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Walden University
November 2017

Abstract

An Exploration of Emotional Intelligence in Victim-Survivors of Intimate Partner Violence

by

Terri L. Ratliff

MA, Spring Arbor University, 2008

BS, Spring Arbor University, 1998

Dissertation Submitted in Fulfillment

of the Requirements for the Degree of

Doctor of Philosophy Psychology

Walden University
November 2017

Abstract

Despite decades of preventive education and services for intimate partner violence, such violence continues. Studies have shown mixed evidence regarding the effectiveness of current treatment options and prevention remains paramount. If victims seek therapy, the focus is typically on a single diagnosis, such as depression or post-traumatic stress disorder, rather than cause-and-effect. Emotional intelligence in abusers of intimate partner violence has been tested and studied. There is literature on victims, but they are rare, regional, and examined only female participants resulting in conflicting findings. There is a gap in research in the review of the nuances of emotional intelligence in participants of both genders. The present quantitative study explored the branches of emotional intelligence differences in intimate partner violence victim-survivor participants ($N = 180$) using the Mayer-Salovey-Caruso Emotional Intelligence Test. The 4 branches explored were perception, use, understanding, and management of emotions. Using linear regressions, any differences in emotional intelligence in partner violence victim-survivors were compared to the normative population by gender, length of time a victim was abused, and the types of abuses experienced. Both genders resulted in finding lower levels of the understanding branch when compared to the normative population. Male levels were higher in use, perception, and understanding than females. The length of time in an abusive relationship and types of abuse experienced showed no significance. Testing victim-survivors' emotional intelligence levels could effect social change with personal data focusing on enhancing skills in introspection, healthier emotional responses, and help to dissuade a victim from returning to their abusive relationship.

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Dedication

I dedicate this to my beloved husband, the kindest man I have ever met who has shown me what unconditional love and support really looks like. I dedicate this also to victims and survivors of intimate partner violence. Know your worth, secure your safety, and seek revenge only through living your best life.

We shall draw from the heart of suffering, the means of inspiration and survival

– Winston Churchill

Acknowledgments

I want to thank all of my family for being my cheerleaders from start to finish--you are my greatest blessings!

To Dr. Wilson, thank you for your commitment to my success, knowing when to aid, critique, support, and even calming me at just the right times to keep me focused and motivated. You were always in my corner, providing the external motivation when my intrinsic motivation was lacking. For helping me keep my eyes on the prize, I am truly grateful.

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Chapter 1: Introduction to the Study

Introduction

Intimate Partner Violence (IPV) crosses all lines of gender and sexual orientation. Truman and Planty (2011) found that in the United States, 1.4 million people were victims of IPV. The National Coalition Against Domestic Violence (NCADV, 2015) stated that one in three women and one in four men had experienced IPV. There are 20 people per minute physically abused by an intimate partner. IPV varies, from emotional abuse with verbal threats to name calling and mocking. Physical abuse is slapping, grabbing, and bruising, while severe abuse can be broken bones, black eyes, use of a weapon, and more. Financial abuse requires victims to turn over paychecks to their abuser or not be allowed to hold a job, requiring them to ask for money and be financially dependent on their abuser. Sexual abuses are those sex acts a victim is forced to take part.

The Center for Disease and Prevention (CDC, 2010) conducted the first National Intimate Partner and Sexual Violence Survey (NISVS, 2010). The CDC NISVS report underscores the pervasiveness of IPV in the United States with women disproportionately victimized. However, two years later, over 40% of victims were male and male victims are most often emotionally and severely physically abused (Hoff, 2012). Nationally, 72% of all murder-suicides are IPV related, and 94% of those murdered are female (NCADV, 2016).

The widespread phenomenon of IPV has devastating consequences for both families and communities (Ehrensaft et al., 2003). A greater frequency of IPV in adulthood correlates to individuals who had witnessed IPV as a child, which is found to

promote IPV behaviors known as intergenerational IPV (Graham-Bermann et al., 2009; US Department of Justice [DOJ], 2006).

Perpetrators of IPV have lower levels of emotional intelligence [EI] (Welty, 2011). EI levels have shown to contribute to a lack of one's belief in the ability to manage one's environment healthily (Goleman, 1995; Mayer, Roberts, & Barsade, 2008). While exploring IPV victim-survivors' EI levels, it determined that EI levels differ in IPV victim-survivors when compared to the normative population. Branches of EI work synergistically; therefore, when one level is lower than others, it can decrease abilities to respond appropriately. By assessing victim-survivors, a baseline of EI levels is available, and a victim-survivor could begin therapy and education to build on these baseline emotional skills. In turn, this could lead to lowered rates of recidivism rates (Zurbriggen, 2009).

A rise in 18 to 24-year-old IPV victims has been determined by the CDC (2010) and according to the NISVS report (2010). Providing testing of student's EI levels in high schools, such as life skill classes, may also prevent IPV in teen dating. The result of reducing IPV is exponential. Providing adjunct intervention programs could lead to personal education and possible reduction of influences causing IPV victimization.

Background

IPV has a long history. Orthodox Jewish, Muslim, and other ancient religions began as societies that taught male dominance over women. Ancient Romans along with other early empires had decrees declaring male authoritarianism. In the United Kingdom, in the early 1300s, a beer named Stella Artois was popularized. Allegedly, due to an

increase in alcohol levels, Stella Artois was a strong beer. Reports of excessive drinking, subsequent aggression, and violence of men toward their wives were attributed to the use of Stella Artois (Dutton, 1994; Heru, 2007). Consequently, the term wife beater became associated with Stella Artois beer. Centuries later, in 1856, a campaign to change divorce laws in the United Kingdom introduced the term wife beater, and it quickly became the typical phrase for spouse batterers (Heru, 2007).

The early Christian church affirmed the husband's rule over his wife (Heinemann, 1996; Lemon, 1996; Muraskin, 2007). The American colonists, living under English common laws, allowed men to beat their wives. Even after the United States won their independence from England, the United States had a dominant patriarchal culture (Heinemann, 1996). Violence against women was acceptable. Women were considered as property and not regarded as individuals with the same rights given to adult males (Epstein, 2002).

The legalities and apathy towards wife beating did not markedly change until the 1970s when the movement brought more attention to residual social issues surrounding violence in the home (Ramsey, 2013). The term wife beater and a battered woman were then largely replaced by domestic violence (Heru, 2007). There is an irony that social organizations forbade cruelty to animals ten years before agencies became dedicated to eliminating child abuse and even longer before IPV against women became recognized (Lemon, 1996).

With the presence of more studies and data on IPV, the term domestic violence came to include child and elderly abuse or any violence against others within the same

household. In 1993, the phrase IPV was first used to distinguish violent acts of abuse among individuals in a romantic relationship (Johnson & Ferraro, 2004). IPV remains the current term. IPV is any physical, severe physical, psychological, emotional and sexual, and financial abuse (limited or no access to family finances).

For years, the typical social response had been to look at IPV as a private matter, within the family, and away from open examination by others. In 1994, Congress passed the Violence Against Women Act [VAWA] (Heger, 2000). The Act and following amendments helped the general public and legal systems to recognize IPV as a national crime. The VAWA caused an immediate responsiveness to reported crimes of IPV. The Act enhanced victim safety, increasing the availability of victim services, and improved offender accountability through arrests and convictions. The majority of IPV cases continue to be handled by state and local authorities. Funding of IPV education for first responders became much more frequent.

All 50 states in the United States have mandated reporting by healthcare workers of suspected child or elder abuse (Brewer & Jones, 1989; Child Welfare Information Gateway, 2014; Sachs, Peek, Baraff, & Hasselblad, 1998). Currently, however, only 40 states in America require mandatory reporting of IPV (Family Violence Prevention Fund, 2010; Gupta, 2007). There is no sweeping mandate of reporting suspected violence by healthcare workers throughout the nation (Family Violence Prevention Fund, 2010) and some ethical issues have arisen from mandatory reporting. These concerns are a lack of informed consent and confidentiality, which conflicts with the Health Insurance Portability and Accountability Act (HIPAA) of 1996. Statistics have shown that another

ethical concern is bias, which can influence more frequent reporting of IPV in persons of color. Healthcare workers are less apt to report white, middle, and upper-class victims (Futures without Violence, 2004; Hyman, 1997; National Network to End Domestic Violence (NNEDV, 2012, 2013, 2016).

According to the National Coalition Against Domestic Violence (2015), an increase in legal system reactions to deal with IPV resulted in more reports scrutinizing abuse, both on a social level and within family units. Findings also indicate that 26% of teen girls are physically abused by their teen boyfriends while ten percent of boys reported abuse by their girlfriend (CDC, 2008). The highest victimization range of IPV is teens, young adults, and the elderly (Heinemann, 1996). Twenty-two to 28% of homeless families are homeless as a direct result of IPV, and 50% of homeless women were homeless due to IPV (Doorways for Women and Children, 2014; NNEDV, 2012). IPV victims often have household finances withheld by their abuser, leaving the victim without the money to leave the relationship (Doorways for Women and Children, 2014; NNEDV, 2013; Sutherland, Sullivan, & Bybee, 2001). Also, the CDC (2003) reported a cost of over $858 billion in lost work time and 32,000 jobs lost per year due to IPV.

With the advent of the feminist movement, education and awareness programs changed some perspectives about IPV. Reports of incidences were taken more seriously (Fagan, 1995). Differing social views of IPV became a catalyst for developing new IPV treatment (Dobash & Dobash, 1992; Johnson & Ferraro 2004). In the 1980s, in Duluth, Minnesota, a community plan was designed and became known as the Duluth model. The model was developed to understand the reasons for the perpetration of IPV, highlighting

an abuser's need for power over their victim (Gondolf, 2007). The model facilitated the idea that the necessity of power evolved into controlling their victim through abuse. The Duluth model worked with the objective of transitioning accountability for abuse from the victim to the abuser (Dutton & Corvo, 2006).

The Duluth Model supports practices, policies, and procedures to keep victims safe. Due to the success of the Duluth model locally, the model was adopted by cities throughout the United States (Gondolf, 2004). The design enhanced methods to help de-escalate IPV incidents by utilizing local agencies and police departments. The judicial systems implemented mandated sentences and education, including supervised parole for batterers (Gondolf, 2004; Pence & Paymar, 1993). However, over the years, it has been found that treatment options have stalled due to a lack of uniformity in definitions and a lack of mandated batterer legal sentencing and interventions (Barocas, Emily, & Mills, 2016). Also, a victim of abuse finds it difficult to discuss their abusive situation has made it hard to promote changes (Chang et al., 2005). Therefore, identifying methods to provide greater education and insight for victims at the time of initial reporting could lead to change sooner.

With the availability of prototype programs, the National Institute of Justice (NIJ, 2005) reviewed interventions for the victim. The NIJ reported less on the advances in interventions and more on the problems of one-size-fits-all programs (Dutton & Corvo, 2006). Outcomes of these interventions have found to vary based on the pattern of physical and psychological abuse that the victim received (Dutton & Corvo, 2006).

An abuse victim can quickly realize their efforts to end their victimization often do not eliminate the maltreatment. Consequently, the victim can become discouraged and feel trapped, and accept the abuse. A victim may no longer attempt to change or improve their situation. Without intervention, distress can cause victims to become immobilized (Anderson & Saunders, 2003). Furthermore, in the case of IPV, the emotional component of the fight or flight response could be skewed depending on the impact of long-term trauma. According to Krause, Kaltman, Goodman, and Dutton (2006), traumatic symptoms were found higher, at baseline, among women previously abused. Threats, intimidation, economic coercion, entitlement behaviors, or any combinations levied against IPV victims require different interventions.

Despite the increase in awareness and knowledge in the United States, thousands of victims still report limited quality of life due to a partner's intimidation, abuse, stalking, or other physical, emotional, and financial harassment (CDC, 2015; NCADV, 2016). In the United States, within six months of treatment, recidivism is 30% (Maxwell & Robinson, 2014; Stover, Meadows, & Kaufman, 2009). Further, a gap remains in exploring both genders of victim-survivors of IPV and different treatment options that may be required.

Accordingly, the CDC (2012) promoted prevention of IPV through a platform that encouraged respect filled, nonviolent relationships within society, communities, and personal relationships. The CDC (2015) stated that improvement in knowledge of respectful relationships with the self and others guards against IPV. These issues could be

enhanced by higher levels of EI, which increasing discernment, recognition, and benefit from the regulation of one's emotions.

Emotional Intelligence

Wechsler (1943) posited that non-intellectual abilities are as necessary as general intelligence in determining appropriate behaviors. Wechsler also suggested that total intelligence without testing non-intellectual features, could not be measured. Van Ghent (1961), in literary analysis, first introduced the term EI. Van Ghent wrote that characters in the book, Pride and Prejudice, written by Jane Austen and first published in 1813, had "emotionally informed intelligence" (1961, p. 107) or more developed non-intellectual abilities than others. Gardner (1983) later posited that multiple-intelligence denotes a person's ability to maneuver efficiently with others, intra-personally and interpersonally. According to Gardner, the capacity to understand intentions, motivations, and desires of others is a result of interpersonal intelligence enhancing a person's self-regulation and the understanding of one's desires, abilities, and fears.

Payne (1985) wrote a psychological doctoral thesis about the study of emotions and development of EI. In 1987, Beasley (1987) wrote an article for Mensa, a British magazine, when the term EI became published. However, Mayer and Salovey (1990, 1993) produced an actual definition of EI as the ability to monitor one's own and others' feelings, differentiate between them, and use the information to guide one's appropriate actions.

The term EI remained highly unrecognized until it became popularized with Goleman's (1995) self-help books (Berg, 2004; Cherniss, Extein, Goleman, &

Weissberg, 2006). Later, Van Rooy, Viswesvaran, and Pluta (2005) completed a meta-analysis supporting the theory that EI is different from personality or intelligence quotients. Currently, EI testing is frequently used in corporations as a tool for hiring and promoting individuals based on interpersonal skills (Cooper, 2013).

Ciarrochi, Chan, and Caputi (2000) conducted a study testing undergraduate students using the Multi-factor Emotional Intelligence Scale (MEIS). In conjunction with the MEIS, the students were given a battery of personality, IQ, life satisfaction, relationship quality, and other theoretical measurable criteria. After controlling for personality traits and IQ, EI was found unrelated to IQ but related to empathy (personality measurement), and life satisfaction (criteria) (Ciarrochi et al., 2000).

Later, Mayer, Salovey, and Caruso (2000) refined their definition, resulting in four branches of EI. The branches were the abilities to perceive, understand, use, and manage emotions (Mayer & Salovey, 1997; Mayer, Salovey, & Caruso, 2000). The ability to perceive is to interpret facial and vocal emotions, along with recognizing feelings, in the self and others. Distinguishing or perceiving emotions is the fundamental characteristic of EI (Mayer, Salovey, Caruso, & Sitarenious, 2003). Another branch of EI is the use of emotions, referring to an individual's willingness and abilities to associate emotions with thinking and problem solving, utilizing dispositions to perform optimally. The third branch is the understanding of emotions, which is the skill to value the association and slight changes in emotions, such as being happy and thrilled. The final branch is the management of emotions. The control of emotion refers to one's ability to regulate personal emotions while managing others to reach a mutual goal (Mayer et al.,

2003). Based on everyday life events, the test measures how well a participant solves emotional problems and performs tasks. By using a variety of creative tasks to measure a participant's capacity for reasoning with emotional information by directly testing their ability, it also prohibits participants from creating a false positive impression.

The Mayor-Salovey-Caruso Emotional Intelligence Test (MSCEIT) is appropriate for corporate, educational, research, and therapeutic settings. The MSCEIT has four related abilities that examine eight task scores, using 141 items, and provides a total of 15 primary scores with three ancillary scores (see Appendix A). When developing the MSCEIT, Mayer et al., (2003) used a normative population of 5000 participants. Participants were chosen based on age, ethnicity, gender, and level of education (Mayer et al., 2003).

EI Models

EI is associated with various models, and according to Mayer et al. (2004) the ability model assesses an individual's skills to process emotions. The skills help individuals to successfully maneuver in social settings and in seeking a personal quality of life (Mayer et al., 2004). The ability EI model uses mental intellect that correlates and reciprocates with existing intelligence developed with experiences and age. The mixed model describes a cross-section of interrelated emotional and social competencies, skills, and facilitators that impact intelligence behavior (Bar-On, 2006; Boyatzis & Sala, 2004). These are measured by self-report with a potentially expandable multi-modal approach, including interview and multi-rater assessment (Bar-On & Handley, 2003a, 2003b). The

model measure and define EI as perceived abilities, skills, and personality (Petrides, Furnham, & Mavroveli, 2007; VanderZee & Wabeke, 2004).

Salovey and Mayer (1993) found positive correlations between high EI levels in individuals and the ability to examine and understand emotions in themselves and others. The connection has remained scientifically valid and reported in studies outlined in the literature review. The authors reported a link between physical and mental healthy choices based on levels of EI. The foundation of this proposed research was based on the abilities model of EI.

Problem Statement

From 1994 to 2010, nearly four in five victims of IPV were female. IPV continues to be the leading cause of homicides of pregnant women, and overall, women account for a high percentage of emergency room visits due to IPV (Catalano, Smith, Snyder, & Rand, 2009). The United States Department of Health and Human Services, Office of Disease Prevention and Health Promotion (ODPHP, 2010) demonstrated a relationship between IPV and Leading Health Indicators (LHI) as defined by the Healthy People Initiative of 2020. The initiative, developed by The Office of Disease Prevention and Health Promotion (ODPHP) of Health and Human Services (DHHS), and the Healthy People Initiative, was used by the United States to pinpoint the major preventable threats to health. Upon studying ten LHI factors during found that there was a link between eight of the ten LHIs and IPV. The study of the LHI factors revealed that the more experiences of IPV, the more likely IPV victims result in one or more LHIs. The

findings confirm that IPV is a high-risk factor for chronic health conditions and health risk behaviors (Schutte, Malouff, Thorsteinsson, Bhullar & Rooke, 2007).

Sharps et al. (2001) examined 11 cities to review how health care providers handle IPV victim LHI risk factors. Nearly 90% of individuals treated for attempted murder by their intimate partner had sought prior emergency care (Sharps et al., 2001). IPV victims underestimate the threat of physical or other harms. Victims may not always recognize the severity of violence perpetrated against them or deny abuse as a survival method to diminish further physical danger (Sharps et al., 2001; Weisz, Tolman, & Saunders, 2000).

According to Mayer, Salovey, Caruso & Sitarenios (2003), the four branches of the EI abilities model are perception, use, understanding, and management of the emotions of self and others. As an IPV victim, an inaccurate appraisal or perception of the severity of danger could keep the victim from maneuvering to a safe resolution. An error in evaluating the abuser's motives and cyclical behaviors can lull the victim into a temporary sense of false security (Walker, 2009). The cycle moves from what is considered a reconciliation period to a time of calming. The cycle continues into a tense episode where communication breaks down, and the victim accepts or defaults to their abuser's change in behaviors. This phase often quickly leads to the crisis stage of abuse. The cycle then returns to reconciliation (Walker, 2009). A full cycle can take hours, days, weeks, and even years.

The use of one’s emotions aids in planning and achieving personal life goals while an inappropriate use of emotions can lead to a lack of self-understanding and

maladaptation to situations. Understanding one's needs and goals, resulting in short and long-term efforts to create a quality of life. Finally, managing one's emotions assists in the ability to promote one's own needs. The lack of any or all of these abilities can lead to isolation, depression, and the belief that nothing can change, ultimately leading to succumbing to an abuser's needs (Walker, 2009; Mayer et al., 2004).

Perpetrators of IPV have lower levels of EI than non-abusers (Welty, 2011). Emotional intelligence levels have shown to contribute to a lack of one's belief in the ability to manage their environment (Goleman, 1995; Mayer et al., 2008). Limited research has been conducted on IPV victims, specifically examining both genders and the branches of EI levels.

