick-and-mortar institution and had been in an intimate relationship where there was violence within the last 12 months relative to the time when the study was conducted. I used regression analyses results to answer all of the research questions.

Before reporting the results, I made a few assumptions. The first assumption was that the independent and dependent variables were highly correlated. The second assumption was that the measure of variables followed a normal distribution curve.

I proposed three questions to guide my analysis:

- RQ1: Is there a relationship between exposure to intimate partner violence (IPV) and depressive symptoms among emerging adult women?
- RQ2: Does exposure to IPV in an intimate relationship predict levels of academic motivation?
- RQ3: Do depressive symptoms mediate the relationship between IPV exposure and academic motivation?

This chapter begins with a discussion of how data were collected and screened. This discussion is followed by demographic and descriptive statistics for each variable.



Multiple regression analysis, histograms, and scatter plots are also explained. The chapter concludes with a summary of the findings.

### **Results of Data Collection**

Data were initially collected over a 7-day period using a paid service for participants. The company that I used was different from the originally agreed-upon company (ResearchNow) because when administrative changes occurred at that firm, the replacement representative was uncomfortable with instruments I had to be use for this study and expressed a need to omit or change some of my instruments. After weeks of researching other available companies, I found Centiment, LLC Company that was able to facilitate the data collection process.

The online questionnaire was submitted to, and completed by 508 women initially, but many of the women failed to meet all criteria for participation. Among the 508 recruited individuals, there were 107 who were under 18 years old, and of the remaining 401 participants, 176 were not attending any higher educational institution, because 50 had graduated from college and 126 were either working or not currently enrolled in higher education. Centiment, LLC had to recruit an additional 100 women, all of whom were attending a form of higher education in the 48 contiguous United States and met the age and relationship experience criteria. The target sample size for this study was 244 emerging adult women who were enrolled in higher education either part or full time (at a brick-and-mortar or online institution), had been in an intimate relationship within the past 12 months in which they had experienced violence, and were within the age criteria. When I grouped the additional 100 responses to the questionnaire and applied the age criterion, there were 19 women who did not meet the requirement of

being 19-29 years of age but met all other criteria. Likewise, there were a number of women who met the age criterion but had graduated from college, so they were eliminated from the study. The final count of eligible emerging adult women between ages 19 and 29 years was 225. This number was 19 below the target of 244 participants.

As demonstrated in the descriptive statistics in Table 2, there was some diversity among the emerging adult women randomly selected for the study.

Table 2

*Demographic Information on Emerging Adult Females*

Demographic information	Percentage	Frequency
<i>Ethnicity</i>		
African American/Black or African	13.8%	31
Caucasian /White	65.3%	147
Hispanic Latina/Afro-Latina	13.8%	31
Asian Pacific Islanders	5.8%	13
Native American	1.3%	3
<i>Marital status</i>		
Single	43.6%	98
Married	15.1%	34
In a committed relationship	39.1%	88
Divorced	2.2%	5
<i>Employment status</i>		
Full time	34.7%	78
Part time	35.6%	80
Total employed	70.2%	158
Missing system	29.8%	67
<i>Age range of participants</i>		
19-22	43.1%	97
23-26	47.1%	106
27-29	9.3%	2
*30	.4%	1

Note. N = 225.

\*turned 30 years old at the time survey was taken.

There were 31 or 13.8% African American women, 147 or 65.3 % Caucasian women, 31 or 13.8% Hispanic or Latina women, 13 or 5.8% Asian Pacific women, and three or 1.3% Native American women. Table 2 demonstrates that the largest age range of the populations studied was ages 23-26 years, which accounted for 47.1% or 106 females. The second largest age group was 19-22 years, which accounted for 43.1% of 97 females. Among the emerging adult women studied, 43% were single, 15% were married, 39% were in a committed relationship with an intimate partner who psychologically or physically abused them, and 2% were divorced.

All women meeting the criteria for this study were enrolled in some form of higher education. Among 225 women in this study, 158 were employed (78 full time and 80 part time) and 67 were not.

### **Descriptive Statistics of Study Variables**

Table 3 shows descriptive statistics for the study variables, along with skewness and kurtosis values. Skewness and kurtosis values provide indications of whether or not a variable is approximately normally distributed. When the skewness is greater than or equal to 2 or less than or equal to -2, or when the kurtosis is greater than or equal to 3, then the variable's distribution is markedly different from a normal distribution (Westfall & Henning, 2013). The skewness and kurtosis values in Table 3 do not indicate that the distribution of the data for any variable deviated strongly from a normal distribution.

Table 3

*Descriptive Statistics of CTS2, MBDI, and AMS Scales*

	Minimum	Maximum	Mean	Std. deviation	Skewness	Kurtosis
Physical Assault	0.0	57.0	10.0	13.6	1.7	2.2
Psychological Aggression	0.0	48.0	18.2	11.1	0.59	-0.47
Depressive symptoms	1.0	81.0	38.18	17.2	0.22	-0.54
Amotivation	3.0	15.0	5.8	3.0	1.0	0.38
Extrinsic/ Introjection	5.0	25.0	18.0	4.2	-0.56	0.13

Table 4 shows the values of Cronbach's alpha coefficient for each of the study variables, which provide indications of the internal consistency of each scale. Because the values of Cronbach's alpha were all above 0.7, it appeared that all of the scales had adequate levels of internal consistency. Table 5 shows the correlations among the study variables.

Table 4

*Cronbach's Alpha Reliability Statistic*

Variable	Cronbach's alpha	N of items
Psychological Aggression	.879	8
Physical Assault	.940	12
Depressive Symptoms	.932	21
Amotivation	.775	3
Extrinsic/Introjection	.814	5

Table 5

*Pearson Correlation Between Variables*

	1	2	3	4	5
1. Physical Assault					
2. Psychological Aggression	0.642**				
3. Depressive symptoms	0.109	0.156*			
4. Amotivation	-0.014	0.091	0.225**		
5. Extrinsic/Introjection	0.051	0.032	0.011	-0.348**	

*Note.*  $n = 225$ .

\*Correlation is significant at the 0.05 level (2-tailed). \*\*Correlation is significant at the 0.01 level (2-tailed).

### Regression Analysis and Results

#### Research Question 1

To investigate Research Question 1, multiple linear regression was used to examine whether exposure to physical assault and psychological aggression from a participant's intimate partner was a significant predictor of depressive symptoms. The regression analysis was used to test the following null hypothesis, versus the alternative hypothesis:

Ho1: Among emerging adult women, there is no relationship between exposure to IPV (as measured by the physical assault and psychological assault scores of the Conflict Tactics Scales [CTS2]) and depressive symptoms (as measured by Modified Beck Depression Inventory [MBDI]).

Ha1: Among emerging adult women, there is a relationship between exposure to IPV (as measured by the physical assault and psychological aggression

scores of the CTS2) and depressive symptoms (as measured by the MBDI).

The results are in Table 6.

Table 6

*Results of Regression Analysis Examining Physical Assault and Psychological Aggression Scores as Predictors of Depressive Symptoms*

Independent variable	Unstandardized coefficients		Standardized coefficients		<i>t</i>	<i>p</i> -value	VIF
	<i>B</i>	Std. error	Beta				
(Constant)	35.767	2.235			16.006	< .001	
Psychological Aggression	0.022	0.13	0.014		0.167	.87	1.701
Physical Assault	0.187	0.11	0.147		1.702	.09	1.701

*Note.* Dependent variable MBDI:  $R = .157$ ,  $R^2 = .025$ , adjusted  $R^2 = .016$ ,  $F(2,222) = 2.797$ ,  $p = .063$ .

As shown in Table 6, the results of the regression analysis indicate the extent to which the IPV variables (Physical Assault and Psychological Aggression scores) explain variation observed in depressive symptoms. The adjusted  $R$  square value for the regression model was 0.016, which indicates that physical assault and psychological aggression explain 1.6% of the variance in depressive symptoms. The overall  $p$ -value for the regression model ( $p = .063$ ) was greater than the alpha level of ( $\alpha = 0.05$ ), which indicated that the independent variables, physical assault and psychological aggression, did not account for a significant amount of variation in depression symptoms.

