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Predicting Volunteerism Through Factors of Emotional Intelligence, Self-Efficacy, and Education Level

Dan Clark
Walden University

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Walden University

College of Psychology and Community Services

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Dan Clark

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Walden University
2023

Abstract

Predicting Volunteerism Through Factors of Emotional Intelligence, Self-Efficacy, and
Education Level

by

Dan Clark

MPhil, Walden University, 2020

MDiv, Saint Paul School of Theology, 1999

BS, East Central University, 1995

Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Philosophy

Educational Psychology

Walden University

February 2024

Abstract

In times of crises, natural disasters, and providing relief to those in need, volunteers are those who work to aid others. With the increasing need for more volunteers, it is important to consider how more people can be encouraged to volunteer. The purpose of this correlational quantitative study was to determine if participants' factors of emotional intelligence, self-efficacy, and education level had a predictive relationship to engaging in volunteer activities to create social change. To address this question, the research design included correlation analyses and multiple linear regression. The theoretical framework used in this study included the theory of unified responsibility, the theory of thriving with social purpose, and the social learning theory. The results of the multiple linear regression were significant, $F(7, 1393) = 69.90, p < .001$ and $R^2 = 0.26$. Appraising own emotions ($\beta = .25, 95\% CI [.001, .49], t = 1.97, p = .05$), regulating others' emotions ($\beta = 1.32, 95\% CI [1.10, 1.53], t = 12.09, p < .001$), utilizing emotions ($\beta = .48, 95\% CI [.23, .73], t = 3.76, p < .001$), self-efficacy ($\beta = .11, 95\% CI [.05, .17], t = 3.81, p < .001$), and education ($\beta = .19, 95\% CI [.07, .30], t = 3.22, p = .001$) significantly predicted volunteerism. The factors of emotional intelligence, self-efficacy, and education can predict the likelihood of a person volunteering. Therefore, using education to increase emotional intelligence and self-efficacy should result in more people volunteering to help others in need and lead to positive social change.

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November 2023

Dedication

I dedicate this dissertation to all those who taught me along my journey. I dedicate this to my wonderful spouse, partner, friend, guide, companion, research assistant, and fellow journeyer on this path of discovery and wonder. I dedicate this to my family, my mother and father, my brother, all who taught me the value of curiosity and put up with my constant questions of why and for examples. I dedicate this to my family-in-law, to my mother and father-in-law, who taught me inspiration, inclusion, and togetherness; and to my sisters-in-law, who each taught me different aspects of what it means to belong; and to my brothers-in-law who each taught me the meaning of understanding and compatriotism; and to my nieces and nephews who each taught me the joys of shared stories, shared smiles, and hope for the brightness of tomorrow. I dedicate this to my grandparents who taught me compassion, honor, fortitude, and love; and to my ancestors, in whose memory I delight in the life I have.

Acknowledgments

If I have seen further, it is by standing on the shoulders of giants (Newton, 1675).

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Chapter 1: Introduction to the Study

An increasing need for volunteers exists in the United States to meet the national, state, and local needs of society. The annual number and intensity of natural disasters are on the rise in the United States. Further, the global pandemic, reduced global trade of goods and services, and global supply chains for food has led to worldwide crises. In the United States, with shifting economic priorities away from publicly funded social services, these organizations cannot fulfill the societal needs of hunger, wellness, and communal education without volunteers. This quantitative research study was conducted to explore how to increase volunteerism and determine whether emotional intelligence, self-efficacy, and educational experiences can be used to predict the likelihood of volunteerism. In this chapter, I discuss the background for this study, identify the problem statement and purpose of this study, describe the research questions and hypotheses studied, describe the theoretical framework for this study, discuss the nature, scope, limitations of this study, and conclude with the significance of this study and what this study can contribute to the ongoing discussion of volunteerism and creating positive social change.

Background

Creating positive social change is gaining attention in American society. More universities are having a focus on social change, and social change is becoming institutionalized within colleges and universities as an emphasis in the curricula similar to reading, writing, and arithmetic (Clark-Taylor, 2017). The reason for this trend is to help educate adults to be more engaged in society to create a better world, beginning in higher

education institutions and influencing society at large. However, despite the emphasis on education, there are relatively few in the population who engage in creating social change (Christens et al., 2016).

Considering the multiple social needs and natural disasters experienced in the United States, a relatively small percentage of people living in the various communities across the country actively participate in creating social change. Similarly, organizations focusing on creating social change have a goal of making the world better, yet these organizations also report significant numbers of their members do not actively engage in volunteer activities for these organizations (Christens et al., 2016; Clark-Taylor, 2017). With so many social problems facing the general populace, it is important to examine why few people engaging in volunteerism (Wilkins et al., 2019). Previous studies have shown a link between emotional intelligence and self-efficacy (Black et al., 2018), links between education increasing both self-efficacy and emotional intelligence (Clark-Taylor, 2017), and studies that show self-efficacy may increase volunteer behavior (Bandura, 1997; Wilkins et al., 2019).

Problem Statement

The specific research problem addressed through this study was whether factors of emotional intelligence, self-efficacy, and education level contribute to an individual engaging in volunteer activities. Although researchers have previously investigated elements of this study, such as how factors of emotional intelligence, or self-efficacy, or education level contributes to engaging in volunteer activity, the scholarly community has not studied how the cumulative relationships between the independent variables of

the five-factor model of emotional intelligence, self-efficacy, and education level predict volunteerism. Researchers have recommended further researching the role of education on self-efficacy and community engagement (Clark-Taylor, 2017), education as part of the relationship between self-efficacy and increasing volunteer behavior (Wilkins et al., 2019), and additional variables that might influence prosocial behavior to help understand the complexities leading to prosocial behavior instead of forming a mono-causal explanation for collective action to create social change (Elad-Strenger, 2016).

Purpose of the Study

The purpose of this correlational quantitative study was to determine if participants' factors of emotional intelligence, self-efficacy, and education level related to engaging in volunteer activities to create social change using correlation analyses and multiple linear regression. I explored how these elements might be used to predict the possibility of volunteer activities and behaviors through the predictive elements of the five factors of emotional intelligence, self-efficacy, and education experience. If factors of emotional intelligence, self-efficacy, and education level can be used to predict volunteer behavior, then an intentional focus to increase emotional intelligence and self-efficacy through education might result in more people volunteering to create social change. The independent variables were factors of emotional intelligence, self-efficacy, and education level, and the dependent variable was volunteer behaviors.

Research Questions and Hypotheses

There were four research questions used to investigate this study.

RQ 1: What is the relationship between factors of emotional intelligence and

volunteerism among adults living in the United States?

H_01 : There is no relationship between factors of emotional intelligence and volunteerism among adults living in the United States.

H_A1 : There is a relationship between factors of emotional intelligence and volunteerism among adults living in the United States.

RQ 2: What is the relationship between self-efficacy and volunteerism among adults living in the United States?

H_02 : There is no relationship between self-efficacy and volunteerism among adults living in the United States.