Chen and White (2004) conducted a longitudinal study of 725 young adult men and women to examine IPV perpetrator and victim predictors in adults. Findings showed lower education for women and experience of parental fighting in men predicted perpetration of abuse. Lower education, childhood abuse, and alcohol predicted female victimization. No like predictors of victimization were identified in men. Chen and White (2004) assert that additional studies of IPV need to include exploration of gender differences. Therefore, this study also examined whether there were differences in EI levels based on gender, along with types of abuse experienced and length of time in an abusive relationship.

Most types of abuse in IPV fall under the single term of a battery (Kelly & Johnson, 2008). Types of abuse in IPV have not always been considered, resulting in treatment that does not target effects of the specific abuses or time spent in an abusive

environment (Coker, Smith, McKeown, & King, 2000; Hegarty et al., 2013; Kobak & Hazan, 1991; Kelly & Johnson, 2008). Therefore, this research also explored types of abuse experienced by a victim-survivor, along with the length of time the victim remained in the abusive relationship.

Victims of IPV experience acute and more often overwhelming emotional and mental distress, many falling under the diagnosis of major depression (Hamberg & Phelan, 2004). Nearly one-quarter of IPV victims assessed have symptoms of post-traumatic stress disorder (PTSD). More than 30% suffer from anxiety and panic disorders (Goodwin, Chandler, & Meisel, 2003; Hamberg & Phelan, 2004). However, treatment often becomes focused on a single diagnosis. With testing of EI, victim-survivors could learn personal information about EI and begin to develop areas of EI that are lacking to enhance relationships and overall quality of life.

Insufficient research into the etiology of IPV victims may have stalled the development of options for treating the cause-effect relationship, resulting in unmet interventions (Graham-Keaven & Dixon, 2011). While victims seeking treatment have evolved from being blamed for their abuse, they are still frequently seen as traumatized, and subsequent diagnoses such as PTSD or depression often become the center of their treatment (Burstow, 2003). By exploring IPV victim-survivors' EI, the study could demonstrate that survivors could be helped with the identification of their emotional beliefs about their relationship skills (Zurbriggen, 2009). An opportunity exists to provide victims with awareness and skills training, thus strengthening victim-survivors response options and creating a survivor versus victim outlook (Anderson, 2010; Davies, 2009).

Purpose of the Study

To date, there is little literature related to victim-survivors and their levels of EI, or victim-survivors comparing differences in EI levels based on gender. The theory of EI explores the success, or lack of, in a person's belief in their ability to direct his or her relationships and self-understanding through EI testing. This quantitative study's purpose is to examine the possible differences in EI for IPV victim-survivors versus the normative population. The study also examined victim-survivors' gender, length of time in an abusive relationship, and type of abuse experienced.

This quantitative study was a validated and reliable instrument known as the MSCEIT (Brackett & Salovey, 2006). The MSCEIT assisted in accessing needed data for the research. The research goal was to examine EI levels of IPV victim-survivors. The criterion variables were the four branches of interpersonal and intrapersonal EI as measured by the MSCEIT. The predictor variables were gender, participant-defined types of IPV experienced, and length of time abuse was experienced.

Tsirigotis and Kochanowski (2016) conducted a study in Poland on women victims of IPV. Using an EI testing instrument similar to the Assessing Emotional Scale (Schutte, Malouff, & Bhullar, 2009), which was derived from the original MEIS assessment designed by Mayer and Salovey (1990). With two groups of women, one group currently in an abusive relationship and the other group not experiencing partner abuse. The overall scores of EI were found lower in women in an abusive relationship. Women not experience partner abuse had higher scores. In the abilities and skills subscales, abused women scored significantly lower and non-abused women with higher

scoring. The researchers suggested that EI testing become part of the overall treatment plan for victim-survivors of IPV.

Research Questions and Hypothesis

In this study, I examined the following research questions and hypotheses:

RQ1: Does the level of EI of IPV victim-survivors differ from the normative EI average levels, as measured by the MSCEIT?

H_{01}: There is no difference in the mean of EI levels in IPV victim-survivors versus the normative average EI levels with regard to the ability to perceive, use, understand, and manage emotions, as measured by the MSCEIT.

H_{a1}: There is a difference in the mean of EI levels in IPV victim-survivors versus the normative average EI levels with regard to the ability to perceive, use, understand and manage emotions, as measured by the MSCEIT.

RQ2: Is there a difference in the EI levels between male and female IPV victim-survivors?

H_{02}: There is no difference in the mean of EI levels in male versus female IPV victim-survivors with respect to the four branches of interpersonal and intrapersonal factorial components: perception, use, understanding, and management of emotions.

H_{a2}: There is a difference in the mean of EI levels in male versus female IPV victim-survivors in respect to the four branches of interpersonal and intrapersonal factorial components: perception, use, understanding, and management of emotions.

RQ3: Is there a relationship between the mean of EI levels of IPV victim-survivors and the length of time spent in the violent relationship?

H_{03}: There is no significant predictive relationship between EI levels in IPV victim-survivors and the length of time a victim is in a violent relationship.

$H_{a3:}$ There is a significant predictive relationship between EI levels in IPV victim-survivors and the length of time a victim is in a violent relationship.

RQ4: Is there a relationship between the type of abuse (financial control, physical abuse, severe abuse, emotional terrorism, and sexual abuse) and EI level in IPV victim-survivors?

H_{04}: There is no difference in the mean of the four branches of EI in IPV victim-survivors based on the type of abuse experienced (financial control, physical abuse, severe physical abuse, emotional terrorism, and sexual abuse).

H_{a4}: There is a difference in the mean of the four branches of EI in IPV victims-survivors based on the type of abuse experienced (financial control, physical abuse, severe physical abuse, emotional terrorism, and sexual abuse).

Theoretical Frameworks

The earliest works of Darwin (1872) stressed the necessity of the expression of emotions to adapt for survival. Bandura (1994) posited that human communication patterns influence environment, behavior, and personal cognitive issues. Bandura (1986) further speculated that an individual's personality is a product of environment, behaviors, and cognitive issues.

In cases of observed abuses, the observer sees how the IPV victim submits to the control and complies with their abuser. For example, a child observer of IPV will often repeat the emotional model as an adult (Goldblat & Eisikovits, 2005). The pattern of

abuse can desensitize any observer and distort their view of familial dynamics (Bair-Merritt, Blackstone, & Feudtner, 2006; Black, Sussman, & Unger, 2009).

Positive developed behaviors are based on whether one is allowed to assert one's self-efficacy (belief in one's abilities to make changes or succeed) and find security outside of the familial relationship (Bandura, 1986, 1994; Bandura & Adams, 1977; Carpenter & Stacks, 2009). If not, a child will rely on their previous observations that provided them security within the abusive lifestyle. Consequently, as adults, they often respond in the same manner in comparable relationships (Capaldi, Short, & Kim, 2005).

If someone succumbs to the victimization of abuse, why the victim stays with their abuser can be confusing to friends and family (Ramsey, 2013; Wirta-Leiker, 2013). However, the theory suggests that an IPV victim will often accept their fate and find escape attempts futile. Witnessing a parent try to leave an abusive relationship, without success, gives the impression of powerlessness. Therefore, later as a victim, opportunities to escape appear to be pointless (Seligman & Maier, 1967; Seligman, 1972; Thompson, 2010). Literature also finds that economic reasons are often at the heart of why many victims stay with their abuser. The biggest cause of for women and children is IPV, and lack of financial resources often thwarted while in an abusive relationship (US Conference of Mayors, 2008).

Piaget's schema (1936) suggests that cognitive development is linked to a person's picture of the world. Intimate partner violence victims use their developed picture of the world and apply those views based on their experiences (Walker, 1977; Walker 1970, 2009). A victim may become hyper-vigilant, consequently becoming

reactive and chaotic, causing their natural fight or flight response to become suspended or skewed. As IPV victims adapt to abuse, a victim's reasoning can erode their ability to self-regulate (Bandura, 1986; Carpenter & Stacks, 2009; Hayslip, Neumann, Louden, & Chapman, 2012).

Thorndike (1898) posited that social intellect is a skill for understanding and managing others. Hashemi, Kimiaie, Shirpoor, and Delaviz (2014) stated that self-efficacy is a non-cognitive ability and success means adaptability to varied circumstances, impacting effective and strategic human interaction. Perceived EI is a predictor of self-efficacy beliefs. Individuals with high levels of self-efficacy have an increased ability to regulate their behavior and attempt to change behaviors accordingly (Anda et al., 2006; Dutton, 2002). People with low self-efficacy are less likely to believe they are capable of changing their behavior. In turn, this may cause their inability to make the necessary behavioral changes when needed for a secure quality of life (CDC, 2013).

With the study of an EI definition, four branches of EI resulted (Mayer et al., 2003; Brackett & Salovey, 2006). The ability to distinguish emotions is to interpret facial and vocal emotions, along with recognizing one's feelings. Distinguishing or perceiving emotions is the fundamental characteristic of EI. The third branch is the understanding of emotions, which is the skill to value associations and slight changes in emotions, such as the difference between being happy and thrilled. The final branch is the management of emotions. Management refers to ones' ability to regulate personal emotions while managing others to reach a mutual goal (Mayer et al., 2004).

The EI ability established by Mayer et al. (2004) is the basis of this research and will be discussed further in chapter two. Emotional intelligence is associated with various models. The ability model assesses an individual's skills to process emotions. The skills help individuals to successfully maneuver in social settings and in seeking a better quality of life (Mayer et al, 2004). The ability model uses mental intellect that correlates and reciprocates with existing intelligence developed with experiences and age.

The MSCEIT is appropriate for corporate, educational, research, and therapeutic settings. The MSCEIT has four related abilities that examine eight task scores, using 141 items, and provides a total of 15 primary scores with three ancillary scores (See Appendix A). When developing the MSCEIT, the authors used a normative population of *N*=5000 participants. Participants were chosen based on age, ethnicity, gender, and level of education (Mayer et al., 2003).

The foundation of this proposed research is grounded in the abilities model of EI. Mayer and Salovey (1993) found positive correlations between high EI levels in individuals and the skills to examine emotions in themselves and others. The connection has remained scientifically valid and has established a link between physical and mental health choices based on the levels of EI attained (Barrett & Salovey, 2002; Martins, Ramalho, & Morin, 2010; Salovey & Mayer, 1990, 1993).

Nature of Study

This study used the MSCEIT, a commonly used, validated, and reliable instrument (Mayer et al., 2003) to assess the variables under investigation. Unlike other EI testing tool, the MSCEIT allows for a more thorough examination within the four

branches of EI. This quantitative study explored EI in IPV victims as compared to the normative population (N = 5,000) tested by the authors when they created the MSCEIT. This study investigated IPV victim-survivor participants' EI levels to the normative population exploring differences of EI levels based on gender, types of abuse experienced, and length of time a participant spent in an abusive relationship. Any significant differences in EI levels, based on any or all of the variables, can be important in the development of EI skills, as branches of EI work synergistically. Increasing EI levels may contribute to a victim's enhanced recognition of their abilities and options to live outside of an abusive relationship.

Participants became notified of the study through various social network venues, as well as a call for participants through flyers sent to IPV treatment and refuge centers throughout the United States. The information on flyers and advertisement for the study included an online address to take part in the research. The address accessed online, provided complete anonymity through Survey Monkey. At the end of the demographic survey, a hyperlink was available, taking participants to the Multi-Health Systems online MSCEIT testing instrument.

Definitions of Terms

Criterion Variables: The criterion variable is the variable that is being predicted. The criterion variables for the study include the four branches of emotional intelligence, as defined by Mayer et al. (2000), which are perception, use, understanding, and management of EI.

Emotional Intelligence (EI): Viewed as an aspect of general intelligence; often described as the ability to assist persons in adapting to change within their social environment (Bar-On, 2004). Salovey and Mayer (1993) described this form of intelligence as the ability to self-examine feelings and distinguish those feelings to help direct thoughts and actions. Components include four related abilities to assess, perform, and distinguish feelings in self and others, use the knowledge of others' reactions and self to function in a social acceptable manner, understand how feelings impact actions of others and self, and management of one's own feelings through self-control or successfully managing emotions of others (Mayer et al., 2000).

Emotional Intelligence Quotient (EQ): The term describes the numerical values generated by five composite factors and 15 subscales associated with the skills related to observing and appropriately dealing with others' feelings.

Health Maintenance Organization (HMO): A business that provides or arranges managed care for medical insurance, individual corporate self-funded medical care plans, and other organizations in the United States. The business coordinates a relationship between the insured and medical care providers (e.g., hospitals and doctors).

Predictor Variables: A variable that is being manipulated in an experiment in order to observe the effect on a criterion variable. The predictor variables for this study are gender, length of time spent in an intimate partner violence relationship, and types of abuse experienced, including financial control, physical abuse, emotional terrorism, or sexual abuse.

Intimate Partner Violence (IPV): Referred to as battering and domestic violence, IPV describes physical, sexual, psychological, or any other combination of abuse from a romantic companion or spouse. Physical abuse is slapping, punching, pushing, kicking, and other types of aggression physically imposed on a partner. Psychological reasons that cause abuse are social and financial control, terroristic acts, including verbal intimidation and denying basic needs, such as medical care, food, and shelter (CDC, 2012). Sexual abuse includes any forced or non-consensual sex imposed on a partner.

Mayer-Salovey-Caruso-Emotional Intelligence Test (MSCEIT): An ability-based test designed to measure the four branches of the model to interpret, express, and manage feelings. The assessment was developed from a testing tradition formed by the emerging scientific understanding of feelings and their function. The exam consists of 141 items and takes 30-45 minutes to complete and provides 15 main scores: Area scores, four branch scores, and eight task scores. In addition to these 15 scores, there are three supplemental scores (Mayer et al., 2004).

Relationship Questionnaire (RQ): A tool used to measure adult peer relationship attachment patterns. On a 7-point scale, users report their degree of similarity to each question, which provides the individual's feelings and behaviors as they relate to others.

Relationship Scales Questionnaire (RSQ): A tool used to measure adult attachment on a 5-point scale. Users rate the degree to which each statement describes their relationship style.

Self-efficacy: The belief in one's ability to succeed in specific situations. A sense of self-efficacy provides the impetus for how a person approaches life's challenges.

Significance of the Study

Questions used to assess victims in hospitals are brief and serve as the first line of defense to deter current and future physical harm. Such assessments should assist in evaluating future danger based on familial details and a victim's ability to emotionally and physically extricate themselves from their abuser (Snider, Webster, O'Sullivan, & Campbell, 2009). If a victim presents in the hospital or emergency room with their abuser, victims often underreport or deny the abuse due to fear. There is evidence that the highest risk of retaliation by the perpetrator occurs when a victim attempts to leave the relationship or tries to participate in an intervention service (Campbell, Sullivan, & Davison, 1992). Consequently, a victim accepting an offer of help from a hospital or service agency often places them at greater risk of retaliation, reinforcing that prevention is the most desired method of reduction in IPV (Wolfe & Jaffe, 1999; Hart & Klein, 2013). According to Salamone (2010), 85% of partner abuse victims return to their abuser. It takes an average of eight times for victims to leave their abuser and not return. Emotional skill assessment and subsequent behavioral therapy could be used as an adjunct preventive option and assist in the reduction of victim recidivism rates.

Proficiency in interpersonal relations is contingent upon a variety of factors. Some features rest in one’s ability to understand and perceive one’s response to the emotional aspects of changing environments, influenced by historical events. The study resulted in new data regarding EI levels of victim-survivors of IPV. Examining EI levels as an adjunct treatment in health care or therapeutic settings could aid behavioral awareness, providing steps for changes toward a greater self-awareness and empowerment.

Research into the etiology and treatment options for IPV victims is limited. This study provides information on a validated method of assessing EI levels in IPV victims. It offers healthcare providers, treatment centers, mental health professionals, and educational venues an adjunct intervention for the emotional support for individuals overcoming IPV. Prevention and self-care are paramount in avoiding the trappings of an IPV relationship. Use of the MSCEIT assessment tool addresses both prevention and specific treatment for a victim-survivor to successfully move away from a violent relationship. Additionally, this could result in lowered recidivism rates. Policymakers, along with healthcare and IPV treatment centers, could be encouraged by the evidence-informed response, promoting and improving training of IPV and treatment options in all sectors.

Assumptions and Limitations

The assumptions for this research include:

a) EI levels differ in persons who are victims of IPV versus the normative population.

b) Fear is a secondary feeling and not the only determinant associated with staying in an IPV relationship.

c) EI is an acceptable hypothesis, measurable through psychometric assessment.

d) The response of the participants involved in the study is deemed to be accurate and authentic.

Limitations of this study could result from misinformation self-reported not confirmed by judicial or healthcare data and information. There is also the possibility of an underrepresentation of both ethnic and racial groups within the United States, but this was not an area examined in the study. As an online quantitative study, this study does not go into detail about personal complex issues of each participant or ensure participants understood the nuances of the test questions or instruments used.

Scope and Delimitations

The study objective was to gather EI levels of IPV victims compared to normative population levels. Participants became aware of the study through Walden University's research pool and social media venues. Letters and flyers for posting were sent to IPV refuge sites throughout the United States. Volunteers self-identified as a victim-survivor of IPV, male or female, 18 years or older, living in the United States, and a minimum of six months removed from their abusive relationship. Not included in the study were abuse victims currently in an abusive relationship due to the additional emotional stress or trauma that testing could place on the participant. Also, 18 years old was the minimum age that was accepted to be a participant due to the ethical concerns required for the younger population.

Positive Social Change

This study first adds to the body of literature on the topics of EI and IPV. Modifying how people reflect and behave regarding IPV inspires the need for social change. The Minnesota Department of Health (MDH, 2003) found that the prevention of IPV would be best delivered through addressing individual coping skills and cultural

norms. In this study, EI and IPV victim-survivors were assessed and will aid in contributing a new body of literature to the topic of assessing survivors. The ensuing information from this study will also be used to create more awareness of how individuals deal with IPV and may result in more individualized interventions. By testing EI levels, post-trauma interventions could shed light on the particular immediate emotional and self-efficacy needs for victim-survivors to gain their emotional footing.

Summary

Research has shown the pervasiveness and damaging nature of IPV. Social and familial studies and statistics find that women are particularly susceptible to becoming a victim; however, male reported abuse is on the rise, and most often emotional and severe abuse is a result of their experience. Early in history, IPV was often referred to as wife beating and later labeled domestic violence. The term was changed, once again, to IPV to differentiate partner abuse from a child or elderly abuse. Early views of IPV blamed the victim for abuse, causing most to endure the abuse or leave their families, facing social apathy. In the 1990s, the Duluth Model program focused accountability for IPV on the perpetrator. The program was designed for use as a comprehensive community response to aid victims and hold perpetrators accountable. IPV remains a statistically significant social phenomenon. The best method of preventing initial victimization of IPV or returning to an IPV relationship shows new methods of education and intervention or adjunct preventions are needed. Assessing a victim-survivor to determine EI levels, in a healthcare or therapeutic setting, can provide a baseline of emotional abilities, leading to awareness of readiness for change, providing a clearer picture of best overall treatment

options. This quantitative study reviews emotional fundamentals of IPV in the United States and introduces an option for assessing emotional abilities of victims. Further review of the literature on research studies, statistics, current interventions and proposed adjunct assessment is presented in the following chapter.

Chapter 2: Literature Review

Introduction

The literature review reveals the need for EI research related to survivors of IPV. Treatment options for IPV have resulted in immediate and often short-term medical, physical, and emotional assistance for IPV victims (Warshaw, Sullivan, & Rivera, 2013). Upon extensive review of the current literature, EI levels of IPV perpetrators had been investigated. However, there remains a gap in research for determining if EI levels differ in IPV victim-survivors and the normative population regarding both genders. Exploring EI levels in IPV victim-survivors may expose their inability to maneuver safely in life. The understanding of one's own emotions, belief in one's abilities, and how a person interacts under varied conditions is vital in EI (Segal & Smith, 2015).

The chapter delivers a review of the literature provided by a variety of academic articles, magazines, and other research materials. Theories that affect EI levels are examined, as well as the theoretical basis for this study. Studies reviewing IPV and nuances affecting the ongoing cycle of abuse are shown. Further, the social aspects of IPV and costs involved, both monetarily and emotionally, are presented.