The regression coefficients shown in Table 6 indicate that generally, an increase in exposure to physical assault and psychological aggression predicts small increases of depression levels. As shown in Table 6, the standardized coefficient values indicate a

positive relationship between the dependent and independent variables. For psychological aggression, the value of the standardized coefficient ( $\beta = 0.014$ ) indicated that an increase of 1.0 standard deviation in psychological aggression predicts an increase in depression symptoms of 0.014 standard deviations. For physical assault, an increase of 1.0 standard deviation predicts an increase in depressive symptoms of 0.147 standard deviations.

The  $p$  values for the two independent variables, psychological aggression and physical assault, were ( $p = .87$ ) and ( $p = .09$ ), respectively, and they were greater than .05, indicating that there was no significant relationship between the independent and dependent variables. Therefore, the implication was that exposure to IPV did not significantly affect the development of depression symptoms. Given the results, the null hypothesis (Ho1) was not rejected.

## **Research Question 2**

To investigate Research Question 2, multiple linear regression was used to examine whether exposure to physical assault or psychological aggression from a participant's intimate partner were significant predictors of participants' academic motivation. The regression analysis was used to test the following null hypotheses versus the alternative hypotheses, as stated below.

Ho2: Exposure to IPV in an intimate relationship, as measured by CTS2 Physical Assault and CTS2 Psychological Aggression scores, does not predict levels of academic motivation as measured by the AMS-C Amotivation subscale.

Ha2: Exposure to IPV in an intimate relationship, as measured by CTS2 Physical Assault and CTS2 Psychological Aggression scores, does predict



levels of academic motivation, as measured by the AMS-C Amotivation subscale.

Table 7

*Results of Regression Analysis Examining Physical Assault and Psychological Aggression Scores as Predictors of Academic Motivation (Amotivation)*

Independent variable	Unstandardized coefficients		Standardized coefficients	<i>t</i>	<i>p</i> -value	VIF
	<i>B</i>	Std. error	Beta			
(Constant)	6.040	.393		15.355	< .001	
Psychological Aggression	-.033	.023	-.123	-1.421	.157	1.701
Physical Assault	.038	.019	.170	1.962	.051	1.701

*Note.* Dependent variable: Amotivation  $R = .131$ ,  $R^2 = .017$ , adjusted  $R^2 = .008$   $F(2,222) = 1.946$ ,  $p = .145$ .

As shown in Table 7, the results of the regression analysis demonstrate the extent to which the independent IPV variables (Physical Assault and Psychological Aggression scores) explain the variation observed in academic amotivation. The adjusted  $R$  square value for the regression model was .008, which indicates that physical assault and psychological aggression explain 0.8% of the variance in academic amotivation. The overall  $p$ -value for the regression model is .145, which is greater than the alpha level ( $\alpha = 0.05$ ), indicating that the independent variables physical assault and psychological aggression do not account for significant variance in academic amotivation.

The regression coefficient for psychological aggression was ( $\beta = 0.-123$ ) and for physical assault was ( $\beta = 0.170$ ). This means that physical assault has a stronger and unique contribution in explaining academic amotivation. The coefficient values of

(-.033) for psychological aggression and (.038) for physical aggression indicate an increase in psychological aggression and physical assault by unit scale results into an increase in academic motivation (amotivation) by the factors expressed in the respective coefficient.

The  $p$  values for the independent variables psychological aggression and physical assault were ( $p = .157$ ) and ( $p = .051$ ), respectively. Both were greater than .05, indicating that there was no significant relationship between the independent variables and the dependent variable Amotivation. Therefore, the implication was that exposure to IPV does not significantly affect Amotivation. Given these results, I failed to reject the null hypothesis (Ho2).

This section also explores Research Question 2, except that the dependent variable is measured using the Extrinsic Motivation subscale. The hypotheses were as follows:

- Ho3: Exposure to IPV in an intimate relationship as measured by CTS2 Physical Assault and CTS2 Psychological Aggression scores does not predict levels of academic Extrinsic Motivation as measured by the AMS-C Extrinsic Motivation/Introjected Regulation (EMIN) subscale.
- Ha3: Exposure to IPV in an intimate relationship as measured by CTS2 Physical Assault and CTS2 Psychological Aggression scores does predict levels of academic Extrinsic Motivation, as measured by the AMS-C EMIN subscale.

Table 8

*Results of Regression Analysis Examining Physical Assault and Psychological Aggression Scores as Predictors of Academic Motivation (Extrinsic Introjection)*

Independent variable	Unstandardized		Standardized		<i>t</i>	<i>p</i> -value	VIF
	coefficients		coefficients				
	<i>B</i>	Std. error	Beta				
(Constant)	17.705	.548			32.307	< .001	
Psychological Aggression	.019	.033	.051		.588	.557	1.701
Physical Assault	.001	.027	-.001		-.009	.993	1.701

*Note.* Dependent variable: AMS/Extrinsic Introjection  $R = .051$ ,  $R^2 = .003$ , adjusted  $R^2 = -.006$ ,  $F(2,222) = .288$ ,  $p = .750$ .

As shown in Table 8, the results of the regression analysis indicate the extent to which IPV variables (psychological aggression and physical assault scores), explains variation observed in academic motivation extrinsic introjection. The adjusted  $R^2$  is .003 for the regression model which indicate that the independent variables explain 3% of variance in academic motivation extrinsic introjection. The overall  $p$  value for the regression model ( $P = .750$ ) is greater than the alpha level of ( $\alpha = 0.05$ ), which indicates that the independent variables of psychological aggression and physical assault does not account for a significant amount of variation in academic motivation extrinsic motivation. 1.0 standard deviation units in psychological aggression by unit scale predicts into an increase in academic motivation (Extrinsic Introjection) of 0.051 standard deviation units.

The significant values for both independent variables psychological aggression and physical assault are ( $P = .557$ ) and ( $P = .993$ ) respectively which are greater than 0.05. The implication is that exposure to IPV does not significantly affect academic motivation extrinsic motivation.

### Research Question 3

The corresponding null hypothesis and alternative hypotheses to the stated research question are presented below: To test the mediating effects of depressive symptoms I used the Freedman-Schatzkin test.

Ho4: Depressive symptoms as measured by (MBDI) do not mediate the relationship between (CTS2) Physical Assault scale scores and AMS-C Amotivation subscale scores.

Ha4: Depressive symptoms as measured by MBDI do mediate the relationship between (CTS2) Physical Assault scale scores and (AMS-C) Amotivation subscale scores.

Table 9

#### *Results of Freedman-Schatzkin Tests for Research Question 3 Concerning Mediating Effects of Depressive Symptoms*

Null hypothesis	Dependent variable	Independent variable	Regression coefficients for independent variable							Indirect effect (Freedman-Schatzkin test)	
			$r_{XM}$	Model 1			Model 2			$t(223)$	$p$
				$b$	$SE$	$p$	$b$	$SE$	$p$		
H <sub>04</sub>	Amotivation	Physical Assault	.156	0.020	0.015	.173	0.013	0.015	.387	3.236	.0014
H <sub>05</sub>	Extrinsic Motivation/ Introjected Regulation	Physical Assault	.156	0.010	0.021	.631	0.002	0.016	.924	0.095	.9240
H <sub>06</sub>	Amotivation	Psychological Aggression	.109	-0.004	0.018	0.834	0.040	0.012	0.001	3.4	.0008
H <sub>07</sub>	Extrinsic Motivation/ Introjected Regulation	Psychological Aggression	.109	0.019	0.025	.448	0.001	0.016	.930	0.087	.9304

Ho5: Depressive symptoms as measured by (MBDI) do not mediate the relationship between CTS2 Physical Assault scale scores and the AMS-C Extrinsic Motivation/Introjected Regulation subscale scores.

