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Examining the Relationship Between Emotional Intelligence and Interpersonal Forgiveness Among Internet Users

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This is to certify that the doctoral dissertation by

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Walden University
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Abstract

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Noelle Z. Lowry

MS, Walden University, 2013

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Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

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Abstract

Emotional Intelligence (EI) and forgiveness both involve interpreting emotional content. Empirical study of a relationship between these two constructs is lacking. This is a problem as many psychological studies infer a relationship between these two constructs. The purposes of this study were to explore whether EI and forgiveness are correlated and to identify whether predictor variables (empathy, life satisfaction, emotional management, and emotional understanding) contribute to the probability of forgiveness within an interpersonal relationship. A quantitative, nonexperimental research design, based on the theory of mind, was used to answer two research questions: Does a correlational relationship exist between the two EI domains (emotional understanding and emotional management ability) and the three forgiveness domains (affective, behavioral, and cognitive)? And do empathy, life satisfaction, emotional management ability, and emotional understanding predict forgiveness? The sampling strategy involved a convenience sample of Internet users. There were a total of 142 participants. Statistical analysis of data were carried out on the 95 participants whom completed all of the survey items. Results of a Pearson *r* correlational analysis show no significant relationship between study variables was detected. A multiple regression analysis was planned but not implemented. EI ability directly impacting the process of forgiveness and the process of forgiveness directly impacting EI was unsubstantiated. Social change implications involve consideration of situations and conflict resolution rather than a specific emphasis on EI ability or ability to forgive. Doing so may promote research fostering positive mental health outcomes.

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Dedication

There is no way I could have begun, much less completed this project without the Lord's calling, example, and ongoing help. I dedicate this paper and my doctoral experience completely to the Lord.

To my husband, Keith, of 22 years: I appreciate you encouraging me to start down this road 5 years ago and follow this dream. I am convinced there is no way either of us could have known the twists and turns or where the road would take us. Thank you for the family dinners, talks, late-night back rubs, and taking on even more responsibility at home so that I could continue and complete this. I love you.

To our five children: Tommy, Libby, Molly, Joey, and Sophie. Thank you for your hugs, kisses, encouragement, all the extra chores, and most of all your understanding, as you have spent the last 5 years with "mom and her laptop." You are my five greatest blessings, and I am so proud of each of you. I enjoy being your mom.

To my friends and especially my extended family: Chad Zuleger, Courtney Zuleger, and Bob Clore, thank you for all of your support in this process. A special thank you to my friend, Sherri Armistead, for flying with me to Minnesota. I am so glad we got to do school together. It would not have been nearly as fun without you.

This is written in memory of my mother, Latane James Clore, who died while I was working on my degree. You may not be sitting in the audience as I walk across the stage to receive my diploma, but I know you are watching with a huge smile on your beautiful face.

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A special thank-you to Dr. Magy Martin and other Walden faculty, especially my professors. I will continue to value my time spent here as a student.

To the participants of my research project, thank you for your help. Your contribution has allowed me an unique opportunity to learn and share more of the processes involved in forgiveness and emotional intelligence.

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Chapter 1: Introduction to the Study

The processes of forgiveness and emotional intelligence (EI) have many commonalities. Emotionality, an individual's reaction to emotional stimulus, involves personal capacity and emotional awareness, which are evident in both EI and forgiveness. Concepts of empathy, perception, discernment, choice, and acceptance are also embedded in both of these processes (Hodgson & Wertheim, 2007; Meneses & Greenberg, 2014). Emotionality is an important life proficiency; it involves the deciphering of emotional content, influences personal behavior, and provides a basis and incentive for decision making (Mier, Lis, Neuthe, Sauer, Esslinger, Gallhofer, & Kirsch, 2010; Rey & Extremera, 2014). Though there are many commonalities between these processes, a research base including the constructs together is lacking.

The significance of this study was based on previous assertions that the emotional, cognitive processes of EI are teachable (Goleman, 1995; Mayer, Salovey, & Caruso, 2008). If a correlational relationship between EI and forgiveness be established, emotional cognitive processes of forgiveness may be likewise taught and learned. Researchers have found that the emotional and cognitive processes of EI are teachable (Goleman, 1995; Mayer, Salovey, & Caruso, 2008). Potential positive implications of this research include benefits such as heightened personal insightfulness, conflict resolution, fostering of quality relationships, increased life satisfaction, and enhanced overall well-being. Study findings may encourage researchers, educators, and practitioners to emphasize and value the teaching and practicing of forgiveness and EI in additional contexts and milieus.

This chapter contains an overview entailing a potential correlational relationship between ability EI and forgiveness and the contribution of potential predictor variables (empathy, life satisfaction, emotional management ability, emotional understanding) of forgiveness. Provided is a preview of research to include background information, problem statement, research questions, hypotheses, theoretical foundation, nature, definitions, scope and delimitations, limitations, and significance of the study.

Background of the Study

Researchers in the fields of philosophy and theology acknowledge forgiveness as a concept (Enright, 1996; McCullough & Worthington, 1994). Many of them view the concept of forgiveness to be a theological construct. Other researchers have examined forgiveness from an evolutionary standpoint, viewing it as an instinct with interpersonal and societal purpose (McCullough, 2008). Trait forgiveness is conceptualized as emerging from the relational adaptation of society over time and being a basis for self-preservation (McCullough, 2008). Researchers stress the presence and importance of empathy in the conceptualizations of trait and state forgiveness (Enright, 1996; Hodgson & Wertheim, 2007; Meneses & Greenberg, 2014; Wade, Hoyt, Kidwell, & Worthington, 2014). Forgiveness is a new concept to the field of psychology and is undergoing development. These are some of the conceptualizations basic to the construct of forgiveness.

Enright's (1996) work contributed to the establishment of forgiveness as a psychological construct. According to Enright (1996), forgiveness is a state encompassing three parts: forgiving others, receiving forgiveness from others, and

forgiving oneself. McCullough and Worthington (1994) expound on forgiveness occurring in interpersonal relationships and on an intrapersonal level. Forgiveness within the context of a relationship requires the unilateral and bilateral processing of emotions involving reciprocal consideration of the self and another individual while self-forgiveness consists solely of an internalized emotional process (Woodyatt & Wenzel, 2014). Recent researchers emphasize empathic understanding as a prominent element involved in the process of forgiveness (Meneses & Greenberg, 2014; Wade et al., 2014). The acknowledgment of empathy is a recent key component in the conceptualization of forgiveness and an established component in EI, emphasizing the relevance of dealing with emotions surrounding negative memories of offense. This relevance aids in the understanding that disparity in personal power and position can potentially influence interpersonal forgiveness, especially when the offender is in a position of power. Such one-up position may lead to pseudo-forgiveness, identified by increased negative emotion, rather than the practice of authentic forgiveness.

Like the process of forgiveness, EI encompasses mental ability, emotional management, and discernment of emotions (Hodgson & Wertheim, 2007; Rey & Extremera, 2014). Individuals who possess a higher EI ability are proficient in the identification, use, and regulation of their emotions (Allen, Rahman, Weissman, MacCann, & Roberts, 2015; Allen, Weissman, Hellwig, MacCann, & Roberts, 2014). They can simultaneously take into account the state of others (Goleman, 1995; Hodgson & Wertheim, 2007; MacCann & Roberts, 2008; Mayer et al., 2008; Mier et al., 2010). The use of EI guides an individual in emotional inference and decision making and acts

as a basis for individual choice and behavior (Goleman, 1995; Hodgson & Wertheim, 2007; MacCann & Roberts, 2008; Mayer et al., 2008; Mier et al., 2010). Individuals with higher EI ability are skilled in the control of their emotions and in identifying the emotions of others.

Emotions are recognized and conveyed in communication with others. Mayer et al. (1990) conceptualized EI as being emotionally perceptive and being able to identify the emotions of others through nonverbal and visual cues. In the establishment of EI as a psychological construct., Mayer et al. (2008) surmised that individuals with a higher level of EI proficiency have favorable personality characteristics while individuals with lower levels of EI ability have disadvantageous personality characteristics. Individuals with lower EI lacked empathy and exhibited deficit in emotionality.

Individuals displaying higher levels of EI ability are adept in forming, shaping, and maintaining significant relationships (Goleman, 1995; Mayer et al., 2008). Such individuals have more capacity for deeper and more satisfying relationships than individuals with lower EI ability (Mayer et al., 2008). Relational development based on emotional processing includes being able to understand another person's emotional state and use such understanding as a basis and fulcrum for decision making (Fallon, Panganiban, Wohleber, Matthews, Kustubayeva, & Roberts, 2014; Fernández-Berrocal, Extremera, Lopes, & Ruiz-Aranda, 2014; Mayer et al., 2008; Schlegel, Grandjean, & Scherer, 2013). It is asserted by researchers in both trait and state conceptualizations of EI that having higher levels of EI are advantageous (Goleman, 1995; Mayer et al., 2008). Significant relationships are positively influenced by a higher EI ability.

As the concepts of EI have progressed, however, it is asserted that not all relationships are positively influenced by a higher EI ability (Copestake, Gray, & Snowden, 2013; Nagler, Reiter, Furtner, & Rauthmann, 2014; Konrath, Corneille, Bushman, & Luminet, 2014). Recently, researchers have found evidence showing that the presence of higher EI ability in individuals who display noxious behavior (Copestake et al., 2013; Nagler et al., 2014). Other researchers (Konrath, Corneille, Bushman, & Luminet, 2014) implicate a lack of the specific emotion, empathy, as an essential feature in individuals who have a higher EI ability and display pathological behavioral patterns (Copestake, Gray, & Snowden, 2013; Nagler, Reiter, Furtner, & Rauthmann, 2014). Konrath, Corneille, Bushman, and Luminet (2014). Higher EI ability is deployed by individuals for purposes of personal gain through manipulation (Copestake et al., 2013; Konrath et al., 2014; Nagler et al., 2014). Individuals who experience obscure thought processes and display pathological behaviors have the potential to utilize a higher ability of EI for darker intentions (Copestake et al., 2013; Nagler et al., 2014) such as cruelty to others (Konrath et al., 2014). Empathy may be a key element in the development of symptoms indicative of psychological well-being and development of sadistic tendencies that signify psychopathology (Konrath et al., 2014). Higher EI ability is observed in individuals whom display both favorable and unfavorable personality characteristics.

The concepts of EI and forgiveness share some similarities. Individuals must rely on emotional awareness, empathy, perspicacity in both EI and forgiveness. (Enright, 1996; Goleman, 2005; MacCann & Roberts, 2008; Mayer et al., 2008; Wade et al., 2014; Woodyatt & Wenzel, 2014). EI and forgiveness involve self-contemplation,

understanding, and reciprocal emotionality (Braithwaite, Selby, & Fincham, 2011; Enright, 1996; MacCann & Roberts, 2008; Mayer et al., 2008; Pronk, Karremans, Overbeek, Vermulst, & Wigboldus, 2010; Wohl DeShea, & Wahkinney, 2008). Based on my review of the literature, however, I believe that foundational research is lacking about potentially similar or divergent mechanisms concerning these two constructs.

Problem Statement

Psychological well-being has to do with emotionality, or perception of emotion, which is common in researchers' conceptualization of EI (Goleman, 1995; Mayer et al., 2008) and forgiveness (Enright, 1996; Wade et al., 2014; Woodyatt & Wenzel, 2014). However, research involving both of these constructs is sparse, according to my review of the literature. Based on my literature review, almost all previous studies of EI and forgiveness research and analyze other variables in addition to EI and forgiveness. Researchers have differently conceptualized, defined, and measured key constructs and had inconsistent findings (see Hodgson & Wertheim, 2007; Rey & Extremera, 2014; Van Dyke & Elias, 2008). Carvalho et al. (2010) find a weak association between trait EI and lasting resentment, a positive though only a small significant association between trait EI and a willingness to forgive, and no relationship between trait EI and sensitivity to situation. In a qualitative study of 5th graders, Van Dyke and Elias (2008) find that themes of forgiveness do not predict trait EI. Bruce (2014) identified forgiveness, as a mediator between ability EI and parent-child relationships. Forgiveness was a mediator between EI and parent-child attachment, as indicated across four parenting outcomes (attachment, communication, relationship frustration, and responses of anger). Mugrage

(2014) considered the relationship between trait EI and forgiveness but found no relationship between the variables. There lacks a research foundation with focus on only ability EI and forgiveness.

To address this lack and conflict of findings on the constructs together, I empirically examined the relationship between EI and forgiveness. In my investigation, I sought to identify potential predictor variables (e.g., empathy, life satisfaction, emotional management ability, and emotional understanding) of forgiveness. Based on my review of the literature, an empirical research foundation encompassing the potential relationship between EI ability and forgiveness is absent. I sought to fill this gap by providing empirical research on the relationship between the two variables. Such research inquiry may promote positive social change by encouraging psychologists to develop solutions regarding inter and interapersonal conflict to include regarding EI and forgiveness together. These solutions may enrich relationships, increase autonomy, and foster overall psychological well-being on a micro and macro level (Goleman, 1995; Hanke & Fischer, 2013; Macaskill, 2012; Rey & Extremera, 2014; Ricciardi, Rota, Sani, Gentili, Gaglianese, Guazzelli, & Pietrini, 2013; Wade, Hoyt, Kidwell, & Worthington, 2014).

Purpose of the Study

The purpose of this study was to quantitatively investigate the relationship between EI and forgiveness using the theoretical foundation of theory of the mind (ToM; Call & Tomasello, 2008). I sought to explore a potential correlational relationship between the dependent variables, EI and forgiveness, as well as identify predictor variables and the extent, if any, to which they predict forgiveness. The population

included a Walden University research pool participant and social media volunteers to whom I forwarded the link to the study.

Within this study, I considered the relationship between two dependent variables. The dependent variable, EI, was defined by the measurement of two domains, emotional management, and emotional understanding. An overall quotient representing the domain of emotional management ability was indicated by the Situational Test of Emotion Management-Brief (STEM-B; MacCann & Roberts, 2008). An overall quotient representing the domain of emotional understanding was indicated by the Situational Test of Emotion Understanding (STEU; MacCann & Roberts, 2008) was determined. The dependent variable, forgiveness, was defined by the measurement of three domains (affective, behavioral, and cognitive) with an overall quotient representing forgiveness as indicated by the Enright Forgiveness Inventory (EFI; Enright, Rique, & & Coyle, 2000).

There were four predictor variables within my study. The first predictor variable, empathy, contained an overall quotient representing empathy, as indicated by the Toronto Empathy Questionnaire (TEQ; Spreng, McKinnon, Mar, & Levine, 2009b). The second predictor variable, life satisfaction, contained an overall quotient representing personal life satisfaction, as indicated by the Satisfaction With Life Scale (SWLS; Diener, Emmons, Larsen, & Griffin, 1985). The third predictor variable, emotional management ability, contained an overall quotient representing the ability for an individual to manage emotions, as indicated by the Situational Test of Emotion Management - Brief (STEM-B; MacCann & Roberts, 2008). The fourth predictor variable, emotional understanding,

contained an overall quotient representing the ability for an individual to understand emotions, as indicated by the Situational Test of Emotion Understanding (STEU; MacCann & Roberts, 2008). The intent was to investigate the unique variance contribution of these four predictor variables on the criterion variable, forgiveness.

Research Questions and Hypotheses

RQ1. Does a correlational relationship exist between the two domains (emotional understanding and emotional management ability) of EI and the three domains (affective, behavioral, and cognitive) of the construct of forgiveness?

Tested were six hypotheses based on this question:

$H_0$1: No significant relationship exists between emotional understanding as measured by the STEU and the affective domain of forgiveness as measured by the EFI.

$H_1$1: A significant relationship exists between emotional understanding and the affective domain of forgiveness.

$H_0$1: No significant relationship exists between emotional understanding as measured by the STEU and the behavioral domain of forgiveness as measured by the EFI.

$H_1$1: A significant relationship exists between emotional understanding as measured by the STEU and the behavioral domain of forgiveness as measured by the EFI.

$H_0$1: No significant relationship exists between emotional understanding as measured by the STEU and the cognitive domain of forgiveness as measured by the EFI.

$H_1$1: A significant relationship exists between emotional understanding as measured by the STEU and the cognitive domain of forgiveness as measured by the EFI.

$H_0$1: No significant relationship exists between emotional management ability as measured by the STEM-B and the affective domain of forgiveness as measured by the EFI.

$H_1$1: A significant relationship exists between emotional management ability as measured by the STEM-B and the affective domain of forgiveness as measured by the EFI.

$H_0$1: No significant relationship exists between emotional management ability as measured by the STEM-B and the behavioral domain of forgiveness as measured by the EFI.

$H_1$1: A significant relationship exists between emotional management ability as measured by the STEM-B and the behavioral domain of forgiveness as measured by the EFI.

$H_0$1: No significant relationship exists between emotional management ability as measured by the STEM-B and the cognitive domain of forgiveness.

$H_1$1 A significant relationship exists between emotional understanding and the

cognitive domain of forgiveness as measured by the EFI.

RQ2. How well do variables associated with EI (namely, empathy, life satisfaction, emotional management ability, and emotional understanding) predict forgiveness?

Tested were four hypotheses based on this question:

$H_0$2: The predictor variable, empathy, as measured by the TEQ, will not significantly contribute to the probability of forgiveness as measured by the EFI overall score.

$H_1$2: The predictor variable, empathy, as measured by the TEQ, will significantly contribute to the probability of forgiveness as measured by the EFI overall score.

$H_0$2: The predictor variable, life satisfaction, as measured by the SWLS, will not significantly contribute to the probability of forgiveness as measured by the EFI overall score.

$H_1$2: The predictor variable, life satisfaction, as measured by the SWLS, will significantly contribute to the probability of forgiveness as measured by the EFI overall score.

$H_0$2: The predictor variable, emotional management ability, as measured by the STEM-B, will not significantly contribute to the probability of forgiveness as measured by the EFI overall score.

$H_1$2: The predictor variable, emotional management ability, as measured by the STEM-B, will significantly contribute to the probability of forgiveness as measured by the EFI overall score.

$H_0$2: The predictor variable, emotional understanding, as measured by the STEU, will not significantly contribute to the probability of forgiveness as measured by the EFI overall score.

$H_1$2: The predictor variable, emotional understanding, as measured by the STEU, will significantly contribute to the probability of forgiveness as measured by the EFI overall score.

I explored the relationship between the variables EI and forgiveness by conducting a Pearson *r* correlation test of significance. The variables were identified as interval and continuous levels of measurement, appropriate for correlation analysis. I anticipated A positive relationship between these variables. It was my intent to test whether other variables such as empathy, life satisfaction, emotional management ability, and emotional understanding predict forgiveness by running a standard multiple regression analysis. I expected these four variables to predict and significantly contribute to forgiveness.

Theoretical Foundation

The theoretical foundation I chose was ToM. ToM involves the development of mental representation, reflective of self-perceptions and other-perception, and thus recognizing that differences between the two perceptions occur (Flavell, 2004; Mier et

al., 2010; Qualter, Barlow, & Styianou, 2011). These perceptions involve empathy, emotional reciprocity, and evident proficiencies entailed in the ability for a person to distinguish, decipher, and discern, emotions (Mier et al., 2010; Qualter et al., 2011). ToM includes behavioral response prediction resulting from an individual's apprehension of such mental representations (Heyes, 2014; Martinovski & Mao, 2009; Mier et al., 2010; Qualter et al., 2011). These representations involve perception.

The relevance of ToM as the theoretical foundation was founded on the perceptual recognition of emotional states in self and others (Mier et al., 2010; Qualter et al., 2011). Basic mental representations develop an understanding of the distinct and autonomous emotional reflection of self and others (Martinovski & Mao, 2009; Mier et al., 2010). Based on these basic mental representations, individual responses, to include personal decision making, then emerge (Castelli, Massaro, Sanfey, & Marchetti, 2014; Heyes, 2014; Mier et al., 2010). ToM processing is not straightforward; individuals practice ToM in a multifaceted and erratic manner (Martinovski & Mao, 2009). A mental representation of ToM may bring about new emotions for an individual that may trigger new ToM cognitions and additional mental representations (Martinovski & Mao, 2009). Such processing may be replicated several times by someone before the objective response is realized and or decision making is attained (Martinovski & Mao, 2009). Decision making in ToM is complex.

Forgiveness and EI involve mental representations based on introspection and emotional interpretations that elicit reaction and aid in personal decision making. Based

on these assertions, I believed ToM was an appropriate though unprecedented theoretical framework, whereby to investigate the reciprocating emotional processes involved in these constructs. I found previous research focusing on EI from the theoretical framework of ToM (Ferguson & Austin, 2010; Mier et al., 2010; Qualter et al., 2011); however, from my research query, research of forgiveness from the theoretical standpoint of ToM did not exist.

Nature of the Study

I chose a quantitative correlational nonexperimental research method for the study. I believe a correlational design would best address my first research question involving the exploration of the relationship between EI (variable X) and forgiveness (variable Y). I believe A standard multiple regression analysis would best address my second research question in consideration of predictor variables (empathy, life satisfaction, emotional management ability, and emotional understanding) on the criterion variable, forgiveness. My rationale was that such methods would provide an answer to the research questions.

Participants within this study were volunteers and accepted an invitation to participate. This invitation was posted in the Walden research pool, and the invitation was found in a forwarded Internet link from either another participant, individual, or directly from me. The participants took online versions of all instruments (TEQ, SWLS, STEM-B, STEU and EFI). The distribution, collection, and scoring of this data were accomplished through the use of SurveyMonkey (2015). A Pearson *r* zero-order

correlation was conducted to explore the potential relationship between dependent variables X and Y. A standard multiple regression analysis was planned in order to explore potential predictors (empathy, life satisfaction, emotional management ability, and emotional understanding) on the criterion variable, forgiveness.

Definitions

Emotional intelligence (EI): Perception acuity involving an intelligence is based on emotional understanding and intention (MacCann & Roberts, 2008; Mayer et al., 2008). Specifically, EI ability includes cognitive processing engaged so that an individual can identify and interpret emotional content. This interpretation is pivital in an individual's formation of thoughts and gives a basis for decision making (Hodgson & Wertheim, 2007; MacCann & Roberts, 2008; Mayer et al., 2008; Mier et al., 2010; Nagler et al., 2014). In keeping with the original concept by initial researchers Mayer et al. (2008), within this study, I regarded EI as an individual ability.