Literature Search

Information in this chapter was located through a variety of databases: Academic Search Complete, Education Research Complete, PsycArticles, PsycBooks, and PubMed. Key words used included *intimate partner violence*, *physical abuse*, *emotional intelligence*, *self-efficacy*, *femicide*, *domestic violence*, *MSCEIT*, *IPV*, *intergenerational IPV*, *IPV treatment*, and *IPV health treatment.* Journals used as references include:

Aggression and Violent Behavior, *American Psychology*, *American Journal of Psychoanalysis*, *Annals of Emergency Medicine*, *Behavior and Social Issues*, *Behavior Research Methods*, *Human Development*, *Pediatrics*, *Journal of Abnormal and Social Psychology*, *Psychotherapy: Theory Research*, *Practice & Training*, *Journal of Family Violence*, *Journal of Personality and Social Psychology*, *Journal of Public Health, Trauma, Violence & Abuse*, and *Violence Against Women*. Additional searches were based on data and information found in original studies. The literature spanned from the early 1960s through current studies on the topics of both IPV and EI.

Theoretical Basis

Learned helplessness, social learning, intergenerational, attachment, and emotional intelligence theories can be used as foundations for understanding limited self-confidence, esteem, and self-efficacy. Each is explored, with EI the basis for this study.

Social Learning Theory

Bandura (1963) is known for his social learning theory, also known as social cognitive learning. Bandura's theory stemmed from his concern with the lack of cognitive motivation in psychoanalysis and behaviorist theories. According to Bandura, the social learning theory includes four core areas of development. The core areas are attention (observation), retention (assess for a future reenactment), motivation (reward), and reproduction (reenact). The theory posits that learning occurs through observation, imitation, and modeled behaviors of significant adults in one's life (Bandura, 1963; 1997; 2003).

After viewing violence modeled by an adult, Bandura (1963) was concerned with the range of aggression in children. Bandura and his associates initiated a study of children to help assess what was reinforced and conditioned in social settings. They designed a study using 36 male and 36 female nursery school children placed into one of the three groups: an aggressive mode-rewarded, a mode-punished group, and a control group. As predicted, the study showed that the children in the mode-rewarded experimental group were found likely to play aggressively when placed in a play situation following exposure to aggressive play by an adult. In post-experimental interviews, children in the mode-rewarded group described the adult acting aggressively as negative even though they had an increased tendency to imitate the aggressive behavior.

Bandura (1963) posited that social learning provides informative feedback, in turn causing the development of personal ideas about success or failure. Cognitive events are then selectively strengthened or disproved by the differential results accompanying the behavior. This type of learning, in the case of IPV, reinforces consequences and can serve as a nonverbal way to inform a victim about how to gain positive results or avoid negative ones. Bandura concluded that people who expect certain actions achieve the outcomes they value based on their experiences.

To further determine the reliability of Bandura's theory researchers, Mahalic and Elliott (1997) initially garnered 1,725 participants, ages 11 to 17. One-on-one interviews were conducted annually through 1980. Subsequent meetings were held every three years from 1983 to 1992 with a final total of 290 males and 260 females. Women that have

been a witness IPV as a child were found later in life to have stress filled and unsatisfactory marriage and were more likely to be a perpetrator or victim. Males who witnessed IPV during childhood are shown to lead to perpetration of IPV as early as adolescence. Mahalic and Elliott (1997) verified that witnessing IPV as a child is a large contributor to the acceptance of IPV in adolescent and adult relationships. The research underlines how the observation of the results of negative behavior in persons of perceived or actual authority over another will influence the observer's behavior later.

Self-efficacy is a major facet of Bandura's social learning theory (Ashford & LeCroy, 2010; Bandura, 1977). Self-efficacy reflects confidence in one's ability to exert control over one's motivation, behavior, and social environment (Bandura, 1977; Lunenburg, 2011). The social learning theory emphasizes how familial and social experiences contribute to forming responses in individuals. Self-efficacy highlights how a person will typically only carry out actions they believe they are capable of completing (Bandura & Locke, 2003; Cochran, Sellers, Wiesbrock & Palacious, 2009). IPV can lead victims to feel incapable and, consequently, less likely to pursue change or seek help. Therefore, survivors require initial and ongoing intervention education and programs such as empowerment, enabling them to recognize and use their skills to cope successfully and move toward positive personal change (Johnson, Worell, & Chandler, 2005).

The social cognitive theory provides a rationale to consider the theory of EI levels and IPV victims when reviewing an individual's behavior. The social learning theory relies on discrete actions based on information drawn from memory in children and

adults alike (Bandura, 1963). If an observer believes the person they are observing has a perceived power over them, then that perceived power impacts the observer's belief in their capabilities to make a change (Bandura, 1963, 1977). The perceived power can be brought on by victim isolation from friends and family, refused financial resources, or through a full range of abuse (Bandura, 1963, 1977).

Tirone, Shorey, Nathanson, and Rhatigan (2014) researched women with a history of IPV using the Perceived Self-Efficacy Scale (PSES). Over 100 participants completed the 22-item measurement. The PSES measured each participant's belief in their ability to handle stress and difficulties in life to cope or effect change. Results of the study found victims experienced in either current or past IPV, especially women of color, had poorer self-efficacy (Tirone et al., 2014).

Lerner and Kennedy (2000) found 191 women, living outside of their abusive relationship for six months or more, had significantly higher self-efficacy than IPV victims still living with their abuser. Rhatigan, Shorey, and Nathanson (2011) noted that increased self-efficacy after an assault impact a victim's perception on how successful they could live post-victimization. Another study recruited 204 women in IPV shelters determined that increasing women's self-efficacy was the prerequisite to assisting them in successfully using tools and resources necessary to leave their abuser (Wright, Perez, & Johnson, 2010). Each study highlights the significance of self-efficacy in predicting success.

Adeyemo and Ogunyemi (2005) measured the relationship between EI, self-efficacy and occupational stress. Low levels of both EI and self-efficacy levels were

found to be significant contributors to stress outcome. Results showed EI (r = -.632) and self-efficacy (r = -.672). A similar study, conducted in Egypt in a nursing faculty, used 91 female participants. They were separated by academic position: demonstrator, assistant professor, and professor/lecturer (n = 42), (n = 22), (n = 27), respectively. When EI and self-efficacy were tested, both were found low when compared to high-stress levels in all ranks. Very significant in these studies was the link to the ability-based model of EI (Salovey & Mayer, 1997). The model in the EI theory demonstrated an increased competency of EI when an individual could decrease stress-filled situations (Salovey & Mayer, 1990, 1997). Lower self-efficacy can make this a difficult, if not impossible challenge.

The insidiousness of IPV is stressful for the IPV victim. The IPV relationship begins romantically, but eventually, incremental negative messages are subtly introduced. The negative messages are purposeful and deliberate often leaving the IPV victim feeling confused. The abuser lays the blame for the abuse on the victim resulting in a profound impact on the victim. The violent behavior progresses slowly, recurs, and tends to increase in frequency and severity over time. Although victims of IPV may suffer severe physical injuries, emotional effects can be just as debilitating from anticipated stress and emotional abuse (Domestic Violence Outreach, 2013).

Applying the social learning theory to IPV, self-efficacy is diminished due to stress and for a variety of reasons the victim endures the violence, and the abuse continues. The Bandura's social learning theory represents a broad framework asserting a strong negative relationship between perceived self-efficacy and perceived stress

(Bandura, 1997). In turn, the victim develops a belief that their abuser has more power and therefore, they cannot stop the abuse or attempt to leave the relationship (Bandura & Locke, 2003). With an IPV victim becoming emotionally confused or debilitated, the residuals from social learning within an IPV relationship can erode the victim's self-esteem and self-efficacy, causing a host of other emotional issues.

Attachment Theory

Attachment theory provides a developmental perspective that examines parent-child relationships. The parent-child relationship can begin to shape the way a child regulates emotions and develops a belief system about themselves and the world. The belief system will serve as the basis for managing future relationships (Feeny, 1999; Hazan & Shaver, 1987; Park, 2016). According to Bowlby (1984), defensive emotions are linked to an insecure attachment, which later represses the processing of appropriate emotional awareness of feeling and intentions of self and others (Bowlby, 1969, 1988; Johnson, 2008).

While working several years in various hospital and institutional settings Bowlby observed hundreds of maternal separation incidences, noting the effect of the deprivation of maternal interaction. Through his observations, Bowlby learned that for one to grow up emotionally healthy, they must experience warm, intimate, and have a continual relationship with one's mother or a permanent substitute (Bowlby, 1988; Bretherton, 1992). The theory emphasizes the link between familial insecurity in early stages of life and emotional impairment.

Attachment theory further describes how socialization experiences contribute to shaping individual behaviors within cognitive, emotional, and social context (Bowlby, 1984). Specifically, the actions of significant figures will influence children's behaviors and later inspires adult emotions and relationships in reaction to stress (Besser & Priel, 2005; Bowlby, 1984). Situations, beliefs, and particularly reinforcement affect the development of essential features of EI from childhood. Such features include empathy, emotional self-awareness, problem solving, and stress tolerance (Arsenio, 2003; Simpson, Collins, Tran, & Haydon, 2007).

Kafetsios (2004) conducted a study to evaluate attachment adjustments and EI across one's life. Participants consisted of 239 volunteers. The demographic range was considered ample for all areas. Kafetsios (2004) used the Mayer-Salovey-Caruso-Emotional Intelligence Test (MSCEIT) and relationship questionnaire (RQ) to measure each participant's capability (Bartholomew & Horowitz, 1991; Bradberry & Su, 2006). Secure attachments were found related to the subscales, except perceiving emotions and positive association between dismissing attachment and understanding emotions were found. Differences in age and gender groups were also discovered, with older participants obtaining scores higher in facilitation. Emphasis was given to the cognitive and affective processes in distinguishing fearful (not given up on the relationship) and dismissing avoidance, validating the EI abilities testing (Kafetsios, 2004).

The MSCEIT provided 141 items and scored four branches: perception, use, understanding, and managing emotions. The testing demonstrated that older participants had scores higher in emotional branches of management, perception, and use; however,

women scored higher in the areas of perception of emotions. The study found secure attachment had consistent, positive correlations in all branches of EI. Interestingly, results showed fearful and preoccupied attachments as negatively associated with EI use of emotions in females. The researcher had assessed orientations of attachment simultaneously conducted a multiple regression analysis to test the relation between EI and attachment orientations. Findings showed that younger participants and fearful orientations were positively associated experiential areas of EI and interactions, between age and fearful attachment, significant ($p < 0.05$) in the prediction of perception and total EI scores.

Hamarta, Deniz, and Saltali (2009) linked attachment theory and EI after conducting their study that investigated attachment styles as predictors of EI levels. Participants included 463 randomly selected undergraduate students. Testing instruments included the Bar-On Emotional Quotient (EQ) Inventory (Bar-On, 2006) and the Relationships Scales Questionnaire (RSQ), developed by Griffin and Bartholomew (1994). The study examined EI levels of intra and interpersonal actions, adaptability, stress management, and general mood. These were compared to maternal attachment styles of fearful, dismissive, secure, and preoccupied. For data evaluation, the researchers used regression and correlational analysis. Results found a meaningful and positive link between secure attachment styles and higher EI levels in all sub-scales (Hamarta et al., 2009).

Kafetsios (2004) and Hamarta et al., (2009) provided some of the first empirical evidence linking attachment orientation to EI abilities. For this reason, the predictive

validity of the MSCEIT testing instrument, when associated with attachment orientations, was possible. Additionally, the studies tested for age differences in attachment and EI. Secure attachment was consistently positively related to three out of four EI branches use, understanding, and management of emotions, the strategic area, and total EI scores. Certain tasks were particularly predictive of the secure attachment orientation (use, blends, and emotion management in relationships). These results were characteristic of both males and females and did not show any interactions with age.

Hamarta et al., (2009) found that a preoccupied attachment orientation was negatively associated with EI abilities, but significant for the first branch (perception skills, especially facial). The results concerning fearful avoidant attachment and EI skills were in line with expectations but not at statistically significant levels. Future study trends could be more effective if aimed at interventions in cognitive or emotional aspects of adult attachment.

Learned Helplessness Theory

Seligman and Maier (1967) and associates presented the learned helplessness theory after conducting a conditioning research on dogs. The dogs had been slightly shocked after the ringing of a bell. After the electric shock had occurred and a bell rang again, the dogs began to react after the bell rang, but before the administered shock. Later the researchers placed the dogs in large cages with a very low divider between two areas. The divider separated an electrified area from a non-electrified area and could easily be stepped over to reach the other side of the cage. However, once a dog was administered the small shock, instead of jumping to the other side to escape the shock, the dogs would

consistently just lay down. The dogs believed they could not escape the shock and submitted to their belief without physically attempting to change their outcome.

Such learned helplessness conditioning is a type of learning that is now known to cause neurological alterations in the brain. Brain areas acquire and store traumatic memories, and as time goes on, memories stored, over time, become traumatic memories that are ingrained. Such memories are difficult to treat effectively (Bremner, 2006; Meadows & Foa, 1999). To help cope with new trauma, a victim will attempt to use cognitive and behavioral strategies to manage the demands of a situation (Campbell, Sullivan, & Davidson, 1992). However, an IPV victim will quickly learn that such strategies cause more emotional stress and rarely reduce conflict. Consequently, attempting to cope using cognitive and behavioral changes is quickly abandoned. In turn, victims will often relinquish control of their safety (Campbell et al., 1992; Cascardi & O'Leary, 1992; Stein & Kennedy, 2001; Suvak, Taft, Goodman, & Dutton, 2013; Watson et al., 1997).

According to Barnett, Miller-Perrin and Perrin (2011) learned helplessness in IPV victims could be linked to a lack of quality of life, which diminished to a mere existence level due to unexpressed human emotions. Dobash and Dobash (1992) suggested there are similarities in characteristics in the learned helplessness theory and IPV victims. They posited that learned helplessness features are distinctive by the effects of the psychological and physical abuse often found in IPV victims.

In review, the learned helplessness theory appears to exclude other factors why IPV victims may stay with their abuser. Factors can include the victim's possible lack of

economic, social, or cultural support. Victims may find themselves shunned by their family, friends, or social circle, making leaving difficult. Other probable influences are a lack of financial resources, religious beliefs, or even the hope to renegotiate the marital relationship without abuse (Dobash & Dobash, 1992; Walker, 2009). As a result, IPV victims are found to live in a personal cycle of staying in the relationship, leaving, and then returning to their abuser, depending on their circumstance. Other findings do not necessarily describe victims as being helpless, but rather explains that victims often lose their ability to predict the outcome of their actions.

Emotional Intelligence Theory

Darwin (1872) discussed primary emotions and suggested that they play a part in a successful adaptation to surroundings, theorizing this as part of survival of the fittest. The origins of EI began with a theory of social intelligence initiated by E. L. Thorndike (Goleman, 2000; Thorndike, 1898). His argument referred to the understanding of the management of people to perform effectively in social settings. Thorndike conducted studies involving animal behaviors. His research tested animal actions using positive and negative reinforcement. The outcome was referred to as the law of effect (Goleman, 2000; Thorndike, 1898). Once an animal experienced an adverse outcome, the animal would stop responding, weakening their stimulus-response. Thorndike studies found that when pleasant events are experienced than pleasant response will likely to be repeated. Behaviors followed by unpleasant events; a response will discontinue (Thorndike, 1898).

Wechsler (1943) suggested there was a broader definition of intelligence than customarily thought, acknowledging the importance of non-intellectual factors, to include

emotions. Wechsler's study highlighted how non-intellectual factors are necessary to deal rationally with one's surroundings. In 1927, Moss and Hunt defined social intelligence as the ability of an individual to get along with others (1927). Vernon (1933) added that social intelligence is a technique to maneuver successfully in social situations by discerning group stimuli and other's moods (Habib, Saleem, & Mahmood, 2013; Vernon, 1933). Both studies strengthen the hypothesis of intelligence that differentiated from IQ by stressing life skills in emotions and social interaction.

In an article about the value of emotion and motivation, Leeper (1948) discussed the importance of having an emotionally rich life. Contrary to what was prevalent in the field of psychology at the time, Leeper emphasized the importance of understanding emotion and his study highlighted that emotions serve the purpose of helping to organize information. Further, the study indicated that de-emphasizing some emotions might help an individual. Leeper predicted that emotional development was a crucial part of human growth and necessary to distinguish humans from lower life forms (Leeper, 1948).

In 1950, 80 Berkeley Science Ph.D.'s were interviewed and given IQ and personality tests (Feist & Barron, 1996). Forty years later, all of the available Ph.D.'s were interviewed. Their overall professional lives were assessed based on their work histories, resumes, and evaluated by experts in their field of work. Incredibly the assessments showed that emotional abilities were four times more important than IQ when compared to professional success (Feist & Barron, 1996). The study underscores the necessity of having an emotional compass to assist in providing a secure, confident quality of life.

Snarey et al. (1987) began in the early 1940s with 500 non-delinquent 14-year-old Boston boys (control group), along with 500 delinquent 14-year-old boys. Each group was matched for age, IQ, and ethnicity. Subsequent interviews were conducted at ages 25, 31, and 47. Participants were included if they were later married and were able to complete an interview at age 47. The final sample size resulted in 343 participants (Snarey et al., 1987). The study reviewed how childhood ability to control emotions impacted effectiveness to socialize effectively with others later in life. Results concluded that the participant's ability to control emotions and socialization effectiveness was more profound than IQ (Snarey et al., 1987). The referenced study shows the need for a mean level of EI skills to maneuver life successfully.

Legitimacy of Emotional Intelligence

Salovey and Mayer (1993) presented an outline of EI skills and abilities. The authors established a working description and a framework for reviewing research on emotions from the viewpoint of EI's role. After working on aspects of non-cognitive areas of intelligence, Salovey and Mayer (1993) began the use of the EI term. Their description of EI is designated as a person's ability to monitor one's own and other's moods and, based on the belief in their ability, use the information to stimulate appropriate thoughts and actions.

Mayer and Salovey (1997) developed measures of EI to study its relevance in daily life. For EI to be considered intelligence, measures are required to meet the criteria used for the study of standard intelligence to be considered legitimate science. The criteria they developed included: 1) The test must be capable of demonstrating an

operationalized set of abilities; 2) The test must meet certain correlational criteria and should form inter-correlation with existing intelligence measures, while showing some uniqueness, and 3) Intelligence must be shown to develop with age (Mayer & Salovey, 1997).

In two studies, one with 503 adults and the other with 229 adolescents, the Multifactor Emotional Intelligence Scale [MEIS] (Mayer & Salovey, 1997) test was given and completed by participants. The researchers learned that EI levels were higher in individuals who were able to recover emotionally sooner and able to define their emotion after viewing a particularly upsetting movie. Findings showed the criteria for standard intelligence had been met for EI (Brackett, Rivers, Shiffman, Lerner, & Salovey, 2006; Mayer, Salovey, Caruso, & Sitarenios, 2001). According to these studies all forms of intelligence, including non-intellectual and emotional, work synergistically to enhance and inform the other.

The term EI became more popular in the 1990s when Goleman built on Salovey and Mayer's work and subsequently published a self-help book about EI (Goleman, 1995). Goleman, a New York Times writer, attended Harvard as a psychology student and wrote about the brain and behavioral research. While at Harvard, Goleman conducted studies with McClelland (1973), a researcher interested in cognitive testing, specifically the limited availability of such studies. McClelland and other researchers understood that intelligence quotient (IQ) was not necessarily the best way to assess how a person would perform socially or otherwise (McClelland, 1973). Goleman referenced these early studies to support the necessity of research and the value of social and emotional skills

for personal success. His publications and other works are used in many corporations worldwide today to assess EI for leadership positions and pre-hire of candidates.