H_A2 : There is a relationship between self-efficacy and volunteerism among adults living in the United States.

RQ 3: What is the relationship between education level and volunteerism among adults living in the United States?

H_03 : There is no relationship between education level and volunteerism among adults living in the United States.

H_A3 : There is a relationship between education level and volunteerism among adults living in the United States.

RQ 4: Do the observed scores of emotional intelligence factors, self-efficacy, and education level, individually or in linear combination, predict volunteerism among adults living in the United States?

H_04 : The observed scores of emotional intelligence factors, self-efficacy, and education level, individually or in linear combination do not predict volunteerism among

adults living in the United States.

H_{A4}: The observed scores of emotional intelligence factors, self-efficacy, and education level, individually or in linear combination do predict volunteerism among adults living in the United States.

Theoretical Framework

There are three theories that form the framework of this study. The first theory was thriving with social purpose (TSP), based on the work of Ford and Smith (2007). The second theory was the theory of unified responsibility (Dutta-Bergman, 2004). The third theory was the social learning theory, based on the work of Bandura (1977).

The theory of TSP incorporates motivation, personal agency beliefs, educational design, and self-identity to produce a sense of social purpose and well-being (Ford & Smith, 2007). This model of motivation is based on the mutual interaction of a person's self-efficacy, personal identity, and emotional intelligence to lead a life of purpose and create social change. TSP directly aligned with my research problem statement and purpose through the identification of different variables that influence volunteer behaviors such as educational design, social purpose, and a sense of well-being.

The theory of unified responsibility (TUR) put forth that volunteer behavior is a product of the alignment between an individual sense of self-concept and behaviors such as a person's lifestyle, job, and interactions in society (Dutta-Bergman, 2004). The TUR focuses on self-image, self-efficacy, emotional intelligence, individual beliefs, and actions for social wellness in people's personal lives which are also likely to be actively engaged in responsible action in their social lives. Community participation such as

volunteerism is linked to a sense of personal social responsibility. Dutta-Bergman's (2004) theory directly aligns with my research problem statement and purpose by highlighting the influence of self-image, self-efficacy, and emotional intelligence on a person's behavior as a good member in their community. The variable that differs in my research study was with the inclusion of education level and studying the predictive nature of the variables on volunteerism.

The third theoretical framework for educational psychology in my study was the social learning theory (SLT), which suggests that learning is a cognitive process that occurs in a social environment, and all knowledge is socially constructed (Bandura, 1977, 2001). The epistemological use of the SLT for my study was that knowledge is contextualized by the learner: the learning environment, social context of the learner, and the learning content all interact with the learner to make meaning. The ontological use of the SLT in my study was an understanding that humans are a thinking and reasoning species able to communicate and make meaning from the social and cultural context in which they exist. This epistemological and ontological aspects of the SLT related to how individuals learn social action and volunteer behaviors along with emotional intelligence and self-efficacy. The context of the volunteer, along with emotional intelligence and self-efficacy, create a synergistic foundation; increasing emotional intelligence and self-efficacy in a social learning environment may increase volunteer behavior to create social change.

Nature of the Study

To address the research questions in this quantitative study, the specific research

design included correlation analyses and multiple linear regression focused on determining the possible engagement in volunteer behaviors through the predictive elements of the five factors of emotional intelligence, education level in years, and self-efficacy level. The dependent variable of volunteer activities was continuous with scale ratings on a volunteer activities scale. The independent variables of five factors of emotional intelligence, self-efficacy, and education level were continuous. The variable of education level was data gathered at the beginning of the survey series.

Following an informed consent statement approved by the Institutional Review Board (IRB), there was one survey with four sections administered containing a total of 23 questions. The first section measured how many years of formal education the participant had completed. As Bandura (1977) pointed out, all knowledge is socially constructed, and being in a formal learning environment was a key interest in my study. The second section covered self-efficacy questions using the New General Self-Efficacy scale (NGSE) based on the general self-efficacy scale of Bandura (Chen et al., 2001). The third section encompassed the five factors model of emotional intelligence created by Davies et al. (2010), which was itself derived from the emotional intelligence scale from Salovey and Mayer (1990). The fourth section of the survey utilized a five-item volunteering scale focused on self-reported types of volunteer activities (Rodell, 2013). Permission to use each survey is in the appendices. All questions used for the content area of the survey underwent validation and reliability measures as indicated in each of the respective articles from these authors.

Definitions

There are eight variables I used in my quantitative research study investigating factors for predicting volunteerism. The dependent variable was volunteerism, with the seven independent variables being an individual's self-efficacy, education experience measured in years, and the five factors of emotional intelligence.

Education experience: For my research study, the measurement of education was defined as the number of years an individual was exposed to a formal learning environment. The emphasis on the number of years in a formal learning environment did not focus on degrees earned. Instead, the focus of education was on the social learning environment where individuals were exposed to learning and knowledge where individuals construct their own understanding through interactions with situations, the environment, and others (Simpson, 2002).

Emotional intelligence: A type of intelligence which focuses on the ability to recognize one's own emotions as compared to other people's emotions and the ability to use that information to influence one's own thinking and actions (Salovey & Mayer, 1990).

Self-efficacy: The belief or confidence one has in one's own abilities (Bandura, 1977).

Volunteerism: An act providing time, effort, or resources to benefit others through unremunerated and proactive service with volunteers typically engaged in self-interested, altruistic, and affiliative organizations in social or communal activities (Englert & Helmig, 2018).

Assumptions

There were five identified assumptions for this research. The first assumption was with the research design. I assumed the variables used in this research were relevant for the investigation of this research to determine if predictions could be made for volunteer activity in adults. The support for using these variables was found in the literature review (Kee et al., 2018; Manesi et al., 2019; Nejati et al., 2018; Yao et al., 2020).

Second, it was assumed that participants in the research would respond honestly and accurately. Participants in this research answered a series of questions accessed online. Following an informed consent statement approved by the IRB, and an attestation of eligibility, participants responded to each question unsupervised. I also assumed that the participant giving consent was also the person answering the questions.

The third assumption for this research was that the phenomenon of volunteering, factors of emotional intelligence, and self-efficacy were measurable. Questions used to assess each of these variables were self-referential and subjective. I therefore assumed that the answers provided by participants accurately reflected the amount of personal volunteering, the factors of emotional intelligence for that participant, and the level of self-efficacy for that participant as reflected in the results from the questions answered. The fourth assumption of the research design was that the survey was comprehensible and had a shared meaning of the variables researched as presented in the testing apparatus, namely the concepts of volunteering, emotional intelligence, education level measured in years, and self-efficacy, which were considered terms commonly used in educational psychology and the public.

The fifth and final assumption in this area was the generalizability of the research results. The demographic used for this research were adults living in the United States. A call for participants was made on several social media outlets and national non-profit organizations, all accessible via the internet nationwide.