Empathic understanding: The compassionately shared perspective one has of the emotional state of another individual (Baldner & McGinley, 2014).

Empathy: Empathy is the understanding and compassionate response to another individual. An empathetic response is reflective of how oneself would want to be understood and then treated within a given context (Baldner & McGinley, 2014; Hodgson & Wertheim, 2007; Konrath et al., 2014; Meneses & Greenberg, 2014).

Forgiveness: Forgiveness occurs when a person offended recognizes the offense and then releases the desire to personally regard the offender liable, letting go the urge to seek revenge in order to compensate for the offense. It does not matter if the offense is

apparent or illusory (Hill & Allemand, 2012; Prieto, Jodar, Martinez, Carrasco, Gismero, & Cagigal, 2013). The person offended experiences an emotional shift from noxious emotions to an increased sense of well-being of oneself, and this is extended toward the offender (Enright, 1996; Macaskill, 2012; McCullough, 2008; Meneses & Greenberg, 2014; Rey & Extremera, 2014; Wade et al., 2014; Woodyatt & Wenzel, 2014). The definition of forgiveness was in congruence with original conceptualization (Enright, 1996), and measured by the EFI (Enright & Rique, 2000).

Interpersonal Forgiveness: Interpersonal forgiveness is practiced within a significant relationship and in an interpersonal context (Meneses & Greenberg, 2014; Pronk et al., 2010). Such relationship may be of a professional, intimate, and/or social nature (Hanke & Fischer, 2013; Rey & Extremera, 2014; Woodyatt & Wenzel, 2014).

Mental Representation: This is a term used to describe the very basic ability involving recognition of states, including emotions, of self and others (Flavell, 2004; Mier et al., 2010). The representation of mental states was recognized in definition as crucial and foundational in the ToM process, a precursor and building block to the more advanced ToM development of self-intention and/or perceiving the intention of others (Flavell, 2004; Mier et al., 2010).

Pseudo-forgiveness: Pseudo-forgiveness was defined as a denial or justification of an offense rather than the practice of actual forgiveness (Enright & Rique, 2000; Hodgson & Wertheim, 2007; McCullough & Worthington, 1994; Pelucchi, Paleari, Regalia, & Fincham, 2013).

Self-Forgiveness: Self-forgiveness referred to a specific type of forgiveness involving the conversion from a self-blaming and restrictive mindset to that of self-acceptance following a perceived offense (Enright, 1996; Kim & Enright, 2014; Macaskill, 2012; Pelucchi et al.,2013; Woodyatt & Wenzel, 2014).

Assumptions

The following were assumptions made within this study:

Assumption 1: Participants would understand all posed questions within the measurements and respond in an honest, straightforward manner.

Assumption 2: Higher levels of EI ability and emotional understanding were believed to be positive while lower levels of EI ability were considered undesirable.

Assumption 3: The ability to forgive was viewed as positive while an inability to forgive was regarded undesirable.

Assumption 4: The completion of the assessments online was an acceptable form of test administration, and this method did not adversely affect the data provided or the test-taking process.

All instruments utilized (TEQ, SWLS, STEM-B, STEU and EFI), were self-administered. These instruments were distributed in an online format, and the assumptions made within this study were in corroboration of accurate and acceptable research data.

Scope and Delimitations

The following were delimitations made within this study:

Delimitation 1: The variables, EI, and forgiveness, were each regarded as personality states, or abilities, rather than traits. Internal congruence was addressed in the conceptualizing, defining, and measuring of the variable characteristics as abilities. The theoretical import of the variables reflected the definitions provided by MacCann & Roberts (2008) and Enright (1996). These variables involved the judgment of a contextual situation.

Delimitation 2: The Toronto Empathy Questionnaire (TEQ), developed by Spreng et al. (2009b), the Satisfaction With Life Scale (SWLS) developed by Diener et al. (1985), and the EFI (Enright & Rique, 2000) were all self-assessment measures used in this study. By using a self-assessment measure, I introduced a greater potential for bias and subjectivity. Specifically, the participants had a greater likelihood to represent themselves in a perceived socially desirable manner through their choices of response rather than answering straightforwardly.

Delimitation 3: The choice to focus on interpersonal forgiveness rather than self-forgiveness was made. The EFI (Enright & Rique, 2000) measured affective, behavioral, and cognitive domains of forgiveness. The STEU measurement provided a general number, representative of an overall EI ability, while the EFI (Enright & Rique, 2000) provided a general number, representative of overall forgiveness. The choices in similarity and complexity of the instrumentations increased internal validity of the research.

Delimitation 4: This nonexperimental study was an example of a nonprobability sample design, specifically a sample of convenience sample (Frankfort-Nachmias &

Nachmias, 2008). The population was identified as Internet volunteer participants. The strategy was largely chosen due to the ease of access, dissemination, and scoring opportunity of self-completion instrumentations. The choice of strategy prohibited the randomization and/or stratification of the sampling units.

Limitations

The following were acknowledged limitations:

Limitation 1: My study was a correlational study. Consequently, as with all correlational studies, causal inferences involving the variables cannot be determined.

Limitation 2: This study involved only volunteer participants. The participants were from either Internet and largely social media or volunteers from only one University. The findings of this study cannot be generalized beyond the present population. EI involves cognitive intelligence based on perceived situational judgments (Libbrecht & Lievens, 2012; MacCann & Roberts, 2008; MacCann, Pearce, & Roberts, 2011); the overall population within my study may have had a higher or lower EI ability than other populations. It may be that those who completed the questionnaires had a higher EI ability, as they were comfortable with responding to questions regarding situational judgments.

Limitation 3: In comparing instrumentation, an identified limitation is that the TEQ (Spreng et al., 2009b), the SWLS (Diener et al., 1985), and EFI (Enright & Rique, 2000) are subjective questionnaires involving self-perception, while the STEM-B and the STEU (2008) are objective measurements of emotional ability and understanding, given a specific situation.

Limitation 4: The majority of foundational research of the construct, forgiveness, was largely from the integrative perspective of theology and counseling practices (Enright, 1994; McCullough & Worthington, 1994). This was a methodological issue. Lacking was a broader base of foundational scientific data involving the conceptualization of forgiveness as an established psychological construct (Enright, 1996; McCullough & Worthington, 1994).

Limitation 5: In the conceptual framework of this study, the following potentially confounding demographic variables were unaccounted: socioeconomic status (SES), cultural background, gender, educational level, age, and ethnicity.

Significance of Study

The significance of the study was based on the following assertion: EI can be taught and learned (Goleman, 1995; Mayer et al., 2008). If a positive correlational relationship exists between EI and forgiveness, then an emphasis on forgiveness, emphasizing forgiveness and EI may foster greater emotional competency and proficiency. This may increase ability and capacity to forgive (Mayer et al., 2008; Wade et al., 2014). Implications of a positive correlational relationship would involve the simultaneous consideration of EI and forgiveness, expanding the science of psychology to include areas of theory, practice, and positive social change.

Significance to Theory

Potential contribution and significance in advancing the theory of EI and forgiveness may encourage more research of EI and forgiveness. Such research may provide theoretical understanding regarding the processes of forgiveness, to include the

giving of forgiveness, the receiving of forgiveness, and forgiveness of self (Enright, 1996). The consideration of forgiveness together with EI may promote greater integrative psychological and theological competence. The exploration of the variables simultaneously may open a new way of regarding roles of emotions involved in these constructs. A theoretical exploration of these constructs may provide an understanding of emotional intention and other responses besides forgiveness, such as revenge (McCullough, 2008). Such considerations may have implications regarding the practice of EI and forgiveness.

Potential implications include advancing the practice of psychology by encouraging EI and forgiveness together. From this stance, new understandings may emerge, such as: interpersonal communication and skills, alexithymia, intrapersonal understanding, increase of personal insight, self-efficacy, conflict resolution, relationship restoration, improvement of relationships, empathy, emotional processing, perception and behavior, emotional regulation, decision making, therapeutic intervention, and psychological treatment options (Wade et al., 2014). Vital information may be accumulated concerning the more noxious behavioral patterns indicative of mental illness. This is important, as higher EI ability is indicated in healthy individuals as well as individuals who struggle with under or over emotional sensitivity, psychopathy, and/or symptomologies indicative of personality disorders (Copestake et al., 2013; Konrath et al., 2014; Nagler et al., 2014). Greater psychotherapeutic treatment opportunities may increase hopefulness, resilience, and overall psychological well-being (Wade et al., 2014). The advancement of EI and forgiveness in psychological practice may advance

current understandings of the constructs and make available new mental health therapeutic options.

The significance of parallel investigation of EI and forgiveness included addressing positive social change. While I acknowledged limitations preventing causal inferences and generalization of findings beyond the present population, this acknowledgement may spur future approach of social ramifications involving EI and forgiveness. Such exploration may provide greater understanding resilience factors involved in healthy interpersonal as well as intrapersonal relationships. Conversely, such investigation may provide greater knowledge of developmental factors involved in problematic symptomologies indicative of personality disorder and maintenance patterns involved in unhealthy interpersonal relationships.

EI and forgiveness may have implications on a macro level. Prospective benefits implicating emotionality, forgiveness, and psychological well-being may be increasingly recognized and reflected across cultural contexts (Hanke & Fischer, 2013). An overall research emphasis on emotional processing and forgiveness may provide greater understanding involving emotional consequences of developed and developing nations, contributing to a larger cultural context of societal awareness, understanding, and potential positive social change. Stressing EI and forgiveness across cultures may enable new national customs, positively encouraging healing in relationships on a national level by encouraging these concepts.

Summary and Transition

Chapter 1 provided an introduction to my research involving a potential correlational relationship between EI and forgiveness and the contribution of potential predictor variables (empathy, life satisfaction, emotional management ability, emotional understanding) of forgiveness. This introduction provided an overview of information regarding background, problem statement, research question, hypotheses, theoretical foundation, nature, definitions, scope and delimitations, limitations, and significance of this study.

Upcoming chapters deliver more detailed information regarding EI and forgiveness. This information will include expounding on the potential correlational relationship between these two dependent variables as well as exploring the unique contribution of predictor variables (empathy, life satisfaction, emotional management ability, emotional understanding) and the criterion variable, forgiveness. Chapter 2 involves a literature review. In chapter 3, research methodology will be delineated. In the chapter 4, results of the research will be provided. In chapter 5, discussion involving conclusion and suggestions for future research is indicated.

Chapter 2: Literature Review

Although EI and forgiveness have been delineated by researchers as individual constructs (Mayer et al., 2008; Enright, 1996), they have not examined their relationship to, and interaction with, each other to a great degree (Carvalho, Neto, & Mavroveli, 2010; Rey & Extremera, 2014; Van Dyke & Elias, 2008; Wilks, Neto, & Mavroveli, 2015). Most of the studies I found that included EI and forgiveness contain other variables (Rey & Extremera, 2014; Van Dyke & Elias, 2008; Wilks, Neto, & Mavroveli, 2015). Most studies between EI and forgiveness have been based largely on data inferring a relationship between these constructs (see Carvalho et al., 2010; Rey & Extremera, 2014; Van Dyke & Elias, 2008; Wilks et al., 2015). In my review of the literature, I found two research studies focusing exclusively on a potential relationship between EI and forgiveness: one regarded forgiveness as a mediating factor of EI and the parent-child relationship (Bruce, 2014) and another explored the relationship between trait EI and forgiveness (Mugrage, 2014). To address this gap in research, I examined whether a potential relationship between these two constructs existed. I also wanted to explore the relationship between forgiveness and ToM, as I could not find other studies on this topic. Based on my review of the literature, researchers have examined the relationship between ability EI and ToM (Ferguson & Austin, 2010; Mayer et al., 2010; Qualter et al., 2011; Volk, Zeigler-Hill, Mercer, & Noser, 2015), but they have not studied that between forgiveness and ToM.

The purpose of this experimental study was to investigate the relationship between ability EI and forgiveness using the theoretical foundation of ToM (specifically,

social-cognitive ToM; Ferguson & Austin, 2010). Another intention of mine was to explore a potential relationship between the dependent variables, EI and forgiveness. Chapter 2 includes specific details of my literature search strategy. This chapter identifies ToM as my theoretical foundation. I provide details exploring the history and development of this concept and rationale as to shy ToM was my theoretical foundation choice. In the literature review, I give the background of both EI and forgiveness, to include current delineations of both concepts. This chapter ends with a summary of content.

Literature Search Strategy

I began reviewing the literature for this dissertation in [March of 2012]. During that time, I narrowed my research scope and shifted my conceptualization of EI and forgiveness from a *trait*, or personality characteristic that one has, to a *state*, or ability that one possesses a. Over the past 4 years, I have collected and reviewed numerous articles from peer-reviewed literature sources on topics relating to EI, forgiveness, and ToM.

To search for peer-reviewed literature, I accessed Walden library databases. I used the following psychological databases: PsychINFO, PsychARTICLES, SAGE Premier, and ProQuest. The PsychINFO database inquiry of the two variables *emotional intelligence* and *forgiveness* yielded five articles, but only two of the research studies concentrated on the interaction between EI and forgiveness (Van Dyke & Elias, 2008; Wilks et al., 2015). The same query repeated in PsycARTICLES search yielded only one article (Van Dyke & Elias, 2008), which I had already found. The same query repeated in

SAGE Premier resulted in 125 articles; however, only one of these included examination of these two variables together (Wilks et al., 2015). I had already found this citation by using other databases. Using the ProQuest Dissertation database, I found four dissertations, though only two include both research variables (Mugrage, 2014; Bruce, 2014). In my study, I also included a few additional studies (Carvalho et al., 2010; Hodgson & Wertheim, 2007; Rey & Extremera, 2014; Ricciardi et al., 2013), which I accessed using other resources during the 4 years of collecting my research.

After conducting these searches, I conducted searches of the following terms on the search engine Google Scholar: emotional intelligence, emotional intelligence ability, Enright Forgiveness Inventory, forgiveness, forgiveness ability, interpersonal forgiveness, Mayer-Salovey-Caruso emotional intelligence test (MSCEIT), self-forgiveness, Situational Test of Emotion Management (STEM), Situational Test of Emotion Understanding (STEU), and theory of mind. From this search, I identified other concepts that overlapped in the literature on both EI and forgiveness. The concepts I identified were empathy, anger, aggression, autonomy, shame, internal processing, [interpersonal] relationship, self-differentiation, attentional bias, well-being, emotionality, gratitude, the big five, psychopathy, and optimism. While an exhaustive list of overlapping constructs is beyond the scope of this study, I elaborated on these prevalent emotional concepts.

Theoretical Foundation

The theoretical foundation for this study was ToM (Call & Tomasello, 2008). The main principle of ToM involves recognition of the emotional states relating to self and

others (Mier et al., 2010; Qualter et al., 2011). A new perception is derived from the differentiation of emotional states of the self and those of another person (Ferguson & Austin, 2010; Martinovski & Mao, 2009; Mier et al., 2010; Qualter et al., 2011). This perception held by an individual incorporates interpretation, perspicacity, and mutual exchange involving communication, negotiation, decision making (Castelli et al., 2014; Qualter et al., 2011) and empathic understanding (Van Doesum, Van Lange, & Van Lange, 2013; Martinovski & Mao, 2009). Researchers using ToM view the new perception of an individual as building and eventually initiating emotional response and behavior (Castelli et al., 2014; Ferguson & Austin, 2010; Mier et al., 2010; Qualter et al., 2011). Personal decisions and responses of an individual are carried out in regard of anticipated perceptions (Martinovski & Mao, 2009); thus, an individual's choices are achieved through a process of interactive decision making (Ferguson & Austin, 2010; Mier et al., 2010; Qualter et al., 2011). An individual's perception of fairness and the capability to identify the intentions of another progresses and improves from childhood into adolescence (Castelli et al., 2014). An individual's developmental progression of ToM is observed in emotional growth.

Development and History of Theory of Mind

ToM is a newly emerged psychological construct. The development and history of ToM included a premise in developmental cognitive and egocentric thought processes in the ascribing of mental states of self and others (Call & Tomasello, 2008; Flavell, 2004). Research studies in the 1970's referred to this as *metacognition,* a term that is used

interchangeably today with the term, ToM (Flavell, 2004). Building on the precepts of metacognition, the researchers credited with the expression, *theory of mind*, were Premack and Woodruff (Call & Tomasello, 2008). Initial research involved the acquisition of a false-belief task by a chimpanzee. More recent research emphasizes that chimps may have an apprehension of the knowledge of informed and uninformed actors, ToM ability is evident on a surface level, though not equivalent to complex human reasoning. The ability to implicitly mentalize distinguishes humans from other species; higher social communicative ability brings meaning to human life (Heyes, 2014). False-belief tasks currently resemble this original research and are still popular measurements of ToM (Call & Tomasello, 2008; Castelli et al., 2014; Heyes, 2014). ToM has facilitated a new understanding of how complex human thought processes take place.

Tripartite Division Resulting in Three Theory of Mind Categories

There are different views of how ToM occurs. In the 1990's, a tripartite division is recognized among experts as to the conceptualization in ToM (Martinovski & Mao, 2009). All three ToM conceptualizations assert higher ToM ability is achieved in differing ways (Heyes, 2014; Martinovski & Mao, 2009; Mier et al., 2010). ToM, from the *theory-theory* view, involves the conceptualization of cognitive mental structures, or thoughts, as constructs built from experiences (Heyes, 2014; Mier et al., 2010). One can identify another's emotional state by the self-construction or mentalization of previous personal experiences. Through functional imaging, indicated that recognition of emotions occurs first and then initiated is the recognition of intentions (Mier, 2010). Activation of

brain areas during this process involves three areas: the inferior prefrontal gyrus, the superior temporal sulcus (STS), and the temporal pole.

ToM, from the *modulation theory* standpoint, is sometimes referred to as the *nativist view* (Heyes, 2014), and emphasizes imprinting and neurological development evident in the early preschool developmental years (Martinovski & Mao, 2009; Wellman, Fang, & Peterson, 2011). Facial cues are thought important in nonverbal communication and thus socialization, components of the modulation theory of ToM (Moor, Macks, Guroglu, Rombouts, Van der Molen, & Crone, 2012; Neath, Nilsen, Gittsovich, & Itier, 2013). The eyes hold attention between self and other, as eye contact and gazing is an instinctive practice observed as early as infancy (Neath et al., 2013; Wellman et al., 2011). This is relevant, as the eyes provide indications of information involving emotional content (Moor et al., 2012; Neath et al., 2013). The practice of ToM is affected by developmental visual sensory input and detected at a young age.

ToM, from the *simulation theory* standpoint, underscores the fostering emergence of higher ToM ability through observation, simulation, and repeated performance, replicating previous implementations (Heyes, 2014). This theory is based on processes of the brain mainly, though not exclusively, to include: the mirror neuron system of the inferior prefrontal cortex, the inferior prefrontal gyrus, the STS, and the somatosensory cortex (Mier et al., 2010). From this sub-theory standpoint, mental practice is pivotal, as higher levels of ToM are constructed and achieved through the practice of imitation of others (Heyes, 2014; Lane, Wellman, Olson, Miller, Wang, & Tardif, 2013). The observation of mentalization of others is key in this particular practice of ToM.

Similarities and Differences of the Three Theory of Mind Categories

Understanding the differences and similarities of the three categories of the theory of mind (ToM) helps to delineate how ToM influences other constructs such as IQ, EI, and forgiveness. These three categories are somewhat interconnected, with modulation theory linked to ToM and innate early brain growth and development (Heyes, 2014; Moor et al., 2012; Neath et al., 2012). The ToM simulation theory and the theory-theory of ToM are viewed as constructed abilities and lent to the development of ToM over time in sequential progression (Wellman, 2011). Different tests are employed to provide evidence and measurement of ToM (Castelli et al., 2014; Heyes, 2014; Lane et al., 2013; Moor et al., 2012; Neath et al., 2013). Recent theoretical conceptualizations are not restricted by distinct ToM sub-theory boundaries (Heyes, 2014; Mier et al., 2010). Any of the three categories of ToM can stand alone (Flavell, 2004), two of the three sub-theories of ToM can be grouped together (Heyes, 2014), or all three of the sub-theory categories can be broadly synthesized together (Mier et al., 2010). Current understandings of ToM stress that mentalization may occur in ways that are very specific or indistinct.

Theory of Mind and Emotion-Based Model

In an emotion-based model of negotiation referred to as modeling emotion in negotiation and decision making (MEND), Martinovski and Mao (2009) conceptualize ToM as parallel to emotionality, with ToM enabling perceptions and emotional ratiocinations of self and others. Emotions can influence ToM cognition and vice-versa, as interactions involving self and between these two entities occur and impact each other (Ferguson & Austin, 2010; Mayer et al., 2010; Moor et al., 2012; Neath et al., 2012). The

result of this exchange involves strategy, decision making, and negotiation with others through a multilateral and discontinuous progression that may bring about new emotions and then goal recognition and/or achievement (Martinovski & Mao, 2009). From this model, it is clear that these emerged emotions may act to engage further ToM reasoning, further influencing personal strategy involving coping decisions and negotiations. Corroborating research by Mier et al. (2010) finds a positive correlational relationship between the accurate identification of emotional state and the accurate identification of behavioral intention, confirming that the correct identification of emotional state facilitates ToM. Progression of ToM development is believed to begin in the years of infancy, with higher-level abilities possible in later childhood (Moor et al., 2012; Neath et al., 2013; Wellman et al., 2011). ToM deficits or deficits in mentalization are frequently noted in individuals diagnosed with autism spectrum disorder (ASD), and a common symptomology is averted gaze and misunderstanding social signals that may involve nonverbal communicative processes to include facial cues and discernment of emotions (Moor et al., 2012; Neath et al., 2013). Emotional discernment is essential in the practice of mentalization.

Theory of Mind and Empathy

Empathy is a critical emotion identified in the decision making and negotiation process of ToM. Empathy entails assumptions regarding the perspective of another individual in a reflective and considerate manner (Van Doesum et al., 2013; Martinovski & Mao, 2009; Moor et al., 2012). Empathy involves an understanding of self as a representation by which to access the perceptions of others, in an awareness of the

difference between self and other (Martinovski & Mao, 2009). Therefore, empathy comprises skill and will (Van Doesum et al., 2013). Those who are regarded more empathetic typically have a higher level of ToM achievement, are largely other-oriented, more socially mindful, and have goals that tend to reflect pro-social decisions (Van Doesum et al., 2013; Neath et al., 2013). ToM deficits are believed to be largely associated with difficulty in proficiency of ToM, specifically the lack of empathy (Van Doesum et al., 2013; Moeller, Robinson, Wilkowski, & Hanson, 2012; Moor et al., 2012; Neath et al., 2013). Empathetic understanding has bearing on self and other awareness.