Salovey and Grewal (2005) later expanded on their definition of EI and illustrated EI by outlining four aspects that they considered to comprise EI. The first is the ability to distinguish emotions and seen as the capacity to detect a change in other peoples' moods and facial expressions. Recognizing emotions includes an ability to interpret the situation and to understand one's needs through emotional awareness of self. Second is the use of emotions and the capacity to problem-solve cognitively in situations. Use of emotions is to be aware of one's emotions and how they influence personal thoughts and actions. The third is the ability to understand emotions, which highlights insight and sensitivity of emotions in oneself and others. Understanding emotions provide the capacity to recognize how personal nonverbal communications (e.g., gestures, voice volume) can be cues to a response either positively or negatively. The fourth aspect of EI is the ability to manage emotions. Managing emotions is found to assist in controlling self and others. Managing emotions provides the skills to be flexible and to resolve conflict (Boyatzis, Goleman, & Rhee, 2000; Mayer, Salovey & Caruso, 2002, 2004; Salovey & Grewal, 2005).

Elfenbein, Marsh, and Ambady (2002) demonstrated how social skills and emotional ability contribute to the expression of appropriate social behavior and the person-environment connection. EI levels have been shown to assist individuals in managing one's emotional realities. Management allows the person to move successfully through life safely, securely, and appropriately (Bracket et al., 2006; Damasio, 1994;

Savage, 2002).

Gohm and Clore (2002) developed the concept of affect-as-information (p. 90), where emotional or affective responses are viewed as one type of information used in making appraisals of situations. The researchers point out that emotions exist as an interface between one's self and environment for providing information and motivation. The perspective generates significant practical questions regarding EI, such as identifying emotional cues and how best to react in a given circumstance

VanRooy, Viswesvaran, and Pluta (2005) completed a meta-analysis supporting the theory that EI is different from personality or IQ. Results of 58 studies involving more than 8,000 research participants through ability-based testing demonstrated that EI is different from IQ. The metal-analysis reviewed an EI meta-analytic construct of mixed and ability models as compared to the Big Five personality theory. The Big Five theory includes openness, conscientiousness, extraversion, agreeableness, and neuroticism. Results found the mixed model of EI showed a bigger connection with personality ability-based measures and ability based EI showed a greater association with cognitive strengths when compared to the Big Five.

Measuring Emotional Intelligence

Many detractors of EI posit that EI is not measurable and unable to be quantified due to EI's alleged intangibility (Cox & Nelson, 2008). Mayer and Salovey (2003) and a later study by Salovey and Grewel (2005) found that EI could be measured. Subsequent studies began to measure resiliency during adverse situations (Peterson et al., 1982). Once commissioned, the Seligman Attributional Style Questionnaire (SASQ) was

provided to the Metropolitan Life Insurance Company. The questionnaire was used for screening resiliency to determine levels of pessimism versus optimism in individuals (Peterson et al., 1982). The SASQ has an EI component and is primarily used by corporations as a predictor of motivation and performance. Over 500 studies worldwide have validated that the SASQ is a measurement of emotions that lead to motivation, contentment, and performance. The SASQ has been used in numerous universities and corporations with approximately one-half million current and prospective employers (Peterson et al., 1982).

Reuben Bar-On (2004) asserted that EI included competencies and skills that were not cognitive. He developed a self-report measuring test to assess awareness, stress tolerance, problem-solving and overall happiness in test takers who took his emotional quotient-intelligence test [EQ-I] (Bar-On, 2004). Bar-On's model posits that EI is part of both the emotional and social abilities of understanding. Bar-on found that EI contributes to the expression of self, along with how one relates to others, using skills to cope with life situations (Bar-On, 2004). These intrapersonal skills are the basis for effective management of personal, social, and environmental issues. The abilities assist in problem solving, decision-making, flexibility, and managing with intrinsic motivation to maneuver through daily circumstances positively.

Mayer and Salovey (1997) developed the MEIS assessment. The tool measures a test taker's abilities to understand, identify, perceive, and use emotions appropriately. The authors later developed another test called the Mayer-Salovey-Caruso Emotion Intelligence Test [MSCEIT] (Mayer, Salovey & Caruso, 2003; 2004). The test has four

branches and eight task scores, using 141 items, providing a total of 15 primary scores and three ancillary scores. The MSCEIT is a problem-solving tool, emotionally based and modeled after IQ tests (Mayer, Salovey, Caruso & Sitarenious, 2003).

For the MSCEIT scoring, primarily emotional research experts were obtained from the International Society for Research in Emotions members. The consensus score standardized by 5000 participants with diverse ethnicities, backgrounds, gender, and age. The consensus identified optimal answers and the experts used a criterion to judge correct answers. The MSCEIT results in 15 primary scores, four branch scores, and individual task scores were averaged and used as the normative population data (Mayer et al., 2003). This study compared IPV participants EI levels to the 5,000 normative population of the MSCEIT scoring.

Researchers Legree, Psotka, Tremble, and Bourne (2005) believe that consensus scoring can work instead of theory-based scoring when there is a "lack of certified experts and well-specified, objective knowledge" (p. 155), as in research on EI. The authors reasoned that areas of knowledge are "lodged in opinion, and [may] have no objective standard for verification other than societal views, opinions, and interpretations" (p. 159). One detractor, Maul (2012), conducted a meta-analysis on the validity of the MSCEIT. Maul posited that the emotion branches identified in the MSCEIT instrument, and associated scoring, could not measure variances effectively. Maul suggested further research attempting to measure EI should include an explanatory approach. He added better definitions and methods for measuring EI abilities are necessary to explore any relationship between those abilities (Maul, 2012). However,

Maul further reports that the MSCEIT did provide the impetus for research and contributed to human behaviors.

Concepts of IPV and EI

Intergenerational Intimate Partner Violence

Kalmuss (1984) conducted a longitudinal quantitative study about family and marital aggression. Kalmuss collected data by interviewing 2,143 adults to examine next-generation child participants. The study explored aggression between spouses and parent/child assault. Kalmuss (1984) found a positive correlation between witnessing spousal hitting and victimization of parental hitting of a child. Kalmuss discovered those children witness to abuse became aggressive in their adolescent and adult relationships (Goldblatt & Eisikovits, 2005). Such marital violence had a strong effect size. However, a larger effect size was found when children are subjected to both types of spousal abuse and child abuse.

Holt, Buckley, and Whelan (2008) conducted a study from 1995-2006, analyzing the impact of IPV in the home on the health and development of a child through adolescence. The researchers reviewed exposure to IPV and child abuse. They found an increased chance of IPV, along with a rise in adversities in life, in those children exposed to IPV. The authors recommended that interventions must be timely and most importantly, accurately respond to the needs of each person rather than follow universal interventions (Holt et al., 2008).

Research conducted by Emery and Laumman-Billings (1998) reviewed the origins, features, and the magnitude of how IPV impacted family members. In a

correlational study, the authors made the argument about the necessity of differentiating between child abuse and child maltreatment. Emery and Laumman-Billings (1998) also researched how violence in the home contributes to an individual becoming a perpetrator of abuse, highlighting the spectrum of violence and paths that lead to abuse types and severity. They posited that by identifying abuse distinctions, there could be interventions and treatments based on the individual needs of families and victims. The study provided social significance with an innovative objective of identifying the particular history and emotional needs of victims, through assessment. They found this to aid in developing a more effective treatment based on victim needs. The study did not demonstrate, however, how violence in the family dynamic contributes to becoming a victim of IPV.

Makin-Byrd, Bierman, and Conducts Problems Prevention Research Group (2013) lead a study researching what affect family aggression has on an adolescent's propensity to perpetrate violence or become an IPV victim. The study followed 401 female children beginning in Kindergarten through 18 years of age. The research revealed a positive correlation between early adolescent aggressive and hostile problems at home and school. Other findings demonstrated significant influences from family characteristics on the emergence of teenage dating violence perpetration and a tendency toward victimization.

One associated consequence of parent-child conflict is that such conflict can lead a child to receive inadequate positive socialization support at home. The child often enters school exhibiting low levels of behavioral control and elevated rates of impulsive and disruptive behaviors (Dodge, Greenberg, Malone, & the Conduct Problems

Prevention Research Group, 2008). Aggressive parent-child conflict plays a special role in teaching young children to use aggressive behavior in personal relationships (Coie & Dodge, 1998). The early exposure to the exchanges of family aggression will prime child witnesses to react aggressively as they begin to enter an adolescent romantic relationship (Bookwala & Zdaniuk, 1998). The research underscores a conspicuous need for preventive intervention specific to adolescent's emotional and coping deficits.

Intergenerational violence theory has its origin in social learning theories and learned helplessness (Renner & Slack, 2006). Renner and Slack hypothesized, in part that forms of childhood abuse are linked to IPV victimization as an adult. Using an existing population of recipients of temporary Illinois State aid, along with some State reported cases of child maltreatment the researchers used a stratified, randomly selected participant pool for the study (N = 1,055). The participants for this study reported on the types of child abuse they had experienced (physical, sexual, neglect, and witnessing of IPV) if applicable. They reported whether they were currently victims or perpetrators of IPV.

The study reported that IPV victimization correlated with child maltreatment (Pearson's $r = .10$, $p < .01$), although it was a small correlation. All forms of family violence, however, were linked to adulthood IPV. Sexual or physical childhood abuse or the witnessing of IPV increased the risk of IPV perpetration by 200-300%. The researchers used logistic regression and found that maltreatment in childhood or the exposure of violence in childhood causes a significantly higher likelihood of being

victimized as an adult. The study emphasizes the need for assessment options, at time of intervention, to detect coping mechanisms, along with individual emotional status.

Austin (2010) studied the contribution of intergenerational transference of abuse. She reported that adult witness to IPV as a child could become adult perpetrators of IPV or be victimized by their romantic partner. In the study of adolescents, Lichter and McClosey (2004) found that young people having witnessed parental violence held attitudes that condoned violence as a strategy to resolve conflict within relationships. Such observations of violence result in a lack of trust and security in relationships as adults. In turn, this can lead to acceptance of IPV as an appropriate solution to disagreements within an intimate relationship, whether perpetrator or victim (Austin, 2010; Lichter & McClosey, 2004; Black et al., 2010). The referenced studies point to determining an IPV victim's emotional attitude toward EI skill building and coping strategies skills.

Power and Control Cycle

Based on interviews with victims of IPV, research dealing with a cycle theory found that victims are not abused all of the time or randomly (Domestic Abuse Intervention Program [DAIP], 2008). Included in the power and control wheel are actions of perpetrators of IPV. Perpetration can include coercion and threats, intimidation, emotional abuse, and isolation. Other threats can be using the children, economic terrorism, and, in the case of male perpetrators, citing male privilege. Both the learned helplessness theory and the power and control concept lead to a person becoming dependent on the moods and actions of their perpetrator. The dependence of the victim

creates emotional highs and lows, deep depression, self-doubt and exacerbates weakness (Joiner, 2001). Such emotional ramifications can enhance a victim's belief that they are unable to change or remove themselves from an abusive relationship.

Coercive behaviors most often include threats of reporting the victim to welfare to obtain child custody, threats of suicide, or threats to leave the victim without resources. The use of intimidation may consist of the abuser carrying a weapon, hurt or kill a family pet, or destroy family belongings. Emotional abuse follows, causing humiliation to the victim and inducing guilt. The abuser uses name-calling and mind games as part of their power and coercive behaviors to intimidate their victim. Isolation instills control by prohibiting the victim from seeing family or friends, threatening their relatives, and controlling activities of the victim. The abuser may deny abuse occurred, or places blame on the victim in the event of an attack or injuries.

Male perpetrators often use the excuse as being head of the household to control activities and keep the victim in line. Economic terrorism may be used to control all family finances including any money the victim may earn. A victim may be required to ask for money for household or personal items. In some cases, the abuser will require receipts to account for any spending or face possible retribution. An additional study by Stets and Burke (2005) demonstrated how control and perceived power perpetuates IPV and leads to more aggression. The power and aggression destabilize a victim and inhibits their ability to self-identify and diminishes self-efficacy (Stets & Burke, 2005). Consequently, victims learn to react in the manner expected by their abuser rather than

what is best for their overall emotional and long-term physical health, as represented by a lower level of EI.

The Power and Control Wheel is based on the Duluth Model (DIAP, 2008). The model and wheel are viewed as men claiming control of their intimate partner. The model does not address women perpetrators, even though a significant number of men are victims (Hoff, 2012). The model blames abuse on the man based on the use of alcohol, emotional insecurities, skewed coping skills, and the man's belief in male privilege. Consequently, this model does not address women perpetrators' intentions, beliefs, and emotions, limiting consistency in measuring IPV.

Themes of IPV

Healthcare

Intimate partner violence (IPV) crosses all socioeconomic levels, races, age, and genders. Over 30% of all adults in the United States have reported abuse, either physical or sexual (Kimerling, Alvarez, Pavao, Kaminski, & Baumrind, 2007). Victimization often exposes socioeconomic factors of IPV, which is a circumstance that compounds the risk of developing mental health issues, as well. Findings show that low-income women are most likely to be seen in both IPV shelters and the public mental health system. These same women have the highest risk of being victimized throughout their entire life (Vijayaraghavan et al., 2011).

The 2010 summary report from the National Center for Injury Prevention and Control from the Centers for Disease Control and Prevention included a national survey of IPV victims. The study found that over the course of their lifetime, 35.6% of women

and 28.5% of men have suffered some form of IPV. Over one-third of female victims experienced many forms of victimization, while 92.1% of male victims experienced physical victimization solely, and 6.3% were both stalked and physically victimized (CDC, 2010).

The report revealed that exposure to violence is a contributor to ongoing detrimental physical and emotional health and associated risk behaviors. As violence increases, health issues increase exponentially in the form of fear, anxiety over safety, and post-traumatic stress disorder [PTSD] (Pico-Alfonso, Echebarua, & Martinez, 2008). Additionally, physical stressors, such as the need for healthcare, alternate housing, and legal services impact the emotional complications of IPV victims.

Other health conditions found to accompany IPV often include chronic cardiovascular, immunity, gastrointestinal, and endocrine issues. Immediate consequences of a cause, such as bodily injuries, are not included (CDC, 2010). Long-term issues associated with witnessing IPV include many emotional disorders, which if left untreated, frequently last a lifetime. Results of untreated issues have been shown to demonstrate that emotional, physical control and trauma can skew one's reasoning regarding the relationship with victim and aggressor in an IPV relationship (Makin-Bryd et al., 2013).

Cost of IPV

A study from 1997-2002 in Seattle, Washington, investigated health maintenance organization (HMO) medical records for different groups of adult female patients (Max, Rice, Finelstein, Bardwell, & Leadbetter, 2004). A group of women, 18 years and older,

with a medical history of IPV were randomly selected from a health maintenance group (HMO). The researchers developed two groups. The first group compared women without evidence of IPV at the time of treatment but mentioned prior abuses by their current romantic partner ($N = 2287$). The second comparison was randomly selected from the general HMO population and reported no victimization of IPV ($N = 6032$). The study discovered that women victims of physical or sexual IPV visited their doctors more often than other women, causing healthcare costs to be much higher for them than for non-victims. The healthcare for victims of IPV averaged over $5,000 per year when compared to an average of $3,000 for the other group (Max et al., 2004; Ulrich et al., 2003).

The Centers for Disease Control in the United States Centers released a study in 2003 disclosing the United States health care costs associated with IPV. Each female incident reported cost nearly $950, and male incidents came at the cost of $390 each. The study found that violence against women resulted in more visits and inpatient hospital stays. Men, however, typically sought family physician services. Healthcare costs for mental health services, due to IPV, included productivity loss for time off from jobs, inability to care for children, or accomplish household duties. Annual lost productivity attributable to IPV has been estimated at just over $727 million with nearly $8 million paid in lost workdays annually. Overall cost to the United States economy was found to be over $8 billion annually (Bonomi, Anderson, Rivara, & Thompson, 2009; CDC, 2003). Due to the increased healthcare costs and funding concerns to support intervention programs, it is critical to have the most effective treatment options for victims based on recovery and recurring rates of victimization (Rorie, Backes & Chahal, 2014).

Why Victims Stay

IPV victims have been found to sustain explosive outburst and physical beatings. Doing so, results in victims often succumbing to feelings of low self-esteem, confusion, fear, numbing, and hyper-arousal (Warshaw, Sullivan, & Rivera, 2013). IPV victims deal with the reality of their abuse with differing strategies to help with their stress. They most often minimize the abuse and injuries or deny that the abuse has taken place altogether (Warshaw et al., 2013). Another tactic is to make up a cover story for their abuse to ensure that friends, family, co-workers, and healthcare providers do not realize the abuse is occurring. Victims often believe they are at fault for the abuse and attempt to calm their abuser by appeasing them and adhering to their aggressive requests or actions (Warshaw et al., 2013).

A difficult aspect of IPV is the question of why many victims remain in abusive relationships (Bell & Naugle, 2005). Victims often leave and return to their abuser many times. Studies examine the reasons for staying or leaving an abusive relationship (Bell & Naugle, 2005). The longer a victim is in an abusive relationship, the more likely they are to stay. The victim is more likely to leave once abuse has extended to the children or other family members. The access to financial, employment, housing resources contributes to a victim deciding to leave or stay (Bell & Naugle, 2005).

One study was advertised for participants in the newspaper to solicit former IPV victim volunteers. The requirements for the 195 women participants were that they had been free of abuse for at least one year. They reported on the length of time that victims took to leave an abusive relationship. Findings show an average of eight years before

these victims were able to leave permanently and successfully end the relationship (Anderson & Saunders, 2003). Employment opportunities and the availability or access to community resources played a direct role in their decision to leave. However, the biggest catalyst for moving away from the abuser was a severe episode of abuse, but before any reconciling attempts by the abuser, as represented in the Power and Control Wheel (Anderson & Saunders, 2003).

Anderson and Saunders (2003) categorized the reasons that participants stayed in their abusive relationship. The primary reasons involved the characteristics of perpetrator violence, history of the victim's personal experiences, social psychological influences, available outside resources, and personal coping strategies found under EI subscales. The research revealed that women recently moving out of the abusive relationship had more psychological problems than those still in an abusive relationship. While in the abusive relationship, victims become confused and adapt to a limited existence. When suddenly managing life without boundaries, a victim can become overwhelmed, and a victim can be uncertain in their abilities, which is a facet of higher levels of EI.

Summary

Self-efficacy is found to be an essential area of EI (Bar-On, 2006) and is correlated to an individual's belief in their ability to successfully maneuver through life. Witnessing aggression as a child often promotes aggression in their intimate relations later in life, contributing to intergenerational IPV. Victims immersed in physical and emotional abuse have a depressed ability to leave their situation (Mayer, Salovey, Caruso & Sitarenios, 2001). Studies report that EI is an essential non-intellectual tool to provide

the ability to function successfully in relationships and socially. EI allows for the appropriate organizing and handling of external information. Studies have demonstrated that EI is a bigger indicator of lifetime success than IQ. The MSCEIT instrument was developed to assess individual's EI levels with high validity and reliability. Social-cognitive, attachment, learned helplessness theories could contribute to the EI levels. The EI theory provides the basis for how individuals can become a victim of an abusive intimate relationship. Together these theories contribute to the lack of self-efficacy and skills to meet social challenges successfully. Children that witness aggression and IPV most often grow up to perpetuate the same behaviors in their adult intimate relationships. A victim may become unable to leave an abusive relationship due to self-efficacy, and the ability to leave can lessen over time.

Chapter 3: Research Method

Introduction

The study explored EI levels in IPV victim-survivors in the United States. The research was 100% accessible online and anonymous with no Internet Protocol (IP) addresses traced or personal information requested. Participants began with a survey accessed online through Survey Monkey. An informed consent form preceded the initial survey. The survey criteria were self-reported: participants were either male or female, 18 years or older, living in the United States, and removed from their abusive relationship for at least six months. Following that, each participant was asked to report the length of time they were in an abusive relationship and to report the types of abuse experienced via multiple-choice options. Once a participant completed the short survey, they were provided an access code and password, along with a hyperlink to the testing instrument at a different website. The testing instrument used was the Mayer-Salovey-Caruso Emotional Intelligence Test (MSCEIT). The study first looked at EI levels in IPV victims versus the normative population. The branches of EI, as reported by Mayer et al. (2004) include perception, use, understanding, and management of emotions. These EI branches were assessed in IPV victims based on criteria for participation.