Scope and Delimitations

The data collection method I used was an online survey to measure general self-efficacy, factors of emotional intelligence with each factor reported as a subscale, volunteer activities, and self-reported years of education completed. The first part of the survey consisted of a single item asking for the years of education completed by the participant. The second part of the survey used the New General Self-Efficacy scale (NGSE) consisting of eight items based on the general self-efficacy scale of Bandura (Chen et al., 2001). The third part of the survey used the Brief Emotional Intelligence Scale (BEIS-10) consisting of 10 items to measure the five factors model of emotional intelligence created by Davies et al. (2010), based on the five content areas of the emotional intelligence scale from Salovey and Mayer (1990). The fourth and final part of the survey utilized a five-item volunteering scale which focused on self-reported types of volunteer activities (Rodell, 2013). The overall survey was used to collect scale data measuring the five factors of emotional intelligence, self-efficacy, years of education completed, and volunteering activities. The volunteering scale was used to serve as the dependent variable data in the research; the NGSE, BEIS-10, and self-reported data on years of education completed were used as the data for the independent variables in the research.

Participants eligible for this study were adults living in the United States. No at-risk or vulnerable populations were used for this study. The invitation for participation in this study were disseminated through online social media, internet message boards, networks of organizations participating or supporting community service activities, networks of nationwide religious education groups, divisions within the American Psychological Association, and from alumni organizations of Walden University.

Limitations

A limitation for this research was the nature of the surveys designed to measure factors of emotional intelligence and self-efficacy. In keeping the online survey to a manageable size while maximizing response rates, the surveys used for this research were selected for both accuracy and brevity. Ten questions were for factors of emotional intelligence, eight questions for self-efficacy, and five questions on volunteer activities. The survey questions and online consent form were expected to be completed in 10 to 15 minutes.

A second limitation of this study was the data gathered as self-reported. A research instrument to objectively measure factors of emotional intelligence and self-efficacy was not used for my study. Similarly, the responses given by participants for the type and volume of volunteer activities were not verified through a tracking or monitoring system. Therefore, the limitation with participant data being fully representational of actual emotional intelligence level, self-efficacy level, and volunteer activities must be received as subjectively given by each participant. However, as a mitigating effort, the survey instruments used for my study also were designed for self-

reported data in the areas of emotional intelligence, self-efficacy, and volunteer activities. Each of the survey questions underwent rigorous validation and reliability testing. Therefore, the data results from my study had a likelihood of generalizability.

Significance

If factors of emotional intelligence, self-efficacy, and education level can predict the likelihood of a person volunteering, then using education to increase emotional intelligence and self-efficacy should result in more people volunteering to create social change. Education in general has an ancillary benefit of increasing both emotional intelligence and self-efficacy (Bandura, 1997; Pinkney & Shaughnessy, 2013). An implication from my study was that using education to raise a person's skills in the five factors model of emotional intelligence and self-efficacy may help increase people volunteering in the United States, especially when the need for volunteers continues to increase. As evidenced by my study, organizations focusing on volunteerism may potentially benefit from engaging in educational programs to increase emotional intelligence and self-efficacy which may increase the likelihood of members engaging in volunteer activities.

With ever increasing occurrences of natural disasters (Garcia-Navarro, 2018; Kusnetz, 2018), the increasing disparity in healthcare and health services between the rich and poor (Wiemers et al., 2020), and the multiple social issues facing this nation, the need for volunteerism is increasing. Despite the growth in need for social support and social services in times of crises, U.S. government funding and grants for social services is decreasing, leaving third sector and charitable organizations to fill the gaps in basic

services needed by the public (Lynch, 2016). Increasing the likelihood of people volunteering to help others in need can likewise increase social change.

Summary

The purpose of this correlational quantitative study was to determine if participants' factors of emotional intelligence, self-efficacy, and education level related to engaging in volunteer activities to create social change. To address this question, the specific research design of my study included correlation analyses and multiple linear regression, which focused on determining the possible engagement in volunteer behaviors through the predictive elements of the five factors of emotional intelligence, education experienced in years, and self-efficacy. If factors of emotional intelligence, self-efficacy, and education level can predict the likelihood of a person volunteering, then using education to increase emotional intelligence and self-efficacy should result in more people volunteering to create social change. Increasing the likelihood of people volunteering to help others in need can likewise increase social change.

In the next chapter I provide an in-depth literature review of the four variables I used in my study, namely volunteering, factors of emotional intelligence, self-efficacy, and years of education. I describe the theoretical foundation supporting my research, specifically with the theory of unified responsibility, the theory of thriving with social purpose, and the educational theory of the social learning theory. I conclude the next chapter with an overall summary of why and how these four variables were useful in helping to craft a way to increase positive social change by understanding factors which predict the likelihood of individuals volunteering to create that social change.

Chapter 2: Literature Review

Nearly 200 years ago French diplomat to the United States and political scientist Alexis de Tocqueville (1838) published his notes and observations on American democracy and culture, stating that the heart of this country is based on active community engagement at all levels of society forming the backbone of American social systems. Tocqueville witnessed the importance of volunteerism in American society and how that volunteerism shaped this country from an emerging nation into a world power. The current social and political climate in the United States shares roots with Tocqueville's observations; however, the changes to American society by a global pandemic, political discourse, and an institutional and governmental move away from supporting social services has strained the populace. Government funding for social services decreased while increasing the need for charitable organizations to provide basic service needs for the public (Lynch, 2016). Charitable giving to nonprofit organizations and community support groups was negatively impacted by tax credit cuts by the U.S. Congress in 2017, placing more burden on communities to stretch services with less money (Osili et al., 2019). Volunteerism in many nonprofit organizations is at record lows (Wilkins et al., 2019), which has negatively impacted social services and community support for those in need (Sims et al., 2020). With the decrease in funding, a narrower donor base, and a decrease in volunteer participants to help provide these social services, many nonprofit organizations are experiencing difficulty serving the public need.

The need for public and community services increased in the past years with more natural disasters experienced in the United States (Garcia-Navarro, 2018; Kusnetz, 2018).

Communities across the country encountered unprecedented types of natural disasters in 2016 to 2022, from tornadoes experience in the northeast, heatwaves in more northern areas of the country, severe and historic droughts, dangerous heat indices in the south, rivers once thought to be ubiquitous now dry, air quality dangers, and earthquakes in otherwise unshaken land. All of these events have strained public resources and federal funds (Garcia-Navarro, 2018). The global pandemic of COVID-19 has also struck the United States with increased needs in health care. The illness and death experienced from the pandemic caused many states to ration health care, furthering disparities of health services for preexisting conditions (Wiemers et al., 2020). The Federal Emergency Management Agency of the United States (FEMA, 2021) has a webpage designated to seek volunteers to help with managing the U.S. COVID-19 response. With increasing natural disasters affecting communities across the United States, social and economic infrastructures are in need of more volunteers to provide aid and services to those in need.