Mentalization

Mentalization is a term used interchangeably with the term ToM when referring to the unconscious attentional ability to view the mental states of another (Heyes, 2014). The modulation theory involves implicit mentalizing; it is posited as an inherited genetic attribute (Heyes, 2014; Wellman et al., 2011). The process of implicit ToM through eye tracking tasks is observed in young children at such an early age that explanation other than modulation is found inadequate (Heyes, 2014; Moor et al., 2012; Wellman et al., 2011). Explicit mentalizing is largely represented by the simulation theory and theory-theory. Theory-theory involves linguistic influence and reciprocation. Developmental progression of ToM is influenced by culture and social context (Heyes, 2014; Lane et al., 2013). Implicit mentalization involves modulation theory of ToM is first observed in infancy; this is too early to attribute toward a cultural or social construction (Heyes, 2014). The modulation sub-theory does not recognize a communicative reciprocal flow from infant subject-to-researcher, as verbalization involving emotional states is not

possible for such a young child; for this reason, explicit mentalizing is not a component of the modulation theory (Moor et al., 2012; Wellman et al., 2011). *Submentalization* rather than internal mentalization is the terminology Heyes (2014) asserts as correct to refer much of what has been observed in prior ToM research. Much of the research of internal mentalization merely simulates the processes of mentalization, producing a behavior due to expectation in a social context rather than an actual process.

Rationale for the Choice of ToM as a Theoretical Foundation

The concept of ToM has progressed and enlarged from a theoretical framework to that of an intact infrastructure, affording a complex understanding of the internal mental processes involving emotional understanding of self and others (Call & Tomasello, 2008; Ferguson & Austin, 2010; Flavell, 2004; Heyes, 2014; Mayer et al., 2010; Wellman et al., 2011). The practice of ToM occurs across the lifespan, and development involves the reciprocal understanding and communication of emotions (Heyes, 2014; Mayer et al., 2010; Moor et al., 2012; Wellman et al., 2011). Key to ToM abilities involve recognition, negotiation, decision making and the element of empathy (Castelli et al., 2014; Van Doesum et al., 2013; Martinovski & Mao, 2009; Moeller et al., 2012), likewise delineated abilities in EI (Fallon et al., 2014; Fernández-Berrocal et al., 2014; Konrath et al., 2014) and forgiveness (Copestake et al., 2013; Enright, 1996; Meneses & Greenberg, 2014). Current understandings of ToM stress reciprocity in communication and influence of decision making and behavior.

ToM is an existing theory that provides a theoretical framework whereby the similar internal processes of EI and forgiveness can build be researched and further

explored. Ferguson and Austin (2010) find that social-cognitive aspects of ToM over social-perceptual aspects (facial and nonverbal cues) are related to more crystalized than fluid EI ability. Facial and nonverbal cues are largely associated with fluid ability as exhibited by the modulation theory (Moor et al., 2012; Neath et al., 2013). Instead of the dearth of research in consideration of these two constructs together from the theoretical framework of ToM, a broad stance of ToM, incorporating two of the three components of ToM (theory-theory and simulation theory) is deemed appropriate (Ferguson & Austin, 2010). Social-cognitive reasoning based on a situational judgment as held by theory-theory and simulation theory is largely correlated with EI ability. The ToM theoretical framework of my research project is based on the understanding of these two ToM sub-theories.

Literature Review

Background of Emotional Intelligence

EI is a relatively new psychological construct, engaging emotion and intelligence simultaneously (Goleman, 1995; Mayer, Salovey, & Caruso, 2004; Mayer et al., 2008). Today, there are two main categories of EI; one outlines the conceptualization of EI as a state or ability, and the other as a personality trait (Copestake et al., 2013). The approach of EI by Salovey & Mayer (1990) is that of ability. Subsequent examples of research based on this conceptualization followed (Cardoso, Ellenbogen, & Linnen, 2013; Fallon et al., 2014; Fernández-Berrocal et al., 2014; Ford & Tamir, 2012; MacCann & Roberts, 2008; Nagler et al., 2014; Rey & Extremera, 2014). Goleman (1995) and other

researchers (Carvalho et al., 2010; Mugrage, 2014; Van Dyke & Elias, 2008; Wilks et al., 2015) have conceptualized EI in their research as a trait, or a personality characteristic. Mayer et al. (2008) call for recognition in the field of psychology of the difference between ability EI and trait EI, the first to insist that these are two different constructs altogether. Proceeding researchers reiterate this initial stance, finding EI ability and EI trait are two separate emotional constructs (Qualter, Gardner, & Whiteley, 2007; Schlegel et al., 2013) and negatively related (Copestake et al., 2013; Ferguson & Austin, 2010; Libbrecht & Lievens, 2012). The general population easily confuses trait EI and ability EI; further delineation of these constructs is warranted.

Description of Ability Emotional Intelligence

The ability to forgive others is respected as a mature practice. According to Pronk et al. (2010), forgiveness enables executive functioning. EI is an astuteness of intelligence involving emotional purpose (Mayer et al., 2004; Mayer et al., 2008). Individuals who exhibit higher EI are proficient in identifying, utilizing, and managing internal emotions while at the same time recognizing the mental state of others (Castillo et al., 2013; Fallon et al., 2014; Fernández-Berrocal et al., 2014; Ford & Tamir, 2012; MacCann & Roberts, 2008; Mayer et al., 2008; Robinson, Fetterman, Hopkins, & Krishnakumar, 2013; Schlegel et al., 2013). Individuals who have higher EI ability exhibit greater resilience, reporting significant negative life experiences as less distressing over time (Armstrong et al., 2011). EI ability is negatively associated with distress over major life incidents. Examples of such incidents are the loss a job, the death of a loved one, or onset of severe illness.

The construct of EI was initially represented largely from a narrow linear view; those who are EI proficient are believed to have a greater capacity of overall psychological well-being (Mayer et al., 2008). Higher levels of EI ability are aligned with positive personality characteristics and presumed to be of benefit to the individual. This alignment includes an understanding regarding a positive aspect within social context (Allen et al., 2015; Allen, Weissman, Hellwig, MacCann, & Roberts, 2014; Libbrecht & Lievens, 2012; MacCann & Roberts, 2008) while lower levels associated with social difficulty (Mayer et al., 2008), negative personal attributes, and problematic behavior (Castillo et al., 2013; Poulou, 2013). An individual with higher levels of EI ability has the capacity for deeper and satisfying relationships; these persons are adept in forming, shaping, and maintaining significant relationships (Mayer et al., 2008; Poulou, 2013). Such relational development includes the ability to understand another's emotional state and to use such understanding as a basis and fulcrum for decision making (Fallon et al., 2014; Fernández-Berrocal et al., 2014; Ford & Tamir, 2012). Traditionally, higher ability EI has been viewed as beneficial while lower ability EI has been understood as disadvantageous.

Emotional Intelligence and Decision Making

As previously stated, EI is important in decision making. In the process of decision making, EI may affect how an individual perceives situational context during stressful situations (Fallon et al., 2014; Robinson et al., 2013), sad, fearful, and angry situations (Allen et al., 2015; Austin, 2010; MacCann & Roberts, 2008; MacCann et al., 2011) and situations involving competition (Ford & Tamir, 2012). Those with higher EI

may be able to discern positive potentials in situations involving adversity (Fallon et al., 2014) and competition, displaying greater cognitive flexibility in reasoning in situations involving competition and self-interest (Fernández-Berrocal et al., 2014; Ford & Tamir, 2012). Social competence is another factor, as those identified by Robinson et al. (2013), to have higher social competence reacted less aggressively in a hostile context. Higher social competence may be observed during a provocation or aggravating event, and an individual with this higher competence acts in a less aggressive and destructive manner.

In negative feedback situations, Fallon et al. (2014) observe adverse mood swing that impacted decision making through the measurement instrumentation, situational judgment test of emotional abilities (SJTEA), measuring EI ability in a situational specific context involving feedback situations. In specific regards to emotions of sadness, fear, and anger, these emotions have a negative effect on emotional regulation (Allen et al., 2015). This lack of ability to manage self-emotions may impede understanding and application of emotional knowledge (Allen et al., 2015; Allen et al., 2014; Libbrecht & Lievens, 2012; MacCann & Roberts, 2008; Moeller et al., 2011). Based on their recent meta-analysis, Peña-Sarrionandia, Mikolajczak, & Gross (2015) propose a greater integration and concurrent understanding of EI ability and emotional regulation. The ability to regulate emotions may help or hinder individuals in decision making.

Attentional focus. The mood state of an individual affects unconscious attentional focus (Becker & Leinenger, 2011). It is asserted by Fallon et al. (2014) that the individual mood state along with perceived relevance of tasks at hand may be responsible for lower measurements of EI ability in other assessments. Those with higher

EI ability may persist in finding benefits even when receiving external negative feedback. Those with lower EI ability display less cognitive flexibility and become more quickly dejected, giving up when receiving criticism. In competitive situations, those with higher EI ability may persist due to additional motivational factors involving desire to win or otherwise succeed (Ford & Tamir, 2012). Attentional focus may be influenced by choices and behavior of those with higher or lower EI ability.

Cognitive flexibility. Those with higher EI ability participate in strategic decision making, exhibiting a greater cognitive flexibility (Fernández-Berrocal et al., 2014; Ford & Tamir, 2012; Peña-Sarrionandia et al., 2015). Part of strategic decision making entails speculation of largest gain potential and recognition of long-term repercussions over shortsighted immediate gratification choices (Fernández-Berrocal et al., 2014). Individual choices in situational context may be largely reflective of strategic decision making based on motivation rather than associated with one person or the other having a higher ER ability (Fallon et al., 2014; Robinson et al., 2013), specifically situations involving perception of motivational gain in situations of cooperation and competition (Fernández-Berrocal et al., 2014). Cognitive flexibility is another positive attribute of higher EI ability.

Higher EI ability. Higher EI ability involves strategic decisions, pre-empting proactive social choices as well as reactive (Robinson et al., 2013) and egocentric ones (Copestake et al., 2013; Konrath et al., 2014; Nagler et al., 2014; Vonk, Zeigler-Hill, Ewing, Mercer, & Noser, 2015). Higher EI ability is documented in individuals who then use such ability to manipulate others (Nagler et al., 2014; Vonk et al., 2015). Narcissistic

individuals with higher EI ability implement such emotional process for exploitive and egocentric purposes (Konrath et al., 2014; Vonk et al., 2015), and social competence is key in aggressive reaction to provoking situations (Robertson et al., 2013). Factors involving negative connotation, motivation, and situational context, specifically aggressive response and higher EI ability, remain only partially understood.

Measurements of Emotional Intelligence

There are several measurements of EI used today. The Bar-On measurement, created by Bar-On, Tranel, Denburg, and Bechara (2003), measures emotional and social intelligence, popularly used as a trait measurement of EI. There are several instruments used to measure state EI. MacCann and Roberts (2008) developed the Situational Test of Emotion Management (STEM) is a measurement of action based on emotional states, and the Situational Test of Emotion Understanding (STEU) is an assessment regarding an individual's perception of the origin of an emotional state. Fallon et al. (2014) measures EI ability in negative feedback situations specific to situational contexts by use of the Situational Judgment Test of Emotional Abilities (SJTEA) and find that adverse mood impacts decision making. Ability to manage emotions is important in contexts involving social-cognitive understanding; conflict resolution and decision making (Ferguson & Austin, 2010; MacCann et al., 2011). The Swinburne University Emotional Intelligence Test (SUEIT) is another measurement of EI with six subscales involving emotional ability (Armstrong et al., 2011). These measurements of EI are based on different conceptualizations of EI as a construct.

One highly recognized measurement of ability EI is the MSCEIT (Mayer et al.,

2008). According to Fallon et al. (2014), one limitation of the MSCEIT involves a lack of focus on the situational context of an individual. The consideration of an individual's situation may motivate and either positively or negatively influence attention to a task request. This may encourage a biased evaluation indicative of lower EI ability, when in actuality, it may be that the individual is indifferent to the task at hand. Fernández-Berrocal et al. (2014) and Mayer et al. (2008) assert a positive aspect of using the MSCEIT (2002); this measurement of ability prohibits potential distortion involved in self-report measurements utilized with trait EI. MacCann & Roberts (2008) recognize the importance of situational context in measuring ability EI, to include components of managing emotions (Allen et al., 2015), emotional understanding (Allen et al., 2014), and sensitivity and intensity of emotions perceived (Lyusin & Ovsyannikova, 2015). The situational content of items in measuring ability EI provides an opportunity of practical reasoning.

The MSCEIT (2002) and the STEU (2008) are instruments based on empirical research and are regarded as appropriate and prevalent measurements of ability EI (Allen et al., 2014; Lyusin & Ovsyannikova, 2015; MacCann & Roberts, 2008; Mayer et al., 2008). In selecting between one of these two assessments, the STEU (2008) was chosen for instrumentation. The STEU measures emotional recognition and specifically emotional understanding (MacCann & Roberts, 2008). The STEU and the STEM have this commonality with the third branch of the four-branch EI ability model of the MSCEIT (2002), the third branch also measures emotional regulation (Allen et al., 2014; Meyer et al., 2008).

The STEM-B and the STEU (MacCann & Roberts, 2008) share attributes with the ENI (2000); both measurements involve mentalization (Ferguson & Austin, 2010) and perceptual understanding of a situation. A brief version of the STEU (STEU-B) has been recently designed (Allen et al., 2014). According to Allen et al. (2014), recommendations of this assessment are appropriate in research where EI is not the principal focus. Within this study, EI was a principal focus; the full STEU was determined the appropriate choice between these two instruments. The use of the Mayer-Salovey-Caruso Emotional Intelligence Test (MSCEIT) was contemplated (Mayer et al., 2004; Mayer et al., 2008). A practical constraint contemplation involved a substantial financial charge for use of the commercialized assessment, MSCEIT, even at a student researcher discounted rate (Austin, 2010). All forms of the STEU and the STEM are made available as research assessments of EI ability measurement without charge.

Background of Forgiveness

Forgiveness was postulated an ambitious and multifaceted human process, traditionally regarded as only a theological or religious concept (Enright, 1996; Hanke & Fischer, 2013; Van Dyke & Elias, 2008). In a macro approach consideration of influential attributes, researchers assert forgiveness has moral and social repercussions rendering it relevant for society as a whole (Enright, 1996; Hanke & Fischer, 2013; Pronk et. al., 2010; Ricciardi et al., 2013; Wohl et al., 2008; Woodyatt & Wenzel, 2014). Individuals who forgive experience a decrease in stress, enmity (Meneses & Greenberg, 2014), anxiety, depression, and anger, with an increase in hope (Wade et al., 2014). Cultural context and economic standing largely influence the propensity of forgiveness (Hanke &

Fischer, 2013). Forgiveness is a concept that may extend beyond individual repercussion; it may positively impact the relationship between different nations.

In addition to apprehending EI as ability (Braithwaite et al., 2011; Enright, 1996), recent researchers in the field of psychology conceptualize forgiveness as an instinct (McCullough, 2008), a personality trait (Goleman, 1995; Wohl et al., 2008), and a virtuous behavior (Mayer, 2000). Forgiveness understood in the latter three ways emphasizes individual personality and tendencies involved with forgiving and do not focus the emotional processes involved in the ability and deliberate practice of forgiveness. Taking into consideration the context of the client, therapeutic choices to include whether forgiveness would be an appropriate or counterproductive therapeutic intervention or what type of forgiveness emphasis (self, interpersonal, dispositional) may emerge from a greater understanding. The EFI is also commercialized; the price was considerably less than that of the MSCEIT (2000), and I thought it affordable.

Description of Forgiveness

There are different aspects of how forgiveness is practiced; the emotional concepts involving the process, practice, and context of forgiveness vary accordingly. Forgiveness and self-forgiveness have interpersonal relational consequence, predicting relationship satisfaction (Braithwaite et al., 2011; Macaskill, 2012). Individuals in healthy interpersonal relationship practice forgiveness (Hill & Allemand, 2012; Hill, Hasty, & Moore, 2011; McCullough & Worthington, 1994; Wade et al., 2014). Forgiveness is identified as a crucial aspect of relational fulfillment, permanency, and perception of relational success (Pronk et al., 2010). While interpersonal forgiveness involves a

relational understanding and practice, dispositional forgiveness refers to the internal features of an individual that contribute to the practice of forgiving (Macaskill, 2012). Dispositional forgiveness emerges from considerations of trait rather than ability (Carvalho et al., 2010; Pronk et al., 2010). According to corroborative research involving forgiveness and mental health, well-being is influenced by an individual's ability to forgive (Braithwaite et al., 2011; Prieto et al., 2013; Ricciardi et al., 2013; Wohl et al., 2008; Woodyatt & Wenzel, 2014) and self-forgive (Macaskill, 2012; Pelucchi et al., 2013). Individual well-being may be enhanced by practicing forgiveness.

Interpersonal Forgiveness. Interpersonal forgiveness involves cognitive and emotional processes within the context of a relationship that recognizes and then accepts an injustice, letting go of a need to hold another personally accountable for the offense (Enright, 1996; Woodyatt & Wenzel, 2014). Such offense may be evident to the offender and others, or illusory, perceived and apparent only to the one offended (Hill & Allemand, 2012). Responsibility and liability resulting from an offense are not dismissed (McCullough & Worthington, 1994), but the noxious struggle with anger, vengeful ruminations, ideations, or retaliatory actions previously performed by the one offended, are relinquished by the offended (Enright, 1996; Macaskill, 2012; McCullough, 2008; Meneses & Greenberg, 2014; Rey & Extremera, 2014; Wade et al., 2014; Woodyatt & Wenzel, 2014). Forgiveness has occurred when the offended experiences an emotional shift of these noxious emotions to an increase in a sense of well-being, lacking a desire of ill-will toward the offender. An increase in emotional regulation is observed when forgiveness has occurred (Braithwaite et. al., 2011; Ricciardi et al., 2013). Emotional

regulation in the process of forgiveness has been accentuated from a neuroanatomical view. Ricciardi et al. (2013) observe forgiveness through the use of functional magnetic resonance imaging (fMRI) by asking participants to imagine an offense. They find that forgiveness is linked to positive emotional states and emotional regulation.

Forgiveness includes reconciliation of interpersonal relationship unless such reconciliation may place the one offended in a position of physical and/or psychological harm (McCullough & Worthington, 1994; Woodyatt & Wenzel, 2014). The practice of reciprocity is an important factor in relationships, and those who are autonomous can relationally interact with others without taking an unbalanced, one-up or one-down position (Hill et al., 2011). Those who are self-differentiated to a lesser extent either behave in ways that are overly pleasing or emotionally detached in the reaction to relational discord. In the situation of subjection to ongoing abuse, interpersonal forgiveness, involving relational repair and restitution of wrongs, may not be in an individual's best interest (Woodyatt & Wenzel, 2014). Individuals in abusive situations may be encouraged to practice forgiveness in a way that is beneficial for the individual whom has experienced the abuse without stipulation of reconciliation with the abuser.

The distinction of the best interest of an individual can be problematic. This is true especially in situations when an individual is pressured to forgive in such a way that dismisses rather than acknowledges the offense (Prieto et al., 2013). Avoidance, forgetting, or otherwise dismissing the offense and hurt involved for the offended, is not the same as forgiving (McCullough & Worthington, 1994; Prieto et al., 2013). By disregarding the offense and dismissing the emotions experienced by the offended instead

encourages pseudo-forgiveness (McCullough & Worthington, 1994). Persuasion for the offended to minimize, deny, move on, let go, or otherwise overlook and forget the offense, are not part of the forgiveness process; encouraging such practices can be a further damaging, marginalizing, and ostracizing rather than a therapeutic or restorative (Prieto et al., 2013; Wade et al., 2014; Woodyatt & Wenzel, 2014). It is for this reason that psychologists need to be familiar with the processes of forgiveness to help those who have extenuating or otherwise difficult circumstantial influences in the dealing with emotions after trauma (Rey & Extemera, 2014) as well as mental illness treatment (McCullough & Worthington, 1994). Understanding the nuances of forgiveness will help professionals distinguish between authentic forgiving and pseudo-forgiveness.

Forgiveness is practiced in the context of relationship. Braithwaite et al. (2011), observes the construct of forgiveness within the context of an intimate relationship and find the ability to forgive increases relational satisfaction while decreasing interpersonal conflict and identify self-regulation behaviors and negative interpersonal maneuvers as mediating mechanisms. Without these mechanisms, they find no direct link between relationship satisfaction and the practice of forgiveness. This longitudinal study explores negative interpersonal defenses and self-regulatory behaviors in the context of an intimate relationship, and deliberation is given to these factors as mediators in the process of forgiveness. Through the decrease of using negative interpersonal defenses and the increase in self-regulatory behaviors, forgiveness of the offender is practiced, and the satisfaction of the intimate relationship is notably enhanced. Factors associated with a lack of forgiveness in a relationship include ruminative thoughts (Pronk et al., 2010),

holding onto negative emotions (Hodgson & Wertheim, 2007), and avoidance of the perceived offender (Rey & Extremera, 2014). The increase of these specific emotional factors may lead to vengeful or retaliatory behavior.

There are different considerations in relational forgiveness. Riek (2010) found the gravity of the offense, relational intimacy level, perceived responsibility, ruminating thoughts, and anger; all affect whether an offender pursues the forgiveness of one offended. The perceived severity of the offense (Wade et al., 2014) and the commitment level in a relationship are two situational contexts involved in forgiveness (Pronk et al., 2010). The greater the perceived severity of the offense, the more difficult the practice forgiveness (Wade et al., 2014), while the greater the level of commitment to the relationship, the more probable one is to forgive (Pronk et al., 2010). Differing needs of an offender and one who has been offended exists in the practice of interpersonal forgiveness (Riek, 2010), though little is known regarding the needs and appropriate address within the context of psychological intervention. Likewise, scarcity of research regarding the role EI plays in the practice of interpersonal forgiveness.