Studies conducted on current treatment options resulted in inconsistent and short-term solutions for victims of IPV (Eckhardt et al., 2013; Sartin, Hansen, & Huss, 2006). Exploring differences in EI scores of IPV victim-survivors provides an opportunity to assess EI and use the information as an adjunct IPV treatment option. Knowledge of personal EI levels in a victim may lead to an understanding of personal abilities and how

to enrich their quality of life. An ineffective emotional decision could mean the difference between continually succumbing to an abuser, moving out only to return, or surviving the relationship. Therefore, this chapter reviews the research design and instrument used to study the gap represented in literature, listing the designated variables and relating the design of the study to research questions.

Research Design and Instrument

The study examined differences in EI levels of IPV victims and the normative group (N=5,000) tested by the authors of the MSCEIT. The MSCEIT has been published and in use for over a decade (Mayer et al., 2003). The quantitative study was more appropriate for this research than a qualitative study, as test scores and demographic data are appropriate for statistical comparison. EI is multidimensional, as is the scoring of MSCEIT assumptions about the variables about EI and IPV victims. The MSCEIT is based on abilities of emotional intelligence, known as an abilities model. The test evaluates EI in participants ($N = 180$) using impersonal and objective questions. The MSCEIT examined each participant's abilities to use, understand, perceive, and manage emotions. Using scenarios from life, the MSCEIT assessed how well tasks were performed and how participants resolve emotional problems. The exam utilized a variety of tasks to evaluate each participant's capacity for reasoning.

The initial survey, designed and accessed on Survey Monkey, provided the predictor variables. Included were gender, the length of the abusive relationship (in years) and types of abuse experienced and compared differences in the four branches of EI, which are perception, use, understanding, and management of emotions not found in

other studies investigating EI in IPV victims. It provides insights into EI to aid in predicting success in an individual and is suited for accurately accessing those with lower EI ranges (Fiori et al. 2014). Research using the MSCEIT instrument was conducted on college students demonstrated that EI is a greater predictor of social success and self-efficacy than general mental abilities (Song et al., 2010). The MSCEIT tool converts raw scores into standard scores, making comparisons and statistical analysis possible. The Multi-Health Systems (MHS) conducted scoring to eliminate scoring errors. After the sections were scored, an indicator was used to compare each participant's scores against the authors' original statistically weighted representation of the adult normative population.

Data Collection and Participants

A convenience sample of participants was collected from sources such as Walden University's research pool, the researcher's personal Facebook page, LinkedIn, and advertisements on Craigslist in cities all over the United States. Flyers were sent to intimate partner violence treatment and treatment centers throughout the United States (See Appendix C and Appendix D). The participants accepted into the study were men or women, age 18 or older, living in the United States. Participants would have to be involved with an intimate, romantic partner resulting in physical, emotional, financial, sexual abuse, or any combination thereof. Also, volunteers had to state they were removed from their abusive relationship for at least six months.

The form was accessible online and preceded the demographic survey on Survey Monkey. Participants had the option to leave an answer blank or opt out of the study

altogether. In case a participant felt in crisis, overwhelmed, or needed other help, a national helpline number was provided throughout the informed consent form and survey (See Appendix E). At the end of the survey garnered access to the MSCEIT testing site. Participants were volunteers and received no incentives or pay to be part of the study. All testing and results were completed online. Thorough instructions were provided for participants.

The Institutional Review Board (IRB) provided a Walden University approval number for this study, #04-29-16-0160216, along with an expiration date of March 21, 2018. The informed consent form provided participants with my contact information and stated the researcher is a student, provided reasons for study, and outlined steps to be taken by a participant. The informed consent form also stipulated how the data will be used and explained that any information would remain confidential and be held by the researcher and MSCEIT testing administrator for seven years and then destroyed.

Data Analysis Plan

Data was entered into SPSS version 24.0 for Windows. Descriptive statistics were conducted to describe the sample demographics and the research variables used in the analysis. Frequencies and percentages were calculated for any nominal variables of interest (i.e., two or more categories), while means and standard deviations were calculated for any continuous, scale or ratio data of interest (i.e., between the minimum and maximum value) (Howell, 2010).

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Data were screened for accuracy, missing data, and outliers. Descriptive statistics and frequency distributions were conducted to determine that responses were within a possible range of values and that data was not distorted. The presence of outliers was tested by calculation of standardized values. Standardized values represent the number of standard deviations an individual score falls from the mean of those scores. Participants with scores more than +3.29 standard deviations from the mean were considered outliers and removed from the dataset (Taberchnick & Fidell, 2012). Cases with missing data were examined for nonrandom patterns. Some participants opted out of certain questions or the testing after starting; therefore, those with portions of non-random missing data were excluded from the sample.

Research Questions and Hypotheses

Research Question One

RQ1: Are there differences between the levels of EI of IPV victims from the normative average EI levels?

H_{01}: There is no difference in the mean of EI levels in IPV victim-survivors versus the normative average EI levels with regard to the ability to perceive emotion, use of emotion, ability to understand emotions, and ability to manage emotions, as measured by the MSCEIT.

H_{a1}: There is a difference in the mean of EI levels in IPV victim-survivors versus the normative average EI levels with regard to the ability to perceive emotion, use of emotion, ability to understand emotions, and ability to manage emotions, as measured by the MSCEIT.

To examine RQ1, *t*-tests were conducted to determine if the observed means for participant scores on the four components of EI differ from expected means. The one-sample *t*-test is the appropriate analysis to use when the researcher aims to compare the observed mean of a sample to the hypothesized or theoretical mean for the population (Morgan, Leech, Gloekner, & Barrett, 2012). In these analyses, the criterion variables were the four branches of interpersonal and intrapersonal EI as measured by the MSCEIT. The survey data was compared to the normative data for EI.

Before analysis, the assumptions of the one sample *t*-test were assessed. The one sample *t*-test assumes that the scores to be compared to the hypothesized mean follow a normal distribution (i.e., normality). Additionally, the test assumes that data are independent such that scores of each participant do not depend upon one another. Normality was going to be used to assess using a one-sample Kolmogorov-Smirnov (KS) test (Shesking, 2003). However, the *t* statistic was shown to be strong against mild violations of assumption (Stevens, 2009) and therefore, the KS was not conducted.

Research Question Two

What are the differences in the EI levels between male and female IPV victims?

H_{02}: There is no difference in the mean of EI levels in male versus female IPV victim-survivors respect to the four branches of interpersonal and intrapersonal factorial components; perceive, use, understand and management of emotions.

Ha_2: There is a difference in the mean of EI levels in male versus female IPV victim-survivors respect to the four branches of interpersonal and intrapersonal factorial components; perceive, use, understand and management of emotions.

To examine RQ2, a multivariate analysis of variance

(MANOVA) was conducted. The MANOVA is the appropriate analysis when the goal of the research is to assess the difference in several continuous scores between two or more discrete groups. In this analysis, the criterion variables are the four branches of interpersonal and intrapersonal EI or perceiving, use, understanding, and management of EI. The predictor-grouping variable in this analysis corresponded to gender (male vs. female).

The MANOVA created a linear combination of the four criterion variables for a grand mean used to assess whether or not there were group differences on the set of criterion variables (Stevens, 2009). The MANOVA indicates significant differences in this total mean between one, or more, of the criterion variables between the two groups in question. Statistical differences in gender were found.

Before analysis, the assumptions of normality and homogeneity of variance/covariance matrices were assessed. Normality assumes that the scores are normally distributed (bell-shaped) and was assessed using the Kolmogorov-Smirnov test (Pallant, 2010). According to Stevens (2009), MANOVA is robust toward the violation

concerning Type I error. Homogeneity of variance assumed that both groups would show equal error variances and was assessed using Levene's test. Homogeneity of covariance matrices is the multivariate equivalent to homogeneity of variance and will be tested using Box's M test (Leech, Barrett, & Morgan, 2015).

Research Question Three

What is the relationship between the mean of EI levels of IPV victim-survivors and the length of the violent relationship?

H_{03}: There is no significant predictive relationship between EI levels in IPV victim-survivors and the length of time a victim was in a violent relationship.

H_{a3}: There is no significant predictive relationship between EI levels in IPV victim-survivors and the length of time a victim was in a violent relationship.

To examine RQ3, a linear regression analysis is conducted. A linear regression is a suitable analysis when the research objective is to review the extent of a relationship of a continuous predictor variable on an interval/ratio criterion variable (Tabachnick & Fidell, 2012). In this analysis, the continuous criterion variable was the four branches of EI, and the predictor variables were the amount of time a participant spent in a violent relationship, measured in years. To examine RQ3, a linear regression analysis was conducted.

A linear regression is a suitable analysis when the research objective is to review the extent of a relationship of a continuous predictor variable on an interval/ratio criterion variable (Tabachnick & Fidell, 2012). In this analysis, the continuous criterion variables were the four branches of EI, and the predictor variables was the amount of time a

participant spent in a violent relationship, measured in years. A linear regression analysis was conducted to assess if the criterion variable predicts the criterion variable by way of the F test. R2 will be reported in chapter 4 and shows variances in the predictor variable attributed by the criterion variable.

The assumptions of a linear regression analysis include normality and homoscedasticity. The assumption of normality is that error terms follow a normal distribution. This assumption was assessed by visual examination using a normal P-P plot. The assumption of homoscedasticity is that data is nearly equidistant from the regression line from one end to another. This assumption was assessed by visual examination of the standardized residuals scatterplot (Stevens, 2009). No significance of the model was found.

Research Question Four

What is the relationship between the four EI levels in IPV victim-survivors who experienced different types of abuse?

H_{04}: There is no difference in the mean of the four EI levels in IPV victim-survivors based on the type of abuse by the IPV victim (financial control, physical abuse, emotional terrorism, or sexual abuse).

H_{04}: There is a difference in the mean of the four EI levels in IPV victim-survivors based on the type of abuse by the IPV victim (financial control, physical abuse, emotional terrorism, or sexual abuse).

To examine RQ4, a multivariate analysis of variance (MANOVA) was conducted. The MANOVA is the appropriate statistical analysis to determine if the mean difference

exists on a series of continuous variables between grouping variables (Tabachnick & Fidell, 2013). In this analysis, the criterion variables were the four EI branches, perceiving, use, understanding, and management scores as measured by the MSCEIT. The predictor variables were based on types of abuse experienced, financial control, physical abuse, emotional terrorism, or sexual abuse. The MANOVA is used when the groups are defined by only one predictor variable, regardless of the number of groups (Howell, 2010).

The assumptions of MANOVA were examined before conducting the analysis. The assumptions of the MANOVA include normality and homogeneity of variance and homogeneity of covariance matrices. Normality assumes that the scores are normally distributed (bell-shaped) and was assessed using the Kolmogorov-Smirnov test (Stevens, 2009). The assumption of homogeneity of covariance matrices is the multivariate equivalent to the assumption of homogeneity of variance and assessed using Box's M test. In many cases, the MANOVA is considered a robust statistic in which assumptions can be violated with relatively minor effects, particularly when group sizes exceed 30 (Stevens, 2009).

Sample Size Justification

The presented study involved one sample t-tests, MANOVA, ANOVAs, and a multiple linear regression. Of these analyses, the MANOVA had the largest sample size requirement, and as such, was used in determining a sufficient sample size for the study. Using G*Power 3.1.7, a sufficient sample size was determined to find a significant difference with a medium effect size ($f = 0.0625$). The analysis had a power of .80 with

the significance with the alpha level of $\alpha = .05$, ensuring a 95% confidence it was not due to chance. Given these parameters, and calculating a necessary sample using the MANOVA with four groups (i.e., IPV type definition), the four criterion variables (branches of EI), the power analysis suggested that 180 participants were used to ensure empirical validity (Faul, Erdfelder, Lang, & Buckner, 2007).

Summary

As a quantitative study, it was determined the validated testing instrument to use in examining the EI levels of victim-survivors of IPV is the MSCEIT. The four branches of EI (perceive, use, understanding and managing) will be compared to the predictor variables of gender, length of time in an abusive relationship and type(s) of abuse experienced. These variables will be compared to the normative population. The tests used for the study were t-tests, an ANOVA, MANOVA and linear regression. It was presented how the sample size was determined to ensure an appropriate power with a significance of .05, ensuring a 95% confidence, resulting in a sample size of N=180.

Chapter 4: Results

Introduction

The purpose of this study was to explore the four branches of EI and criterion variables, which are perception, use, understanding, and management of emotions in intimate partner violence (IPV) victim-survivors when compared to the normative population. Differences were determined based on the predictor variables, gender, types of abuse experienced, and length of time a victim had been in the abusive relationship. A pilot study was not conducted.

A power analysis was completed to find the largest sample size for a significant data collection, resulting in N=180. Recruitment parameters for participants were established, including men and women living throughout the United States who were 18 years or older and no longer living with their abuser for at least six months. Recruitment of participants was randomly found through social media sites. These include Facebook, LinkedIn, and Craigslist, as well as the Walden University participant pool. Also, IPV treatment and refuge centers throughout the United States received a copy of a flyer, announcing the call for participants. The demographic survey and testing instrument was made accessible online. Instructions were provided on recruitment advertisement and flyers describing how to access the online informed consent form, which preceded an anonymous demographic survey. At the end of the survey, participants were provided an access code and password to the MSCEIT instrument for this study. A national IPV helpline telephone number was provided in the informed consent form and initial survey for participants to use if they felt threatened or needed other emotional interventions. The

chance to opt out of a single question or the entire questionnaire was provided throughout.

Without direct access to the population, it took 13 months to obtain the number of participants required for adequate data. Once the target number of participants was reached, the data sets were collected and put in in SPSS version 24.0 for Windows. Data was screened for accuracy, missing data, and outliers caused by participants opting out of one or more questions or opting out of the study once started. Descriptive statistics were explored to look at the trends in the variables. Frequencies and percentages were examined for the nominal level variables. Means and standard deviations were calculated for continuous variables of interest. The primary inferential analyses included one-sample t-tests, MANOVAs, and linear regression analyses.

Pre-Analysis Data Screen

Before analysis, the data were assessed for outliers. Outliers were identified by calculation of standardized values, or *z*-scores that fell $\pm$ 3.29 standard deviations away from the mean (Tabachnick & Fidell, 2013). Six cases were identified with outlying data and were removed from for the analysis. The final sample consisted of 174 participants.

Descriptive Statistics

Frequencies and percentages of demographics. The gender of participants was distributed between 124 females (71.3%) and 50 (28.7%) males. Most participants had experienced violence for 1-5 years (n = 54, 32.7%), with several participants having experienced violence for a period of 5-10 years (n = 46, 26.4%). Among the participants involved, 153 (87.9%) experienced emotional abuse, 107 (61.5%) experienced physical

abuse, 63 (36.2%) experienced extreme physical abuse, 57 (32.8%) experienced sexual abuse, and 66 (37.9%) experienced financial control. The frequencies and percentages of the participants' demographic characteristics are presented in Table 1.

Table 1

Frequencies and Percentages of Demographic Characteristics

Demographic	*N*	%
Gender		
Male	50	28.7
Female	124	71.3
Length of Violence		
1 year	16	9.2
1-5 years	54	31.0
5-10 years	46	26.4
10-15 years	27	15.5
>15 years	22	12.6
No response	9	5.2
Emotional Abuse		
Yes	153	87.9
No	21	12.1
Physical Abuse		
Yes	107	61.5
No	67	38.5
Extreme Physical		
Yes	63	36.2
No	111	63.8
Sexual Abuse		
Yes	57	32.8
No	117	67.2
Financial Control		
Yes	66	37.9
No	108	62.1

Descriptive statistics of continuous variables. Means and standard deviations for the four branches were calculated. For perceiving emotions, participants' scores ranged from 0.30 to 0.65, with $M = 0.58$ and $SD = 0.07$. For use of emotions, the

participants' scores ranged from 0.26 to 0.59, with $M = 0.49$ and $SD = 0.06$. For understanding emotions, participants' scores ranged from 0.25 to 0.62, with $M = 0.47$ and $SD = 0.07$. For managing emotions, participants' scores ranged from 0.16 to 0.52, with $M = 0.40$ and $SD = 0.07$. The descriptive statistics of the continuous variables are presented in Table 2.

Table 2

Descriptive Statistics of Continuous Variables

Continuous Variables	*Min.*	*Max.*	*M*	*SD*
Perceiving Emotions	0.30	0.65	0.58	0.07
Use of Emotions	0.26	0.59	0.49	0.06
Understanding Emotions	0.25	0.62	0.47	0.07
Managing Emotions	0.16	0.52	0.40	0.07

Research Question One

RQ1: Is the level of emotional intelligence of IPV victim-survivors different from the normative average EI levels?

H_{01}: There is no difference in the mean of EI levels in IPV victim-survivors versus the normative average EI levels regarding the ability to perceive emotion, use of emotion to facilitate thought, ability to understand emotions, and ability to manage emotions, as measured by the MSCEIT.

H_{a1}: There is a difference in the mean of EI levels in IPV victim-survivors versus the normative average EI levels regarding the ability to perceive emotion, use of emotion, and ability to understand and manage emotions, as measured by the MSCEIT.

To examine RQ1, one sample *t*-tests were conducted to determine if the observed means for participant scores on the four components of EI differ from expected means. The one sample *t*-test is the appropriate analysis to utilize when the researcher plans to compare the observed mean of a sample to the hypothesized or theoretical mean of the population (Morgan et al., 2012). In these analyses, the criterion variables are the four branches of interpersonal and intrapersonal EI as measured by the MSCEIT. The survey data was compared to the normative data for EI.

The results for the one sample *t*-test for perceiving emotions were statistically significant ($t(173) = 3.73$, $p < .001$), indicating that there is a significant difference in perceiving emotions between IPV victims and the normative average ($M = 0.56$). Examination of the means indicates that participants' perceived emotions were higher than the normative average (mean difference: 0.02). The results of the one sample *t*-test for understanding emotions were statistically significant ($t(173) = -29.55$, $p < .001$), indicating that there is a significant difference between understanding emotions of IPV victims and the normative average ($M = 0.63$). Examination of the means indicates that participants' understanding emotions were lower than the normative average (mean difference: -0.16).

The results of the one sample *t*-test for use thought were statistically significant ($t(173) = 4.16$, $p < .001$), indicating that there is a significant difference in use of emotions of IPV victims and the normative average ($M = 0.47$). Examination of the means indicates that participants' use of emotions were higher than the normative average (mean difference: 0.02). The results of the one-sample *t*-tests for managing

emotions were statistically significant (t (173) = -8.44, $p < .001$), from the normative average ($M = 0.44$). Examination of the means indicates that participants' managing emotions were lower than the normative average (mean difference: -0.04). Due to significance, the null hypothesis ($H_0 1$) for research question one was rejected. The findings of the one-sample *t*-tests are presented in Table 3.

Table 3

One Sample t-tests for Comparisons of Scaled Scores

Emotional Intelligence	Scaled Scores	Normative Data	Mean difference	*T*	*p*
	M	*M*			
Perceiving Emotions	0.58	0.56	0.02	3.73	<.001
Use of Emotions	0.49	0.47	0.02	4.16	<.001
Understanding	0.47	0.63	-0.16	-29.55	<.001
Managing Emotions	0.40	0.44	-0.04	-8.44	<.001

Research Question Two

RQ2: What are the differences in the EI levels between male and female IPV victim-survivors?

H_{02}: There is no difference in the mean of EI levels in male versus female IPV victim-survivors with respect to the four branches of interpersonal and intrapersonal factorial components; perceive, use, understand and management of emotions.

Ha_2: There is a difference in the mean of EI levels in male versus female IPV victim-survivors with respect to the four branches of interpersonal and

intrapersonal factorial components; perceive, use, understand and management of emotions.