- Ha5: Depressive symptoms as measured by (MBDI) do mediate the relationship between CTS2 Physical Assault scale scores and the AMS-C Extrinsic Motivation/Introjected Regulation subscale scores.
- Ho6: Depressive symptoms as measured by (MBDI) do not mediate the relationship between CTS2 Psychological Aggression scale scores and AMS-C Amotivation subscale scores.
- Ha6: Depressive symptoms as measured by (MBDI) do mediate the relationship between CTS2 Psychological Aggression scale scores and AMS-C Amotivation subscale scores.
- Ho7: Depressive symptoms as measured by (MBDI) do not mediate the relationship between CTS2 Psychological Aggression scales and the AMS-C Extrinsic motivation/Introjected Regulations (EMIN) subscale scores.
- Ha7: Depressive symptoms as measured by (MBDI) do mediate the relationship between CTS2 Psychological Aggressive scale scores and the AMS-C Extrinsic motivation/Introjected Regulation (EMIN) subscale scores.

Tests of the mediation hypotheses 4-7 for Research Question 3 were performed using the Freedman-Schatzkin test. In each of the hypotheses 4-7, the dependent variable was either amotivation or extrinsic motivation /introjected regulation and the independent variable was either physical assault or psychological aggression from the intimate partner. The mediation variables were depressive symptoms in each of the hypotheses 4-7. The mediation test was based on two regression models: 1) a simple linear regression model, with only the independent variable as predictors of the dependent variable, and 2)

a multiple regression model with independent variable and the mediator variable as predictors of the dependent variable. The Freedman-Schatzkin tested whether there was an indirect effect of the independent variable on the dependent variable through depressive symptoms as the mediator variable. This was based on examining the null hypothesis that there was no difference between the regression coefficients for the independent variables in the two regression models. The t-statistic for the Freedman-Schatzkin test was calculated using the formula.

$$t = (a-b) / \sqrt{(s_a^2 + s_b^2 - 2 s_a s_b (1-r^2))},$$

where  $a$  = raw (unstandardized) regression coefficient for the relationship between independent variable and the dependent variable in the simple linear regression analysis (model 1);  $s_a$  = the standard error of this score;  $b$  = raw (unstandardized) regression coefficient for the relationship between independent variable and the dependent variable in the multiple linear regression analysis (model 2);  $s_b$  = standard error of this score; and  $r$  is the Pearson correlation coefficient for the relationship between the independent variable and the mediator variable. The t-statistic has  $n-2$  degrees of freedom where  $n$  is the number of cases in the regression analyses.

The results of Freedman-Schatzkin test for hypotheses 4-7 are shown in Table 8. The p-values obtained from model 1 for each of the hypotheses 4-7 showed there was no significant relationship between the IPV exposure variables and the academic motivation variables. There were significant indirect effects of physical assault on amotivation via depressive symptoms ( $p = .0014$ ) and of psychological aggression on amotivation via depressive symptoms ( $p = .008$ ). Therefore, null hypotheses  $H_{04}$  and  $H_{06}$  were rejected.

Indirect effects on extrinsic motivation /introjected regulation were not statistically significant; null hypotheses  $H_{05}$  and  $H_{07}$  were not rejected.

### **Summary**

The purpose of this study was to determine whether there existed any statistical significant relationship between intimate partner violence exposure and academic motivation among the age group of emerging adult women (19-29). The results of the linear regression test led to not rejecting the null hypotheses for questions 1, and 2. Although the study results gave evidence that physical assault and psychological aggression are related to increase in depressive symptoms, physical assault and psychological aggression were not statistically significant as predictors of depressive symptoms. Similarly, physical assault and psychological aggression were not statistically significant as predictors of AMS academic amotivation scores or of AMS extrinsic motivation/introjected regulations scores.

Hence the results did not offer substantial evidence to infer the level of effect exposure to intimate partner violence has on academic motivation. However, there was a significant indirect effect via MBDI scores of physical assault and psychological aggression on academic amotivation. This suggest that depressive symptoms mediate the correlations between depressive symptoms psychological aggression and AMS-C amotivation and between physical assault and AMS-C amotivation. In chapter 5, the study results are interpreted and discussed with reference to the research questions and previous research conducted in this area. I will discuss the limtations of the methodology used in the present study, implications of the results and recommendations for action and future study.

## Chapter 5: Discussion, Conclusions, and Recommendations

### Introduction

This chapter presents a summary of the study, discussion of results, conclusions, and recommendations elicited from this quantitative correlational study. The purpose of this study was to examine the relationship between IPV and academic motivation among emerging adult women, and to investigate depressive symptoms as a potential mediator of this relationship. Two CTS2 scales (Straus et al., 2003) were used to measure psychological aggression and physical assault as dimensions of IPV. The two subscales of the AMS-C (Stover et al., 2012) were used to measure extrinsic motivation/introjected regulation and amotivation and for the mediator MBDI (Galit & Overholser, 2000) to measure depressive symptoms.

The analysis of data in this study was conducted for the purpose of addressing the three research questions. The research questions that guided this study concerned whether or not exposure to IPV affects academic motivation, and whether depression is a mediator among the variables. The research questions for this study were the following:

- RQ1: Is there a relationship between exposure to intimate partner violence (IPV) and depressive symptoms among emerging adult women?
- RQ2: Does exposure to IPV in an intimate relationship predict levels of academic motivation?
- RQ3: Do depressive symptoms mediate the relationship between IPV exposure and academic motivation?

In the first research question, I explored the correlation between IPV and depression symptoms. In the second research question, I examined whether exposure to



IPV influenced an individual's academic motivation, and in the third research question, I looked at the mediating variable of depressive symptoms.

For all three research questions, I gathered and analyzed data using a multiple linear regression model to determine whether there was a relationship between the dependent variables and the independent variables. Research Question 3 required the Freedman–Schatzkin formula to test for depression as a mediation between IPV and academic motivation.

The target sample size for analysis was 244 emerging adult women between the ages of 19 and 29 years who were enrolled in higher education and had experienced IPV within the past 12 months. However, a total of 225 participants out of 508 met all criteria for participation and completed the questionnaire. The final sample size was below the target amount for adequate statistical power. Among these participants, 43.6% or 98 were single women, 15.1% or 34 were married, 39.1% or 88 were in a committed relationship, and 2.2% or 5 were divorced. All participants were enrolled in higher education by way of either distance learning or a brick-and-mortar institution, and all had been in a relationship within the past 12 months in which IPV occurred.

### **Summary of Research Findings**

In regard to the first research question, as presented in the results section, I found that IPV, measured by both physical assaults and physical aggression, did not have a significant effect on an individual's depression symptoms. The regression coefficients reflected in Table 4 in Chapter 4 showed that a general increase in exposure to both physical assault and psychological aggression by 1 standard deviation predicts small increases in depression levels.

For the second research question, as presented in the results, the independent variables of physical assault and psychological aggression did not account for significant variance in the dependent variable academic amotivation. Similar to the findings for Research Question 1, the results for Research Question 2 did not yield a significant relationship between the variables. Finally, Research Question 3 findings showed an indication of a significant indirect effect of IPV on academic amotivation.

### **Interpretation of Findings**

The results for the Research Question 1 multiple linear regression analysis were inconsistent with previous research that supported a significant relationship between IPV exposure and depressive symptoms. Although this study's findings showed that variation of the dependent variable (depressive symptoms) as explained by the independent variable was not statistically significant, there was a slight increase in depressive symptoms among emerging adult women in the study. The correlation of this study was insignificantly small compared to previous studies where the magnitude was greater because the sample size was much larger and yielded stronger correlations between IPV and depressive symptoms. An earlier study using a large sample of 36,163 female participants yielded a positive and direct association between IPV and depressive symptoms, and depressive symptoms with the incidence of IPV (Devries, 2013). Likewise, in a more recent study of 390 adult women victims of IPV, Mendonca and Ludemir (2017) explored the relationship between IPV and the occurrence of common mental disorders among women. The authors explored three forms of IPV, namely sexual, physical, and psychological. Their findings demonstrated that all three forms of IPV were related to common mental disorders. Finally, the results of a Cascardi et al.

(1999) study on co-occurrence correlates of women who were physically abused gave an indication of a significant connection between physical IPV and clinical depression.