Dispositional forgiveness. Dispositional forgiveness is an internal process and involves a sensitivity of offense, an inclination of forgiveness, and a decrease of resentment (Carvalho et al., 2010). In a four-part correlational study involving dispositional forgiveness and executive functioning as a cognitive process, Pronk et al. (2010) find: a) a positive relationship between these constructs, b) executive functioning predicts greater forgiveness five weeks after the offense, c) executive functioning enables forgiveness when the offense is severe, and d) rumination of offense is an identified

mediator between the constructs. Those who have a higher level of executive functioning also experience a higher level of forgiveness. Confirming research by Carvalho et al. (2010), assert individuals who exhibit trait EI have a greater dispensation toward forgiveness. Hill & Allemand (2012) find that the ability to self-regulate affects the association between dispensational forgiveness and conscientiousness; traits involving agreeableness, emotional stability, maturity, and adapting to an adult role status are not associated with dispensational forgiveness and conscientiousness. Hodgson and Wertheim (2007) find that emotional management involving empathetic reasoning is linked to dispensational forgiveness. These understandings give further reason to explore the shared aspects of EI and dispensational forgiveness.

Self-forgiveness. Self-forgiveness is distinctly an internalized process and practice (Macaskill, 2012; Prieto et al., 2013; Wohl & Thompson, 2011), and involves a dispensational stance of forgiveness extended toward the self (Hodgson & Wertheim, 2007). Self-forgiveness may be practiced independent of the process of forgiveness involving another person, though may be influenced by the response and reaction of another person. Hill et al., (2011) assert that the autonomy of self, a positive understanding of individuality, is an important element in self-forgiveness. Autonomous individuals have an emotional awareness that enables them to identify and distinguish their own and others emotional states as well as empathize with the feelings of others.

Self-forgiveness is a distinct construct of forgiveness. While self-forgiveness and interpersonal forgiveness involve different processes (Enright, 1996; Hill & Allemand, 2012; Macaskill, 2012; Prieto et al., 2013), just as in interpersonal forgiveness, offenses

involving greater severity are more difficult to self-forgive (Pelucchi et al., 2013). Self-forgiveness is not the same as the practice of self-excusing; self-forgiveness is identified as involving a recognition and responsibility of wrong-doing. Prieto et al. (2013) point out that forgiveness is a unilateral process, and self-forgiveness involves a bilateral process. Macaskill (2012) finds that anxiety, shame, and anger are related to self-forgiveness, while only anger is a predictor in relational forgiveness. The practice of self-forgiveness may occur independently from the practice of interpersonal forgiveness; self-forgiveness may be influenced by perception and emotional reaction of another individual (Hodgson & Wertheim, 2007). While Hodgson and Wertheim (2007) contend that emotional management ability involving empathetic reasoning is associated with dispensational forgiveness, they do not find empathetic reasoning associated with self-forgiveness. Self-forgiveness is a distinguished practice of forgiveness.

Measurements of Forgiveness

There are several measurements of forgiveness used today. The Tendency to Forgive Scale (Brown, 2003; as cited in Hill & Allemand, 2012), the Trait Forgivingness Scale (Berry et al., 2005; as cited in Hodgson & Wertheim, 2007), the Heartland Self-Forgiveness Scale (Thompson et al., 2005), and the Trait Emotional Intelligence Questionnaire (Petrides & Furnham, 2006, as cited in Carvalho et al., 2010) are measurements specific to dispensational forgiveness. The State Self-Forgiveness Scales (Wohl et al., 2008) is specific to the measurement of self-forgiveness. The EFI (Enright 2000) measures affective, behavioral, and cognitive domains of forgiveness. Forgiveness

is conceived as ability and involves cognitive and behavioral processes; this instrument measures episodic forgiveness; I chose this as the appropriate measurement.

Establishment of the Variables

The establishment of ability EI is based on several psychological thoughts involving cognitive thought and social EI (Allen et al., 2015; Allen et al., 2014; MacCann & Roberts, 2008; Mayer et al., 2008). Rationalization of EI provided by Mayer et al. (2008) is based on the premise of Gardner's multiple intelligence theory (1983), the name of his continuum framework specifically categorized as an example of Gardner's personal intelligence. EI includes perceptive information of self and other emotional states for the purpose involving self-regulation (Allen et al., 2015) and problem-solving (Allen et al., 2014; MacCann & Roberts, 2008). In further development and understanding of this ability, Mayer et al. (2012) elaborate that cool intelligence involve impersonal information, comprehension and identification and hot intelligence involve an internalized relevant process of stirring up emotion. Ability EI is designated a hot intelligence.

Forgiveness may be considered a type of intelligence. In a commentary, Mayer (2000) asserts forgiveness as a type of spiritual intelligence and conceptualizes it as a virtuous behavior. Asserted is the understanding of spiritual intelligence as a distinct form of intelligence founded on a state of consciousness rather than abstract reasoning and forgiveness a virtue emerging from this state of awareness. Forgiveness ability may best fit as a subcomponent of personal intelligence; it involves processing of emotions that would conceptually fit the description of a hot intelligence, as described by Mayer et

al. (2012). Based on these insights, appropriate theoretical regard of forgiveness ability is warranted.

Common Considerations of Emotional Intelligence and Forgiveness

EI and forgiveness have commonalities. Similarities involving EI and forgiveness include common processes involving emotional content and empathy (Mayer et al., 2008; Pelucchi et al., 2013; Woodyatt & Wenzel, 2014). A determinant of healthy relationships is the ability to give and take in a reciprocal manner; this is observed in forgiveness (Braithwaite et al., 2011; Enright, 1996; Pronk et al., 2010; Wohl et al., 2008). Just like EI, the ability to forgive within significant relationships is linked to emotional stability and healthy relationship (Braithwaite, 2011; Pronk et al., 2010; Ricciardi et al., 2013). These commonalities may provide further grasp and link between EI and forgiveness.

Previous studies involving trait EI and forgiveness provided varying results. Hodgson & Wertheim (2007) assert that emotional management predicts dispensational forgiveness, and Pronk et al. (2010) find cognitive processes, specifically executive functioning, facilitates forgiveness. In examination of ability EI, Rey and Extremera (2014) study how overall EI ability affect or influence other personality traits and ability to forgive, finding that the specific MSCEIT (2002) branch, managing emotions, accounts for the greatest variance in interpersonal forgiveness. Research by Mugrage (2014) involving the relationship between trait EI and forgiveness utilize the Trait Emotional Intelligence Questionnaire-Short Form and the EFI (Enright & Rique, 2000), and find no evidence based on the empirical study of the relationship between trait EI and forgiveness. The research between these constructs has mixed findings; previous research

confirmed a positive relationship (Hodgson & Wertheim, 2007), a negative relationship (Carvalho et al., 2010), and no significant relationship (Mugrage, 2014; Van Dyke & Elias, 2008). Aside from these specific studies, the link between EI and forgiveness is based on an inferred relationship and not on empirical data. In collaborative review of research related to EI and forgiveness, I found a lack of empirical study of ability EI and the ability to forgive.

The big five. In three articles (Rey & Extremera, 2014; Schlegel et al., 2013; Hill & Allemand, 2012), the big five (extraversion, agreeableness, conscientiousness, neuroticism, and openness), EI, and forgiveness are explored. In addition to the big five, Rey and Extremera (2014) research other factors: gratitude, optimism, and forgiveness. Emotional instability (as demonstrated in neuroticism) along with openness and agreeableness, are predictors for vengeful desire or intent. After accounting for these predictors, the researchers find that unique variance exists between vengeful desire and EI ability. I observed a significant secondary finding; individuals with higher agreeableness, conscientious, gratitude (as determined by the gratitude questionnaire), and optimism scores (as determined by the revised life orientation test) along with low neuroticism predict nonvengeful reprisal. Nonvengeful reprisal, the practice of refraining from gaining vengeance through retaliation, is a characteristic of forgiveness.

There is a link between EI ability and behavior. Rey & Extremera (2014) find those with higher EI ability tend to adopt avoidant type behaviors (as determined by the Transgression-Related Interpersonal Motivations Scale (TRIM; Rey & Extremera, 2014). This may be a differential coping mechanism, a noted higher EI ability developed in

preventing further harm. Pertaining directly to dispensational forgiveness and conscientiousness, Hill & Allemand (2012) study the big five personality traits and find that the ability to self-regulate affects the association between forgiveness and conscientious, though not traits involving agreeableness, emotional stability, maturity, or the adaptation to adult role status. Further study of the big five traits may provide greater understanding of EI and forgiveness.

Personality traits may influence EI. In exploration of ability and trait EI, research by Schlegel et al. (2013) involved 32 subscales, the big five personality traits, and 27 other personality traits, and find individuals who score high on neuroticism were likely to have higher EI ability, though exhibit lower self-control. The total 32 subscales contribute to a structure where four domains (emotional abilities, sensitivity, expressivity, and self-control) emerged. Subscales of ability EI loaded on emotional ability domain, while subscales of trait EI loaded in the other three domains, sensitivity, expressivity, and self-control. Empathic concern loaded in the domain, sensitivity. This study affirms that EI should have minimal correlation with the big five (Libbrecht & Lievens, 2012; MacCann & Roberts, 2008; Mayer et al., 2008). Based on contexts involving specific situational judgment, ability EI and trait EI not strongly correlated affirming the difference between EI ability and personality traits (Ferguson & Austin, 2010; Libbrecht & Lievens, 2012). However, results by Rey & Extemera (2014) showing higher levels of EI have been associated with persons who exhibit big five traits and additional traits including gratitude and optimism. This finding conflicts with Mayer et al. (2008) and

Schlegel et al. (2013). Further study of the big five traits is necessary to better understand these traits and their relation to EI and forgiveness.

Empathy. Empathy is an identified and shared personality trait of relevance in forgiveness (Hill et al., 2010; Pelucchi et al., 2013; Wade et al., 2014; Woodyatt & Wenzel, 2014) and in EI (Castillo et al., 2013; Hodgson & Wertheim, 2008; Konrath et al., 2014; Mayer et al., 2008; Moeller et al., 2011; Rey & Extemera, 2014). Individuals with higher EI ability are more proficient in recognition and reasoning emotionality and emotions in situations of social consequence (Ferguson & Austin, 2010; Mayer et al. 2008; Moeller et al., 2011). Individuals who possess empathetic understanding have an advantageous stance in conflict resolution (Konrath et al., 2014). In addition to empathy, individuals who display gratitude and optimism are observed to circumvent the avoiding behaviors, displaying forgiveness of an offender and lack incentive to retaliate or otherwise participate in vengeful behaviors (Rey & Extremera, 2014). Such conflict resolution incorporates the practice of forgiveness rather than opting to avoid or retaliate against those who are perceived to have committed an offensive act.

Individuals with psychopathy and higher EI ability can be skillful in deciphering other emotional states, using such information to manipulate, exploit, and otherwise negatively influence others (Copestake et al., 2013; Konrath et al., 2014; Nagler et al., 2014). Hill et al., 2011) contemplate associations between self-differentiation and forgiveness, linking self-differentiation to empathy as well as to one's identified level of EI. Those who are regarded highly differentiated individuals exhibit a higher level of EI

to inwardly recognize personal emotions while contemporaneously discerning and empathizing with another's emotional states.

I found a difference between one who has higher EI ability and utilizes it in a positive manner and one who utilizes EI in a negative manner, may involve the presence of narcissism that by definition precipitates an absence of empathy (Castillo et al., 2013; Konrath et al., 2014; Nagler et al., 2014). According to Konrath et al. (2014), empathy is a key personality trait in the distinction between constructive decision making and unfavorable choices; a lack of empathic understanding is attributed to antisocial and narcissistic personality disorders. Vonk et al., (2015) observe narcissism with higher ToM abilities and emotional management ability have higher ToM ability, while those with other darker personality qualities such as grandiosity, psychopathology, and borderline traits, experience deficit in mentalization ability. Nagler et al. (2014) regard dark intelligence, lack of empathy, and feeling of guilt in the emotional manipulation of others. Empathy is identified as having a role in positive and negative use of EI.

Anger, guilt, and shame. While anger, guilt, and shame are construed as negative personality traits, these traits are found to play a pertinent and beneficial role in interpersonal forgiveness (Ford & Tamir, 2012; Meneses & Greenberg, 2014; Rick, 2010;) play a beneficial role. Contemplations involving anger greatly depends on the context and a personal determination of circumstances as to whether anger is advantageous in the long-run (Ford & Tamir, 2012). Individuals with higher EI perceive and then more appropriately decide whether and when to get angry, while Riek (2010) asserts guilt is predictive of forgiveness, and anger of the offender may prevent the desire

to seek forgiveness and thus impede relational restoration. In their research of emotion-focused therapeutic intervention, Meneses & Greenberg (2014) use the EFI (Enright & Rique, 2000) and find that acceptance and shame are pertinent in a process of interpersonal forgiveness. They discovered that shame lead to an empathic understanding. The strength of a relationship may encourage the pursuance of forgiveness whether or not guilt feelings are internalized (Riek, 2010). Shame has something to do with feeling empathy in the context of relationship.

In a qualitative approach, forgiveness is viewed from the offender's perspective. In Riek's (2010) model of seeking forgiveness, five factors (rumination, responsibility, severity, anger, and closeness) collectively influence an individual's feelings of guilt in the offender. The emotional state of guilt is identified as a mediator of motivation for the offender. Meneses & Greenberg (2014) find expressed shame a more powerful motivational emotion than guilt in the eyes of the offender. Personality characteristics and social context are also contributing factors as to whether an offender seeks forgiveness as well as whether the offender feels responsible for the offense (Riek, 2010). Greater research is needed in understanding the roles and interactions of these personality traits, and especially the role of relational strength, anger, guilt, and shame, as to whether an offender extends an apology requesting forgiveness and whether forgiveness is granted by the offended.

Considerations of Psychopathy

I found conflicting research as to whether those with psychopathy accurately assess emotions (Konrath et al., 2014). Some researchers point to a deficit in

emotionality, while others find acute EI ability though utilize such ability in a darker manner. The proficiency involving awareness of another's emotional state is instrumental, as one who practices empathy can participate in a reciprocal, give-and-take pattern of relationship (Cardoso et al., 2013; Mayer et al., 2008; Rey & Extremera, 2014). Those with psychopathic characteristics such as narcissism or antisocial personality disorder may have a more egocentric appraisal for effective or ineffective behavior, determined by manipulation and motivation of self-gain rather than social competence and lack empathy (Robinson et al., 2013). Motivation is undergirded by personality traits rather than ability EI; this is an identified pivotal point between emerging positive well-being or dark pathological tendencies (Konrath et al., 2014). As the findings of researchers differ, more studies focusing emotionality and psychopathy are needed.

Dark intelligence. Higher EI ability is only recently acknowledged in socially aversive individuals identified as having a dark intelligence (Nagler et al., 2014). Individuals who have a dark intelligence use higher EI ability for egocentric self-gain, manipulation, and exploitation (Copestake et al., 2013; Konrath et al., 2014). Paulhus and Williams (2002) identify three markers: psychopathy, narcissism, and Machiavellianism, as the *dark triad*. Nagler et al. (2014) explore how three markers indicative of dark intelligence are related to socio-EI skill. Psychopathy and narcissism are positively related to emotional manipulation, while Machiavellianism is negatively related to socio-EI. I found that current research emphasizes higher EI ability is recognized in psychologically healthy and unhealthy individuals.

One whom exhibits narcissistic behavior employs EI with a different intent than an individual whom is psychologically healthy. Wai and Tiliopoulos (2012) identify empathy as a common deficit with individuals who have a dark triad personality. Specifically found was a lack of affective empathy and a small indication of cognitive empathy. Research by Konrath et al. (2014) and Copestake et al. (2013) support the premise of Wai and Tiliopoulos (2012). Narcissistic explosiveness is a noted behavior of potentially damaging consequence; individuals who exploit take advantage of the susceptibility and vulnerability of others lack empathy (Konrath et al., 2014). A key difference between inappropriate reactive aggression (aggressive behavior when provoked) and anger utilized by one involving short-term gain involves the blatant choice of exploitation of another in the absence of relational reciprocity. The perception of the mental states of others is ascertained for the purpose of manipulation rather than empathy (Copestake et al., 2013; Konrath et al., 2014; Moeller et al., 2012; Vonk et al., 2015). Socio-emotional skills exist in these individuals; however, these skills extend from the individual in a destructive pathological manner and for purposes involving malicious intent.

Psychopathy. Individuals with identified psychopathy may have a greater perceptual ability and heightened sensitivity, detecting emotional states (Copestake et al., 2013; Konrath et al., 2014), specifically noted with individuals who have narcissistic features (Vonk et al., 2015). Those who exhibit pathological symptoms in interpersonal relationships are also observed to have the potential of higher EI ability (Konrath et al., 2014; Nagler et al., 2014). Arguably, a positional regard of ability EI is that of neutrality,

as individuals are observed to utilize EI in prosocial as well as notorious respects. Instead of present research, emotional state recognition may be best described as a neutral ability, neither positive nor negative. It is asserted that details involving mental health disorders greatly determine whether or not forgiveness would be an appropriate or useless therapeutic intervention strategy.

Attentional Bias. Attentional bias involves an automatic implicit focus and attention to emotional stimuli in another person that is similar to the present emotional state of the self (Becker & Leinenger, 2011). The mood state of an individual may affect personal reactions to negativity; individual mood state along with perceived relevance of tasks at hand may be responsible for lower measurements of EI ability (Fallon et al., 2014). The intensity of emotion and sensitivity to emotional content are two other factors involving the perception of a mood state (Lyusin & Ovsyannikova, 2015). When a person is experiencing an emotional state such as anxiety, that person may filter emotional information in such a way as to hone in on an emotionally charged stimulus, the same emotional state found in other people with whom they come into contact (Becker & Leinenger, 2011). Implicit attentional bias may be key in emotional recognition and interpretation, with ongoing individual frequent negative mood experiences on one hand, and positive mood experiences as reflective by those with positive personality characteristics on the other. Increasing ability EI may focus an individual on the correct interpretation of emotional content, this may ameliorate and lessen symptoms of psychopathy (Mayer et al., 2008) and encourage resilience after negative life experiences (Armstrong et al., 2011). The mood state and automatic attentional focus of an individual

may have bearing on whether they correctly interpret the emotional state of another as well as whether they continue to experience symptoms of psychopathy.

Aggression is a construct that is observed in relationships and social situations. In a three-part study, Robinson et al. (2013) find that lower social competence is predictive of reactive aggression: participants obtained higher scores on measurements of trait anger and aggression, participants show a favorable tendency toward aggressive action in response to a perceived provocation, and participants actively take part in aggressive behavior on days experienced especially discouraging. This study emphasizes those whom experience difficulty in emotional management lack understanding of effective and ineffective behavior. The researchers also find those whom had problems managing their emotions had difficulty with emotional regulation. Emotional regulation and emotional understanding are crucial to social understanding and competence in situational contexts (Ferguson & Austin, 2010; MacCann et al., 2011). Stressing emotional regulation in therapeutic contexts may help individuals whom display aggressive behavior.

Self-interest. Self-interest involves selfish gain. Fernández-Berrocal et al. (2014) find that individuals with higher EI ability were more inclined to cooperate as well as compete when best self-interest is served in a task of goal achievement than those with lower EI ability. Such behavior displays cognitive flexibility and is further based on the anticipation of the decision of another in contemplation of personal response, dependent on situational context. Ford and Tamir (2012) find that a short-term negative emotional preference, such as anger, are exhibited by individuals with higher EI ability in

situational contexts where such emotions may be useful, such as in confrontation. Those with lower EI ability have a preference of negative emotional preference in incongruent situational contexts: for example, feeling angry when a goal necessitates collaboration or feeling contented in a confrontational or disadvantageous context (Robinson et al., 2013). The individual familiarity of negative emotional preference may influence the actual feeling; for example, when one feels anger because the individual is largely familiar with the emotion anger (Ford & Tamir, 2012). Such emotional preference may influence attentional bias (Becker & Leinengger, 2011). A therapeutic emphasis involving emotionality, attentional bias, and specifically increasing EI ability may be beneficial for individuals who prefer negative emotions.

Forgiveness and attentional functioning. Pronk et al. (2010) explore the underlying processes of cognitive functioning and forgiveness to include attentional functioning. Switching tasks, revising tasks, maintaining focus, and inhibiting focus on irrelevant detail are all components of attention and are factors of behavioral regulation. Those who have the ability to maintain focus on negative emotional states and experience ruminating thoughts are less likely to forgive (Meneses & Greenberg, 2014; Pronk et al., 2010). Individuals who have the ability to inhibit ruminating thoughts are more likely to forgive, with a restoration of positive emotions toward the offender (Enright, 1996; Macaskill, 2012; McCullough, 2008; Meneses & Greenberg, 2014; Rey & Extremera, 2014; Wade et al., 2014; Woodyatt & Wenzel, 2014). The researchers Pronk et al. (2010) assert forgiveness as a positive example of facilitating the executive functioning process, as sustained negative focus may maintain mood and prohibit a process of forgiveness

altogether. Mood is an identified potential covariate to trait; personality traits may encourage specific mood experiences, and such experiences may affect emotional identification, a function of ability EI (Konrath et al., 2014). Further study may provide regard of EI and forgiveness in individual differences involving personality and offer greater understanding involving how such implicit attention to mood-congruent stimuli influences emotional processing (Becker & Leinenger, 2011). An individual's inability to take focus off of a negative emotional state may impede the process of forgiveness.

Summary and Conclusions

I have summarized the fundamental nature of the variables, EI, and forgiveness. In chapter 2, I have explored the theoretical framework of ToM and the variables posited on ToM presuppositions. The potential relationship between ability EI and forgiveness remains empirically unfounded. EI has been previously regarded from a theoretical framework of ToM (Ferguson & Austin, 2010; Mayer et al., 2010; Qualter et al., 2011; Vonk et al., 2015), and to knowledge, forgiveness has not. This identified gap in the literature will provide unprecedented cognitive socio-emotional consideration of forgiveness.

A second identified gap in the research involves an unparalleled nomothetic approach to the variables, emphasizing internal processes involving ability. Using a synthesized coherence, Based on previous research of EI and forgiveness, I explore the plausibility of a link between these variables (Sandberg & Alvesson, 2011). If a relationship between ability EI and forgiveness is established, then future teaching and practice of psychology may include simultaneous attention to these processes.