To address research question two a multivariate analysis of variance (MANOVA) was conducted to examine differences in perceiving emotions, facilitation or use, understanding emotions, and managing emotions. A MANOVA is an appropriate statistical analysis when assessing for multiple continuous criterion variables between grouping variables (Tabachnick & Fidell, 2013). The continuous criterion variables in this analysis corresponded to perceiving emotions, use of emotions, understanding emotions, and managing emotions. The prediction variables in this analysis corresponded to gender (male vs. female).

Assumptions of a MANOVA. Before analysis, the assumptions of the MANOVA were assessed. Normality of the criterion variables was assessed with Kolmogorov-Smirnov (KS) tests. Box's M test was used to test the homogeneity of covariance assumption. Levene's test was used to test the homogeneity of variance assumption.

Normality assumption. Homogeneity of Covariance was assessed with Box's M test, and results were statistically significant at $\alpha = .001$ (Pallant, 2010); thus, the assumption was not met. Due to the significance of Box's M test, the Pillai's Trace test statistic was interpreted for the MANOVA.

Results of MANOVA. The results of the overall MANOVA were significant for gender, ($F (4, 169) = 2.71$, $p = .032$, partial $\eta 2 = .060$), suggesting that there are statistical

differences by gender. Due to the significance of the overall MANOVA the individual ANOVA's were further examined.

The result of the individual ANOVA was significant for perceiving emotions ($F(1, 172) = 6.27$, $p = .013$, partial $\eta 2 = .035$), suggesting that there are statistical differences in perceiving emotions by gender. Males ($M = 0.60$) had a higher average score of perceiving emotions in comparison to females ($M = 0.57$).

The result of the individual ANOVA was significant for the use of emotions ($F(1, 172) = 5.87$, $p = .016$, partial $\eta 2 = .033$), suggesting that there are statistical differences in use of emotions, by gender. Males ($M = 0.50$) had a higher average score of use of emotions in comparison to females ($M = 0.48$).

The result of the individual ANOVA was not significant for understanding emotions ($F(1, 172) = 1.22$, $p = .271$, partial $\eta 2 = .007$), suggesting that there are no statistical differences in understanding emotions by gender. The result of the individual ANOVA was not significant for managing emotions ($F(1, 172) = 1.45$, $p = .230$, partial $\eta 2 = .008$), suggesting that there are no statistical differences in managing emotions by gender. Due to the significance of the overall MANOVA, the null hypothesis ($H_0 2$) for research question two was rejected. Table 4 and Table 5 present the findings of the overall MANOVA and individual ANOVAs. Table 6 presents the descriptive statistics of the variables.

Table 4

MANOVA for EI Levels by Gender

Source	*Hypothesis df*	*Error df*	*F*	*p*	η^2
Gender	4	169	2.71	.032	.060

Table 5

ANOVAs for EI Levels by Gender

Source	Criterion variable	*df*	*SS*	*MS*	*F*	*p*	η^2
Gender	Perceiving Emotions	1	0.03	0.03	6.27	.013	.035
	Use Thought	1	0.02	0.02	5.87	.016	.033
	Understanding Emotions	1	0.01	0.01	1.22	.271	.007
	Managing Emotions	1	0.01	0.01	1.45	.230	.008
Error	Perceiving Emotions	172	0.87	0.01			
	Use Thought	172	0.57	0.00			
	Understanding Emotions	172	0.92	0.01			
	Managing Emotions	172	0.76	0.00			
Total	Perceiving Emotions	174	59.52				
	Use Thought	174	42.09				
	Understanding Emotions	174	38.67				
	Managing Emotions	174	28.27				

Table 6

Means and Standard Deviations EI Levels by Gender

Continuous Variables	Male		Female	
	M	*SD*	*M*	*SD*
Perceiving Emotions	0.60	0.06	0.57	0.08
Use Thought	0.50	0.04	0.48	0.06
Understanding Emotions	0.46	0.05	0.47	0.08
Managing Emotions	0.41	0.06	0.39	0.07

Research Question Three

Is there a relationship between EI levels of IPV victims and the length of the violent relationship?

H_{03}: There is no relationship between the mean of EI levels in IPV victim-survivors and the length of time a victim was in a violent relationship

H_{a3}: There is a relationship between the mean of EI levels in IPV victim-survivors and the length of time a victim is in a violent relationship.

A series of linear regressions were conducted to examine research question three to predict any relationship between the length of time a victim was in a violent relationship and mean of EI levels in IPV victim-survivors. A linear regression is an appropriate statistical analysis when assessing the relationship between a predictive variable and a continuous criterion variable (Tabachnick & Fidell, 2013). In these analyses, the predictor variable will correspond to the length of time a victim is in a violent relationship. The continuous criterion variables will correspond to the EI levels: perceiving emotions, use of thought, understanding emotions, and managing emotions.

Perceiving Emotions

Assumption testing. Before the main regression analysis, the assumptions of normality, and homoscedasticity were inspected. The normality assumption was tested by review of a normal P-P plot between the expected cumulative probability and the observed cumulative probability. The data closely followed the trend line. Thus the assumption of normality was met (see Figure 1). Homoscedasticity was tested by visual inspection of a residual scatterplot. The homoscedasticity assumption was met due to no

recurring pattern in the data (see Figure 2).

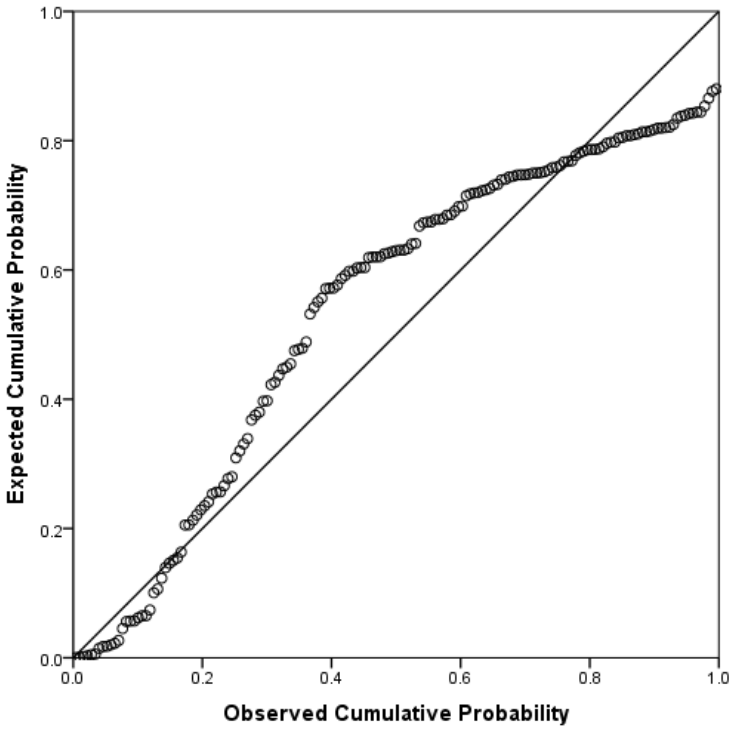

Figure 1. Normal P-P Plot for perceived emotions scores

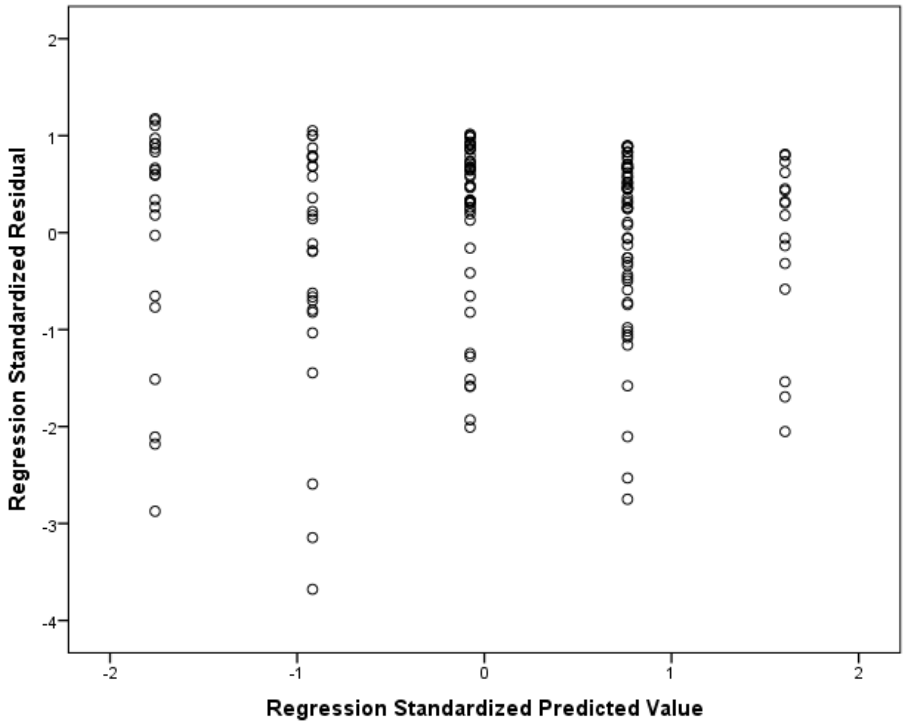

Figure 2. Standardized predicted values versus standardized residuals of regression on perceived emotions scores.

Results of the linear regression. The results of the overall model of the linear regression were not statistically significant, ($F(1, 163) = 2.07$, $p = .152$, $R2 = .013$), suggesting that collectively there is not a significant predictive relationship between the length of violence and perceived emotions scores. The R2 value indicates that approximately 1.3% of the variance in perceived emotions scores can be explained by the length of violence. Due to non-significance of the overall model, the individual predictor was not further examined. Table 7 presents the results of the linear regression.

Table 7

Linear Regression with Length of Violence Predicting Perceived Emotions Scores

Source	*B*	*SE*	B	*T*	*P*
Length of Violence	-0.01	0.01	-0.11	-1.44	.152

Note: $F(1, 163) = 2.07$, $p = .152$, $R^2 = .013$

Use of Emotions

Assumption testing. Before the main regression analysis, the assumptions of normality, and homoscedasticity were assessed. The normality assumption was tested by inspection of a normal P-P plot between the expected cumulative probability and the observed cumulative probability. The data closely followed the trend line; thus the assumption of normality was met (see Figure 3). Homoscedasticity was tested by visual inspection of a residual scatterplot. The homoscedasticity assumption was met due to there not being a recurring pattern in the data (see Figure 4).

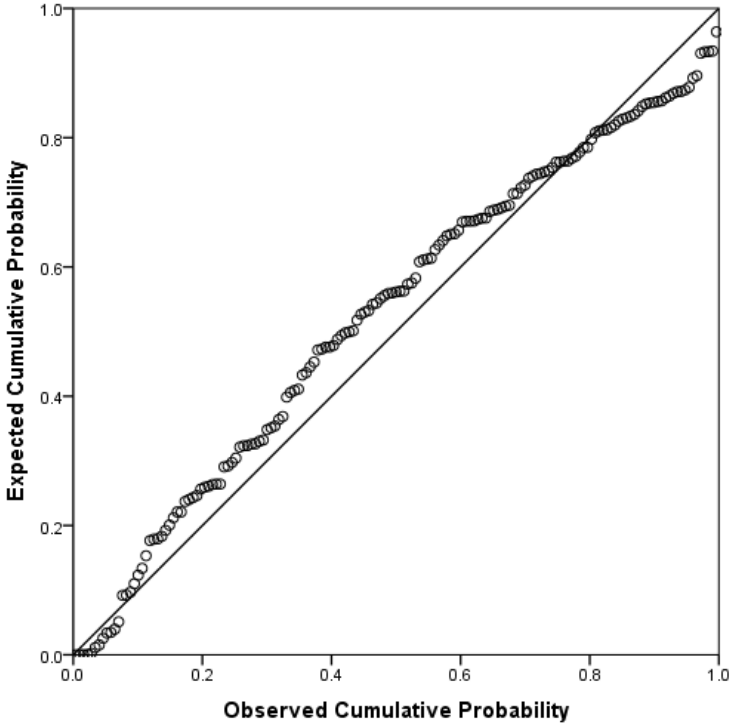

Figure 3. Normal P-P Plot for use of emotions thought scores.

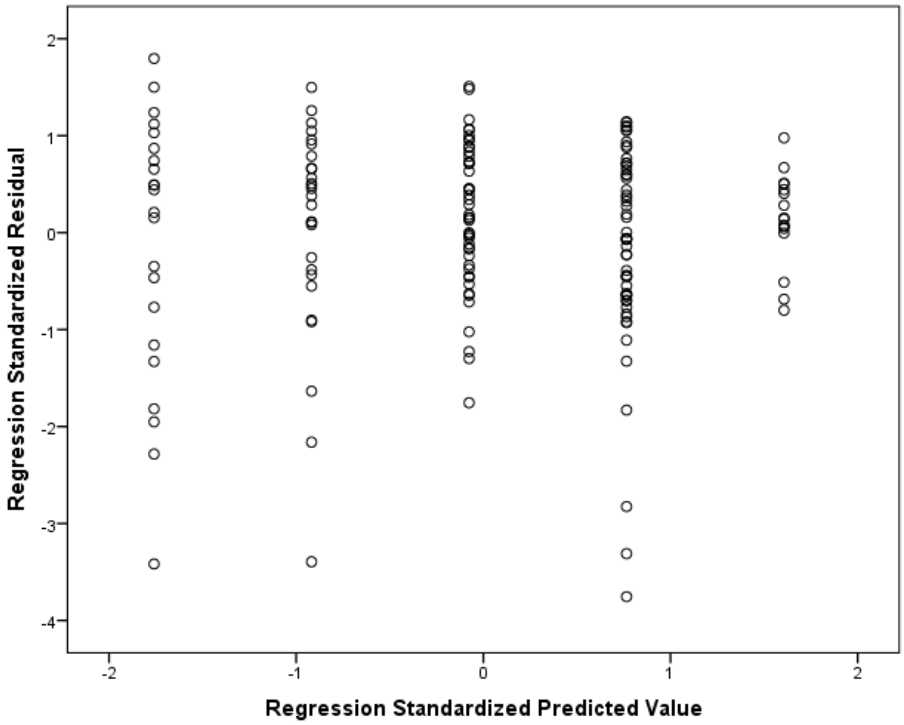

Figure 4. Standardized predicted values versus standardized residuals for the regression on Use of Emotions scores.

Results of the linear regression. The results of the overall model of the linear regression were not statistically significant, ($F(1, 163) = 0.01$, $p = .908$, $R^2 = .000$), suggesting that collectively there was not a significant predictive relationship between the length of violence and use of emotions scores. The R^2 value indicates that close to 0% of the variance in the use of emotions scores could be explained due to the length of violence. Due to non-significance of the overall model, the individual predictor was not further examined. Table 8 presents the results of the linear regression.

Table 8

Linear Regression with Length of Violence Predicting Use of Emotions Scores

Source	*B*	*SE*	B	*T*	*P*
Length of Violence	.00	.00	-.01	-0.12	.908

Note: ($F(1, 163) = 0.01$, $p = .908$, $R^2 = .000$)

Understanding Emotions

Assumption testing. Before the main regression analysis, the assumptions of normality, and homoscedasticity were assessed. The normality assumption was tested by inspection of a normal P-P plot between the expected cumulative probability and the observed cumulative probability. The data closely followed the trend line; thus the assumption of normality was met (see Figure 5). Homoscedasticity was tested by visual inspection of a residual scatterplot. The homoscedasticity assumption was not met due to there not being a recurring pattern in the data (see Figure 6).

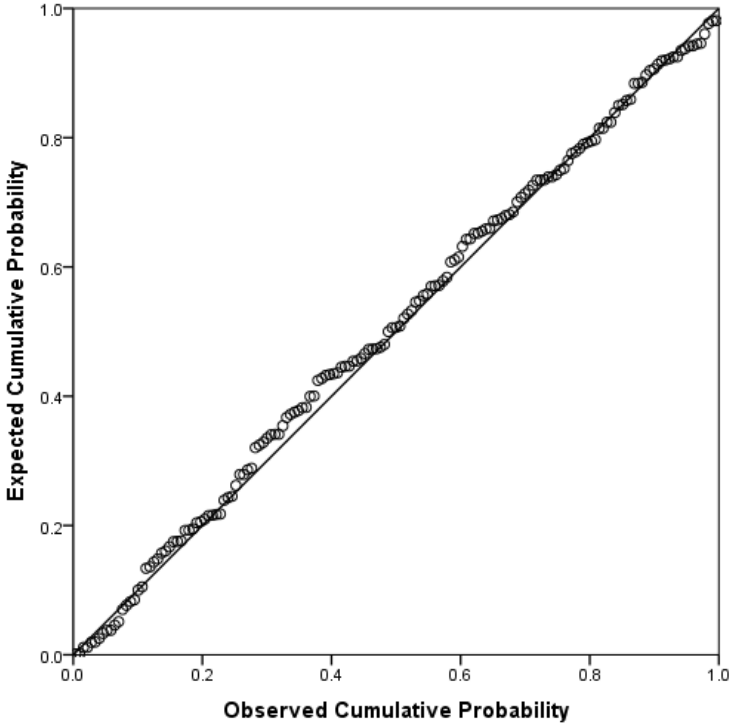

Figure 5. Normal P-P plot for understanding emotions scores.

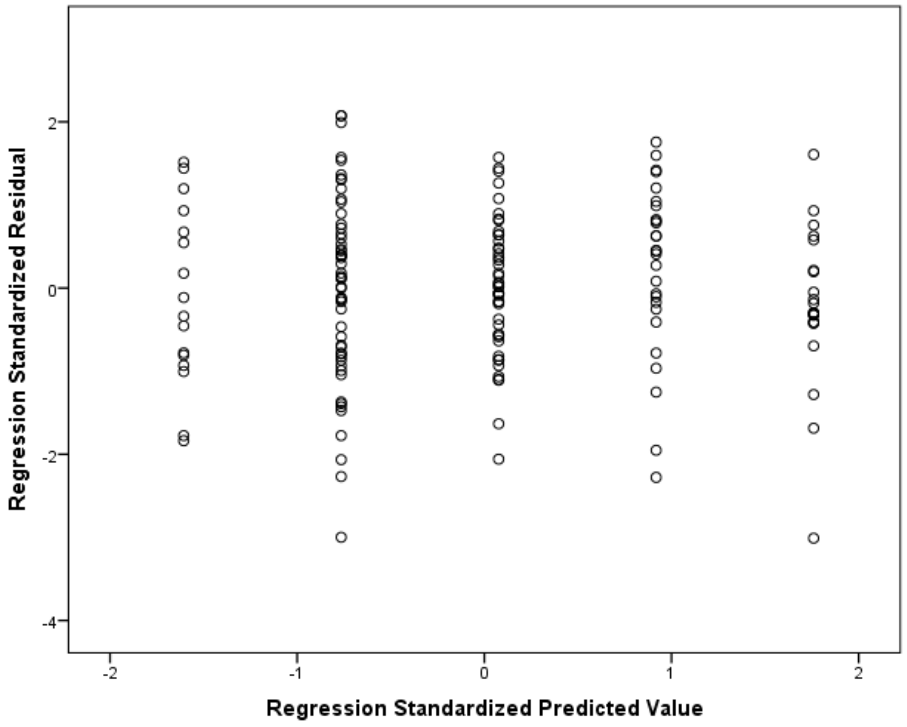

Figure 6. Standardized predicted values versus standardized residuals for the regression on understanding emotions scores.

Results of the linear regression. The results of the overall model of the linear regression were not statistically significant, ($F(1, 163) = 0.17$, $p = .680$, $R^2 = .001$), suggesting that collectively there was not a significant predictive relationship between the length of violence and understanding emotion scores. The R^2 value indicates that approximately 0.1% of the variance in understanding emotions scores can be explained the length of violence. Due to non-significance of the overall model, the individual predictor was not further examined. Table 9 presents the results of the linear regression.