Similarly, in relation to Research Question 2, the data gathered using multiple regressions yielded no significant link between IPV exposure and academic motivation. In conclusion the variables were not significantly correlated. However, it was unclear whether there might have been other intervening variables that influenced academic motivation. A small sample size could have been a factor influencing the outcome, as well as the fact that I focused on only two aspects of academic motivation scales, namely extrinsic introjection/regulation, and amotivation. Amotivation measured the absence of a drive to pursue an activity, and extrinsic introjection/regulation measured the drive to pursue and complete an activity out of a sense of obligation or to gain rewards at the end. In contrast to these findings, a recent study of 85,071 undergraduate students between the ages of 18-24, all of whom were victims of IPV, where academic performance was the dependent variable and health, mental health, and sexuality were intervening variables, I discovered that IPV had a direct effect on academic performance, grade point average (GPA), and poor health (Brewer, Thomas, & Higdon, 2018).

Despite the results of this study being contrary to my expectations, one positive interpretation of it is that exposure to IPV may not be a determinant of academic motivation; therefore, it may be possible for women who are in abusive relationships to become motivated to gain educational qualifications that could enable them to better their positions in life. The results for Research Question 2 confirmed Deci and Ryan's (2011) theory of self-determination. Self-determination/motivation theory holds that people are driven by a need to grow or gain fulfillment. Motivation involves having the experience

of choice or autonomy, competence or self-efficacy, and relatedness (Sikhwari, 2014).

All of the women in this study were enrolled in higher education, and all were victims of IPV.

The results of this study offered information indicating that there is no strong link between IPV and academic motivation among emerging adult women. However, in this same study, there was some correlation between depressive symptoms and academic motivation. In fact, the findings of this study differed from those of an earlier research study by Thompson and Massat (2005) that investigated the effect of exposure to family violence, academic achievement, and posttraumatic stress, where depression, low self-esteem, and poor academic performance were affected. Internalizing feelings can lead to depressive symptoms, which may affect other aspects of life, including academic motivation and performance (Jayasinghe et al., 2009).

Brewer, et al. (2018) conducted a similar study with a population of undergraduate students between the ages of 18 and 24 years. The authors used a structural equation model to explore the relationship between IPV, depression, and academic performance. Academic performance was measured by GPA. The respondents included both heterosexuals and members of the LGBTQ community. The findings demonstrated that students who reported IPV had relatively lower GPAs. Psychological distress was a mediating factor between IPV and academic performance. Slightly different from this study, Brewer et al (2018) included various forms of IPV, such as sexual assault and stalking, which were not part of this current study. However, the overall findings of their study supported the premise that IPV negatively affects academic performance.

The findings of this present study do not fully confirm the premise of previous research findings that reports a link between IPV exposure, depression and academic performance. The outcome of this study suggests that exposure to IPV does not necessarily impede one's academic motivation. In fact, women in this study were enrolled in higher education. Significant indirect correlates mediate between depressive symptoms and amotivation was however, noted. It is essential to explore potential limitations of the present study since the correlational results of the of the study did not yield significant relationship between the variables compared to other studies previously mentioned.

### **Limitations of the Study**

Generalizability of this study was limited by method of convenience sampling. Another limitation of the study is I did not examine women who were not victims of IPV to be able to compare the effect of exposure to IPV. Another limitation of the present study is I utilized only two of five CTS2 scales that measures the extent to which partners engage in intimate partner violence (physical assault and psychological aggression). Often with IPV sexual coercion, conflict resolution and negotiation could have an effect on a victims' mental well-being. I also used two of the six subscales of academic motivation, omitting intrinsic motivation for this study. Another limitation of the study was I did not account for other possible mediating variable such as, substance use, history of mental illness, posttraumatic stress or childhood trauma. Another limitation is that the design of the instrument, administered online, could have had some effect on how participants responded or not. Finally, utilizing a global organization with access to host

of panelists who are paid to answer surveys could lead to survey fatigue. Given these limitations mentioned about this study, there are recommendations for future research.

### **Recommendations for Future Research**

It is apparent that there is an abundance of studies that explored IPV and depression which focused mainly on women as victims. However, there is room for research similar to my study to include women who may not be enrolled in higher education at the time of the study but may have some higher education experience. Future research of a similar study should also include other CTS2 scales such as conflict resolution, sexual coercion and negotiations. In addition, all AMS-C subscale should be included for a comprehensive approach. Future research should also include women without a history of IPV exposure. Lastly, I would like to see future research explore other potential mediating variables such as childhood trauma, PTSD, substance use, and mental illness.

### **Implications for Positive Social Change**

In summary, the results from this study can be understood through the context of Deci & Ryan's (2011) theory of self-determination. IPV exposure and the negative consequences that comes with being a victim does not necessarily have to be an impediment to academic motivation and achievement. IPV victims can improve their circumstances by obtaining higher education, technical skills and professional status. Obtaining higher education can be a social outlet and escape for women who are IPV exposed, and could eventually get them out of the social situation where they are suffering (Vyas & Watts (2009). Social interaction can offer some support and can serve as an incentive to obtain the ultimate reward or accomplishment (Deci & Ryan 2011).

Emerging adult women enrolled in higher education online or brick and mortar in this study supports Deci and Ryan's (2011) theory of self-determination, which states people are driven by a need to grow or gain fulfillment. Having financial resource and support to participate in a higher learning institution can afford them a better position in life and ultimately resulting in positive social change.

### **Recommendations for Action**

The findings of this study had some inconsistencies with previous research in that the link was not significant between IPV exposure and depressive symptoms. There were significant indirect correlates that mediated the relationship between depressive symptoms and amotivation. Findings in this study was not statistically significant with regards to high correlation between the independent and dependent variables. Emerging adult population are those who are between college age and beginning a career stage. It is a period in life where motivation is necessary to progress. There is a need for more awareness among colleges, universities administrators, counselors, professors and corporate employers to identify markers of victims of IPV displaying lack of motivation. Development and implementation of policies to assist, guide, support, protect and intervene on behalf of individuals who may be victimized but are striving to obtain higher education is pertinent. The findings from this study showed promise for future researchers interested in understanding the effects of IPV on academic motivation, by utilizing a larger sample, employing all five CTS2 scales, as well as all subscales of academic motivation scale for college.

## Conclusions

Often in many intimate relationships, partners suffer violence, but because of the intimate nature of the relationship often go unreported. Personal experience, experience from the neighbors, relatives and friends, many adults have in one way or another experienced IPV. A common experience is that many partners exposed to IPV often stay in the relationships, hoping that things will get better for them. Indeed, this is an indication of the potential effects of IPV. As shown by the results and supported by literature, partners who are victims of IPV are vulnerable to depressive symptoms. Depressive symptoms increase with cases of IPV, and this subsequently influences other personal activities. Lastly, research provides the lens for a better understanding of IPV and its effect on not only the victims, but their families, friends and communities. Resource information in addition to education or skill training can empower victims and change the trajectory of their lives.



## References

- Adams, A. E., Tolman, R. M., Bybee, D., Sullivan, C. M., & Kennedy, A. C. (2012). The impact of intimate partner violence on low-income women's economic well-being: The mediating role of job stability. *Violence Against Women, 18*, 1345-1367. <http://dx.doi.org/10.1177/1077801212474294>
- Amstadter, A. B., Elwood, L. S., Begle, A. M., Gudmundsdottir, G., Smith, D., Resnick, H., ... Kilpatrick, D. (2011). Predictor of physical assault victimization findings from national survey of adolescents. *Addictive Behaviors, 36*, 814-820. <http://dx.doi.org/10.1014, addbeh2011.03.008>
- Anderson, K. M., & Bang, E. J. (2011). Assessing PTSD and resilience for females who during childhood were exposed to domestic violence. *Child and Family Social Work, 17*, 55-65. <http://dx.doi.org/10.1111/j.1365-2206.2011.00772>
- Anderson, K. M., Renner, L. M., & Danis, F. S. (2012). Recovery: Resilience and growth in the aftermath of domestic violence. *Violence Against Women, 18*, 1279-1299. <http://dx.doi.org/10.1177/1077801212470543>
- Antai, D. (2011). Controlling behavior, power relations within intimate relationships and intimate partner physical and sexual violence against women in Nigeria. *Biomedical Central Public Health, 11*. <http://dx.doi.org/10.1186/1471-2458-11-5-11>
- Arnett, J. J. (2000). Emerging adulthood: A theory of development from the late teens through the twenties. *American Psychologist, 55*, 469-480.
- Arnett, J. J., & Fishel, E. (2013). *When will my grown -up kid grow up? Loving and understanding your emerging adult*. New York, NY: Workman.