Chapter 3: Research Method

The primary purpose of this study was to explore whether EI and forgiveness are correlated. The two domains of the dependent variable EI were emotional management ability and emotional understanding. Emotional management ability was measured by use of STEM-B while emotional understanding was measured by use of STEU. The three domains of the dependent variable forgiveness were the affective, behavioral, and cognitive domains. All three of these domains was measured by the EFI.

The secondary purpose of this study was to identify whether predictor variables such as empathy, life satisfaction, emotional management ability, and emotional understanding contributed to forgiveness. Empathy was measured by use of TEQ. Life satisfaction was measured by use of SWLS. Emotional management ability was measured by use of STEM-B. Emotional understanding was measured by use of STEU. Forgiveness was measured by use of EFI and determined by an overall quotient. The theoretical foundation for this study was ToM (Call & Tomasello, 2008).

In chapter 3, I discuss methodological aspects of my study. My rationale for population choice is based on a nonexperimental and nonrandomized design. My sampling strategy is a convenience sampling strategy, and specific details are given to choice of population. The research procedures for my study are provided with provided and will include the operationalization of constructs and instrumentation choices. I have made apparent statistical boundaries involved in the data analysis, issues of validity, and the ethical provisions of my research. The chapter ends with a summary of my methodology.

Research Design and Rationale

I used a quantitative, nonexperimental research method to explore the potential relationship between EI and forgiveness. Previous researchers recognized similarities between EI and forgiveness such as emotional awareness and processing, empathy, life satisfaction, perspicacity, and decision making, self-contemplation, understanding, and reciprocal emotionality (see Enright, 1996; Goleman, 2005; Mayer et al., 2008; Wade et al., 2014; Woodyatt & Wenzel, 2014). Other researchers emphasize EI from the context of situational judgments (Allen et al., 2015; Allen et al., 2014; Hanke & Fischer, 2013; MacCann & Roberts, 2008). I found previous research that confirmed a positive relationship (Hodgson & Wertheim, 2007), a negative relationship (Carvalho et al., 2010), and no significant relationship (Mugrage, 2014; Van Dyke & Elias, 2008). Aside from these specific studies, the link between EI and forgiveness is based on an inferred relationship and not on empirical data. It is my opinion that additional research on these two constructs may provide a greater understanding of the relationship between EI and forgiveness.

My study contains two research questions. The first research question involved exploration of the potential relationship between the two dependent variables, EI (variable X) and forgiveness (variable Y). The second research question involved consideration of the impact of potential predictor variables (empathy, life satisfaction, emotional management ability, and emotional understanding) on the criterion variable forgiveness. The nonexperimental correlational research design detects a relationship between two constructs. This design I chose was appropriate and would test my

hypotheses and provide an answer my research questions. Mugrage (2014) also had a nonexperimental design, exploring the relationship between trait EI and forgiveness. I did not detect a relationship between trait EI and forgiveness. My research on ability EI and forgiveness will either corroborate (show no relationship between the constructs) or refute (finding a relationship between the constructs) the findings of Mugrage (2014). If refuted and a relationship is detected between ability EI and forgiveness, this may possibly reveal a difference between trait and ability EI and forgiveness.

Methodology

Population

The Walden research pool is comprised of volunteer University faculty and students who are interested in participating in various research opportunities. My target population consisted of individuals who were 18 years and older from this research pool and those whom I recruited from my social media accounts (see Appendix L) The population from my Facebook and Twitter accounts included personal friends, academic colleagues, immediate and extended family members, acquaintances, fellow alumni, and coworkers.

Internet Access, Social Networking Services, and Facebook

The accessibility and convenience of the Internet increased its use by researchers in social and behavioral sciences (see Kosinski, Matz, Gosling, Popov, & Stillwell, 2015; Rife, Cate, Kosinski, & Stillwell, 2016). Recruiting participants and collecting data from various populations, including hard to reach ones (Baltar & Brunet, 2012), is less complicated with the use of the Internet (Naglieri, Drasgow, Schmit, Handler, Prifitera,

Margolis, & Velasquez 2004; Knapp, Peters, & Oliver, 2013; Kosinski et al., 2015). The In addition to greater access to various populations, the Internet provides an easier way to administer, score, and collect data than traditional methods. Social networking service (SNS) websites are common to research populations, and the largest SNS is Facebook (Baltar & Brunet, 2012; Kapp et al., 2013; Kosinski et al., 2015; Rife et al., 2016).

Some researchers express concern and reservation over the use of SNS websites (Kapp et al, 2013; Kosinski et al., 2015). Recruitment using SNS websites involves striking a balance between attracting participants and accounting for bias, such as experimenter and selection bias, that may raise methodological concerns of validity and reliability (Baltar & Brunet, 2012; Kapp et al., 2013). A lack of proficiency may be prohibitive to some researchers whom may benefit from a greater familiarity and knowledge of SNS websites. Clear ethical research guidelines are lacking in the use of SNS websites concerning participant recruitment, consent, confidentiality, and exposition of study findings(Kosinski et al., 2015). This lack may increase potential adverse effects to participants and subsequently dissuade researchers from considering SNS websites as a viable research option (Kosinski et al., 2015). Lack of technological competence may be an obstacle to conducting research using SNS websites; this may sway a researcher toward more traditional research approaches. In a comparison of a college student population where data were collected through a traditional nonSNS website recruited population and a SNS Facebook recruited population, Rife et al. (2016) find a small difference between the responses of these populations. The researchers interpreted this

difference from a practical standpoint and indicated the study findings showed minimal discrepancy between a traditional recruited population and a SNS recruited population.

Popular virtual sampling techniques in SNS research conducted on Facebook include snowball sampling, advertisement recruiting, profile data collecting, and self-report collecting (Kisinski et al. 2015). One reason for the popularity of these techniques includes ongoing availability and long-term contact options with participants. Snowball sampling with a SNS recruited Facebook population entails encouraging friends of friends to participate in a study; this expedites the process of recruitment. Baltar and Brunet (2012) found that use of a snowball sampling technique on the platform resulted in a higher response rate than using a traditional population. The transparency of Facebook profiles and membership in the same groups of interest as the participants attributed to the increase in response (Baltar & Brunet, 2012). The authors suggested that their involvement on the platform provided a virtual sense of rapport with participants (Balter & Brunet, 2012). Based on several researchers findings that I viewed, SNS websites (specifically, Facebook) are a viable option for research and analogous to traditional methods for recruitment and data collection (Baltar & Brunet, 2012; Kapp et al., 2013; Kosinski et al., 2015; Rife et al., 2016). Participant availability, ease of contact, higher response rate, and virtual rapport are features of SNS Internet research that appeal to both researchers and participants.

Sampling and Sampling Procedure

Sampling strategy. The type of sampling strategy I used in this study was a nonprobability sample design (specifically, a convenience sample; Frankfort-Nachmias &

Nachmias, 2008). The participants in a nonprobability sample design are not randomly selected; moreover, the participants in my study were volunteers. The choice of a nonexperimental correlation design and standard multiple regression analysis will advance the concurrent study of EI and forgiveness in psychology by adding knowledge to a presently sparse research base. A correlational design will allow greater understanding of the relationship between EI and forgiveness. Multiple regression analysis will help to identify predictor variables and their unique contribution to the process of forgiveness.

A nonexperimental correlation design choice was in keeping with a synthesized coherence and incompleteness research strategies (Sandberg & Alvesson, 2011), addressing a lack of recognized relationship between two empirically established variables (EI and forgiveness) with ToM as a theoretical foundation (Ferguson & Austin, 2010). I considered purposive sample and quota nonprobability sample designs. Use of the Internet provides ease of access, convenience to participants and data, and lower monetary expense. These were practical reasons that I selected the convenience sample strategy over other strategies (Frankfort-Nachmias & Nachmias, 2008; Naglieri et al., 2004). The psychometrics I used to measure the constructs of EI and forgiveness were readily accessible through the Internet. The distribution of the tests and collection of responses was achieved through the Internet program, SurveyMonkey (2015).

Sampling procedures. The sampling procedures involved an invitation to participate that was generated in one of the three following ways: the study was posted in the Walden University research pool, the link was forwarded to the survey from a

participant or another individual, or the link was forwarded to the survey from me. The SurveyMonkey (2015) link included information outlining the purpose of the study, anonymity, and gained informed consent from research participants. The distribution and collection of data from the five assessments (TEQ, SWLS, STEU, STEM-B, and EFI) occurred on the Internet via SurveyMonkey. Participants had the option to share a link with other potential participants, as stipulated and encouraged in the informed consent (see Appendix A). Participants were encouraged to share the SurveyMonkey link with individuals, friends, or contacts that they know and potentially may be interested in participating in this study.

Power analysis. A power analysis involves effect size, alpha level, and chosen power level; these considerations affect the choice of appropriate sampling size. According to Cohen (1992), for the social sciences, alpha set at .05 ($\alpha = .05$), and Beta (β) set at .80 (1-$\beta = .80$), are acceptable estimations used within the social sciences, accounting for type I and type II error accordingly in order to detect a medium effect (ES = .30). The *p* value set at .50 (*p* = .5), with an index of effect size from -1 to +1, *df* = 83 (*N*-2 = 83), a CI = 95%, establishes the critical value of +/- .211 (two-tailed). In regard to the predictor variables (*k* = 4), the *p* value set at .50 (*p* = .5), the *F* test (*df* = *k*, *N* - *k* - 1) established the *F* ratio, the critical value needed to detect a variance of medium effect (f^2 = .15) is $F(4,80) > 2.48$.

Sampling size. The estimated target population and appropriate sampling size to detect a medium effect (a Cohen's *d* of 30-50; Cohen, 1992) involving a zero-order

correlation was determined to be at least 85 ($N = 85$; Cohen, 1992). Regression considerations were based on Cohen (1992) recommendations. In regards to the above power analysis, the estimated target population and appropriate sampling size was determined to detect a variance of medium effect ($f^2 = .15$). Per independent variable ($k = 4$), the appropriate number of participants was determined to be at least 84 ($N = 84$). It was decided that the larger number, 85, would provide enough power to detect a medium effect for a zero-order correlation and multiple regression.

Procedures for Recruitment, Participation, and Data Collection (Primary Data)

Recruiting procedures involved an invitation for volunteer participants ages 18 and over. Convenience sampling within this study involved identifying and selecting a large target Internet population of free and easy personal access to me. In addition to the Walden University research pool, the social media populations of Facebook and Twitter were identified and selected; these social media populations met the inexpensive (free) and easy personal access criteria. This targeted population included personal friends, present academic colleagues, potential academic colleagues, immediate and extended family members, acquaintances, fellow alumni, and coworkers. It was determined that the survey would be left opened until at least 85 participants completed all the items on the survey. If there were participants that did not complete all items on the survey, these participants would be counted. However, the statistical data analysis would only be run on the participants who completed all the survey items.

The invitation was posted on the Walden University research pool website and on the social media sites Facebook (see Appendix B) and Twitter (see Appendix C). I

communicated that my study focused on emotions and relationships. Within the informed consent, the prospective participant was explained that the purpose of the study was to explore the potential relationship between emotional understanding and attitudes involving a hurtful interpersonal offense (see Appendix A). The research hypotheses would not be openly communicated to the participants. I would encourage the forwarding of the survey link to others by friends on my Facebook or followers on my Twitter page or individuals in the groups where the link was posted. Details addressing validity issues within this study are described in Chapter 5.

My rationale included the goal to reach a large number of participants through the convenience of Internet use. An invitation was extended to individuals whom may be interested in becoming participants from other individuals on these sites or directly from me. A statement of the purpose was provided within the SurveyMonkey link, asserting this study involved an exploration of the potential relationship between emotional understanding and attitudes involving a hurtful interpersonal offense. Informed consent, to include permission to participate in the study, was requested and confirmed. Anonymity, approximate time of completion of the five assessments, and freedom to discontinue participation in the study at any time without recourse, was delineated.

I informed participants that this study did not involve personal gain (see Appendix A). No individual scores or follow-up involving the data collected will ensue. The consent statement included risks of participation. Risk included potential of emotional discomfort, as participants were asked to recall an instance when someone has offended them in the past. I explained that confidential and free counseling service is available 24

hours a day to any Walden student (see Appendix D). The 24-hour hotline phone number along with the Walden ID code was available to any participant from the Walden pool, whether or not they complete all of the five assessments. I encouraged participants who were not Walden students to call a local counseling center of their choosing to process any problematic negative thoughts or feelings that may emerge from taking part in this study.

Provided was a link confirming the age of the participant as 18 or older, the informed consent, and the five assessments (TEQ, SWLS, STEM-B, STEU, and EFI; see Appendix A); all data were collected on the Internet and through SurveyMonkey (2015). When the participant finished the survey made of the five questionnaires, debriefing procedures were given. These procedures included a thank-you for participation and the information for follow-up counseling if the Walden research pool participant desired this information (see Appendix D). The participants were encouraged to forward the survey link to anyone whom they may know that might be interested in completing the survey.

Instrumentation and Operationalization of Constructs

Toronto Empathy Questionnaire (TEQ).

The Toronto Empathy Questionnaire (TEQ), developed by Spreng, McKinnon, Mar, & Levine (2009a), is a self-report brief measurement of empathetic interpersonal understanding. The TEQ contains 16-items. On each item, the respondent was to choose one of the five possible responses (‘never’ to ‘always’) that best fitted the current attitude of the respondent’s feelings or actions. The scores were added together to obtain an overall score. Approximate completion time of this inventory was five minutes.

Initial study and construction of the TEQ used exploratory factor analysis; through three combined studies, a single factor of empathy was derived (Spreng et al., 2009a). In the first of the three studies with 200 undergraduate psychology class participants, a total of 95 items were drawn from nine various measurements of empathy. These items were re-worded to fit a uniform five-point scale (never, rarely, sometimes, often, always). These initial 95 items were narrowed to 16 items through iterated principal axis factor analysis. Scores on the TEQ are added together producing an overall score of empathy with a range from zero to 64. A score in the lower range indicates a lower degree of empathy and higher scores indicate a higher degree of empathy.

Cronbach's alpha reliability score of .85 demonstrated high internal consistency (Spreng et al., 2009a). Convergent validity indicated positive correlations between the TEQ and the Interpersonal Reactivity Index (Davis, 1980, as cited in Spreng et al., 2009a), the Empathy Quotient (Baron-Cohen & Wheelwright, 2004), the How I feel in Different Situations (Bonino et al., 1998, as cited in Baldner & McGinley, 2014), and the Basic Empathy Scale (Jolliffe & Farrington, 2006). Divergent validity was established by using an autism spectrum disorder measurement. Negative correlations are reported between the TEQ and the Autism Quotient (Baron-Cohen, 1995, as cited in Spreng et al., 2009a). Written permission was not needed for the use of the TEQ; supporting documentation to this end is included (see Appendix E).

Satisfaction With Life Scale.

Diener, Emmons, Larsen, and Griffin (1985) developed the Satisfaction With Life Scale (SWLS). Thirty years later, the SWLS is a widely used subjective measurement of

overall life satisfaction (Pavot & Diener, 2008). The SWLS conceptualizes life satisfaction as an effective, emotional, and cognitive judgment process. The SWLS measures the effective, emotional, and cognitive judgment process of life satisfaction, comparing the overall satisfaction of an individual with life experience and the subjective expectation of overall life satisfaction experience.

Based on principal axis factor analysis, a single factor of life satisfaction was derived from 48 items (Diener et al., 1985). These 48 items were narrowed down to 10 items, then narrowed further through screening for duplication of item content, leaving a total of five items. Chronbach's alpha of the SWLS ranges from .79 to .89, indicating high internal consistency (Pavot & Diener, 2008). Convergent validity included positive and high correlations acknowledged with 11 other well-being subjective measurements, yielding moderate to highly correlated with 10 of the 11 well-being comparison measurements. The exception was a well-being scale measuring affect intensity of an emotional experience (Diener et al., 1985).

On each item of the SWLS, the respondent is to choose one of the 7 possible responses ('strongly disagree' to 'strongly agree') representing life satisfaction. Scores on the SWLS between five and nine points represent extreme life dissatisfaction, between 15- and 19-points represent slight life dissatisfaction, a score of 20-points represents neither satisfied or dissatisfied (neutral), between 21- and 25-points represent slight life satisfaction, and between 31- and 35-points, represent extreme life satisfaction (Pavot & Diener, 2008). Approximate completion time of this inventory is two minutes.

The SWLS was developed by Diener et al. (1985) based on participants who were undergraduate students enrolled in an introductory psychology class ($N = 176$), comparisons with the second group of undergraduate students enrolled in an introductory psychology class ($N = 163$), and a geriatric population ($N = 53$). The use of this scale is vast (Pavot & Diener, 2008) and extending beyond a psychological use and populations. Written permission is not needed for the use of the SWLS; supporting documentation to this end is included (see Appendix F).

Situational Test of Emotion Understanding (STEU).

The Situational Test of Emotion Understanding (STEU) was developed by MacCann and Roberts (2008) as a measurement of EI ability. The names of the two developers of the STEU are MacCann and Roberts (2008). Written permission for the use of the STEU was obtained and is included (see Appendices H and I). The STEU measures emotional understanding based on a provided example of situational context and is comprised of 42 items. In the development of the STEU, the population was that of undergraduate psychology students. The STEU is a measurement of EI ability (Austin, 2010) in three contextual situations: abstract, personal, and workplace (MacCann & Roberts, 2008). There are five possible choices of emotion the situational context could elicit (MacCann & Roberts, 2008). The STEU utilizes a dichotomous scoring. One correct answer is possible per item and modeled in this way after other intelligence tests (Austin, 2010).

Internal consistency of the STEU is provided, with a Cronbach's alpha reliability score of .71 (MacCann & Roberts, 2008). Convergent validity includes associations with

a measure of emotional management. Positive correlations are reported between the STEU and EI and vocabulary, and ability EI measurements (Allen et al., 2014; Libbrecht & Lievens, 2012). Divergent validity is noted with the STEU and personality (MacCann & Roberts, 2008) and fluid cognitive ability (Libbrecht & Lievens, 2012). This instrument was originally used with students from University of Sydney students from urban and rural campus ($N = 207$; MacCann & Roberts, 2008). Permission for the use of the STEU was obtained and is included (see Appendix G).

Situational Test of Emotion Management - Brief (STEM-B).

Based on the Situational Test of Emotion Management (STEM), the brief version, STEM-B, was developed by Allen, Rahman, Weissman, MacCann, and Roberts (2014), as a measurement of EI ability. The STEM-B (along with the STEU) is based on a situational judgment, calling for the application of emotional management of personal and work situations and involving the specific emotions: anger, sadness, and fear (Austin, 2010; Allen et al., 2014). Like the long-version original STEM, the STEM-B is based on item response theory (IRT) analysis (MacCann & Roberts, 2008). The respondent is presented four possible choices per test item; the appropriate choice is made by the respondent in regards to the most effective action of a given situational context (Allen et al., 2015). Dichotomous scoring is implemented; one correct answer is possible per item, as is in keeping with other intelligence tests (Austin, 2010). Written permission for the use of the STEM-B was obtained and is included (see Appendix G).

Validation of the STEM-B involves correlation with the STEU, the use of latent class analysis (the assessment of pattern of scores by which STEM-B predicted STEU

scores; Allen et al., 2014). The scoring key is comprised of 18-items with a reliability index, based on item response theory (IRT), of .87, and a Cronbach's alpha reliability score of .84. Gender differences are noted (small effect, Cohen's $d = 0.20$; Cohen, 1992) in the response patterns on the STEM-B, with women demonstrating a slightly higher ability (Allen et al., 2014). Reliability of STEM-B is at least as good as the STEM, with an increase of Cronbach's alpha, from .83 to .84, and a slight decrease of the reliability index, from .91 to .87. Positive correlations are reported between the STEM (long form) and intelligence, and divergent validity with personality (MacCann & Roberts, 2008). Libbrecht and Lievens (2012) find divergent validity between the long versions of the STEU and STEM, with the highest correlation only .24. Administration of the STEM was initially administered to populations of Australian undergraduate students ($N = 207$; MacCann & Roberts, 2008). In a more recent study of 850 Belgian medical students ($N = 850$), these studies yielded a Cronbach's alpha of .68 and .85, respectively (Libgrecht & Lievens, 2012; MacCann & Roberts, 2008).

Enright Forgiveness Inventory (EFI).

The Enright Forgiveness Inventory (EFI) is a self-assessment inventory developed by Enright and Rique (2000). It is a self-report inventory and development based on the assessment of current attitude involving interpersonal forgiveness and a perceived offense. The EFI contains three subscales measuring affect, behavior, and cognition. Based on a process of forgiveness model that originally contained 150 items (Subkoviak et al., 1995, as cited in Enright & Rique, 2000), the current EFI contains 60 items, each item, the respondent is to choose one of six possible responses ('strongly disagree' to

‘strongly agree’) that best fits the current attitude of the respondent’s perceived offense. Overall scoring ranges from an overall score of 60 (low extension of forgiveness toward offender) to 360 (high extension of forgiveness toward offender). Written permission for the use of the EFI is obtained and is included (see Appendices H and I).

Construct validity involves an additional measure (five items) to detect pseudo-forgiveness, and separately scored (Enright & Rique, 2000). Pseudo-forgiveness implies denial or justification of the identified offense rather than actual forgiveness, with a determined pseudo-forgiveness cut-off score. The consistency check is dependent on one a response to item. Positive correlations are noted with concurrent measurement of forgiveness, with another forgiveness scale (Wade, 1989 as cited in Enright & Rique, 2000), while divergent validity is observed with Marlowe-Crowne social desirability scale (Crowne & Marlowe, 1960 as cited in Enright & Rique, 2000) across three studies (Subkoviak et al., 1995; Sarinopoulos, 1996; Waltman, 1999 as cited in Enright & Rique, 2000).

Cronbach's alpha reliability scores, in the .90’s for the original study (Subkoviak et al., 1995) demonstrate high internal consistency; these scores are supported in other studies (Sarinopoulos, 1996; Sarinopoulos, 1999). Internal reliability as demonstrated by test-retest reliability based on correlational analysis is high, with Cronbach's alpha reliability scores of +.67 to +.91 (Enright & Rique, 2000). Approximate completion time of this inventory is 40 minutes.