Creating positive social change and participating in prosocial behavior is crucial. Yet indications are that a relatively small percentage of people participate in volunteer activities to create social change (Christens et al., 2016). As the philosopher Aristotle put forth, education can help change the world for the better (Gottlieb, 2002). More universities and higher education courses are focusing on social change creating a process of institutionalizing social change in curricula (Clark-Taylor, 2017). Despite engaging service opportunities in an academic environment, not all students learn the lesson of volunteerism. Without the scaffolding of the learning environment, only a relatively few in the population continue to engage in volunteer work in society (Wilkins et al., 2019).

In this study I investigated if a predictive relationship exists between volunteering and education level, factors of emotional intelligence, and self-efficacy. I also sought to determine if a relationship was found, can a person's factors of emotional intelligence, education level, and self-efficacy be used to predict the possibility of engaging in volunteer activity. In this chapter I define the variables in this study, establish a theoretical foundation for investigation, and present research findings on prior investigations of these variables and possible relationships between each variable.

Literature Search Strategy

To research scholarly work on the variables in this current study, I performed an exhaustive search using several databases accessible or linked to the Walden University Library. As this study primarily focused on elements dealing with psychology and social science, databases that had a psychological emphasis were used. The databases of APA PsychArticles, APA PsychInfo, ERIC, Google Scholar linked with the Walden University Library, and Thoreau Multiple Databases were the tools used for items such as primary sources, peer-reviewed works, and meta-analyses. Databases searched for books and seminal works were APA PsychBooks, ERIC, and Google Scholar. To search articles on subjects relating to or opinions about the variables used for this study, I used the database APA PsychExtra, ERIC, and Thoreau Multiple Databases. I discovered the testing apparatus used in this study through searching APA PsychTests specifically for a volunteer activities scale, a self-efficacy scale, and a five-factor emotional intelligence scale.

Scholarly works used in this study had a search parameter of being published

between 2015 and 2022. Topic relating to the variables of this study prior to 2015 were used for background information to trace scholarly knowledge development directly influencing this study. Seminal works for this study's variable of volunteerism, the theory of thriving with social purpose (Ford & Smith, 2007) and the theory of unified responsibility (Dutta-Bergmann, 2004) were used. The seminal work for the variable of emotional intelligence is gained from the works of Salovey and Mayer (1990). The variable of self-efficacy in this study is informed by the seminal work of Bandura (1997). Similarly, the variable of education is informed by the social learning theory of Bandura (1977,1986) as well.

Key search terms used for this study were separated by variables to provide delineation and context. The key search terms used for volunteerism were *volunteer*, *volunteering*, *volunteerism*, *prosocial behavior*, *pro-social*, *positive social change*, *social interactive behavior*, and *society*. The key search terms used for emotional intelligence were *emotional intelligence*, *empathy*, *emotive behavior*, and *emotion intelligence*. The key search terms used for self-efficacy were *self-efficacy*, *self-reliance*, *belief in self*, and *self-confidence*. The key search terms used for education level were *education*, *formal education*, *higher education*, *education level*, *education levels*, and *social learning*.

Theoretical Framework

There are two theories used as the foundation for understanding volunteerism and the interaction of a sense of self, purpose, fulfillment, motivation, environment, and education shape a person for prosocial behavior. The first theory was thriving with social purpose (TSP) from the work of Ford and Smith (2007), which expands on previous work

in motivation systems theory (MST). The second theory was the theory of unified responsibility (TUR) from Dutta-Bergman (2004), who sought an understanding of volunteering which encompassed activities, interests, and motivations of individuals who volunteer. As so many factors influence an individual's act of volunteering, the different dimensions and insights of TSP and TUR provided the structure to further investigate elements of emotional intelligence, education, and self-efficacy on volunteerism.

Thriving with Social Purpose

Originally developed as an educational psychology tool to improve learning outcomes, the theory of thriving with social purpose incorporates motivation, personal agency beliefs, educational design, and self-identity to produce a sense of social purpose and well-being (Ford & Smith, 2007). This model of motivation was based on the mutual interaction of a person's self-efficacy, personal identity, and emotional intelligence to lead a life of purpose and create social change. Influenced by motivation systems theory, Ford and Smith (2007) were focused on an educational setting to foster a holistic approach to learning, where education leads individuals toward fulfillment of goals and outcomes. Understanding that motivation alone does not make learning happen, Ford and Smith put forward that much of adult education was focused on the importance of the motivation of the learner.

According to Ford and Smith, MST had a model of motivation that was formed and influenced by a person's sense of personal agency, goals, and emotions. This model was further enhanced by a person's capability beliefs and the context beliefs in which the learner exists. The work of Ford and Smith improved the MST by including facilitating

the development of optimal functioning through the amplification of motivational processes. In other words, the expansion of MST into TSP was done through including the function of social purpose to learning. Along with the elements of personal optimism, mindful tenacity, emotional wisdom, and social purpose, an individual has a more active approach to goal achievement.

Although TSP had an emphasis on the learning environment, the application of the TSP can be useful in other areas of life. TSP has implementation beyond educational psychology and can be applied to personal actions such as the multidimensional aspects to volunteering as prosocial behavior in a community or society. In studying the process of social perspective taking, Gehlbach and Mu (2021) used TSP as a foundation for conceptualizing motivation for one to take the perspectives of others. Gehlbach and Mu advanced their theory of social perspective taking beyond the role of confidence in motivation, stating that overconfidence may result in a lack of motivation for perspective taking. Smit (2017) similarly studied the importance of improving student motivation in the learning environment. Smit noted that understanding the role of motivation to achieve goals can be applied to children and adults alike; the learning environment was changing from teacher-centered to student-centered. With the shifts in educational needs during COVID, Smit's insights of motivation in a changing learning environment even less traditional than teacher-centered education is pertinent to reach learning goals.

TSP aligned with my research problem statement and purpose through the identification of different variables which influence volunteer behaviors. My research purpose was to investigate specific variables of education level, emotional intelligence,

and self-efficacy and their possible influence on volunteerism. Ford and Smith (2007) examined related variables to my research such as educational design, social purpose, and a sense of well-being.

Theory of Unified Responsibility

The second theory used for my research was the Theory of Unified Responsibility (Dutta-Bergman, 2004). For Dutta-Bergman (2004), an individual has a concept of who they are as a person and who they are as a member of a society. Acts of volunteerism emanate from an individual's sense of responsibility both from one's concept of self and concept of being part of a society or social group (Dutta-Bergman, 2004). Factors influencing the act of volunteering include motivation, education, sense of self, and sense of a person's role in whatever social associations they may have. Dutta-Bergman defines volunteerism, influenced by many factors, as a pro-active choice by an individual to engage in a formalized and public act to donate time and energy to benefit others.

The application of TUR can be used by both organizations specializing in volunteer activities, such as nonprofits, or by institutions of higher education engaging in volunteerism to create positive social change, through an understanding that volunteer actions come from an individual's sense of self and sense of connection with a social group or society among other factors of influence. Dutta-Bergman (2004) pointed out that many organizations that depend on volunteers are constantly looking for ways to include and recruit more and more volunteers. Individual volunteers may have an influence on their actions from factors such as education, religious beliefs, income level, motivations, emotions, and numerous other factors; however, successful recruitment of volunteers

should focus on communicating both how their organization has a responsible commitment to a community or society and how volunteering with their organization is an act of a responsible person.