- Avokian, A.D., & Markou, A. (2012). The neurobiology of anhedonia and other reward related deficits. *Neuropsychiatric Disorders*, 35, 68-77.  
<https://dx.doi.org/10.1016/j.tins.2011.11.005>
- Baron, R.M., & Kenny, D.A. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic and statistical considerations. *Journal of Personality & Social Psychology*, 51(6), 1173-1182.
- Bayarri, E., Ezpeleta, L., & Granero, R. (2011). Exposure to intimate partner violence, psychopathology, and functional impairment in children and adolescents: Moderator effects of sex and age. *Journal of Family Violence*, 26, 535-543.  
<https://dx.doi.org/10.1007/s10896-011-9390-4>
- Belle, D., & Doucet, J. (2003). Poverty, inequality, and discrimination as sources of depression among U.S. women. *Psychology of Women Quarterly*, 27, 101-113.  
<https://dx.doi.org/10.1111/1471-6402.00090>
- Bhandari, M., Sprague, S., Dosanjh, S., Wu, V., & Schemitsch, E. H. (2010). Prevalence of abuse and intimate partner violence surgical evaluation: Rationale and design of a multi-center cross sectional study. *BMC Musculoskeletal Disorders*, 11.  
<https://dx.doi.org/10.1186/1471-2474-11-77>
- Bonomi A. E, Holt V. L, Thompson R. S, & Martin D. (2005). Ascertainment of intimate partner violence in women seeking legal protection. *American Journal Preventive Med.* 28: 52-58. [10.1016/j.amepre.2004.09.011](https://doi.org/10.1016/j.amepre.2004.09.011)

- Brewer, N., Thomas, K.A., & Higdon, J. (2018). Intimate partner violence, health, sexuality, and academic performance among a national sample of undergraduates. *Journal of American College Health* 66 (7), 683-692.  
<https://dx.doi.org/10.1080/07448481.1454929>
- Bushman, B., & Huesmann, R. (2006). Short-term and long-term effects of violent media on aggression in children and adults. *Archives of Pediatric and Adolescent Medicine*, 160: 348-352.
- Campbell, J.C., & Soeken, K.L. (1999). Women's response to battering overtime: An analysis of change. *Journal of Interpersonal Violence*, 14, 21-40.
- Carpenter, G.L. & Stacks, A.M. (2009) Developmental effects of exposure to intimate partner violence in early childhood: A review of the literature. *Children and Youth Review*. 3: 831-839.
- Cascardi, M., O'Leary, K.D., & Schlee, K. (1999). Co-occurrence and correlates of posttraumatic stress disorder and major depression in physically abused women. *Journal of Family Violence* 14, 227-249
- Centers for Disease Control and Prevention. (2012). *Understanding teen dating violence: Fact sheet*. Retrieved from <http://www.cdc.gov/Violenceprevention/pdf/TeenDatingViolence2012-a>
- Centers for Disease Control and Prevention, National Center for Injury Prevention and Control. (2014). *Understanding intimate partner violence* (Fact sheet). Retrieved from <http://www.cdc.gov>

- Chang, J. C., Dado, D., Hawker, L., Cluss, P. A., Buranosky, R., Slagel, L., & Scholle, S. H. (2010). Understanding turning points in intimate partner violence: Factors and circumstances leading women victims toward change. *Journal of Women's Health, 19*, 251-259. <http://dx.doi.org/10.1089/jwh.2009.1568>
- Clarey, A., Hokoda, A., & Ulloa, E. C. (2010). Anger control and acceptance of violence as mediators in the relationship between exposure to inter-parental conflict and dating violence perpetration in Mexican adolescents. *Journal on Family Violence, 25*, 619-625. <http://dx.doi.org/10.1007/s10896-010-9315-7>
- Clements, C. M., & Sawhney, D. K. (2000). Coping with domestic violence: Control attributions, dysphoria, and hopelessness. *Journal of Traumatic Stress, 13*, 219-240. Retrieved from [www.waldenu.com/google-scholar](http://www.waldenu.com/google-scholar)
- Cockley, K. O. (2000). An investigation of academic self-concept and its relationship to academic achievement in African American college students. *Journal of Black Psychology, 26*, 148-164.
- Cockley, K. O., Bernard, N., Cunningham, D., & Motoike, (2001). A psychometric investigation of the academic motivation scale using a United States sample. *Measurement and Evaluation in Counseling and Development, 34*, 109-119.
- Coe, R. (2000). What is effect size? A guide for users. Center for Evaluation and Monitoring. Durham University, NC.
- Cohen, J. (1988) *Statistical power analysis for the behavioral sciences*, 2<sup>nd</sup> edition. Hillsdale, N.J. Erlbaum
- Creswell, J.W. (2009). *Research design: Qualitative, quantitative and mixed methods approaches*. Thousand Oaks, CA: SAGE Publications Ltd.

- Cui, M., Gordon, M., Ueno, K., & Fincham, F. D. (2013, April). The continuation of intimate partner violence from adolescence to young adulthood. *Journal of Marriage and Family*, 75, 300-313. doi: 10.1111/jomf.12016
- Deci, E., & Ryan, R. M., (1985) Intrinsic motivation and self-determination in human behavior. New York: Plenum.
- DeVeaux, R. D., Velleman, P. F., & Bock, D. E. (2014). *Intro to Stats* (4th edition ed.). Boston: Pearson Education Inc.
- Devries, K.M., Mak, J.Y., Bacchus, L.J., Child, J.C., Folder, G., Petzold, M., Astbury, J. & Watts, C.H., (2013). Intimate partner violence and incident depressive symptom and suicide attempts: A systemic review of longitudinal studies. <https://doi.org/10.1371/journal.p.med.1001439>
- Dillon, G., Hussain, R., Laxton, D & Rahman, S. (2013). Mental and physical health and intimate partner violence against women: A review of the literature. *International Journal of Family Medicine*. <https://doi.org/10.1155/2013/313909>
- Dori, G A., Overholser, J C. (2000). Evaluating depression severity and remission with a modified Beck Depression Inventory. *Personality and Individual Differences*. 28, 1045-1061. doi. 10.1016/S0191-8869(99)00156-7
- Dutton, M., James, L., Langhorne, A., & Kelly, M. (2015). Coordinated public health initiatives to address violence against women and adolescents. *Journal of Women's Health*. 24: 80-85 doi. 10.1089/jwh 2014-4884
- Ellsberg, M.C., Winkvist, A., Pena, R., & Stendlund, H. (2001). Women's strategic responses to violence in Nicaragua. *Journal of Epidemiology and Community Health*, 55, 531-531. Doi: 10.1136/jech.

- Ennis, N.E., Hobfoll, S.E., & Schroder, K.E. (2000). Money doesn't talk, it swears: How economic stress resistance resources impact inner city women's depressive mood. *American Journal of Community Psychology*, 28, 149-173. Doi: 10.1023/A:1005183100610.
- Esfandyari, B., Baharudin, R., & Nowzari, L. (2009). Background of inter-parental conflicts and internalizing behaviour problems among adolescents. *European Journal of Scientific Research*, 37, 599-607.
- Fairchild, A. J., Horst, S. J., Finney, S. J., & Barron, K. E. (2005). Evaluating existing and new validity evidence for the academic motivation scale. *Contemporary Educational Psychology*, 30, 331-358. <http://dx.doi.org/10.1016/j.cedpsych>.
- Fantuzzo, J.W., & Fusco, R.A., (2007). Children's direct exposure to domestic violence crime: A population-based investigation. *Journal of Family Violence*, 22, 543-552. doi: 10.1007/s10896-007-9105.
- Fisher, E.M. & Stylianou, A.M., (2016). To stay or to leave: Factors influencing victims' decision to stay or leave a domestic violence emergency. *Journal on Interpersonal Violence*. doi: 10.1177/0886260516645816.
- Garrido, E. F., Culhane, S. E., Petrenko, C. L., & Taussig, H. N. (2011). Psychosocial consequences of Intimate Partner Violence (IPV) Exposure in Maltreated Adolescents: Assessing More than IPV Occurrence. *Journal of Family Violence*, 26, 511-518. doi: 10.007/s10896-011-9386-0
- Geban, E. G. (2011). An investigation of the relationship between motivation and academic achievement of pre-service Chemistry teachers. *Education and Science*, 36, 246-255.