Some of the most recent uses of this instrument involving psychology are listed as follows: for intervention purposes of adult children of divorce (Graham, Enright, & Klatt,

2012), insecure attachment involving young Taiwanese adults with their mothers (Lin, Enright, & Klatt, 2012), women abused during childhood and now struggling with fibromyalgia (Lee & Enright, 2014), in conjunction with Emotion-focused couples therapy (Meneses & Greenberg, 2014), overt or covert narcissism, attribution, and relationship with forgiveness (Ra, Cha, Hyun, & Bae, 2013), post-traumatic stress disorder effects on forgiving and emotion-focused coping strategy of South Korean population (Bae, Hyrun, and Ra, 2014), and a meta-analysis of interpersonal forgiveness across 13 societies (Hanke & Fisher, 2013).

Data Analysis Plan

In exploration of potential relationship between ability EI and forgiveness, the statistical procedures were carried out in the following steps:

Step 1: The Pearson *r* correlation test of significance will be utilized to determine whether a significant correlation between the dependent variables, EI, and forgiveness.

Step 2: Standard multiple regression analysis will be carried out to determine whether forgiveness could be predicted by the following variables: empathy, life satisfaction, emotional management ability, and emotional understanding. While holding constant the effects of the other predictor variables, I intend to identify the unique variance contribution data of each predictor variable on the criterion variable, forgiveness.

Raw data will be collected, scored, and then entered into the statistical package of the social sciences (SPSS). First, a Pearson *r* zero-order correlation analysis will be

performed. Next, a standard multiple regression analysis will be considered. Data analyses included plots examined for outliers and assumptions will be assessed. In the case of violation of an assumption, appropriate post hoc analysis will be deliberated.

The Pearson *r* zero-order correlation test of significance will be calculated to determine a potential relationship and significance between the dependent and continuous variables, EI and forgiveness. The further away from zero the coefficient diverges in either +/- direction, the stronger the correlation between the two variables (Cohen, 1992). If the variables diverge from zero in the same +/- direction, the variables will have a positive linear relationship. If the variables diverge from zero in opposing +/- directions, the variables will have a negative linear relationship ($p = .05$, CI = 95%). It is believed that higher levels of EI ability and forgiveness would be positively correlated. The null will be rejected if the absolute value of the correlation coefficient exceeded +/- .211, and will be retained if the absolute value of the correlation coefficient does not exceed +/- .211.

The prediction of EI and forgiveness by predictor variables (empathy, life satisfaction, emotional management ability, and emotional understanding) is planned, I will run a standard multiple regression analysis. This analysis will provide unique variance contribution data of each predictor variable on the criterion variable, forgiveness ($p = .05, f^2 = .15$). My rationale of research design choice is that this methodology will adequately address the research questions, first in the determination of a potential relationship between EI and forgiveness, and second the potential identification of

predictor variables and their contribution toward forgiveness. I believe that all four predictor variables (empathy, life satisfaction, emotional management ability, and emotional understanding) will significantly and uniquely contribute the probability of forgiveness. The null will be rejected if the *F* value exceeds 2.48 and retained if the *F* value does not exceed 2.48 ($F(4,80) > 2.48$).

RQ1. Does a correlational relationship exist between the two domains (emotional understanding and emotional management ability) of EI and the three domains (affective, behavioral, and cognitive) of the construct of forgiveness?

Six hypotheses will be tested based on this question:

$H_0$1: No significant relationship exists between emotional understanding as measured by the STEU and the affective domain of forgiveness as measured by the EFI.

$H_1$1: A significant relationship exists between emotional understanding as measured by the STEU and the affective domain of forgiveness as measured by the EFI.

$H_0$1: No significant relationship exists between emotional understanding as measured by the STEU and the behavioral domain of forgiveness as measured by the EFI.

$H_1$1: A significant relationship exists between emotional understanding as measured by the STEU and the behavioral domain of forgiveness as measured by the EFI.

$H_0$1: No significant relationship exists between emotional understanding as measured by the STEU and the cognitive domain of forgiveness as measured by the EFI.

$H_1$1: A significant relationship exists between emotional understanding as measured by the STEU and the cognitive domain of forgiveness as measured by the EFI.

$H_0$1: No significant relationship exists between emotional management ability as measured by the STEM-B and the affective domain of forgiveness as measured by the EFI.

$H_1$1: A significant relationship exists between emotional management ability as measured by the STEM-B and the affective domain of forgiveness as measured by the EFI.

$H_0$1: No significant relationship exists between emotional management ability as measured by the STEM-B and the behavioral domain of forgiveness as measured by the EFI.

$H_1$1: A significant relationship exists between emotional management ability as measured by the STEM-B and the behavioral domain of forgiveness as measured by the EFI.

$H_0$1: No significant relationship exists between emotional management ability as measured by the STEM-B and the cognitive domain of forgiveness as measured by the EFI.

$H_1$1 A significant relationship exists between emotional understanding as measured by the STEM-B and the cognitive domain of forgiveness as measured by the EFI.

RQ2. How well do variables associated with EI (namely, empathy, life satisfaction, emotional management ability, and emotional understanding) predict forgiveness?

Four hypotheses will be tested based on this question:

$H_0$2: The predictor variable, empathy, as measured by the TEQ, will not significantly contribute to the probability of forgiveness as measured by the EFI overall score.

$H_1$2: The predictor variable, empathy, as measured by the TEQ, will significantly contribute to the probability of forgiveness as measured by the EFI overall score.

$H_0$2: The predictor variable, life satisfaction, as measured by the SWLS, will not significantly contribute to the probability of forgiveness as measured by the EFI overall score.

$H_1$2: The predictor variable, life satisfaction, as measured by the SWLS, will significantly contribute to the probability of forgiveness as measured by the EFI overall score.

$H_0$2: The predictor variable, emotional management ability, as measured by the

STEM-B, will not significantly contribute to the probability of forgiveness as measured by the EFI overall score.

$H_1$2: The predictor variable, emotional management ability, as measured by the STEM-B, will significantly contribute to the probability of forgiveness as measured by the EFI overall score.

$H_0$2: The predictor variable, emotional understanding, as measured by the STEU, will not significantly contribute to the probability of forgiveness as measured by the EFI overall score.

$H_1$2: The predictor variable, emotional understanding, as measured by the STEU, will significantly contribute to the probability of forgiveness as measured by the EFI overall score.

Validity

As with any nonexperimental design, the design choice was made primarily for descriptive purpose rather than for causal determinations (Thompson, Diamond, McWilliam, Snyder, & Snyder, 2005). Nonexperimental designs are believed to have a higher level of external validity than internal validity (Stone-Romero & Rosopa, 2008). I did not manipulate the variables within my research, and this study lacked the controls that are found in experimental designed studies (Stone-Romero & Rosopa, 2008). The very framework choice I made of a nonexperimental design imposed these limitations (Stone-Romero & Rosopa, 2008).

External Validity

External validity issues within this study included Internet administration. The environment involved in the completion of assessments was not otherwise structured. The results of this experimental condition may be distinctive to only this population and may not extrapolate to a general population.

Internal Validity

While some internal validity issues were inherent to the choice of appropriate design that best answers the research questions I posed (Thompson et al., 2005), several internal validity issues included the use of a self-inventories (EFI, SWLS, and TEQ), experimenter expectancy, selection of participants (convenience sampling) and attribution. I attempted to address potential attrition; the statistical analyses was computed of only from participants who completed all items within the survey rather than included data from participants who did not complete all items. In the case of early withdrawal from the study, starting but not finishing all components of the study, I continued the study, and additional participants were added until there were more than 85 participants whom completed the survey in full. While I included the total number of participants, those who do not finish the study were not considered in statistical analysis. I carried out the statistical analysis on the participants whom completed all survey items.

Statistical Validity

Statistical validity will be addressed, as the framework of my research ensured that statistical data were preempted from construction deliberations of instruments, participants, and measurement that would prevent type I (finding a relationship when

there is not one) and II (finding no relationship when there is one) errors from occurring. Correlation of EI and forgiveness as well as prediction of forgiveness was evaluated within this study; any statistical predictions should not be mistaken for a causal relation (Stone-Romero & Rosopa, 2008). According to Thompson et al. (2005), especially within correlational studies, it was most important to report and interpret effect sizes and interpret findings clearly and in conjunction with research regarding other similar studies (Mugrage, 2014; Van Dyke & Elias, 2008; Wilks et al., 2015). Importance was placed on transparency in any violations of assumptions and attempt to account for violations involved with statistical analysis and conclusions (Thompson et al., 2005). Violations of assumptions, attempt to account for such violations, and post hoc tests were made obvious and reported.

Ethical Procedures

The ethical procedures included careful thought as to stipulations of participation, the keeping of data, and a plan of communication with participants. In the invitation to participate in the study (as already delineated in the Procedures for Recruitment, Participation, and Data Collection), I included the stipulation of 18 years of age and no penalty for early withdrawal (Appendix A). Data were kept anonymous; I did not collect names or identifying personal information from participants.

All raw data were saved on an encrypted flash drive and will be kept at my home in a fireproof combination safe with other raw data documents in compliance with record keeping guidelines (APA, 2007) for the purpose of protection and preservation. I used a second encrypted flash drive to save raw data and kept it off personal and work premises

in a bankers-keyed lock box. I gave access to data to the professors overseeing the research study and will provide access to any other researchers who may request the use of my research data for verification of their research. Raw data disposal will occur five years after the completion of my research project. At this time, all flash drives will be physically destroyed.

Summary

Within the chapter 3, I provided the underlying rationale involving a quantitative correlational and nonexperimental research design choice and convenience sampling strategy. Justification for this choice involved a shortage of previous simultaneous research of the relationship between EI and forgiveness. Due to varying definitions, conceptualizations, and measurement of the constructs, this relationship has had little empirical support (Carvalho et al., 2010; Copestake et al., 2013; Hodgson & Wertheim, 2007; Mugrage, 2014; Rey & Extremera, 2014; Van Dyke & Elias, 2008; Wilks et al., 2015). Statistical considerations included conducting a Pearson *r* correlation test of significance on the dependent variables EI and forgiveness (X and Y variables) and standard multiple regression analysis to identify potential predictor variables (empathy, life satisfaction, emotional management ability, and emotional understanding) of forgiveness (criterion variable). Power analysis was performed. The population sampling size was determined, and critical values were identified for Pearson *r* (critical value of +/-.211, two-tailed) and standard multiple regression analysis $F(4,80) > 2.48$) to detect a medium effect.

Within Chapter 3, I gave details regarding the procedures for online recruitment, participation, and data collection of online assessments (TEQ, SWLS, STEM-B, STEU, and EFI) via SurveyMonkey (2015). I discussed the consent guidelines provided to all participants. I specified instrumentation and operationalization details of the constructs EI and forgiveness and the predictor variables (empathy, life satisfaction, emotional management ability, and emotional understanding). I described the steps of data analysis. As this is a nonexperimental research project, my study is regarded as having higher external than internal validity, and the importance of statistical conclusion validity is clarified. Lastly, ethical procedures to ensure confidentiality and protection of the data were provided. In the upcoming chapter 4, I provided the results of my study and I explicated the statistical specifics of the data.

Chapter 4: Results

The purpose of this study involved a quantitative investigation of EI and forgiveness, based on the theoretical foundation of ToM. The participants included were an Internet and convenience population comprised of individuals from my Facebook page, my Twitter account, and the Walden University research pool. I intended to explore a potential correlational relationship between the dependent variables EI, and forgiveness and to identify to what extent four predictor variables associated with EI contribute to the probability of forgiveness. These predictor variables are empathy, life satisfaction, emotional management ability, and emotional understanding. The research questions and hypotheses that I used are as follows:

RQ1. Does a correlational relationship exist between the two domains (emotional understanding and emotional management ability) of EI and the three domains (affective, behavioral, and cognitive) of the construct of forgiveness?

Tested were six hypotheses based on this question:

$H_0$1: No significant relationship exists between emotional understanding as measured by the STEU and the affective domain of forgiveness as measured by the EFI.

$H_1$1: A significant relationship exists between emotional understanding and the affective domain of forgiveness.

$H_0$1: No significant relationship exists between emotional understanding as measured by the STEU and the behavioral domain of forgiveness as measured by the

EFI.

$H_1$1: A significant relationship exists between emotional understanding as measured by the STEU and the behavioral domain of forgiveness as measured by the EFI.

$H_0$1: No significant relationship exists between emotional understanding as measured by the STEU and the cognitive domain of forgiveness as measured by the EFI.

$H_1$1: A significant relationship exists between emotional understanding as measured by the STEU and the cognitive domain of forgiveness as measured by the EFI.

$H_0$1: No significant relationship exists between emotional management ability as measured by the STEM-B and the affective domain of forgiveness as measured by the EFI.

$H_1$1: A significant relationship exists between emotional management ability as measured by the STEM-B and the affective domain of forgiveness as measured by the EFI.

$H_0$1: No significant relationship exists between emotional management ability as measured by the STEM-B and the behavioral domain of forgiveness as measured by the EFI.

$H_1$1: A significant relationship exists between emotional management ability as measured by the STEM-B and the behavioral domain of forgiveness as measured by the

EFI.

$H_0$1: No significant relationship exists between emotional management ability as measured by the STEM-B and the cognitive domain of forgiveness.

$H_1$1: A significant relationship exists between emotional understanding and the cognitive domain of forgiveness as measured by the EFI.

RQ2. How well do variables associated with EI (namely, empathy, life satisfaction, emotional management ability, and emotional understanding) predict forgiveness?

Tested were four hypotheses based on this question:

$H_0$2: The predictor variable, empathy, as measured by the TEQ, will not significantly contribute to the probability of forgiveness as measured by the EFI overall score.

$H_1$2: The predictor variable, empathy, as measured by the TEQ, will significantly contribute to the probability of forgiveness as measured by the EFI overall score.

$H_0$2: The predictor variable, life satisfaction, as measured by the SWLS, will not significantly contribute to the probability of forgiveness as measured by the EFI overall score.

$H_1$2: The predictor variable, life satisfaction, as measured by the SWLS, will

significantly contribute to the probability of forgiveness as measured by the EFI overall score.

$H_0$2: The predictor variable, emotional management ability, as measured by the STEM-B, will not significantly contribute to the probability of forgiveness as measured by the EFI overall score.

$H_1$2: The predictor variable, emotional management ability, as measured by the STEM-B, will significantly contribute to the probability of forgiveness as measured by the EFI overall score.

$H_0$2: The predictor variable, emotional understanding, as measured by the STEU, will not significantly contribute to the probability of forgiveness as measured by the EFI overall score.

$H_1$2: The predictor variable, emotional understanding, as measured by the STEU, will significantly contribute to the probability of forgiveness as measured by the EFI overall score.

I begin Chapter 4 by reviewing my data collection procedure. I reviewed my research questions and the tested hypotheses. Details involving my data collection were entailed. The findings of my study are then stated. Statistical findings include an explanation of assumptions and findings and post hoc analysis. I performed the Pearson r correlation as planned in Chapter 3. I did not carry out the multiple regression analysis

due to a violation of assumptions. I conveyed statistical data both with and without the outlier. The chapter concludes with a summary.

Data Collection

From start to finish of my data collection, 7 days passed from when I opened the survey until I closed the survey; data collection occurred over these 7 days. A total of 142 participants answered the invitation that I posted on social media and in the Walden University research pool and subsequently began the survey. Of these 142 participants, 95 participants completed all survey items, which is a 67% completion rate. Of the 142 participants, one individual of the sampling unit was from the Walden University research pool. The other 141 participants were individuals of the sampling unit from the SNS websites, Facebook or Twitter. I analyzed the responses of the 95 participants who completed all items in the survey. Based on my power analysis, I needed 85 participants the number of participants ($N = 95$) exceeded this number. Due to missing data, I did not analyze the data from 47 participants.

I forwarded the survey link to all 354 friends on my personal Facebook page and to all 9 of my followers on Twitter. My Twitter followers include personal friends, acquaintances, immediate and extended family members. Friends on my Facebook page are comprised of personal friends, friends of friends, immediate and extended family members, acquaintances, and coworkers. I forwarded the survey link to six Facebook groups of which I was a member (see Appendix M). All six groups chosen to forward the survey link were groups that I thought appropriate (i.e., did not violate the Facebook purpose or stipulations of posting within the group), and these groups included

individuals whom I thought may be likely to participate (Baltar & Brunet, 2012; Kosinski et al., 2015; Rife et al., 2016). The first was a closed support group of Walden doctoral students, with approximately 341 members. The second was a closed group of Walden doctoral students with approximately 1300 members. The third group was a public group of Walden psychology alumni, current students, and prospective students, with approximately 512 members. The fourth group was a closed support group of Walden doctoral psychology students with approximately 21 members. The fifth group was a closed support group of counseling doctoral students at a private University located in Virginia, with approximately 32 members. The sixth group was a closed group of alumni graduates of a private high school located in South Carolina, with approximately 1269 members.

Findings

Of the 142 participants from the Internet population described, 95 participants completed all items of the survey. There were 46 participants who stopped the survey prematurely, an attrition rate of 33%. Data analysis was performed on the data collected from the 95 participants who completed all survey items. The study results included regard of one outlier identified in the data. In examination of the analysis, the outlier affects the assumptions. Without the outlier, some of the variables met, and some violated the assumption of normality for correlational analysis. With the outlier, none of the variables met the assumption of normality for correlational analysis. Both with and without the outlier, the statistical assumptions of independent errors and normal distribution were not met for multiple regression analysis. The overall results of the

Pearson *r* are the same; no significance was found. Details to include statistical assumptions and results for correlational analysis without and with the outlier are provided.

Statistical Assumptions for Correlational Analysis Without the Outlier

Assumption 1: Variable classification. Variable classification involves the predictor and outcome variables being independently classified as quantitative and considered continuous, either interval or ratio. All variables within this study fall into this classification. A linear relationship can be determined. This assumption was not violated.

Assumption 2: Linearity. Linearity involves a linear relationship between the X dependent variable (emotional understanding and emotional management ability) and Y dependent variable (affective, behavioral, and cognitive domains of forgiveness). Monotonic linearity was observed in the scatterplot examples. This assumption was not violated.

Assumption 3: Lack of extreme outliers. Initial visual assessment of the scatterplots was performed, and one extreme outlier was identified. This assumption was violated. I deliberated as to whether to include the outlier. The outlier was not due to an overt data entry error that I could identify. I decided to exclude the outlier from the data to address this violation.

Assumption 4: Normality. The assumption of normality was violated, based on result of the Shapiro-Wilk's test of normality (see Table 1). Scores on the TEQ, EFI-A, and EFI-B were normally distributed; however, scores on the SWLS, STEU, STEM-B,

and EFI-C were nonnormally distributed. The violation of this assumption increases the potential for Type I error, detecting a relationship between the variables erroneously (Bishara & Hittner, 2012; Bishara & Hittner, 2014; Field, 2013; Puth, Neuhauster, & Ruxton, 2014). In Table 1, all of the instruments are listed, and those with normal distribution notated.

Table 1

Results of Shapiro-Wilk Test of Normality Without Outlier (*df* = 94) *for Each Instrument*

Survey instrument	Test statistic	*ρ*
SWLS	.901	< .005
TEQ	.982	.220[a]
STEU	.967	.018
STEM-B	.930	< .005
EFI-A	.975	.069[a]
EFI-B	.987	.470[a]
EFI-C	.932	< .005

Note. $n = 94$. [a]$p > .05$.

Model Considerations and Adjustments Without Outlier

Outlier. Visual assessment of the scatterplots revealed an obvious extreme outlier in the initial data. After reviewing descriptive data and boxplots, the decision was made to remove the one extreme outlier, leaving all other cases for statistical analysis. This

removal method was performed to prevent distortion of central tendency measure that may be otherwise unnecessarily affected throughout the data (Field, 2013; Warner, 2008). Comparison of the 5% trim mean and the 95% lower and upper boundary confidence interval shows a suitable range for data analysis (see Table 2). Statistical analysis was continued on the data without the one identified outlier.

Table 2

Participant Characteristics Without Outlier (*df* = 89)

		95% CI		
Survey instrument	*M (SD)*	*LL*	*UL*	5% Trimmed *M*
SWLS	10.7 (5.0)	9.7	11.7	10.4
TEQ	48.3 (5.1)	47.3	49.4	48.3
STEU	28.9 (4.0)	28.1	29.7	29.0
STEM-B	86.0 (3.1)	85.4	86.7	86.2
EFI-A	68.3 (23.8)	63.4	73.1	68.2
EFI-B	82.0 (20.7)	77.7	86.2	82.3
EFI-C	89.0 (23.9)	84.1	93.9	90.5

Note. $n = 89$.

Transformation considered. The other violated Pearson *r* assumption had to do with nonnormality (skewness and kurtosis; Field, 2013) and transformation of data were considered. RIN has been found helpful in use with nonnormal and asymmetric

(skewness and kurtosis) data (Bishara & Hittner, 2012; Puth, Neuhauser, & Ruxton, 2014). Though Pearson r is recognized as robust even in the case of violation to the assumption of normality, running statistical analysis without addressing this violation increases the risk of Type I error (Bishara & Hittner, 2012; Bishara & Hittner, 2014; Field, 2013; Puth et al., 2014). I believed that a RIN transformation, ranking and distributing the data into a normal shape prior to running the Pearson *r*, may act to minimize Type I inflation that may otherwise be due to nonnormality while simultaneously increasing power (Bishara & Hittner, 2012; Bishara & Hittner, 2014; Puth et al., 2014). I performed transformation using the rank-based inverse normal transformations (RIN) and Rankit option (Bishara & Hittner, 2012) before executing the Pearson r correlation analysis to gain transformed values. It was believed that a RIN transformation, ranking the data and distributing the data into a normal shape prior to running the Pearson r, would act to minimize Type I inflation that may otherwise be due to nonnormality while simultaneously increasing power (Bishara & Hittner, 2012; Bishara & Hittner, 2014; Puth et al., 2014). After running analysis with the RIN transformation and ranking of scores, the Shapiro-Wilk's test of normality ($p > .05$) showed a violation of normality across all variables. Bishara and Hittner (2012) state that the RIN transformation can be helpful but does not always improve a given correlation model. The decision was made not to follow through with the RIN transformation; for this model, it was not considered a good fit.

Correlational Analysis Without Outlier

A Pearson r correlation was carried out (see Table 3). Data analysis indicated a nonsignificant correlational relationship between the two domains of EI (emotional understanding and emotional management) and the three domains of forgiveness (affective, behavioral, and cognitive). Data analysis indicated a nonsignificant correlational relationship between the three domains of forgiveness (affective, behavioral, and cognitive) and empathy as well as life satisfaction.