Huang et al., (2020) studied the relationship between perceived organizational inclusiveness and volunteer need satisfaction. Huang et al. put forth the more an employee feels engaged and included in the workplace, the higher the level of need satisfaction, which creates more positive behaviors toward the organization. In their study Huang et al. demonstrated an uptick in volunteer activities were engaged to fulfill need satisfaction. Huang et al. utilized the insights of TUR to understand how these volunteer activities might lead to higher need satisfaction through an individual's sense of self and responsibility to their organization and society.

A similar study by Malinen and Harju (2017) investigated the role of engagement in the retention of volunteers through studying both job engagement and organization engagement. In their study, Malinen and Harju used the framework of TUR as a basis of an individual's act of volunteerism as an act of a responsible person and a responsible member of the organization. Ultimately, Malinen and Harju determined that organizational engagement had a significantly higher influence on retention of a volunteer than on an individual's sense of engagement through their job.

In my own research, I put forth that education, emotional intelligence, and self-efficacy positively influence a person to engage in volunteerism, an emphasis supported with both TUR and TSP. If higher education institutions emphasize life-long learning and life-long application of that knowledge in areas including creating social change, then the

lessons of volunteering as a student needs to be translated and universalized to volunteering as an individual with responsibility to both self and society. I utilized both TUR and TSP as theoretical foundations to form an idea that the influences of volunteerism are many which may include education level, factors of emotional intelligence, and level of self-efficacy, three factors which impact both an individual's sense of responsibility and an individual's sense of social purpose.

Literature Review Related to Key Variables

In this section I discuss each variable with peer-reviewed literature to define and give an understanding of how each variable may interact and possibly relate to each other. The background literature and published research for each variable provided an organizing structure to my research. Subsequently, I sought to add my research and results to the larger discussion of volunteerism, emotional intelligence, self-efficacy, and education.

Volunteerism

In defining volunteerism, Cnaan et al. (1996) put forth for conceptual and empirical consideration volunteering is an act providing time, effort, or resources to benefit others through unremunerated and proactive service. With continuing decreased public funding and subsidies for nonprofit and social services in the United States, paired with stagnating private donations, the need for volunteers to fill the ever-widening gap in providing social services to meet the needs of society takes on an urgency within U.S. communities and third sector organizations (Khodakarami et al., 2015). Volunteers tend to be engaged in self-interested, altruistic, and affiliative organizations in social or

communal activities (Englert & Helmig, 2018).

Collins et al. (2014) put forth that civic engagement by a community is enabled through a shared sense of collective efficacy to influence shared social, economic, and political goals through both coordinated and interdependent actions. The collective efficacy of a group is formed from a shared belief in the values, future direction, and resource allocations of their community. The hypothesis of the study is that individuals who are more civically engaged have greater levels of collective efficacy (Collins et al., 2014). Through the use of household surveys, Collins et al. determined that a positive relation exists between civic engagement and collective efficacy. An implication from this study is that adult education may be used to shape the communal sense of efficacy through community organizing and providing opportunities for individuals to interact in meaning-making activities. A limitation of this study was that the household surveys used for their quantitative analysis were based on subjective opinion responses rather than objective evidence of communal action in civic engagement; a household reporting activity and engaging in that activity might be different things.

Ertas (2015) also focused on civic engagement comparing public, non-profit, and private sector employees and possible relations to both personal self-efficacy to create social change and actual civil engagement in social change. Noting that many social movements for creating social change are often composed of relatively few citizen participants compared to the larger populace, Ertas investigated which employment sectors were more likely to have citizens who engaged in social change. Data were used from the 2008 Current Population Survey Civic Engagement Supplement from the U.S.

Census Bureau (Ertas, 2015). Ertas found that knowledge of political activities and attentiveness to political events led to increased participation in civic engagement in activities beyond voting. The findings also indicated that public employees and non-profit employees were more likely to engage in social change compared to private sector employees. Furthermore, increasing knowledge of political issues and information increased the likelihood of civic engagement beyond voting regardless of employment sector (Ertas, 2015). Therefore, increasing adult education in the political issues and legislative agendas can support an engaged populace and healthy democracy.

Focusing on politically liberal and conservative viewpoints, Hoyt et al. (2018) used a pair of studies to identify motivations for individuals to volunteer for social change activities in the context of wealth inequality (Hoyt et al., 2018). In the first study, Hoyt et al. determined that political liberals are motivated for volunteerism by exposure to messages describing distributive injustice in wealth, such as wage disparity among the sexes or public education funded by property taxes which results in unequal funding of economically stressed neighborhoods. In their second study, Hoyt et al. determined that political conservatives are motivated for volunteerism when exposed to messaging that focuses on inequality in wealth due to procedural injustice, such as burdensome taxation or systematic withholding earned income. Educating the public on wealth distributive injustice along with procedural injustice can influence the engagement of political activism overall. A limitation of the Hoyt et al. studies was a focus on the motivation and desire to engage in political activity while leaving possible evidence of actual political engagement unstudied.

Another motivator for collective volunteer action to create social change can be found with social media, specifically in the ways of social affirmation and identity building (Kende et al., 2016). Social media can be used as a source for raising awareness, mobilization, and reinforcement to activism, and additionally can serve to build personal identity and a sense of group belonging. Using a questionnaire to collect data on the frequency of offline participation in an Occupy Wall Street action, questions on a sense of identity as activists, and the use of social media in connection with the Occupy movement, Kende et al. (2016) determined that social affirmation use of social media can be used as a predictor of the level of engagement and endurance in participating in social change. In building a self-identity and a sense of self-efficacy for social change, social media can be a powerful tool for motivation. The use of social media for social affirmation was found to be positively correlated to social engagement, while using social media for informational use alone was negatively correlated to participation in social engagement (Kende et al., 2016).

Comparing online and offline social action, Wilkins et al. (2019) examined if online activism translated into offline behaviors to create social change, otherwise known as “slacktivism.” A quantitative study used questionnaires focusing on online and offline activism, perceived self-efficacy to create social change, and prior experiences in offline activism (Wilkins et al., 2019). Wilkins et al. indicated that a personal sense of self-efficacy to volunteer to create social change was a leading factor in translating online activism to offline action. Wilkins et al. also suggested that a person’s self-efficacy for social change was influenced by a person’s prior experiences with successful activities

more than online participation. An implication for virtual based adult education is to provide offline opportunities to volunteer in social change activities along with online education encouraging social change.