Table 9

Linear Regression with Length of Violence Predicting Understanding Emotions Scores

Source	*B*	*SE*	B	*T*	*P*
Length of Violence	0.00	0.01	.03	0.41	.680

Note: $F(1, 163) = 0.11$, $p = .680$, $R^2 = .001$

Managing Emotions

Assumption testing. Before the main regression analysis, the assumptions of normality, and homoscedasticity were assessed. The normality assumption was tested by inspection of a normal P-P plot between the expected cumulative probability and the observed cumulative probability. The data closely followed the trend line; thus the assumption of normality was met (see Figure 7). Homoscedasticity was tested by visual inspection of a residual scatterplot. The homoscedasticity assumption was met due to there not being a recurring pattern in the data (see Figure 8).

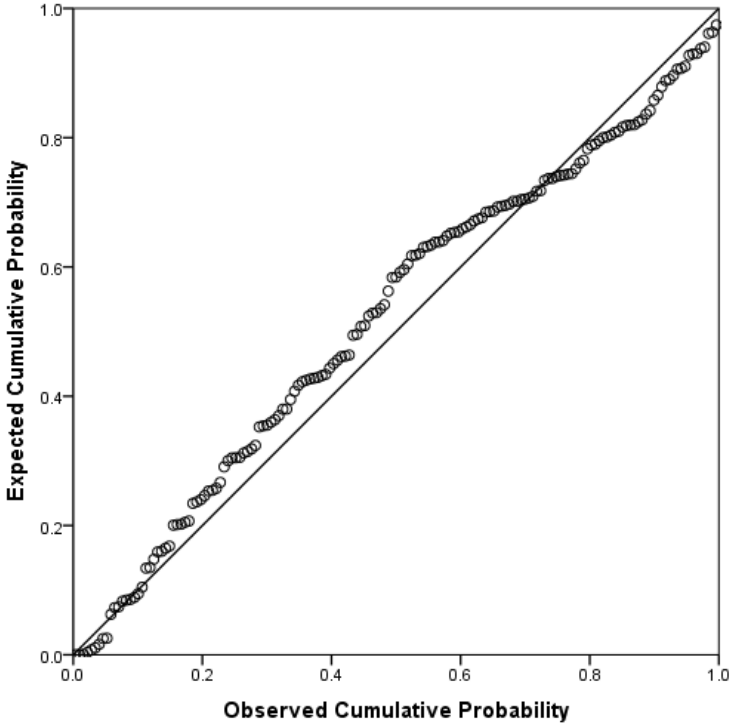

Figure 7. Normal P-P plot for managing emotions scores.

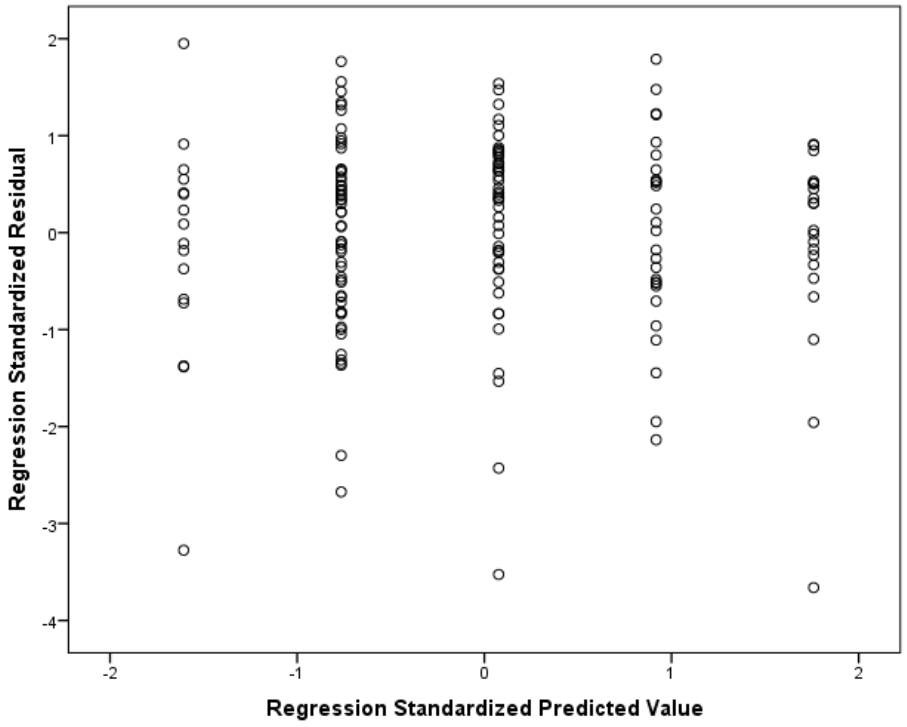

Figure 8. Standardized predicted values versus standardized residuals for the regression on managing emotions scores.

Results of the linear regression. The results of the overall model of the linear regression were not statistically significant, $F(1, 163) = 0.17$, $p = .681$, $R^2 = .001$, suggesting that collectively there was not a significant predictive relationship between length of violence and managing emotions scores. The R^2 value indicates that approximately 0.1% of the variance in managing emotions scores can be explained by the length of violence. Due to non-significance of the overall model, the individual predictor was not further examined. Table 10 presents the results of the linear regression.

Table 10

Linear Regression with Length of Violence Predicting Managing Emotions Scores

Source	*B*	*SE*	B	*T*	*P*
Length of Violence	0.00	0.00	0.03	0.41	.681

Note: $F(1, 163) = 0.17$, $p = .681$, $R^2 = .00$

Due to non-significance of the length of violence in the four-regression models and the null hypothesis ($H_0 3$) for research question 3 was not rejected. It is apparent that there is no significant predictive relationship between length of violence and levels of EI.

Research Question Four

RQ 4: Is there a relationship between the types of abuse and EI level in IPV victim-survivors?

H_{04}: There is no difference in the mean EI level in IPV victim-survivors based on the type of abuse experienced by the IPV victim (financial control, physical abuse, emotional terrorism, or sexual abuse).

H_{a4}: There is a difference in the mean EI level in IPV victim-survivors and the type of abuse experienced by the IPV victim (financial control, physical abuse, emotional terrorism, or sexual abuse).

To address research question four, a multivariate analysis of variance (MANOVA) was conducted to explore any possible differences in criterion variables, which include perceiving emotions, use of emotions, understanding emotions, and managing emotions. A MANOVA is an appropriate statistical analysis when assessing for multiple continuous criterion variables between grouping variables (Tabachnick & Fidell, 2013). The predictor grouping variables in this analysis

corresponded to emotional abuse, physical abuse, extreme physical abuse, financial control, and sexual abuse (yes vs. no).

Assumption of a MANOVA. Before analysis, the assumptions of the MANOVA were assessed. Normality of the criterion variables was assessed with Kolmogorov-Smirnov (KS) tests. Box's M test was used to test the homogeneity of covariance assumption. Levene's test was used to test the homogeneity of variance assumption.

Normality assumption. The results of the KS test were not significant for understanding emotions ($p = .200$), suggesting that the assumption was met. The results of the KS test were significant for perceiving emotions ($p < .001$), use of emotions ($p < .001$), and managing emotions ($p = .001$), suggesting that the assumption was not met. Although the normality assumption was not met for every variable, the MANOVA is robust for stringent assumptions when the sample size is large ($n > 50$) (Stevens, 2009).

Homogeneity of variance assumption. Homogeneity of variance was assessed with Levene's test and the results were not statistically significant for managing emotions ($p = .381$), perceiving emotions ($p = .103$), Use of Emotions ($p = .192$), and understanding emotions ($p = .115$); thus, the assumption was met for these variables. As a result, the statistical findings within the ANOVA must be interpreted with caution.

Results of MANOVA. The results of the overall MANOVA were not significant for emotional abuse ($F(4, 165) = 0.76$, $p = .555$, partial $\eta 2 = .018$), suggesting that there were not statistical differences by emotional abuse. The results of the overall MANOVA were not significant for physical abuse ($F(4, 165) = 1.38$, $p = .244$, partial $\eta 2 = .032$), suggesting that there were not statistical differences by physical abuse. The results of the

overall MANOVA were not significant for extreme physical abuse (F(4, 165) = 1.80, p = .132, partial η2 = .042), suggesting that there were not statistical differences by extreme physical abuse. The results of the overall MANOVA were not significant for sexual abuse (F(4, 165) = 2.09, p = .084, partial η2 = .048), suggesting that there were not statistical differences by sexual abuse. The results of the overall MANOVA were not significant for financial control (F(4, 165) = 1.02, p = .396, partial η2 = .024), suggesting that there were not statistical differences by financial control. Due to non-significance for each of the MANOVAs, the individual ANOVAs were not examined further, and the null hypothesis (H0¬4) was not rejected.

Table 11

MANOVA for EI Levels by Types of Abuse

Source	*Hypothesis df*	*Error df*	*F*	*p*	η^2
Emotional Abuse	4	165	0.76	.555	.018
Physical Abuse	4	165	1.38	.244	.032
Severe Physical Abuse	4	165	1.80	.132	.042
Sexual Abuse	4	165	2.09	.084	.048
Financial Control	4	165	1.02	.396	.024

Table 12

ANOVAs for EI Levels by Types of Abuse

Source	Criterion variable	*df*	*SS*	*MS*	*F*	*p*	η^2
Emotional Abuse	Perceiving Emotions	1	0.01	0.01	2.12	.147	.012
	Use of Emotions	1	0.00	0.00	0.17	.677	.001
	Understand Emotions	1	0.00	0.00	0.14	.712	.001
	Managing Emotions	1	1.26	1.26	0.00	.957	.000
Physical Abuse	Perceiving Emotions	1	0.02	0.02	4.09	.045	.024
	Use of Emotions	1	2.36	2.36	0.01	.933	.000
	Understand Emotions	1	7.08	7.08	0.01	.910	.000
	Managing Emotions	1	0.00	0.00	0.12	.725	.000
Severe Physical Abuse	Perceiving Emotions	1	0.00	0.00	0.13	.724	.001
	Use of Emotions	1	0.01	0.01	4.64	.033	.027
	Understand Emotions	1	0.00	0.00	0.21	.645	.001
	Managing Emotions	1	0.00	0.00	0.63	.429	.004
Sexual Abuse	Perceiving Emotions	1	0.00	0.00	0.30	.589	.002
	Use of Emotions	1	0.01	0.01	2.21	.139	.013
	Understand Emotions	1	0.00	0.00	0.26	.611	.002
	Managing Emotions	1	0.02	0.02	5.44	.021	.031
Financial Control	Perceiving Emotions	1	1.56	1.56	0.00	.956	.000
	Use of Emotions	1	0.01	0.01	2.02	.157	.012
	Understand Emotions	1	0.00	0.00	0.37	.543	.002
	Managing Emotions	1	0.00	0.00	0.93	.337	.005

Table 13

Means and Standard Deviations EI Levels by Types of Abuse

Continuous Variables		Yes		No	
		M	*SD*	*M*	*SD*
Emotional Abuse					
	Perceiving Emotions	0.58	0.07	0.60	0.05
	Use of Emotions	0.49	0.06	0.49	0.05
	Understanding Emotions	0.47	0.07	0.46	0.07
	Managing Emotions	0.40	0.07	0.40	0.05
Physical Abuse					
	Perceiving Emotions	0.57	0.08	0.60	0.61
	Use of Emotions	0.49	0.06	0.49	0.05
	Understanding Emotions	0.47	0.07	0.47	0.07
	Managing Emotions	0.40	0.07	0.40	0.06
Severe Physical Abuse					
	Perceiving Emotions	0.58	0.07	0.59	0.07
	Use of Emotions	0.47	0.07	0.50	0.05
	Understanding Emotions	0.47	0.08	0.46	0.07
	Managing Emotions	0.39	0.07	0.40	0.07
Sexual Abuse					
	Perceiving Emotions	0.57	0.06	0.58	0.08
	Use of Emotions	0.48	0.07	0.49	0.05
	Understanding Emotions	0.47	0.07	0.46	0.07
	Managing Emotions	0.47	0.07	0.41	0.06
Financial Control					
	Perceiving Emotions	0.58	0.07	0.58	0.07
	Use of Emotions	0.49	0.05	0.49	0.06
	Understanding Emotions	0.46	0.08	0.47	0.07
	Managing Emotions	0.40	0.07	0.40	0.07

Summary

The purpose of this study was to assess the branches of EI (perceiving, use, understanding, and management) in IPV victims and the types of abuse they experienced (emotional abuse, physical abuse, extreme physical abuse, financial control, sexual abuse). This chapter presents the findings of the data collected and analysis process. Descriptive statistics were first used to explore the trends of the sample. Frequencies and

percentages were used for nominal level variables. Means and standard deviations were presented for the continuous level variables.

In the examination of research question one, four one sample t-tests were conducted to determine if the observed means for participant scores on the four components of EI differ from expected means. Each one-sample t-test was statistically significant, suggesting that there were significant differences in the observed means and the expected means of perceiving emotions, Use of Emotions, understanding emotions, and managing emotions. Due to significance, the null hypothesis (H01) for research question one was rejected.

To address research question two, a multivariate analysis of variance (MANOVA) was conducted to examine differences in perceiving emotions, Use of Emotions, understanding emotions, and managing emotions by gender. The results of the overall MANOVA were significant for gender, suggesting that there were statistical differences by gender. The result of the individual ANOVAs were significant for perceiving emotions and use of thought, suggesting that there were statistical differences in perceiving emotions by gender. The null hypothesis (H02) for research question two was rejected.

A series of linear regressions were conducted to examine research question three. The predictive relationship between the years a victim is in a violent relationship and mean of EI levels in IPV victims. None of the linear regressions were statistically significant, and the null hypothesis (H03) for research question three was not rejected.

Research question four was evaluated by conducting a multivariate analysis of variance (MANOVA) was conducted to examine the differences in perceiving emotions, Use of Emotions, understanding emotions, and managing emotions between emotional abuse, physical abuse, extreme physical abuse, financial control, and sexual abuse. The overall findings of the MANOVAs were not statistically significant, and the null hypothesis (H04) for research question four was not rejected. Further discussion of statistical findings and hypothesis questions reviewed in Chapter five.

Chapter 5: Discussion, Conclusions, and Recommendations

Introduction

To deal with life events, a person must attempt to manage their problems (Foster et al., 2015). In an IPV relationship, an individual's ability to handle a problem may have a direct correlation with a person's emotional resources to act or cope effectively (Sullivan, Schroeder, Desreen, & Dixon, 2010). Examining an IPV victim-survivor's EI aids in identifying deficits and areas that may negatively impact emotional information, ultimately influencing an individual's thinking and behaviors. The literature review found research that compared EI and IPV victims but studied women in geographic areas in the United States. This study reached participants throughout the United States, both men and women victims.

Interpretation of Findings

The research questions explored in this study used data acquired from a self-report survey done by victim-survivors of IPV. The survey confirmed age and residency in the United States as meeting criteria for participants. It also asked about gender and the types of abuse experienced, and length of time each participant was in an abusive relationship. These predictor variables were tested against the four branches of EI in IPV victims, as measured by the MSCEIT, also completed online by participants.

Hypothesis One

For RQ1, one-sample t-tests were conducted to assess the EI branches. The branches include perceiving, use, understanding, and management of emotions). It was

found that EI levels in perceiving, use, and management of emotions in IPV victims were higher when compared to the normative population.

The result of the t-test for perceiving was shown statistically significant with a p-value of < .001 and the normative average of M = 0.56 and a mean difference of 0.02. Use and management of emotions had statistical significance. The use of emotions demonstrated a p-value of < .001 and mean difference of 0.02, while management of emotions resulted in a p-value of < .001 and mean difference of 0.04. The t-tests for understanding emotions was statistically significant with a p-value of < .001 and the normative average of M = 0.63. The mean difference for the understanding of emotions was lower than the normative average, with a difference of -0.16 (see Table 3). Due to the overall significance, the null hypothesis (H01) for RQ1 was rejected.

Part of perception is the self-awareness of one's feelings as they occur. Emotional perception is a critical branch of EI (Ciarrochi et al., 2000). When associated with the use or management branch of EI, if an IPV victim does not identify their own emotions correctly, they are unlikely to constructively use their feelings and guide to decisions that are healthy. The skill to understand emotions relates to the cause of emotions and whether a personal need is met or not met. Changing emotions leads to behavioral changes. When needs are not met, behaviors can be damaging, particularly for an IPV victim.

Hypothesis Two

RQ2 examined possible differences in EI branch levels in IPV victims based on gender. A MANOVA was conducted to explore the four branches of EI as the continuous

criterion variables and gender as the predictor variable. The MANOVA has advantages when measuring several criterion variables and can guard against Type I errors that can occur when conducting multiple individual ANOVAs. A Pillai's Trace test was used for the interpretation of the MANOVA, as the Box M's homogeneity of covariance was significant at $\alpha = .001$, and the assumption was not met. With Levene's test, the homogeneity of variance was found significant for managing emotions, resulting in the assumption being met. Levene's test for perceiving ($p = .006$), use ($p = .017$), and understanding ($p = .006$) and the assumption for these three branches were not met.

The MANOVA results were found significant; therefore, individual ANOVAs were explored, showing a statistical difference in perceiving based on gender, with men having a slightly higher average score ($M = 0.60$) in this branch of EI compared to females ($M = 0.57$). The ANOVA for use of emotions found male scores higher ($M = 0.50$, Table 5) than females ($M = 0.48$, Table 4). The ANOVAs for both understanding and management of emotions found no significant differences between male and female IPV victims. However, because the MANOVA demonstrated significance, the null hypothesis (H02) was rejected (see Table 6).

Hypothesis Three

RQ3 asked if there was a relationship between the mean of EI levels in victims and length of time a victim was in their violent relationship. By conducting linear regressions to predict any relationship, a normal P-P plot was examined between the cumulative probability and observed cumulative probability, meeting the assumption of normality. The homoscedasticity assumption was also met, as there were no recurring

patterns in the data (See Figure 2). Perceiving emotions and length of time in a violent relationship was shown to be non-significant with a 1.3% R2 value (approximate) variance in scores (See Table 7).

In continuing to explore RQ3, the normality and homoscedasticity were assessed for the use of emotions. By evaluating the P-P plot, the expected and observed cumulative probability and homoscedasticity were tested and examination of a residual scatterplot. The normality was met for both (see Figure 4). Results from examining the linear regression model for length of time in the violent relationship showed non-significance of the model (see Table 8).

For understanding emotions, an assumption testing of normality and homoscedasticity were evaluated with a P-P plot and scatterplot respectively. The normative assumption was met (see Figure 5), and homoscedasticity was not met, as there was not a recurring pattern in the data (see Figure 8). The linear regression R2 value shows a 0.1% variance in understanding emotion scoring. There was no significance in the understanding of emotions (see Table 9).

With the final EI branch, management of emotions, the P-P plot followed the trend line and the assumption of normality was met. The scatterplot inspection for homoscedasticity assumption was met due to no recurring pattern of the data (See Figures 7 and 8). Upon conducting the linear regression, the R2 value showed about 0.1% of the variance in the management of emotion scores could be explained by the length of violence. Overall, there is no significance to the concept of EI levels being influenced by

the length of time in a violent relationship (See Table 10). Therefore, the null hypothesis (H03) for research question three was not rejected.

Hypothesis Four

The final research question regarding whether the types of abuse experienced by an IPV victim could influence EI levels was examined by conducting a MANOVA. The normality of the criterion variables was evaluated through a KS test and a Box's M test to review the homogeneity of covariance assumption. A Levene's test was used to check the homogeneity results, along with the homogeneity of variance and covariance assumptions. The MANOVA results for emotional abuse ($p = .555$), physical abuse ($p = .244$), extreme physical abuse ($p = .132$), and financial control ($p = .396$) were not significant and the null hypothesis (H04) was not rejected (see Table 11).