Table 3

Pearson Correlations of Main Study Variables Without Outlier

	SWLS	TEQ	STEU	STEM-B	EFI-A	EFI-B
TEQ	-.130					
STEU	-.089	.092				
STEM-B	-.264*	.199	.377**			
EFI-A	-.136	-.041	.109	-.049		
EFI-B	-.157	-.052	.118	-.002	.864**	
EFI-C	-.084	.028	.102	-.045	.805**	.857**

Note. * = statistically significant at $\rho < .05$ level, ** = statistically significant at $\rho < .01$ level.

Multiple Regression Analysis Without Outlier

A multiple regression analysis was considered even though none of the variables within the study significantly contributed to the model. EFI-Overall was explained by

4.3% of the predictor variables; 95.7% of EFI-Overall was explained by other variables than the ones within this study. The combined unique variance of the predictor variables may indicate significance. Statistical assumptions appropriate for multiple regression analysis are as follows:

Assumption 1: Variable classification. Variable classification involves the predictor and criterion (outcome) variables being independently classified as quantitative and considered continuous measurements (Field, 2013). All variables within this study fall into this classification. This assumption has not been violated.

Assumption 2: Independent errors. The assumption of independent errors deems the residual terms as unrelated (Field, 2013). The Durbin-Watson statistic was used to determine the independent errors. The Durbin-Watson value = .93, falling outside of the appropriate bounds (between <1 and >3), indicating a violation of this assumption. As our Durbin-Watson value is <1, this indicates a positive autocorrelation (Field, 2013).

Assumption 3: Nonzero variance. The variance of value assumption involves predictor variables not having the variance value of zero (Field, 2013). This assumption has been met, as coefficients reflect variances other than zero.

Assumption 4: Normal Distribution. This assumption involves the normal distribution of residuals whose means are equal to zero (Field, 2013). A histogram is used as a visual check for this assumption (Field, 2013). A slight negative skew (and kurtosis) is observed. This assumption has been violated.

Assumption 5: Multicollinearity. The assumption involving a lack of multicollinearity relationship means that there needs to be a lack of linear relationship between two or more of the predictor variables (Field, 2013). The variance inflation factor (VIF) for all four predictor variables within our model is > 1 and fall within the bounds of greater than one (> 1) and less than 10 (< 10). This assumption has not been violated.

Assumption 6: Homoscedasticity. The assumption of homoscedasticity involves consistency of error variance between variables (Field, 2013). Scatterplots show a pattern indicative of homoscedasticity. This assumption has not been violated.

There are two violations of multiple regression assumptions, independent errors, and normal distribution. The violation of these assumptions increased Type I error potential. With violated assumptions, specifically the independent errors assumption, accurate predictions of the model cannot be determined. For these reasons, the decision was made to refrain from performing multiple regression analysis.

Statistical Assumptions for Correlational Analysis With Outlier

The statistical assumptions and findings for correlational analysis (Field, 2013) with outlier were as follows:

Assumption 1: Variable classification. Variable classification involves the predictor and outcome variables being independently classified as quantitative and considered continuous, either interval or ratio. All variables within this study fall into this classification. A linear relationship can be determined. This assumption was not violated.

Assumption 2: Linearity. Linearity involves a linear relationship between the X dependent variable (emotional understanding and emotional management ability) and Y dependent variable (affective, behavioral, and cognitive domains of forgiveness). Monotonic linearity was observed in the scatterplot examples. This assumption was not violated.

Assumption 3: Lack of extreme outliers. Initial visual assessment of the scatterplots was performed, and one extreme outlier was identified. This assumption was violated. I considered whether to include the outlier. The outlier was not due to an overt data entry error that I could identify. I decided to keep the outlier and regard it as an extreme case.

Assumption 4: Normality. According to the Shapiro-Wilk's test of normality ($p > .05$), this assumption was violated (see Table 4). Nonnormal distribution was found across all variables. The TEQ showed skewness of -.08 and negative kurtosis of -.46. The SWLS showed skewness of 1.01 and negative kurtosis of .49. The STEU showed negative skewness of -1.01 and kurtosis of 2.21. The STEM-B showed negative skewness of -2.06 and kurtosis of 7.52. The EFI-A showed skewness of .16 and negative kurtosis of -.62. The EFI-B showed negative skewness of -.21 and kurtosis of -.17. The EFI-C showed negative skewness of -.82 and negative kurtosis of .23. The violation of this assumption increases the potential for Type I error, detecting a relationship between the variables erroneously (Bishara & Hittner, 2012; Bishara & Hittner, 2014; Field, 2013; Puth, Neuhauster, & Ruxton, 2014). In Table 4, all of the instruments are listed.

Table 4

Results of Shapiro-Wilk Test of Normality With Outlier (*df* = 95) *for Each Instrument*

Survey instrument	Test statistic	*ρ*
SWLS	.904	< .005
TEQ	.982	.222[a]
STEU	.941	< .005
STEM-B	.848	< .005
EFI-A	.975	.069[a]
EFI-B	.987	.462[a]
EFI-C	.934	< .005

Note. $n = 95$, [a] $p > .05$.

Model Considerations and Adjustments With Outlier

Outlier. Visual assessment of the scatterplots revealed an obvious extreme outlier in the initial data. After reviewing descriptive data, the decision was made to run the data both with and without the outlier. Comparison of the 5% trim mean and the 95% lower and upper boundary confidence interval shows a suitable range for data analysis (see Table 5).

Table 5

Participant Characteristics With Outlier (*df* = 90)

Survey instrument	*M (SD)*	95% CI *LL*	95% CI *UL*	5% Trimmed *M*
SWLS	10.7 (4.9)	9.7	11.7	10.4
TEQ	48.4 (5.1)	47.3	49.4	48.4
STEU	28.7 (4.4)	27.8	29.6	28.9
STEM-B	85.8 (3.6)	85.1	86.6	86.2
EFI-A	67.8 (24.1)	62.9	72.7	67.7
EFI-B	81.9 (20.6)	77.7	86.1	82.3
EFI-C	88.9 (23.8)	84.0	93.7	90.4

Note. $n = 90$.

Transformation considered. The other violated Pearson *r* assumption had to do with nonnormality (skewness and kurtosis; Field, 2013) and the transformation of data were considered. RIN has been found helpful in use with nonnormal and asymmetric (skewness and kurtosis) data (Bishara & Hittner, 2012; Puth et al., 2014). The data within the present research has problems across all variables with either skewness or kurtosis. Though Pearson *r* is recognized as robust even in the case of violation to the assumption of normality, running statistical analysis without addressing this violation increases the risk of Type I error (Bishara & Hittner, 2012; Bishara & Hittner, 2014; Field, 2013; Puth et al., 2014). I believed that a RIN transformation, ranking and distributing the data into a normal shape prior to running the Pearson *r*, may act to minimize Type I inflation that may otherwise be due to nonnormality while simultaneously increasing power (Bishara &

Hittner, 2012; Bishara & Hittner, 2014; Puth et al., 2014). I performed the transformation using the rank-based inverse normal transformations (RIN) and Rankit option (Bishara & Hittner, 2012) before executing the Pearson *r* correlation analysis to gain transformed values.

After running analysis with the RIN transformation and ranking of scores, the Shapiro-Wilk's test of normality ($p > .05$) showed a violation of normality across all variables. The rank score of the TEQ showed no skewness (.00) and negative kurtosis of -1.20. The rank score of the SWLS showed no skewness (.02) and negative kurtosis of -1.18. The rank score of the STEU showed no skewness (.00) and kurtosis of -1.19. The rank score of the STEM-B showed no skewness (.00) and kurtosis of -1.20. The rank score of the EFI-A showed no skewness (.00) and negative kurtosis of -1.20. The rank score of the EFI-C showed no skewness (.00) and negative kurtosis of -1.20. Bishara and Hittner (2012) state that the RIN transformation can be helpful but does not always improve a given correlation model. The decision was made not to follow through with the RIN transformation; for this model, it was not considered a good fit.

Correlational Analysis With Outlier

A Pearson *r* correlation was considered a most viable analytical option; Pearson *r* correlation is regarded as robust even when the assumption of normality has been violated (Field, 2013). A Pearson *r* correlation was carried out (see Table 6). Data analyses indicated a nonsignificant correlational relationship between the two domains of EI (emotional understanding and emotional management) and the three domains of

forgiveness (affective, behavioral, and cognitive). Data analyses indicated a nonsignificant correlational relationship between the three domains of forgiveness (affective, behavioral, and cognitive) and empathy as well as life satisfaction.

Table 6

Pearson Correlations of Main Study Variables With Outlier

	SWLS	TEQ	STEU	STEM-B	EFI-A	EFI-B
TEQ	-.128					
STEU	-.091	.060				
STEM-B	-.235*	.137	.517**			
EFI-A	-.138	-.050	.178	.066		
EFI-B	-.157	-.053	.113	.006	.851**	
EFI-C	-.085	.026	.105	-.021	.796**	.857**

Note. * = statistically significant at $\rho < .05$ level, ** = statistically significant at $\rho < .01$ level.

Multiple Regression Analysis With Outlier

A multiple regression analysis was considered even though none of the variables within the study significantly contributed to the model. EFI-Overall is explained by 4.5% of the predictor variables; 95.5% of EFI-Overall is explained by other variables than the ones within this study. The combined unique variance of the predictor variables may indicate significance. Statistical assumptions appropriate for multiple regression analysis are as follows:

Assumption 1: Variable classification. Variable classification involves the predictor and criterion (outcome) variables being independently classified as quantitative and considered continuous measurements (Field, 2013). All variables within this study fall into this classification. This assumption has not been violated.

Assumption 2: Independent errors. The assumption of independent errors deems the residual terms as unrelated (Field, 2013). The Durbin-Watson statistic was used to determine the independent errors. The Durbin-Watson value = .92, falling outside of the appropriate bounds (between <1 and >3), indicating an assumption violation. As our Durbin-Watson value is <1, this indicates a positive autocorrelation (Field, 2013).

Assumption 3: Nonzero variance. The variance of value assumption involves predictor variables not having the variance value of zero (Field, 2013). This assumption has been met, as coefficients reflect variances other than zero.

Assumption 4: Normal Distribution. This assumption involves the normal distribution of residuals whose means are equal to zero (Field, 2013). A histogram is used as a visual check for this assumption (Field, 2013). A slight negative skew is observed. This assumption has been violated.

Assumption 5: Multicollinearity. The assumption involving a lack of multicollinearity relationship means that there needs to be a lack of linear relationship between two or more of the predictor variables (Field, 2013). The variance inflation factor (VIF) for all four predictor variables within our model is > 1 and fall within the

bounds of greater than one (> 1) and less than 10 (< 10). This assumption has not been violated.

Assumption 6: Homoscedasticity. The assumption of homoscedasticity involves consistency of error variance between variables (Field, 2013). The scatterplots show a pattern indicative of homoscedasticity. This assumption has not been violated.

There are two violations of multiple regression assumptions, independent error, and normal distribution. The violation of these assumptions increased Type I error potential. With violated assumptions, specifically the independent errors assumption, accurate predictions of the model cannot be determined. For these reasons, the decision was made to refrain from performing multiple regression analysis.

Comparisons With and Without Outlier

The assumptions with and without outlier were compared. In both instances, the following assumptions were the same: no violation of the assumption of variable classification and linearity was found. The lack of extreme outliers was handled in two different ways. The analysis was considered without the outlier and then with the outlier. In the instance without the outlier, the Shapiro-Wilk's test results showed, scores on the TEQ, EFI-A, and EFI-B were normally distributed, though scores on the SWLS, the STEU, the STEM-B, and the EFI-C were nonnormally distributed. In the instance with the outlier, the Shapiro-Wilk's test results revealed the violation of the assumption of normality across all variables; specific data regarding kurtosis and skewness were

provided.

I reviewed the data with and without the outlier; both instances had violated regression analysis assumptions. Due to the violation of bivariate normality both with and without outlier, I attempted to deal with the issue of nonnormal data. The RIN transformation addresses both kurtosis and skewness and is specifically considered appropriate in correlational studies (Bishara & Hittner, 2012; Bishara & Hittner, 2014). However, after I looked closely at the assumptions of the transformed data, the model both with and without the outlier was not improved by this RIN transformation. I decided not to use the RIN transformation, and I ran the Pearson r correlation on the data with and without the outlier.

Next I reviewed the assumptions for multiple regression analysis, both without and with the outlier. Without the outlier, EFI-Overall is explained by only 4.3% of the predictor variables; 95.7% of EFI-Overall is explained by other variables than the ones within this study. With the outlier, EFI-Overall is explained by only 4.5% of the predictor variables; 95.5% of EFI-Overall is explained by other variables than the ones within this study. Both without and with the outlier, the following assumptions were met: variable classification, nonzero variance, multicollinearity, and homoscedasticity. In both instances, the following assumptions were violated: independent errors and normal distribution. The violation of these assumptions increased Type I error potential. With violated assumptions, specifically the independent errors assumption, accurate predictions of the model cannot be determined (Field, 2013; Warner, 2008). For these

reasons and in both instances, I made the decision to refrain from performing multiple regression analysis. In both instances, a Pearson *r* correlational analysis was performed, as this procedure is considered robust with the assumption violation involving nonnormal data (Field, 2013). Both with and without the outlier, I found no significant correlations.

Retention of the H_O in Correlational Analysis Hypotheses

In all six of the RQ1 hypotheses relating to a potential correlation, the $H_0$1 was retained:

$H_0$1: No significant relationship was found between emotional understanding and the affective domain of forgiveness.

$H_0$1: No significant relationship was found between emotional understanding and the behavioral domain of forgiveness.

$H_0$1: No significant relationship was found between emotional understanding and the cognitive domain of forgiveness.

$H_0$1: No significant relationship was found between emotional management ability and the affective domain of forgiveness.

$H_0$1: No significant relationship was found between emotional management ability and the behavioral domain of forgiveness.

$H_0$1: No significant relationship was found between emotional management ability and the cognitive domain of forgiveness.

Retention of the H_O in Multiple Regression Analysis Hypotheses

Due to the violation of the assumption of independent errors and thus the inability to make accurate predictions within the model, multiple regression analysis was not performed. By default and in all four of the RQ2 hypotheses, the $H_0$2 was retained:

$H_0$2: The predictor variable, empathy, did not significantly contribute to the probability of forgiveness.

$H_0$2: The predictor variable, life satisfaction, did not significantly contribute to the probability of forgiveness.

$H_0$2: The predictor variable, emotional management ability, did not significantly contribute to the probability of forgiveness.

$H_0$2: The predictor variable, emotional understanding, did not significantly contribute to the probability of forgiveness.

Summary

A Pearson *r* zero-order correlation was performed to evaluate the relationship between two domains (emotional understanding and emotional management ability) of EI and three domains (affective, behavioral, and cognitive) of forgiveness (see Table 3). A ρ value of less than .05 ($\rho < .05$, 2-tailed) was required for significance.

Pearson *r* analysis did not present evidence of a linear relationship between emotional understanding and the affective domain of forgiveness. Pearson *r* analysis did

not present evidence of a linear relationship between emotional understanding and the behavioral domain of forgiveness. Pearson *r* analysis did not present evidence of a linear relationship between emotional understanding and the cognitive domain of forgiveness. Pearson *r* analysis did not present evidence of a linear relationship between emotional management and the affective domain of forgiveness. Pearson *r* analysis did not present evidence of a linear relationship between emotional management and the behavioral domain of forgiveness. Pearson *r* analysis did not present evidence of a linear relationship between emotional management and the cognitive domain of forgiveness. Pearson *r* analysis did not present evidence of a linear relationship between the three domains of forgiveness (affective, behavioral, and cognitive) and empathy. Pearson *r* analysis did not present evidence of a linear relationship between the three domains of forgiveness (affective, behavioral, and cognitive) and life satisfaction.

In Chapter 5, I discuss my study and include the interpretation of statistical findings. The limitations of my study are specified. I have made research recommendations and expounded on implications that would promote positive social change. In this chapter, I have provided a conclusion to my study.

Chapter 5: Discussion, Conclusions, and Recommendations

The purpose of this study was to explore the relationship between EI and forgiveness using the theoretical foundation of ToM (Call & Tomasello, 2008). I chose a quantitative correlational nonexperimental research method for the study. My rationale was that such methods would provide an answer to my two research questions. My RQ1 involved an investigation of the potential relationship between EI (variable X) and forgiveness (variable Y). My RQ2 entailed a standard multiple regression analysis to consider whether predictor variables (empathy, life satisfaction, emotional management, and emotional understanding) contribute to the probability of forgiveness in an interpersonal relationship.

In consideration of RQ1, I performed a correlational analysis; I found no evidence of a linear relationship between primary study variables. These variables were the two domains of EI (emotional understanding and emotional management ability) and the three domains of forgiveness (affective, behavioral, and cognitive). In data analysis involving RQ2, I found a small percentage of forgiveness that was accounted for by the predictor variables. Without the outlier, EFI-Overall was explained by only 4.3% of the predictor variables; 95.7% of EFI-Overall was explained by other variables than the ones within this study. With the outlier, EFI-Overall was explained by only 4.5% of the predictor variables; 95.5% of EFI-Overall was explained by other variables than the ones within this study. Due to the lack of evidence of a correlational relationship between the variables, the small percentage of forgiveness explained by the predictor variables, and

the violated assumptions for regression analysis, I decided not to perform the regression analysis. I retained all of the null hypotheses of both research questions.

Interpretation of Findings

This study extends the research foundation on the relationship between EI and forgiveness in several ways. I found no evidence of a correlational relationship between EI ability and interpersonal forgiveness. I discovered much of the psychological research that asserted a relationship between EI and forgiveness did so on assumption rather than on solid research data with clearly defined constructs (Wilks et al., 2015). This may be a reflection of differing focus of the researchers, intent of the researchers, and a variation in the definitions of the construct. For example, I found EI was defined in psychological research as either a personality trait or ability (Goleman, 1995; MacCann et al., 2011), with four levels of ability (Mayer et al., 2008). I found forgiveness was a construct involving different domains (affective, behavioral, and cognitive) with a variety of definitions and juxtaposition of an individual (forgiveness of self, forgiveness of others, receiving forgiveness, extending forgiveness; Braithwaite et al., 2011; Carvalho et al., 2010; Enright, 1996; Hill et al., 2011; Hodgson & Wertheim, 2007; Macaskill, 2012; McCullough, 2008; Meneses & Greenberg, 2014; Pelucchi et al., 2013; Prieto et al., 2013; Thompson et al., 2005Van Dyke & Elias, 2008; Wade et al., 2014). The complexity of both constructs may have contributed to variation in interpretations and ambiguity in the research findings.

I found a small number of research on the relationship of EI and forgiveness, and the findings were mixed. Previous research verified a positive relationship (Hodgson &

Wertheim, 2007), a negative relationship (Carvalho et al., 2010), and no significant relationship (Mugrage, 2014; Van Dyke & Elias, 2008). With exception of these studies, the link between EI and forgiveness is based on an inferred relationship and not on empirical data. However, I found only one researcher whose main research focus was on confirming a potential relationship between EI and forgiveness and no relationship between the constructs was identified (Mugrage, 2014). In this specific study, Mugrage (2014) conceptualized EI as a trait while in my study I conceptualized this construct as ability. Our findings are the same: no relationship was detected between EI and forgiveness.

Limitations of the Study

My study has several limitations. As I pointed out in Chapters 1 and 3, my choice of nonexperimental design framework was based on my purpose for the study; this choice prohibited randomization or stratification of the sampling units. Based on my nonprobability design and convenience sampling method, I recruited volunteer participants from the Walden University research pool and the Internet (specifically, social media sites). My design choices prevent the generalization of findings beyond the study population. The nature of my design was not different from that of any other nonexperimental design (Field, 2013; Frankfort-Nachmias & Nachmias, 2008; Warner, 2008); causal inferences were not appropriate In correlational studies, the potential relationship strength and direction between two dependent variables is verified and the variables are not manipulated. My study adhered to these correlational stipulations.

External Validity

External validity issues within my study included the use of a convenience sampling method with an Internet population from mostly the SNS website of Facebook (Baltar & Brunet, 2012; Kapp et al., 2013; Kosinski et al., 2015). My recruitment of participants on the Internet included individuals whom I may know, introducing potential selection bias (Baltar & Brunet, 2012). The potential of both an over and underrepresentation of participants whom may know me existed (Kapp et al., 2013; Kosinski et al., 2015). Some of the participants may have chosen to complete my survey because they knew me personally. Others may have been dissuaded from taking part in the research because they knew me.

Internal Validity

Three of the surveys (TEQ, SWLS, and EFI) were subjective questionnaires. My use of these scales meant a greater potential for bias and subjectivity and subsequently less internal validity for my findings than if I had used objective questionnaires (Frankfort-Nachmias & Nachmias, 2008; Warner, 2008). Within my study, the subjectivity of instrumentation increased the potential for response and experimenter bias (Kapp et al., 2013; Kosinski et al., 2015); the participants may have responded in a manner perceived as pleasing, expected or desired by me (Frankfort-Nachmias & Nachmias, 2008)I also did not account for possible confounding demographic variables such as SES, cultural background, gender, educational level, age, and ethnicity. In my study, selection bias took place (Baltar & Brunet, 2012; Kapp et al., 2013; Kosinski et al., 2015; Rife et al., 2016); I deliberately chose a convenience population that included

people whom I know as potential participants. As previously stated, the population included the majority of participants from my SNS websites of Facebook or Twitter.

The STEU and STEM-B are objective measures of EI. EI comprises cognitive intelligence based on perceived situational judgments (Libbrecht & Lievens, 2012; MacCann & Roberts, 2008; MacCann et al., 2011). Both the STEU and STEM-B considers the situational judgments of the participants in response to survey questions. Some participants who began but did not complete the study may have experienced difficulty deducing the best response in any given scenario. The 95 participants who completed all items may have experienced a greater comfort level responding to the items, which may have reflected a higher EI ability. The 47 participants whom did not complete all survey items may have had a lower EI ability. Other plausible reasons for attrition within my study would include participants feeling frustrated with the length of the survey (approximately 97 minutes), or they have found the questions on the subjective questionnaires overly personal.