With an interest in how social norm perceptions can be used to either create or subvert volunteerism to create social change, Tankard and Paluck (2016) put forth that influencing the subjective perception of communal norms through intentional approaches in adult education can be used as an intervention to create social change. In order to have a sense of belonging to a community, individuals strive to understand the norms of that community to build acceptance and inclusion while also avoiding behavior which might lead to social rejection and exclusion (Tankard & Paluck, 2016). As an example of their theory, Tankard and Paluck gave the example of how adolescents and young adults might perceive that drug use, smoking, and binge drinking are valued by their peers; a social change in this example would be to change the perception that these behaviors are not valued, resulting in a record low rate of teenage drinking, smoking, and drug use (NIH, 2016). The effectiveness of creating social change is directly linked to individuals of the group feeling a personal sense of identity of the new perceived norm (Tankard & Paluck, 2016). To affect the change in perceived norms, adult education can be used specifically to foster the new normative information and adoption is contextualized in shaping personal buy-in and reinforced through peer feedback. While Tankard and Paluck focused on individual perceptions of norms, Collins et al. (2014) focused on the antecedents of community collective efficacy and volunteerism in civic engagement.

Emotional Intelligence

Emotional intelligence as a phrase was first used by Salovey and Mayer (1990) in describing a type of intelligence which focused on the ability to recognize one's own emotions as compared to other people's emotions and the ability to use that information to influence one's own thinking and actions. Mayer et al. (2008) attempted to define the field for emotional intelligence, stating that a coherent definition of what is, and what is not, emotional intelligence is lacking in general for psychology. As Mayer et al. emphasized, it is important to understand what encompasses emotional intelligence. Broadly speaking, intelligence can be measured in two distinct areas: cognitive functioning, known as intelligence quotient or IQ, and emotional intelligence, often abbreviated as EI. In another study on emotional intelligence, Salovey and Grewal (2005) defined emotional intelligence as a set of four related abilities: perceiving, using, understanding, and managing emotions.

Mayer et al. (2008) further differentiated the field of study for defining emotional intelligence into categories focusing on either traits or ability. An emphasis on EI as a collection of personality traits relegates the scientific inquiries of emotional intelligence to cataloging personality dispositions into a list of attributes. Defining emotional intelligence as a list of traits is little more than an extension of Personality Psychology and the focus on the "Big Five" personality traits so influential in the 1980s and 1990s (Goldberg, 1993). These Big Five traits are identified as Extraversion-Introversion, Neuroticism-Stability, Openness-Closedness, Agreeableness-Disagreeableness, and Conscientiousness-Carelessness (Goldberg, 1993; Mayer et al., 2008).

Defining emotional intelligence as ability allows for scientific investigation on how emotions influence the thinking and reasoning process. Emotional intelligence as abilities, and not emotional traits, focuses on emotional capabilities and competencies rather than on individual personalities. Therefore, psychometric standards of measures that are high in reliability and validity for objectivity may be employed in studying those capabilities and competencies, rather than on subjective self-judgement measures of personality traits.

Emotional intelligence can be a greater indicator of academic and professional success as compared to IQ or technical expertise (Chapin, 2015; Cherniss & Goleman, 2001; Salovey & Grewal, 2005). An individual's ability to understand and comprehend how interpersonal skills and emotions influence and impact others is crucial for success in nearly every profession. In a practical application of the benefits of measuring emotional intelligence in adult college students, a study by Chapin (2015) suggests that emotional intelligence may be used as a predictive tool to identify issues impacting academic performance and improve student academic success.

If emotional intelligence is defined as ability, as Mayer et al. (2008) suggested, then the emotional competencies and capabilities of understanding how emotions are interrelated to the cognitive process can be studied. Areas of further research suggested by Mayer et al. include areas of emotional intelligence such as emotional knowledge measures, emotional awareness, and emotional self-regulation. Additionally, if emotional intelligence is defined as a set of capabilities, then research into increasing those capabilities may also ensue.

Increasing Emotional Intelligence Through Education

Recognizing the importance of emotional intelligence in business, Sigmar et al. (2012) proposed a method of increasing emotional intelligence through strategies in teaching Business Communication courses. Sigmar et al. recommend experiential based learning activities where students engage scenarios and simulations to act out complex interactions. In this educational model, discovery of knowledge occurs through student communication of observations and discussions of other students' actions. While these experiential educational methods have collaboration, the academic goal of the course is to teach Business Communication; increasing emotional intelligence is a by-product of the educational techniques.

Mar et al. (2009) conducted research focusing on increasing emotional intelligence through exposing participants to literary fiction with emotive writing. The research model used literary fiction with characters who experienced complex emotions and interactions, where the reader could encounter the internal and external processes of evaluating emotions and how emotions affect others beyond the self. In furthering the research design, Mar (2011a) indicated that participants in the studies read the fiction individually, followed by small group discussions where the readers shared insights and knowledge gained. In the research model, Mar (2011a) utilized collaborative learning through small-group interactions. Mar (2011b) demonstrated that emotional intelligence increased significantly through studying emotive literary fiction, even in participants who were socially impaired (Decety, 2011; Mar, 2011b). However, Mar's work focused on small-group interactions in a therapeutic environment.

The research by Mar (2011b) indicated that participants in the research studies read particular literary fiction individually, followed by small group discussions where the readers shared insights and knowledge gained. In the research model, Mar utilized collaborative learning through small-group interactions. Mar demonstrated that emotional intelligence increased significantly through studying emotive literary fiction, even in participants who were socially impaired (Decety, 2011; Mar, 2011a). However, Mar's work focused on small-group interactions in a therapeutic environment. Expanding the model of increasing emotional intelligence in a larger adult learning environment is an area deserving further investigation.

In a similar study which utilized examples of literature with emotionally laden writing, Barchard et al. (2013) evaluated an individual's ability to decode emotional connotations in literature. Their study was designed to measure an individual's perception and understanding of emotions using a series of metaphors. The reactions and responses of participants were compared and assessed to determine emotional intelligence. Although Barchard et al. did not use a method to increase emotional intelligence, the research did establish a set of commonalities from the responses gathered to serve as a normative sampling for the particular culture and population studied. How the conclusions of normative emotional responses align with other cultures remains a question to be explored.

The article by Mayer et al. (2008) emphasized the need to differentiate the field of emotional intelligence between a focus on personality traits and a focus on abilities such as emotional capabilities and competencies. To summarize, the emotional abilities for

emotional intelligence include the ability to recognize one's own emotions as compared to other people's emotions, and the ability to use that information to influence one's own thinking and actions. In this way, Mayer et al. put forth that study of emotional intelligence is truly looking into another dimension of intelligence, different from cognitive ability or function, and inclusive of emotion as a process of and for the overall cognitive functions of a person.

If emotional intelligence is defined as emotional capabilities and competencies, then research into increasing those capabilities to engage in volunteerism to create positive social change is fertile ground for psychological engagement. The foundation for the importance of emotion in cognitive processing includes psychological giants such as Bandura (2001), Vygotsky (1978), and Piaget (1955). More recent research endeavors have demonstrated the neurological bases for the emotional cognitive development (e.g., Mar, 2011b; Salovey & Grewal, 2005). Furthermore, as studies in emotional intelligence continue, new knowledge may be discovered in how the mind functions with the complexities of full intelligence with both cognitive and emotional intelligences at work.