- Giustina, J. D (2009). A cross-cultural comparative analysis of domestic violence policies of Nicaragua and Russia. *Journal of International Women Studies*, *10*, 34-39.  
Retrieve from <https://www.researchgate.net/publication/241797504>
- Goodman, L. A., Smyth, K. F., Borges, A. M., & Singer, R. (2009). When crises collide: How intimate partner violence and poverty intersect to shape women's mental health and coping. *Trauma Violence Abuse*, *4*, 306-329.
- Gravetter, F., & Wallnau, L., (2014). Essentials of statistics for the behavioral sciences. 8<sup>th</sup> Edition, Wadsworth, CA.
- Guerra, N.G., Huesmann, L.R., & Spindler, A. (2003). A community violence exposure, social cognitions and aggression among urban elementary school children. *Child Development* *74*; 1561-1576.
- Guo, J., Parker, P. D., Marsh, H. W., & Morin, A. J. (2015). Achievement, motivation, and educational choices: A longitudinal study of expectancy and value using multiplicative perspective. *Developmental Psychology*, *51*, 1163-1176. doi:
- Gurka, M. J., Vishnu, A., Okereke, O. I., Musani, S., Sims, M., & DeBoer, M. D. (2016). Depressive symptoms are associated with worsened severity of the metabolic syndrome in African American women independent of lifestyle factors: A consideration of mechanistic links from the Jackson heart study. *Psychoneuroendocrinology*, *68*, 82–90. doi: 10.1016/j.psyneuen.2016.02.03010.1037/a0039440
- Halpern-Meeking, S., Manning W.D., Giordano, P.C., & Longmore, M.A. (2013). Relationships churning, physical violence and verbal abuse in young adult

- relationships. *Journal of Marriage and Family* 75; 2-12 doi. 10.1111/j.1741-3737.2012-0102-9
- Hamby, S., Finkelhor, D., Turner, H., & Ormrod, R. (2011). Children's Exposure to Intimate Partner Violence and other Family Violence. *Juvenile Justice Bulletin*, 1-12. Retrieved from <https://www.ncjrs.gov/pdffiles1/ojdp/232272>
- Hammond, M.A., Longmore, M., Manning, W., & Giardino, P., (2014). Gainful activity in intimate partner aggression in emerging adulthood. *Emerging Adulthood*. 2, 116-127. doi:10.1177/2167696013512305.
- Hetzel-Riggins, M. D., & Meads, C. L. (2011). Childhood violence and adult partner maltreatment: The roles of coping styles and psychological distress. *Journal of Family Violence*. <http://dx.doi.org/10.1007/s10896-011-9395-z>
- Hoyt, D.R., Ryan, K.D., & Cauce, A.M. (1999). Personal victimization in high risk environment: Homeless and runaway adolescents. *Journal of Research in Crime and Delinquency*. 36: 371-392. doi 10.1177/0022427899036004002
- Insana, S. P., Foley, K. P., Downs, H. M., Kolko, D. J., & McNeil, C. B. (2014). Children exposed to intimate partner violence demonstrate disturbed sleep and impaired functional outcomes. *Psychological Trauma: Theory, Research, Practice and Policy*, 6, 290-298. doi: 10.1037/a0033108
- Israel, E. & Stover, C., (2009). Intimate partner violence: The role of the relationship between perpetrators and children who witness violence. *Journal of Interpersonal Violence* 24, 1755-1764. SSN 0886-2605
- Jones, N. T., Ji, P., Beck, M., & Beck, N. (2002). The reliability and validity for CTS2 in a female incarcerated population. *Journal of Family Issues*, 23, 441-457.



- Kaplan, A., & Flum, H. (2012). Identity formation in educational settings: a critical focus for education in the 21st century. *Contemporary Educational Psychology, 37*, 171-175.
- Kaukinen, C., Gover, A. R., & Hartman, J. L. (2012). College women's experiences of dating violence in casual and exclusive relationships. *American Journal of Criminal Justice, 37*, 146-162. <http://dx.doi.org/10.1007/s12103-011-9113-7>
- Keith, T.Z. (2006) Multiple regression and beyond. University of Texas, Austin: Pearson
- Kemp, K., Signal, T., Botros, H., Taylor, N., & Prentice, K. (2014). Equine facilitated therapy with children and adolescents who have been sexually abused: A program evaluation study. *Journal of Child and Family Studies, 23*: 558-566. <https://doi.org/10.1007/s10826-013-9718>
- Kitzman, K.M., Gaylord, N.K., Holt, A.R., & Kenny, E.D. (2003). Child witnesses to domestic violence: A meta-analytic review. *Journal of Consulting and Clinical Psychology, 71*: 339-352
- Knepp, M. M., Yoza, J., & Quandt, E. (2015). Higher modified beck depression inventory scores are associated with body, eating and exercise comparisons but decreased exercise amounts. *Perceptual and Motor Skills: Physical Development and Measurement, 120*, 945-959. <http://dx.doi.org/10.2466/15.29.PMS.120>
- Kreager, D.A., Felson, R.B., Warner, C., & Wenger, M.R., (2013). Women's education, marital violence and divorce: A social exchange perspective. *Journal of Marriage and Family 25*, 565-581. doi: 10.1111/jomf.12018
- Kulwicki, A., Ballout, S., Kilgore, C., Hammad, A., & Dervartanian, H. (2014). Intimate partner violence, depression and barriers to service utilization in Arab American

women. *Journal of Transcultural Nursing*, 26, 24-30.

<http://dx.doi.org/10.1177/1043659614524000>

Lacour, M., & Tissington, L.D. (2011). The effects of poverty on academic achievement.

*Educational Research and Reviews*. 6: 522-527. ISSN 1990-3839.

Lim, B. H., Valdez, C. E., & Lilly, M. M. (2015). Making meaning out of interpersonal

victimization: The narratives of IPV survivors. *Violence Against Women*, 1-22.

<http://dx.doi.org/10.1177/1077801215590670>

Linley, P. A., & Joseph, S. (2004). Positive change following trauma and adversity: A

Review. *Journal of Traumatic Stress*, 17, 11-21.

Littman, L. (2012). Different strokes for different folks: An intersectional analysis of the

political discourse concerning migrant women exposed to domestic violence in

Sweden (Doctoral dissertation, Stockholm University, 2012). *Dissertations*

*Abstracts International*, (URN 77574), 1-35.

Lohman, B. J., Neppl, T. K., Senia, J. M., & Schofield, T. J. (2013, January 24, 2013).

Understanding adolescent and family influences on intimate partner psychological

violence during emerging adulthood and adulthood. *Journal Youth Adolescence*,

42, 500-517. doi: 10.1007/s10964-013-9923-7

Macmillan, R., & Hagan, J. (2004). Violence in the transition to adulthood: Adolescent,

victimization, education, and socioeconomic attainment in later life. *Journal of*

*Research on Adolescence* 14:127-158.