Approximately one-third (33%) of participants who began the survey did not complete it. I made the choice to use the STEM-B (Allen et al., 2015) rather than the full STEM (MacCann et al., 2011; MacCann & Roberts, 2008) to try to shorten the time expectation for completion of the survey. My use of a different EI measure or a different forgiveness measure also may have influenced study results.

Statistical Validity

In my research, there were a total of 142 participants; statistical analysis was run only on the participants who completed all survey items. My analysis reviewed the

research questions both with ($N = 95$) and without ($N = 94$) the outlier. I made transparent the violation of assumptions within my study, and I considered appropriate post hoc analysis. I attempted a RIN transformation with hopes of addressing the violation of normality (skewness and kurtosis) in my correlation assumptions, both with and without the outlier (Bishara & Hittner, 2012; Bishara & Hittner, 2014). After running preliminary data analysis and still finding assumption violations after transformation of data, I decided that the RIN transformation was not a good fit for the model; accordingly, I did not use a RIN transformation. The Pearson *r* correlation is regarded robust even when the assumption of normality has been violated (Field, 2013). I conducted a Pearson *r* correlation on the data both with and without the outlier even though a violation of normality was found in the data. Violation of assumptions and the outlier are two aspects that lower the statistical validity within my study.

Recommendations

Different measures of EI and forgiveness may provide a difference of results than the ones I found and identified within this study. My research concentrated on only two of the four branches of EI ability, namely emotional understanding and emotional management (Mayer et al., 2004 & Mayer et al., 2008). Both of these measures incorporate individual situational judgments (Allen et al., 2015; Allen et al., 2014; MacCann et al., 2011; MacCann & Roberts, 2008). A recommendation I have would include repeating a design with the use of another EI measure, such as the MSCEIT (Mayer et al., 2004 & Mayer et al., 2008). The utilization of the MSCEIT may provide more detailed information regarding additional EI ability, the identification of emotions

and use of the identification emotions to initiate a cognitive process. Other potential different measurements of forgiveness I would recommend include: the Tendency to Forgive Scale (Brown, 2003; as cited in Hill & Allemand, 2012), the Trait Forgivingness Scale (Berry et al., 2005; as cited in Hodgson & Wertheim, 2007), the Heartland Self-Forgiveness Scale (Thompson et al., 2005), or the State Self-Forgiveness Scales (Wohl et al., 2008), a specific measurement of self-forgiveness.

A second recommendation involves an inquiry of EI and forgiveness and the prevalent overlapping emotional concepts between the two constructs that were identified in Chapter 3 (empathy, anger, aggression, autonomy, shame, internal processing [interpersonal] relationship, self-differentiation, attentional bias, well-being, emotionality, gratitude, the big five, psychopathy, and optimism). Understanding the role and interaction of these constructs in connection to EI and forgiveness may provide a greater understanding of the independent or contingent function of these constructs. I believe further research in this area is warranted.

A third recommendation would involve further exploration of the theoretical framework involving both EI and forgiveness. There has been an experimental study of EI based on the theoretical framework of ToM (Ferguson & Austin, 2010; Mayer et al., 2010; Qualter et al., 2011; Volk et al., 2015); however, I could not find the theoretical framework of ToM in forgiveness research. I believe further study emphasizing forgiveness based on the processes of ToM would be one address to this research paucity. Another possibility would be to consider a different theoretical framework besides ToM altogether. Another theoretical framework may act to encourage a different

understanding, allowing a new theoretical basis of research to emerge. This may act as a basis for conceptualization and understanding, enabling a completely different research position by which to explore EI and forgiveness.

Implications

Present Psychological Research

This study was consequential in comparison to the findings of the relationship between EI and forgiveness found in present psychological research (Carvalho et al., 2010; Hodgson & Wertheim, 2007; Van Dyke & Elias, 2008). Between these constructs, previous researchers have confirmed a positive relationship (Hodgson & Wertheim, 2007), a negative relationship (Carvalho et al., 2010), and no significant relationship (Mugrage, 2014; Van Dyke & Elias, 2008). Within this study, I found that EI ability does not directly impact the process and practice of forgiveness; the practice of forgiveness does not directly impact EI ability. I found the relationship between EI and forgiveness was unsubstantiated. Implications of social change involve consideration of the context in situations where conflict resolution is desirable rather than a specific emphasis on EI ability or the ability to forgive.

Lack of Empirical Support of a Relationship

The findings of this study do not empirically support a relationship between EI and forgiveness. My research project was the second of two studies intentionally exploring only a potential relationship between EI and forgiveness. The first study conceptualized the variables from the standpoint of a personality trait (Mugrage, 2014) and my study conceptualized the variables from the standpoint of ability or state.

Implications involve a call for additional studies involving the constructs of EI and forgiveness. Individuals who perform psychological research and practice would benefit from apparent conceptualization of EI and forgiveness, empirically substantiating the relationship between the two constructs. Additional research may benefit from careful and obvious differentiation between the constructs of EI and forgiveness. This would include clarity of conceptualization of EI as a state (ability) or trait.

Independent Consideration of the Constructs

I regard an emphasis on benefits involving constructs of EI and forgiveness unconnectedly as appropriate. An understanding of these construct processes practiced independently of each other are indicative of positive repercussions. A synonymous exploration of EI and forgiveness with the predominant overlapping emotional concepts already mentioned (empathy, anger, aggression, autonomy, shame, internal processing [interpersonal] relationship, self-differentiation, attentional bias, well-being, emotionality, gratitude, the big five, psychopathy, and optimism) may be helpful in understanding how the processes of EI and forgiveness work. Positive repercussions from future studies may advance psychological theory, practice, and positive social change. Continuing research of both constructs may provide research that can be used to foster positive mental health factors, such as hope, resilience, and well-being (Armstrong et al., 2011; Wade et al., 2014), while decreasing symptoms of psychopathy to include symptoms such as difficulty in interpersonal relationship, noxious tendencies, narcissism, under- or over-emotional sensitivity, lack of empathy, and other problematic signs indicative of mental health issues to include personality disorder (Copestake et al., 2013;

Konrath et al., 2014; Nagler et al., 2014). Understanding of this nature would include research inclusive of appropriate intervention strategies and psychological treatment involving EI and forgiveness.

Forgiveness Conceptualized as a Choice

Individuals who possess higher EI are emotionally aware and able to recognize the emotional states of self and others, the consequences of personal decisions, actions, and reactions in social situations (Castillo et al., 2013; Fallon et al., 2014). Such individuals possess empathy and are in a better position to recognize and address conflict (Castillo et al., 2013; Konrath et al., 2014). Choosing forgiveness rather than retaliation in situations of perceived wrongdoing may be differently conceived as a choice rather than ability. A social change emphasis would bring focus on the role of personal choice in forgiveness and EI. This would include an emphasis on positive choice, psychological well-being, and increase of life satisfaction (Macaskill, 2012; Wohl et al., 2008).

Situations Involving Emotional Intelligence and Forgiveness

I propose that a greater understanding of the similarities and discrepancies of one who has higher levels of EI and chooses to use such abilities in either a socially positive congruent manner or in a manner involving manipulation and self-centered gain is merited (Castillo et al., 2013; Fallon et al., 2014; Rey & Extremera, 2014). Further contemplation regarding differences of specific situations and the utilization of forgiveness and EI is appropriate in further research exploration (Thompson et al., 2005; Meneses & Greenberg, 2014; Pelucchi et al., 2013; Wade et al., 2014). Social change consideration would include psychological intervention that focuses on the specific EI

component of empathy in individuals displaying symptoms of emerging cluster B characteristics.

Emotional Regulation

Individuals who are able to empathize have a greater ability to emotionally regulate and may have an advantage in conflict resolution (Hill & Allemand, 2012; Konrath et al., 2014). Such individuals are more likely to forgive than opt to avoid or retaliate against a perceived offender (Meneses & Greenberg, 2014; Rey & Extremera, 2014; Wade et al., 2014) and are capable of removing obstacles that prevent reconciliation (Woodyatt et al., 2014). Additional research in this area may help to increase empathic understanding and mitigate the development of full-blown personality disorders in individuals whom show a lack of empathy.

Positive Interpersonal Relationships

Individuals whom experience positive interpersonal relationships possess gratitude and optimism (Rey & Extremera, 2014). These persons also recognize benevolence in others while observed to be adept in practicing empathy, support, and forgiveness. These individuals are less liable to choose anger and retaliation as a response to interpersonal conflict. Such positive interpersonal traits that can be learned from parents (Phillips, 2014) and help individuals learn and practice emotional regulation while facilitating healthy and constructive social interactions with others (Castillo et al., 2013). Such situational judgments may act to alleviate noxious tendencies indicative of mental illness, facilitate resilience, enable conflict resolution, and encourage psychological well-being.

Forgiveness and Psychology

A methodological issue (limitation 4) I mentioned in chapter 1 involved a lack of foundational scientific data that establishes forgiveness as a psychological construct. The majority of forgiveness research stems from an integrative perspective of theology and counseling (Enright, 1994; McCullough & Worthington, 1994). I recommend that forgiveness be thought of as a psychological construct, worthy of research and implementation. I believe that doing so may encourage the conceptualization and implementation of forgiveness in the science of psychology. This implementation would be an example of positive social change, by encouraging greater research of this construct.

Conclusions

The practice of interpersonal forgiveness may not directly have to do with being smart or at least emotionally intelligent. Within this study, I considered of EI involved process of emotional understanding and emotional management based on hypothetical situational judgments. Greater emotional understanding and emotional management may afford psychologists and others in mental health field a better position of understanding emotional processing and how to regard and address issues of patients experiencing problematic emotions. Such comprehension of processes of emotionality may enable the psychologist and others in a helping role to better educate and alleviate negatively experienced emotions.

Within this study, my contemplation of forgiveness involved affective, behavioral, and cognitive domains. Greater understanding of the processes of forgiveness

may provide psychologists and others in the field greater knowledge of how, when, and in what context forgiveness may alleviate problems within interpersonal relationships. Such awareness may enable the psychologist and others in a helping role to encourage a process of healing of a relationship or a healing of oneself. An emphasis on the understanding of emotions and forgiveness may encourage patient to make smart choices that would involve positive change and greater overall psychological well-being.

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Appendix A: Informed Consent Form

Informed Consent Form

You are invited to take part in a research study involving the cognitive processes of emotions and interpersonal offense. The researcher is inviting anyone within the Walden research pool over the age of 18 to be a part of the study. This form is part of a process called "informed consent" to allow you to understand this study before deciding to participate.

A researcher by the name of Noelle Lowry, who is a doctoral student at Walden University, is conducting this study.

Background Information:
The purpose of this study is to explore the potential relationship between emotional understanding and attitudes involving a hurtful interpersonal offense.

Procedures:
The total approximate completion time for all five assessments is 97 minutes (1 hour and 37 minutes). If you agree to be in this study, only once (without follow-up contact), you will be asked to:

- Complete a 5-item assessment of personal life satisfaction, with a projected completion time of approximately 2 minutes.
- Complete a 16-item assessment of empathy, with a projected completion time of approximately 5 minutes.
- Complete an 18-item assessment of emotional management, with a projected completion time of approximately 10 minutes.
- Complete a 42-item assessment of emotional understanding, with a projected completion time of approximately 40 minutes.
- Complete a 60-item questionnaire involving a hurtful interpersonal offense, with a projected completion time of approximately 40 minutes.

Here are some sample questions:

- Wai-Hin and Connie have shared an office for years but Wai-Hin gets a new job and Connie loses contact with her. *What action would be the most effective for Connie?*
  (a) Just accept that she is gone and the friendship is over.
  (b) Ring Wai-Hin and ask her out for lunch or coffee to catch up.
  (c) Contact Wai-Hin and arrange to catch up but also make friends with her replacement.
  (d) Spend time getting to know the other people in the office, and strike up new friendships.

- Clara receives a gift. Clara is most likely to feel?
  (a) happy (b) angry (c) frightened (d) bored (e) hungry
- I feel *warm* toward him/her.
  Check the appropriate number matching your level of agreement that best describes your current feeling: (1) Strongly Disagree (2) Disagree (3) Slightly Disagree (4) Slightly Agree (5) Agree (6) Strongly Agree

Voluntary Nature of the Study and Potential Conflict of Interest:
This study is voluntary. The decision of whether or not you choose to be in the study will be respected without pretense. No one at Walden University will treat you differently if you decide not to be in the study. Participant identity is unknown to the researcher. No knowledge of a participant's identity by the researcher would include lack of knowledge as to whether or not participants may be current students or patients. No one will treat you differently if you are a student or client of this researcher. In order to be included in the study, all questions must have a response. If you decide to join the study, and find there are questions you would rather not answer, you can change your mind and stop at any time. There is an option made available for you to exit the study on the top of every page if you choose not to continue and complete the study.

All instructions and questions within this study are written in English. It would be important that you have a proficient understanding of the English language in order to participate in this study.

After the completion of the assessments within the study, participants will have option to share the SurveyMonkey link with other potential participants. All participants are encouraged share this SurveyMonkey link with individuals/friends/contacts who they know and may be interested in participating in this study.

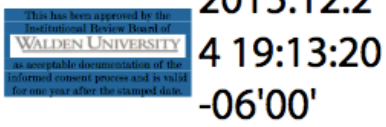
Risks and Benefits of Being in the Study:
Being in this type of study involves some risks of minor discomfort that can be encountered in daily life, such as negative thoughts and feelings toward a person and/or a situation. This study has the potential to pre-empt stress and you may become upset as a result of what may or may not be negative personal memories. Being in this study will not pose a risk to your personal safety or wellbeing. Contact information to the free counseling site made available to all Walden students will be provided within the study, should the thoughts and feelings you incur as a participant become overly stressful or personally problematic. Participants who are not Walden students are encouraged to call a local counseling center of their choosing in order to process any problematic negative thoughts and/or feelings that may emerge as a result of participating in this study. Benefits of your participating in this study would include bringing a greater social awareness between emotional understanding and attitudes involving a hurtful interpersonal offense.

Payment:
There will not be payment or reimbursement for your time and participation in this study.

Privacy:
Any information you provide during this study will be kept anonymous. Not even the researcher will know who participated. You will not be asked to provide any personal information, such as name or email address. After the completion of the above information, no further request for contact of any kind will be made. All research data will be kept secure and saved on an encrypted flash drive, and placed in a lock box and/or a combination safe. Data will be kept for a period of at least 5 years, as required by the University.

Contacts and Questions:
You may ask any questions you have now; or if you have questions later, you may contact the researcher *via* email at [redacted]. If you want to talk privately about your rights as a participant, you can call [redacted]. She is the University representative who can discuss this with you. Her phone number is: xxx-xxx-xxxx (for participants within the US) or xxx-xxx-xxx-xxxx (for participants outside of the US). Walden University's approval number for this study is **12-24-15-0345186** and it expires on **December 23, 2016**. Participants are encouraged to keep a personal copy of this informed consent form.

Statement of Consent:
I have read the above information, and I feel I understand the study well enough to make a decision about my involvement. By clicking "I agree" below, I am stating that I am age 18 or over, and I understand that I am agreeing to the terms described above.



Appendix B: Recruitment of Study Participants (Facebook)

1) An Update and Opportunity -
Hello All - Many of you already know that I am a psychology doctoral student, and close to graduating. I have spent the last year working on my dissertation. I am very excited - I just received word that I may go ahead with data and research collection. My dissertation has to do with emotions and relationships.
The opportunity? I need 85 volunteers to complete 5 questionnaires. Participating would mean complete anonymity (there is no way for me or anyone else to know who participated), no tracking information is kept, and no follow-up at a later date. More details are given within. Thanks for your consideration! Please feel free to forward this to anyone whom you think might be interested in being a participant. Here is the link to the study: https://www.surveymonkey.com/r/FDYK78S I wish all of you a Happy New Year!! - Noelle

2) Happy New Year to you!!
If you happen to find yourself sitting around today, I am in need of participants to complete 5 questionnaires for research for my dissertation. In your spare time, would you be interested in participating? Here is the link:
https://www.surveymonkey.com/r/FDYK78S

3) A big THANK YOU to all who completed the survey. I have reached the number of participants needed, and I have just closed the survey. I appreciate your time!!

Appendix C: Recruitment of Study Participants (Twitter)

I need 85 volunteers to fill out my doctoral dissertation survey. Want to help? Here is the link to the study: https://www.surveymonkey.com/r/FDYK78S

Appendix D: Availability of Confidential Student Counseling at Walden University

(Information Provided to Study Participants)

At Walden, we understand that challenges at home or work can affect the quality of your learning experience.

Our Student Assistance Program provides **free, confidential support; resources; and information that can help you and everyone in your household** address many issues, including:

- Stress, anxiety, or depression
- Family and personal conflict
- Major life changes
- Grief and loss
- Financial and legal concerns

Free, Confidential Counseling Available 24/7 Call our **24-hour hotline at 1-866-465-8942 (TDD: 1-800-697-0353)** to receive confidential counseling from experienced clinicians. A guidance consultant will listen to your needs and, if appropriate, refer you to resources in your community. Refer to Walden ID code SAP4EDU when accessing this free service.

Free Online Information, Tools, and Services Visit GuidanceResources Online to access **expert information on a range of legal, financial, and other topics** important to your well-being. Research answers to specific questions, review fact sheets, or use a variety of planning tools to help organize your life.
Simply create a user account, provide Walden's ID code (SAP4EDU), and get started. Each time you log in, you will receive information customized to your individual needs.

More Information Walden's Student Assistance Program services are provided through ComPsych® GuidanceResources®, and all records are kept private and confidential. Learn more about ComPsych.

[This text is directly copied from the Walden University website; I am not the author.]

Appendix E: Permission to Use the Toronto Empathy Questionnaire

The Toronto Empathy Questionnaire is an instrument is located in the measurement instrument database for the social sciences (MIDSS). The instruments on this site are noncommercialized and are available for use without the need for permission.

Spreng, R., McKinnon, M., Mar, R., & Levine, B. (2009b). The Toronto empathy questionnaire. *Journal of Personality Assessment, 91*(1), 62-71. doi: 10.13072/midss.94

Retrieved from http://www.midss.org/content/toronto-empathy-questionnaire

Appendix F: Permission to Use the Satisfaction With Life Scale

"The scale [the Satisfaction With Life Scale; SWLS] is copyrighted but you are free to use it without permission or charge by all professionals (researchers and practitioners) as long as you give credit to the authors of the scale: Ed Diener, Robert A. Emmons, Randy J. Larsen and Sharon Griffin as noted in the 1985 article in the *Journal of Personality Assessment*."

Permission found here: http://internal.psychology.illinois.edu/~ediener/SWLS.html

Appendix G: Permission for Use of Situational Judgment Test of Emotion Understanding and Situational Judgment Test of Emotion Management--Brief

Carolyn MacCann
Senior Lecturer

12 June 2015

To whom it may concern

I hereby give permission for Noelle Lowry to use the emotional intelligence tests developed by myself and Dr Richard D. Roberts in her research. This includes both the long and brief forms of: (a) the Situational Judgment Test of Emotion Management (STEM) and (b) The Situational Judgment Test of Emotion Understanding (STEU).

I also give permission for her to utilize survey software (i.e., SurveyMonkey) in order to administer tests and gather data.

Yours sincerely.

Carolyn MacCann

[redacted] [redacted]

ABN 15 211 513 464
CRICOS 00026A

Appendix H: Permission to Use the Enright Forgiveness Inventory

www.mindgarden.com

To whom it may concern,

This letter is to grant permission for the above named person to use the following copyright material;

Instrument: ***The Enright Forgiveness Inventory***

Authors: ***Robert D. Enright & Julio Rique***

Copyright: ***2000, 2004 by the International Forgiveness Institute – IFI, Madison, WI***

for his/her thesis research.

Five sample items from this instrument may be reproduced for inclusion in a proposal, thesis, or dissertation.

The entire instrument may not be included or reproduced at any time in any other published material.

Sincerely,

Robert Most
Mind Garden, Inc.
www.mindgarden.com

Appendix I: Permission to Use the Enright Forgiveness Inventory as a Remote Online Instrument

Approval for Remote Online Use of a Mind Garden Instrument

Effective date is July 24, 2015 for:

Noelle Lowry

You submitted your statement for remote online use at 1:29 pm EDT on July 13, 2015.

Noelle Lowry

Remote online use of the Mind Garden instrument stated below is approved for the person on the title page of this document.

Question	Answer
Your name:	Noelle Lowry
Email address:	[redacted]
Repeat email address:	[redacted]
Phone number:	[redacted]
Company/institution:	Walden University

Your project title:	A Correlational Exploration of Emotional Intelligence and Forgiveness
Mind Garden Sales Order or Invoice number for your purchase of reproduction licenses, if applicable:	(purchase made on July 5, 2015 - not sure where to find this number??]

Guidelines

You have agreed to the following guidelines:

Question	Answer
I have paid for my reproductions licenses and I will compensate Mind Garden, Inc. for every time the form is accessed or the participant logs in to access the survey. I understand that an administration or license is considered "used" when a respondent views one or more items/questions.	I agree to this condition.
I will put the instrument copyright statement (copyright date and copyright holder, including "Published by Mind Garden, Inc. www.mindgarden.com") on every page containing questions/items from this instrument **and** I will allow Mind Garden to verify the appearance in one of two ways: I will include info@mindgarden.com on my list of survey respondents **or** I will send screenshots of the survey so that Mind Garden can verify that the copyright statement appears.	I agree to this condition.
I will remove this online survey at the conclusion of my data collection and I will personally confirm that it cannot be accessed.	I agree to this condition.
Once the number of administrations reaches the number purchased, I will purchase additional licenses or the survey will be closed to use.	I agree to this condition.
I will **not** send Mind Garden instruments in the text of an email or as a PDF file to survey participants.	I agree to this condition.

Your comments and method of putting the instrument online

Question	Answer
Please specify the name of and web address for the remote online survey website you will be using and describe how you will be putting this instrument online:	[The web address has not yet been set up - I am a doctoral student at Walden University. I have completed the first draft of my dissertation proposal and needed the instrumentation and letter for URR specifications and approval of research. I plan on using the survey software, Survey Monkey]: www.SurveyMonkey.com

Noelle Lowry

Question	Answer
Please include any other comments or explanations you would like to provide about your remote online use of a Mind Garden instrument:	I would be glad to provide you with further details as my project continues to progress.

Your signature and date

Question	Answer
Your name (as electronic signature):	Noelle Lowry
Date:	7/13/2015