Self-Efficacy

Self-efficacy is the belief or confidence one has in one's own abilities (Bandura, 1977). Self-efficacy can be understood as existing on a continuum from a high self-efficacy to a low self-efficacy. A high self-efficacy is high self confidence that one can do certain tasks, while a low self-efficacy is low self confidence that the task can be performed adequately or correctly (Landis et al., 2007). Landis et al. (2007) put forth a high self-efficacy is related to an internal locus of control, and a low self-efficacy is

related to an external locus of control. Locus of control likewise has two distinctions, being an internal locus of control or an external locus of control. An internal locus of control is a belief that one has more control over events as opposed to an external locus of control which is a belief that events are controlled outside of the person, such as fate, destiny, or luck (Landis et al., 2007). An individual having a high self-efficacy tends to demonstrate positive results in performance. As an example, Beaudoin and Desrichard (2011) discussed that individuals possessing a high self-efficacy for memory resulted in better memory performance versus individuals with low self-efficacy for memory. Furthermore, Valentine et al. (2004) studied the relationship between teachers with high self-efficacy for teaching and student performance. Teachers with high self-efficacy for teaching were more likely to engage students in a learning environment that facilitated academic success versus teachers with low self-efficacy, demonstrating that it is not just the student's self-efficacy that impacts academic success.

However, it must be noted that having a high self-efficacy can lead to success, but it does not guarantee success (Pajares, 1996). Believing one is good at painting does not make one a good artist. A historical example is with President Harry Truman's daughter, Margaret Truman, who began her singing career when her father was in office.

According to Miller (2008), while President Truman was in office and Margaret Truman sang and performed, Margaret received very diplomatic and polite reviews by critics at first, most likely in deference to her father, the sitting President. However, in 1950, the Washington Post critic Paul Hume wrote a more honest and frank critique which was not as flattering, claiming that Margaret Truman was more flat than in tune (Miller, 2008).

Looking back in history, we can probably say that Margaret Truman had high self-efficacy in her belief that she could sing well, and probably had a good internal locus of control in that she practiced and practiced; however, in reality, Margaret Truman had a difficult time singing in tune with the orchestra and falling well short of what a professional singer's voice was expected to perform.

As self-efficacy and motivation are important parts of volunteerism and are therefore integral to the overall process to create social change. Increasing motivation to engage in the behaviors and activities of volunteerism can have a subsequent increase in self-efficacy. Conversely, low motivation may decrease self-efficacy just as low self-efficacy can lower motivation.

Self-efficacy itself both affects and is affected by the triadic reciprocal interactions as Bandura (1977) described in the social learning theory between the learner, behavior, and environment. As self-confidence is raised, success in the environment is more likely to be experienced, which impacts the behaviors and attitudes of the individual. Likewise, poor self-confidence may result in behaviors of quitting, which impacts the environment through consequences which reinforce low self-efficacy. Vital to successful social learning activities is an understanding of how peers, family, and others in the social environment influence and are impacted by the learner's actions, beliefs, and behaviors.

Education Level Measured in Years

The independent variable to be discussed in this section is an individual's education measured in years completed, or the number of years an individual is exposed

to a formal learning environment. The pertinence of using educational experience measured in years is due to education having a strong correlation with improving emotional intelligence and self-efficacy (Clark-Taylor, 2017). Similarly, with higher educational institutions incorporating and encouraging student volunteerism in community services and to create positive social change, it is important to understand how education is shaping the lasting lessons of learning to volunteer for good causes beyond graduation. As an example of how formal education can shape the behavior and motivations of students, it is important to understand both Bandura's (1977; 2001) social learning theory (SLT) and a school of education known as constructivism.

Constructivism is an epistemological approach to learning and knowledge where individuals construct their own knowledge through interactions with situations, the environment, and others (Simpson, 2002). Constructivists view knowledge as relativistic; knowledge is only known by the individual, shaped by experience and the context of that individual, influenced by the knowledge and experiences encountered with others (Osborne, 1996; Simpson, 2002). Thinking and learning are dependent on the physical and social contexts of the learner, where the learner interacts with the situation and context of learning (Anderson et al., 1996; Anderson et al., 2004).

The constructivist approach to learning and development is viewed through the influences of the learning environment, the biological and physiological distinctiveness within individuals, as well as the overarching developmental processes influenced by the social context of the learner. As an example of this constructivist approach, Vygotsky (1978) viewed learning and the social learning environment as integral aspects of each

other, the learner influencing the environment as the environment influences the learner.

Vygotsky's (1978; 1997) theoretical paradigm for education was that learning and development occurred in a dynamic relationship to each other; as learning increased, development of the person likewise increased. As a case in point, Vygotsky viewed that language acquisition could serve as a model for this constructivist learning-development dynamic relationship. As a child begins to learn how language influences the external social environment of the child, subsequent development of an internal language gives voice to internal mental thought. The internal thought process further increases the need for communication with the social environment to confirm and verify thoughts with others.

In a related constructivist paradigm, Piaget (1955) viewed that language acquisition occurs in a similar sequential fashion of egocentric external language and subsequent internal language. According to Piaget, language is first learned as a child from an egocentric perspective and how the individual interacts with their surroundings. Language acquisition transitions to more internal dialog where the individual processes experiences as internal communication. Reflective thought arises from the development of internal speech and the interactions of the child and the social environment.

Piaget's theory on cognitive development further illustrates the constructivist approach to knowledge in the concrete operational stage and the formal operational stage (Pinkney & Shaughnessy, 2013). In Piaget's original theory, children typically enter the concrete operational stage at age 7, while formal operational stage begins around age 12 (Carey et al., 2015). However, research has shown that roughly one third of high school

graduates can perform formal operational thought, with the vast majority of adults continuing in the concrete operational stage (Pinkney & Shaughnessy, 2013). Functioning in the concrete operational stage includes conducting rational inquiry and problem solving, but those problems are typically applied to actual objects or particular events (Pinkney & Shaughnessy, 2013). With a constructivist view that knowledge is constructed through encounters with situations and others, educational opportunities need to provide learners with lessons and opportunities in practical application of formal operations with abstract thinking, learning deductive reasoning, and critical thinking.

Education through constructivism views knowledge as greater than a set of absolute truths (Tobin et al., 1994). Instead, knowledge is formed through experience and is validated through empirical verification by the individual and the larger society (Osborne, 1996). However, knowledge has the dichotomy of also being subjective; knowledge is only known by the social, cultural, and historical context of an individual. Knowledge cannot be separated from the context of learning. As Simpson (2002) pointed out, knowledge is more than making meaning from one's own experiences. Knowledge must be both contextualized and validated with objectivity. As an example, scientific knowledge may contradict common sense or observed phenomena, such as witnessing the sun circling the earth daily at sunrise and sunset. Instead, with objective and empirical understanding, we may embrace a Copernican Revolution and know that the earth revolves around the sun, knowledge that contradicts what we may see from our subjective vantage point. Although a simplistic example, it does highlight that knowledge is more than a contextualized subjective reality. There are times where subjectivity and historical

context must be countered to embrace a new paradigm that others might not conceive, or Copernicus might never have freed us from a stationary earth.