McGee, R. A. & Wolfe, D.A. (1991). Psychological maltreatment: Towards an

operational definition. *Development and Psychopathology*, 3, 3-18

- Margolin, G., & Gordis, E.B., (2004). Children's exposure to violence in the family and community. *Current Directions in Psychological Science, 13*, 152-155.
- Margolin, G., & Gordis, E.B. (2000). The effects of family and community violence on children. *Annual Review of Psychology, 51*, 445-479.
- Markowitz, F. E. (2001). Attitudes and family violence: Linking intergenerational and cultural theories. *Journal of Family Violence, 16*, 205-218.
- Martin, S. G. (2005). Children exposed to domestic violence: Psychological considerations for health care practitioners. *Holistic Nursing Practice, 16*, 7-15.  
Retrieved from [www.Waldenlibrary](http://www.Waldenlibrary)
- Martin, A.J., & Dowson, M. (2009). Interpersonal relationships, motivation, engagement and achievement: Yields for theory, current issues and educational practice. *Review of Educational Research 79*, 327-365. doi: 10.3102/0034654308325583
- Matsushima, R., & Ozaki, H. (2015). Relationships between identity and academic motivation. *Psychological Reports, 117*, 217-229. doi: 10.2466/07.10.PRO.117c16z7
- McFarlane, J., Parker, B., Soeken, K., & Bullock, L. (1995, May 2007 online). Assessing for abuse during pregnancy: Severity and frequency of injuries and associated entry into prenatal care. *Public Health Nursing, 12*, 284-289. <http://dx.doi.org/>
- McKinney, B. (2015). Witnessing parental domestic violence and young girl's dating relationships. *Walden University Dissertation and Doctoral Work*.
- Mendonca, M.F. & Ludemir, A.B. (2017). Intimate partner violence and incidence of common mental disorder. *Revista Saude Publica*. doi. 10.1590/S1518-8787.2017051006912.

- Meyers, L. S., Gamst, G. C., & Guarino, A. J. (2013). *Applied multivariate research design and interpretation*. Thousand Oaks, CA: Sage Publication
- Miceli, M., & Castelfranchi, C. (2000). Nature and mechanism of loss of motivation. *Review of General Psychology, 4*, 238-263. <http://dx.doi.org/10.1037/1089-2680.4.3>
- Moe, A. M., & Bell, M. P. (2004). Abject Economics. *Violence Against Women, 10*, 29-55. <http://dx.doi.org/10.1177/1077801203256016>
- Moore, D., & McCabe, G. (2006). Introduction to the practice of statistic. 5<sup>th</sup> edition. New York, N.Y: W.H. Freeman and Company.
- Morris, A.M., Mrug, S., & Windle, M. (2015). From family violence to dating violence: Testing a dual pathway model. *Journal of Youth & Adolescence, 44*: 1819-1835. doi: 10. 1007/s10964-015-0328-7
- Moylan, C.A., Herrenkohl, T.I., Sousa, C., Tajima, E.A., Herrenkohl, R.C., & Russo, M.J. (2010). The effects of child abuse and exposure to domestic violence on adolescent internalizing and externalizing behavior problems. *Journal of Family Violence 25*, 53-63. Doi.org/10.1007/s10896-009-9269-9
- Muro, A., & Mein, E. (2010). Domestic trauma and adult education on the United States Mexican border. *Adult Education and Literacy Journal, 4*: 140-150. ISSN 1934-2322
- Murphy, L. (2011). Childhood and adolescent violence victimization and the risk of young adult intimate partner violence victimization. Retrieved from US Library of Medicine / National Institute of Health. *26*: 593-607. [www.ncbi.nlm.nih.gov/pubmed/22145539](http://www.ncbi.nlm.nih.gov/pubmed/22145539).

- Namade, R., Reiss, N.S., & Dombeck, M., (2007). Historical Understanding of Depression. *MentalHelp.net*. Retrieve from [Mentalhelp.net/articles/historical understanding of depression](http://Mentalhelp.net/articles/historical_understanding_of_depression).
- National Coalition for Men [NCFM], (2009). Domestic Violence. *National Coalition for Men Newsletter*.
- National Crime Victimization Survey (2014). ICPSR36142-v1. Ann Arbor, MI: Inter-university Consortium for Political and Social Research [distributor], 2015-08-27. Retrieved from <https://doi.org/10.3886/ICPSR36142.v1>
- National Institute of Justice (2007). How widespread is intimate partner violence? Retrieved from National Institute of Mental Health (NIMH). [www.nih.gov/health/pub](http://www.nih.gov/health/pub).
- Novotny, J. S. (2011). Academic resilience: Academic success as possible compensatory mechanism of experienced adversities and various life disadvantages. *Social Pedagogy*, 23, 91-101. doi: ISSN 1732-6729
- O'Brien, K., Cohen, L., Pooley, J.A., & Taylor, M (2013). Lifting the domestic cloak of silence: Resilience Australian women reflected memories of their childhood experiences witnessing domestic violence. *Journal of Family Violence*, 28: 95-108
- Office of Juvenile and Justice and Delinquency Prevention [OJJDP], 2011. National survey of children's exposure to violence. *Juvenile Justice Bulletin of Center for Disease Control*. 1-11. <https://www.ncjrs.gov/pdffiles1/ojjdp/232272>
- Osofsky, J.D. (1995). The effect of exposure to violence on young children. *American Psychologist*. 50: 782-788.

- Osofsky, J.D., Osofsky, H.J., Weems, C.F., Hansel, T.C., & King, L.S. (2014). Effects of stress related to the gulf oil spill on child and adolescent mental health. *Journal of Pediatric Psychology, 41*: 65-72. doi. 10.1093/jpepsy/jsu085.
- Overmier, J.B., & Seligman, M.E. (1967). Effects of inescapable shock upon subsequent escape and avoidance responding. *Journal of Comparative and Physiological Psychology, 63*, 28-33. doi. 10.1087/h0024166.
- Pallant, J. (2016) *SPSS survival manual*. 6<sup>th</sup> edition. New York N.Y.
- Patrick, H., & Williams, G.C. (2012). Self-determination theory: Its application to health behaviors and complementarity with motivational interviewing. *International Journal of Behavioral Nutrition and Physical Activity, 9*:18. doi: 10.1186/1479-5868-9-18.
- Patton, D. U., Woolley, M., & Hong, J. S. (2012). Exposure to violence, student fear, and low academic achievement: African American males in the critical transition to high school. *Children & Youth Services Review, 34*, 388-95. doi: 10.1016/j.childyouth.2011.11.009
- Pico-Alfonso, M.A., Linares, N., Navarro, C., Ros-Blasco, C., Echeburua, E., & Martinez, M. (2006). The impact of physical, psychological and sexual intimate male partner violence on women's mental health: Depressive symptoms, PTSD, state anxiety and suicide. *Journal of Women's Health, 15*, 599-611.
- Rennison, C. M. (2001, October 2001). *Intimate partner Violence and age of victim (1993-99)* (Special Report Bureau of Justice Statistic NCJ 187635). Retrieved from Bureau of Justice Statistic: <http://www.bjs.gov>

- Riggin, M. H., & Meads, C. L. (2011). Childhood violence and adult partner maltreatment: The Roles of coping style and psychological distress. *Journal of Family Violence, 26*, 585-593. doi: 10.1007/s10896-011-9395-z
- Sabina, C., & Tindale, R.S., (2008). Abuse characteristics and coping resources as predictors of problem focused coping strategies among battered women. *Violence Against Women, 14*, 437-456.
- San Francisco Domestic Violence Consortium (2011). The Facts on domestic Violence: Report on family violence. *San Francisco domestic violence consortium*. Retrieved from <http://www.dvcpartners.org>
- Schnurr, M. P., & Lohman, B. J. (2008). How much does school matter? An examination of adolescent dating violence perpetration. *Journal of Youth and Adolescent, 37*, 266-283. <http://dx.doi.org/10.1007/s10964-007-9246-7>
- Scott, C., Burns, A., & Cooney, G. (1998). Motivation for return to study as a predictor of completion of degree amongst female mature students with children. *Higher Education, 35*, 221-239. Retrieved from
- Seligman, M.E., & Maier, S.F. (1967). Failure to escape traumatic shock. *Journal of Experimental Psychology. 74*: 1-9.
- Seligman, M.E. & Beagley, G. (1975). Learned helplessness in the rat. *Journal of Comparative and Physiological Psychology. 88*: 534-541.
- Sikhwari, T. D. (2014). A study of the relationship between motivation, self-concept and academic achievement of students at the University in Limpopo province of South Africa. *International Journal on Education and Science, 6*, 19-25. Retrieved from <http://krepublishers.com/02-Journals/IJES/IJES-06-0-000-14>