Van Rooy, & Viswesvaran (2004) in a meta-analysis of 69 studies, found EI Emotional intelligence measures have an operational validity for predicting performance in employment, academic, and life settings. Mayer et al., (2004) posited that two of the four branches of EI, perceiving and use of emotions, are experiential, the authors also posited that these branches are related more strongly to feelings. The use of personal emotions motivates a person's response to stressors. Understanding and management branches of EI were labeled strategic (Mayer, Salovey & Caruso, 2002). Management is described as focusing on integrating reason and emotion to make decisions effectively. Understanding consists of recognizing how an individual's behaviors change over time due to emotions. While correlated, each branch works discretely and is recognized as ability based EI.

The EI theory is that perception and use of emotions are more closely linked to feelings and emotions and interpreted by external stimuli (Mayer et al., 2004). Testing for the research presented here found an overall higher level of EI levels for perception and use than the normative population. This is further suggested that once emotions are elicited, response behaviors are maintained through past patterns (or experiences) that have proved beneficial in like situations (Damasio & Carvalho, 2013). Use of emotions is influenced by thinking, which is influenced by a person's environment (Rivers, Salovey, Bracket, & Mayer, 2007). Therefore, if it was advantageous for an IPV victim to respond to their abuser in a manner that calmed the abuser and stopped the abuse; therefore, in future situations, the victim may respond in the same manner.

For understanding and management branches of EI in this study, IPV victim-survivors were found to have lower EI levels than the normative population. The understanding branch of EI covers emotional fluctuations. Understanding emotional subtleties assist in anticipating emotional reactions in self and others, subsequently managing emotions more effectively during stressful encounters. Consequently, a victim may attempt to manage the emotional agitation of the abuser in a way that is quite possibly futile. Lopes et al. (2004), conducted research using the MSCEIT instrument on university students. The study found that students with higher levels of EI in the managing branch of EI demonstrated an increased quality of socialization when accessed by two friends. The branch helps to anticipate emotional reactions and subsequently manage emotions more effectively when conflict arises. The four subscales of EI work synergistically, some with less impact on adaptation to a given social situation.

Limitations of the Study

The study was completely anonymous and accessed online to provide complete privacy for victims. Although the online instructions were explicit, some participants may have found the need to enter two different websites confusing and others may not have understood how to answer certain questions, resulting in a loss of participants electing not to start the test, opting out of the study or giving imprecise information.

In hopes to find either accept or reject the hypothesis without bias, this study was analyzed through data comparisons. However, the nature of the topic is on human behavior and could have been investigated through a mixed model method to ensure participant nuances were fully addressed. In addition, confirmation from judicial or healthcare sources of self-reported information was available.

Statistics show that adolescent age groups have the fastest growing incidences of IPV; however, for this study, the age group was not used due to ethical concerns and limited logistics. Participants that did volunteer were required to be removed from their abusive relationship for a minimal of six months and could have created higher scores in one or more branches of EI than if the participants were still in an abusive relationship.

The study showed male victims scored higher EI levels in use, perceiving and understanding than female participants; however, it does not take into consideration possible gender differences in brain connection influences. Ingalhalikar, et al (2013) report that overall, male brains are designed to facilitate connections between perception and organized action, while females enable transmission between analytical and intuitive processing methods. Both may affect EI levels. In addition, psychological differences in

emotional expression based on social and cultural influences could, in part, impact EI level differences in genders.

Recommendations for Future Research

The study is one of the first in the literature assessing emotional intelligence (EI) in both adult men and women living throughout the United States, assessing the four branches of an abilities based EI test. In the study, I explored whether EI levels differed when compared to the normative population and intimate partner violence (IPV). Also, data was collected to examine EI differences in gender, type(s) of abuse experienced, and length of time in the abusive relationship. Future studies should report age, race, religion, sexual identity, and education level of participants. Educational levels have shown to have an impact on the number of times a person attempts to leave before finally ending the relationship altogether and therefore, could impact EI levels (Tolle, 2013). Religion often has an impact on the choice to leave an abusive relationship or not. Sexual identity may provide new insight into EI levels based on sexuality and whether or not levels contribute to IPV victimization.

A future study could use a mixed model to include qualitative to provide personal information during one-on-one interviews. This may assist in delivering a deeper knowledge of the victim and their circumstance (i.e., familial support, economic level/ability) or other nuances pertinent to the impact on EI.

In 2015, Vagi, O'Malley, Basile, and Vivolo-Kantor found that high school students report partner abuse. Nearly 20.9% of females and 13.4% males stated that they were victims of physical and sexual abuse. A future study including teens could provide

data to determine EI levels in youth while simultaneously providing an open dialogue on the topic, educating on preventive strategies, and offering personal assessments to create a safe relationship.

Implications for Positive Social Change

A national study found that 48% of IPV, stalking, and rape victims were provided interim housing (Breiding, Chen & Black, 2014). Most IPV issues are allegedly resolved through legal means to moderately penalize the abuser and temporarily provide safety for a victim. According to Chernis (2001), EI represents a blend of both emotional abilities and cognition. The four branches of EI work synergistically. When one branch shows deficits, the others do not work together to provide the best direction and therefore, outcome. Measuring EI could provide an adjunct behavior option for healthcare organizations. Physician practices, mental health providers, and IPV victim treatment centers could use EI assessment as a source for evaluating EI needs for long-term care. This assessment could ultimately detail EI levels, thus, identifying specific areas to education and enhance individuals, while addressing other health needs.

EI awareness and training may be a benefit in reducing recidivism rates of IPV. A study using a control group provided EI training for a few hours, while another group did not. Upon initial review and again with a six-month retest, the control showed a persistent increase in EI level abilities of those receiving EI training (Nelis, Quoidbach, Mikolajczak, Hansenne, 2009).

Evaluation of EI and education can aid in IPV victims making more informed decisions to create a personal quality of life. Two studies reported by Nellis et al., (2009)

showed an increase in follow-up reports an after education in EI. Participants in the intervention group showed an increase in life satisfaction, fewer somatic complaints, an increase in social interaction and emotional stability. Any area of EI assessed lower than needed, may hinder one's determination to make essential changes. The use of this research could ensure that those who are survivors of IPV are provided personalized information and methods to develop strategies for life choices and empowerment outside of their abusive relationship.

Further, with the goal of IPV prevention, concerted efforts are needed to reduce first-time incidences of IPV through by influencing changes in the social nature of IPV. High school and college campus life skill, healthcare, or other classrooms can provide a baseline for teens and young adults; thus, offering a venue to educate on a life skill through assessment and open dialogue about IPV.

Conclusions

Educational campaigns and the rise of IPV treatment and refuge centers has helped victim awareness and lessened public scrutiny of asking why victims stay. Early views of IPV blamed the victim for abuse causing most to endure the abuse or leave facing social apathy. In the 1990s, the Duluth Model program focused accountability for IPV on the perpetrator. The program was designed for use as a comprehensive community and government response to aid victims and hold perpetrators accountable. Unfortunately, the pervasiveness of IPV continues. Preventive methods of intervention are touted as the best option to reduce initial and recidivism rates of victim-survivors of IPV. Emotional intelligence levels work synergistically and provide the platform for self-

respect, in spite of past failings. Emotional intelligence abilities are related to emotional strength, confidence and self-worth and a belief in one's overall capabilities. Emotional intelligence is found to have a profound impact on the long-term success in life above intelligence quotient (IQ). With the examination of personal EI levels, a victim-survivor will have practical data on areas of emotional concern(s) that need to be changed to provide healthier intra and inter-relationships. As an adjunct to other treatment or alone, testing victim-survivor EI levels could aid in reducing the current 85% recidivism rates. Also, prevention for the fastest growing age group of first-time victims, ages 18-24 could benefit from EI testing through a curriculum in high schools and colleges. Providing a venue for open discussions on the social issue of IPV, give insight into what constitutes abuse, and offer a life skills tool to reduce the insidiousness of IPV.

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Appendix A: MSCEIT Scores

MSCEIT TOTAL

EXPERIENTIAL		STRATEGIC	
PERCEIVING	FACILITATING	UNDERSTANDING	MANAGING
FACES	SENSATIONS	BLENDS	EMOTION MGT
PICTURES	FACILITATION	CHANGES	EMOTIONAL RELATIONS

MSCEIT Instrument designed with a mean ($\mu = 100$); Standard Deviation = 15

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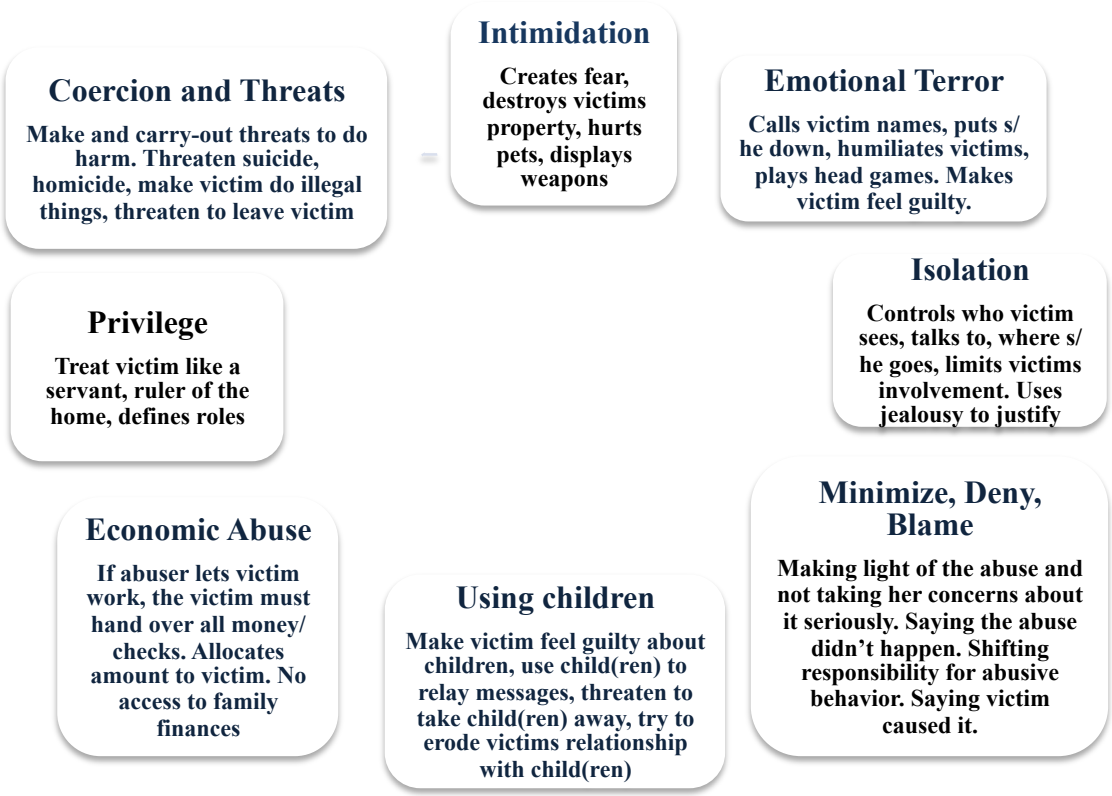
Appendix B: Power and Control Cycle



Power and Control Cycle. Adapted from the Domestic Abuse Intervention Project, Duluth, MN

Appendix C: Agency Invitation Flyer

Are you a survivor of intimate partner violence (IPV)? Would you be willing to volunteer to be part of an anonymous research? The study can be done 100% online from anywhere. You are invited to participate in a study if you are: [1]18 years and older, [2]Out of an abusive romantic relationship and, [3]Live in the United States.

This is an unpaid, online, two-part (short survey, followed by questionnaire), confidential study that will take approximately 30 minutes and conducted by Terri Ratliff, a Ph.D. candidate to complete a dissertation.

Study description

Intimate partner violence (IPV) is physical, sexual, economical abuse, psychological, and stalking, or any combination, of violence that a perpetrator may use to gain or retain control of their intimate partner. By exploring emotions IPV victims versus non-victims, it may provide the platform for an adjunct treatment specific to a survivors' emotional needs.

THERE IS A SURVEY followed by a QUESTIONNAIRE:

Type this link into your search engine: https://www.surveymonkey.com/r/68PJNNG

Follow instructions at the bottom of the Survey to open the QUESTIONNAIRE

(This takes about 30 minutes to complete) at: www.mhsassessments.com

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USE TEAR-OFF BELOW TO ACCESS

1st Access:
https://www.surveymonkey.com/r/68PJNNG
- Complete short survey
2nd, Go to: http://www.mhsassessments.com
TYPE IN CODE: 32606-001-2 –
- PASSWORD: partnerviolence

1st Access:
https://www.surveymonkey.com/r/68PJNNG
- Complete short survey
2nd, Go to: http://www.mhsassessments.com
TYPE IN CODE: 32606-001-2 –
- PASSWORD: partnerviolence

1st Access:
https://www.surveymonkey.com/r/68PJNNG
- Complete short survey
2nd, Go to: http://www.mhsassessments.com
TYPE IN CODE: 32606-001-2 –
- PASSWORD: partnerviolence

1st Access:
https://www.surveymonkey.com/r/68PJNNG
- Complete short survey
2nd, Go to: http://www.mhsassessments.com
TYPE IN CODE: 32606-001-2 –
- PASSWORD: partnerviolence

Appendix D: Invitation List

Forwarded Via Fax or Email to Contact Information Available

Arizona Coalition Against Domestic Violence
2800 N. Central Ave., Suite 1570
Phoenix, AZ 85004

Arkansas Coalition Against Domestic Violence
1401 W. Capitol Avenue, Suite 170
Little Rock, AR 72201

California Partnership to End Domestic Violence
P. O. Box 1798
Sacramento, CA 95812

Colorado Coalition Against Domestic Violence
1120 Lincoln St, #900
Denver, CO 80203
Office: (303) 831-9632

Delaware Coalition Against Domestic Violence
100 W. 10th Street, Suite 903
Wilmington, DE 19801

Georgia Coalition Against Domestic Violence
114 New Street, Suite B
Decatur, GA 30030
Hotline: 1 (800) 334-2836

Hawaii State Coalition Against Domestic Violence
810 Richards Street, Suite 960
Honolulu, HI 96813

Idaho Coalition Against Sexual & Domestic Violence
300 E. Mallard Drive, Suite 130
Boise, ID 83706

Indiana Coalition Against Domestic Violence
1915 W. 18th Street, Suite B
Indianapolis, IN 46202

Kansas Coalition against Sexual & Domestic Violence
634 SW Harrison Street
Topeka, KS 66603

Kentucky Domestic Violence Association
111 Darby Shire Circle
Frankfort, KY 40601

Michigan Coalition To End Domestic & Sexual Violence
3893 Okemos Road, Suite B2
Okemos, MI 48864

Minnesota Coalition for Battered Women
60 Plato Blvd. E, Suite 130
Saint Paul, MN 55107

Mississippi Coalition Against Domestic Violence
P.O. Box 4703
Jackson, MS 39296

Oklahoma Coalition Against Domestic Violence & Sexual Assault
3815 N. Santa Fe Ave., Suite 124
Oklahoma City, OK 73118

Oregon Coalition Against Domestic & Sexual Violence
1737 NE Alberta Street, Suite 205
Portland, OR 97211

Tennessee Coalition To End Domestic & Sexual Violence
2 International Plaza Dr. Suite 425 Nashville, TN 37217

Texas Council on Family Violence
P.O. Box 163865
Austin, TX 78716

Utah Domestic Violence Coalition
205 North 400 West,
Salt Lake City, UT 84103

Vermont Network Against Domestic & Sexual Violence
P.O. Box 405
Montpelier, VT 05601
Hotline: 1 (800) 228-7395

Virginia Sexual & Domestic Violence Action Alliance
5008 Monument Avenue, Suite A
Richmond, VA 23230

Washington State Coalition Against Domestic Violence
711 Capitol Way, Suite 702
Olympia, WA 98501

MALE ADVOCATE GROUPS

Stop Abuse For Everyone
4939 Calloway Drive
Suite 104
Bakersfield, CA 93312

Forum link to post research
At: Stop abuse for everyone
http://www.stopabuseforeveryone.org/kunena/index.html

Valley Oasis Shelter
P.O. Box 2980
Lancaster, CA 93539
Changing Courses
3355 Myrtle Ave # 265,
North Highlands, CA 95660

Life Practice Group
Domestic Abuse Center
3650 Auburn Blvd.
Sacramento, CA 95821

Partnership Against Domestic Violence
1475 Peachtree St. Suite 400
Atlanta, GA 30309

GLBTQ Domestic Violence Project
955 Massachusetts Avenue, PMB 131

Cambridge, MA 02139

Emergency Support Shelter
P.O. Box 877
Kelso WA 98626

Male Domestic Violence Advocate
berthoff@comcast.net

SAFE House
921 American Pacific Drive, Suite 300
Henderson, NV 89014

SAFE House
921 American Pacific Dr., Suite 300
Henderson, NV 89014

FACE
PO Box 3302
Cherry Hill NJ 08034

National Coalition For Men
932 C. Street, Suite B
San Diego, CA 91201

Appendix E: Survey Monkey

If you begin to feel overwhelmed, emotionally distressed and feel you need someone to talk to or other intervention at any time during the completion of this form or participation in the study, please use the National Domestic Violence Hotline: 1-800-799-7233.

1. **Indicate your gender.**

   Male _____ Female _____ Prefer not to answer: _____

   If female, are you pregnant

2. **Do you live in the United States?**

   Yes _____ No _____ Prefer not to answer: _____

   If no, please* discontinu*e the survey. Only those living within the U.S. are eligible to participate in this particular study.

3. **Are you 18 years or older?**

   Yes _____ No _____ Prefer not to answer: _____

   If no, please* discontinue *the survey. Only those 18 years or older are eligible to participate in this particular study.

4. **Indicate the number of years you were in an abusive relationship:**

   0 - 1 years _____
   5 - 10 years _____
   10-15 years _____
   >15-20 years _____

   Prefer not to answer this question: _____

   I am opting out of this research: _____

5. **Check the type of abuse you have experience. (Check all that apply)**

   Emotional terrorism (non-physical aggression). Yelling, punching walls or doors, verbal intimidation, limited access to friends/family without partner's consent.

Yes _____

Physical abuse, causing bruising

Yes _____

Severe abuse, causing broken bones, black eye, use of weapons.

Yes _____

Sexual abuse. For example - forced to have sex without your consent or in a manner that caused pain or physical/emotional harm.

Yes _____

Financial control. For example - you are not allowed access to household money, required to hand over paycheck to your partner or made to ask for money.

Yes _____

Prefer not to answer this question: _____

I prefer to opt out of this survey: _____

If you have completed the entire and submitted your responses, you will be provided a link to the testing site.

Thank you for your participation in this research!

Appendix F: MSCEIT Student Use and Discount Approval Letter

Hello,

You have been approved for a Student Research Discount on the MSCEIT. This discount grants you 30% off of related product orders over $50 (before shipping) as well as access to scored datasets for a fee of $6 per administration online. Please call client services at 1.800.456.3003 to place your order.

Conditions

1) Your discount expires one year from today. If you require a discount beyond the expiry date please re-apply at that point.
2) Please bear in mind that scored datasets are to be used for the collection of data only and cannot be used to provide feedback to respondents. If you are intending to provide feedback please ensure that you order one of our available reports. Your 30% discount will apply to the report cost.
3) It is mandatory that you are in possession of the Users/Technical Manual while making use of this assessment. Please ensure that you order a copy if you do not already have one.
4) Your research is important to us, as agreed upon in your application, please remember to send a report of your results to: researchsummaries@mhs.com following the completion of your study.

Thank you, and good luck with your research,

Shawna Ortiz, *Customer Service Representative*
MULTI-HEALTH SYSTEMS INC. (MHS)
In Canada: 1-800-268-6011 Address: 3770 Victoria Park Ave. Toronto, Ont. M2H 3M6
In U.S.: 1-800-456-3003 Address: P.O. Box 950 North Tonawanda, NY 14120-0950
International: 647-557-9732
Fax: 647-557-9732 Toll Free in Canada & U.S.: 1-888-540-4484
Website: www.mhs.com
Please send all US courier deliveries to 60 Industrial Parkway, Suite 706, Cheektowaga, NY, 14227 or our Canadian address.