- Simons, L., Burt, C., & Simons, R. L. (2008,). A test of explanations for the effect of harsh parenting on the perpetration of dating violence and sexual coercion among college males. *Violence and Victims, 23*, 66-82. doi: 10.1891/0886-6708.23.1 66
- Soini, H. T., & Aro, K. S. (2014). Schoolwork engagement and burnout among Finnish High School students and young adults: Profiles progressions and educational outcomes. *Developmental Psychology, 50*, 649-662. doi: 10.1037/a0033898
- Song, J., Bong, M., Lee, K., & Kim, S. I. (2015). Longitudinal investigation into the role of perceived social supports in adolescents' academic motivation and achievement. *Journal of Educational Psychology, 107*, 821-841. doi: 10.1037/edu0000016
- Somer, E., & Braunstein, A. (1999). Are children exposed to interpersonal violence being psychologically maltreated? *Aggression and Violence Behavior, 4*- 449-456
- Stevens, J. P. (1984). Outliers and influential data points in regression analysis. *Psychological Bulletin, 95* (2), 334-344. Retrieved from <https://doi.org/10.1037/0033-2909-95.2.334>
- Stover, J.B., Iglesia, G., Boubeta, A.R., & Liporace, M.F. (2012). Academic motivation scale: Adaptation and psychometric analyses for high school and college students. *Psychology Research and Behavior Management, 5*, 71-83.
- Tabachnick, B.G. & Fidell, L.S. (2013). Using multivariate statistics. Pearson, Boston.
- Thoennes, N., & Tjaden, P. (2000). Full report of the prevalence, incidence, and consequences of violence against women: Findings from the national violence against women survey. (Policy brief). Retrieved from [ncadv.org](http://www.ncadv.org/files/malevictims.pdf): <http://www.ncadv.org/files/malevictims.pdf>



- Thornton, J.W. & Jacobs, P.D., (1975). Learned helplessness in human subjects. *Journal on Experimental Psychology*, 87, 367-372. Retrieved from <http://dx.doi.org/10.1037/h0030529>.
- Tyler, K. A., Brownridge, D. A., & Melander, L. A. (2011). The effects of poor parenting on male and female dating violence perpetration and victimization. *Violence and Victims*, 26, 218-230. doi: 10.1891/0886-6708.26.2.218
- Vallerand, R.J., Pelletier, L.G., Blais, M.R., Briere, N.M., Senecal, C., & Vallieres, E.F. (1992). The academic motivation scale: A measure of intrinsic, extrinsic and amotivation in education. *Educational and Psychological Measurement*, 52, 1003-1017.
- Vyas, S., & Watts, C. (2009) How does economic empowerment affect women's risk of IPV in low and middle-income countries? A systemic review. *Journal of International Development*, 21: 577-602. Doi. 10.1002/jid.1500
- Welles, T.L. (2010). An analysis of academic success inventory for college students: Construct validity and factor scale invariance. Unpublished doctoral dissertation. Florida State University. Tallahassee, Fl.
- White, H.R., & Widom, C.S. (2003). Intimate partner violence among abused and neglected children in young adulthood: The mediating effects of early aggression, anti-social personality, hostility and alcohol problems. *Aggressive Behavior* 29, 332-345
- Wigfield, A., & Wagner, A. L. (2005). Competence, motivation, and identity development during adolescence. *Handbook of Competence and Motivation*, 222-239.

- Wigfield, A., Eccles, J., Schiefele, U., Roeser, R., & Kean, P. D. (2006). Development of achievement motivation. *Handbook of Child Psychology, 3*, 933-1002
- Wolf, K. A. & Foshee, V. A., (2003). Family violence, anger expression styles, and adolescent dating violence. *Journal of Family Violence, 18*, 309-316
- World Health Organization. (2012). Understanding and addressing violence against women: Intimate partner violence. *World Health Organization*. 1-12
- World Health Organization. (2013). Responding to intimate partner violence and sexual violence against women. *World Health Organization* 10-20.

## Appendix A: Demographic Questionnaire

Please circle the answer that corresponds to you.

**What is your age?**

19-22

23-26

26-29

**What is your gender?**

Male

Female

Transgender

**What is your current status?**

Single

Married

Divorce

In a committed relationship

**What is your primary language?**

English

Spanish

Arabic

Mandarin

French

Other

**Do you have a child(ren)?**

Yes

No

If yes, how many? If no, skip to next question.

1

2

3

4 or more

**What is your race? (please circle one)**

A. African American/ Black or African

B. Caucasian/White

C. Hispanic/ Latina or Afro Latina

D. Asian/Pacific Islander

E. Native American

**Are you currently attending college full-time or part-time?**

Yes

No

**Are you enrolled in an on-line (distance learning) college or university?**

Yes

No

**Are you the first generation in your family to go to college?**

Yes

No

**Are you currently, or have you been in an Intimate relationship with someone within the past 12 months?**

Yes

No

**Did you experience any emotional, verbal or physical abuse in your intimate relationship within the past 12 months?**

Yes

No

**Are you employed?**

Yes

No

**If yes, are you employed full time or part-time?**

Full-time

Part-time

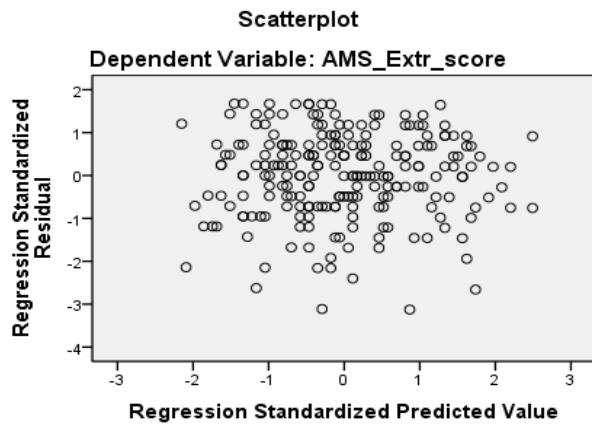
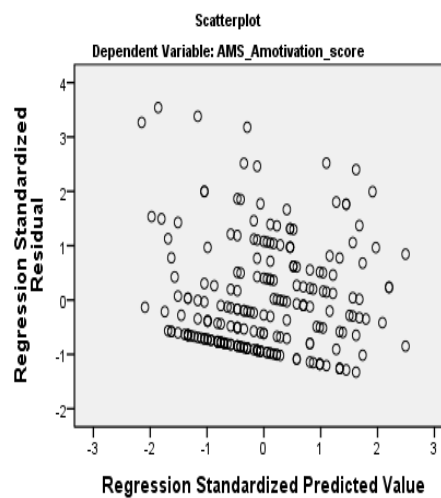
**Did you in the past, or do you currently live in the same household with your intimate partner?**

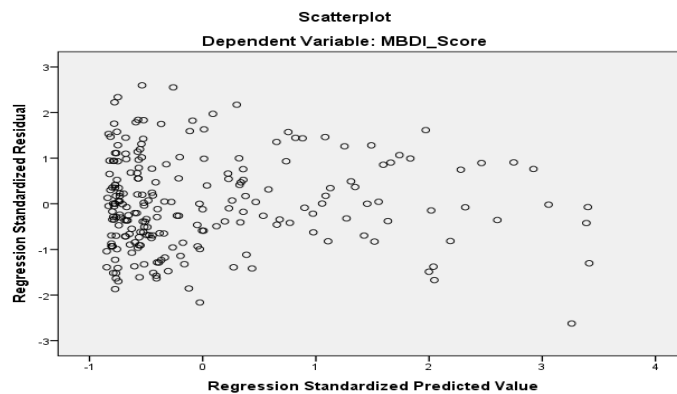
Yes (in the past)

Yes (currently)

No

## Appendix B: Scatterplots





Outliers are described as having a standardized residual of more than 3.3 or less than -3.3 (Pallant, J. 2016; Tabachnick & Fidell, 2013).

### Appendix C: Histograms