Practical Application of the Learning Process for Knowledge Acquisition

A practical application of a constructivist approach to education is through collaborative learning in adults, which can be an effective pedagogy in adult education (Lambropoulos & Romero, 2014; Stephen, 2014). There are certain hallmarks which all variants of collaborative learning share as a constructivist educational approach (Stephen, 2014). First, collaborative learning has a primary emphasis on student interaction and dialog among fellow learners in meaning-making or problem-solving activities. Second, the instructor or teacher provides the scaffolding necessary to engage in learning activities and serves as facilitator and co-learner. The instructor may provide a guiding influence at times to assist with student discovery; however, collaborative learning is more student-focused while the instructor serves as a facilitator. Third, the students share responsibility for learning through interacting with each other and contributing their own experiences, perspectives, expertise, and knowledge with their fellow students. Fourth, in collaborative learning, the students themselves assign roles and responsibilities within the collaborative group to achieve educational goals, as opposed to the instructor assigning roles to individuals (Peterson, 2012).

There are demonstrated benefits to collaborative learning in adult education. Through collaborative learning, students are able to engage in higher level thinking and retain subject information for longer periods of time as compared to individual study (Sultan et al., 2011). Not only is the acquisition of subject matter knowledge enhanced

through collaborative learning, the ancillary benefits to collaborative learning techniques include increased critical thinking skills and improved interpersonal skills (Gokhale, 1995). These additional benefits for the students are achieved through the exchange of ideas in a learning environment where the students themselves take on the responsibility for their own individual learning and the learning of their fellow students (Senior et al., 2012).

It is interesting to note that collaborative learning is most efficacious when the exchange of ideas and interactions of the collaborative participants are in real-time encounters. However, the proximity of the collaborative participants is not an issue; distance collaborative learning events are as successful in achieving educational outcomes as in-person collaborative learning events, and both are just as likely to be more successful than non-collaborative learning events (Lambropoulos & Romero, 2014). Furthermore, distance collaborative learning events which provide opportunities for students to engage in a live exchange and interaction are more successful at building knowledge than learning events which utilize forums or static post-and-response type interactions (Lambropoulos & Romero, 2014). Collaborative learning can occur in distance learning without real-time encounters; however, the most effective collaborative learning outcomes occur with opportunities for students to engage in a real-time exchange of ideas and concepts.

Educational Constructivism and the Social Learning Theory

Social learning theory views the learner as an integral part of the learning environment, where cognition, environment, and behavior are mutually interactive with

each other (Bandura, 1977; 2001). The process of thinking and learning are more than skills which are learned; thinking itself is more context-dependent which requires adaptability and creativity, including lessons from experience as well as practice (Willingham, 2008). Therefore, in my own research of investigating if educational experiences measured in years, an individual's self-efficacy, and their emotional intelligence can be used to predict the probability of that individual volunteering to create social change, having an understanding that the social learning environment such as experienced in formal education is crucial. The context and function of the learning environment and the socio-cultural context of knowledge are mutually inclusive and necessary to construct meaning, such as the need to volunteer to create positive social change.

Therefore, this quantitative research study is interested in how many years of exposure an individual has in both a learning environment and the sociocultural experience in order to study how that exposure shapes and influences a person to volunteer for activities which can lead to positive social change. Previous studies have shown a link between emotional intelligence and self-efficacy (Black et al., 2018), links between education increasing both self-efficacy and emotional intelligence (Clark-Taylor, 2017), and studies that show self-efficacy may increase volunteer behavior (Bandura, 1997; Wilkins et al., 2019). The educational experience, along with an individual's emotional intelligence and level of self-efficacy, might provide insight into predicting the likelihood of volunteerism. If this is so, then designing an educational event to increase both emotional intelligence and self-efficacy might produce an outcome

of creating more participants in creating positive social change.

Summary and Conclusion

In the United States, public funding and subsidies for social services continues to decline, placing more demands on third-sector organizations and private donations to continue to serve the needs of society (Khodakarami et al., 2015). Finding their resources dwindling, third sector organizations continue to have greater needs for volunteers (Osili et al., 2019). Yet only 20% to 30% of members in third sector organizations tend to actively volunteer and participate in the organization's activities (Christens et al., 2016; Clark-Taylor, 2017).

My focus for this quantitative research study is to understand if a relationship exists between volunteering and education level, factors of emotional intelligence, and self-efficacy. The theoretical foundation supporting my study is threefold by using the theory of unified responsibility, the theory of thriving with social purpose, and the social learning theory. In this chapter I reviewed existing scholarly literature discussing the interactions between volunteerism, emotional intelligence, self-efficacy, and education. Volunteerism is defined as an act providing time, effort, or resources to benefit others through unremunerated and proactive service with volunteers typically engaged in self-interested, altruistic, and affiliative organizations in social or communal activities (Englert & Helmig, 2018). Emotional intelligence is defined as a type of intelligence which focuses on the ability to recognize one's own emotions as compared to other people's emotions and the ability to use that information to influence one's own thinking and actions (Salovey & Mayer, 1990). Self-efficacy is defined as the belief or confidence

one has in one's own abilities (Bandura, 1977). For my research study, the measurement of education is defined as the number of years an individual is exposed to a formal learning environment where individuals construct their own knowledge through interactions with situations, the environment, and others (Simpson, 2002). The educational experience, along with an individual's emotional intelligence and level of self-efficacy, might provide insight into predicting the likelihood of volunteerism. If this is so, then designing an educational event to increase both emotional intelligence and self-efficacy might produce an outcome of creating more participants in creating positive social change.

In the next chapter I discuss my quantitative research method, outlining the research design and rationale, the research method, describe the instrumentation for capturing data, sampling procedures, describe my data analysis plan, and detail my ethical considerations for conducting my research.

Chapter 3: Research Method

The purpose of this study was to determine if a predictive relationship existed between a person's five factors of emotional intelligence, level of self-efficacy, years of education completed, and acts of volunteerism. This research may help determine if the likelihood of volunteerism can increase if a person's emotional intelligence, self-efficacy, and education of that potential volunteer is increased, creating the possibility of more volunteers to help create positive social change. In this chapter, I discuss my research design and rationale for quantifying the variables of factors of emotional intelligence, education level, self-efficacy, and volunteer activities. I explain how the research design was connected to the research questions outlined in Chapter 1. I detail the published instruments and testing selected for my research and discuss the reliability and validity of those instruments. I describe the target population for data collection and outline my data analysis plan. I conclude this chapter with a discussion on threats to validity and ethical considerations.

Research Design and Rationale

The research design was a correlational cross-sectional quantitative approach to determine if participants' five factors of emotional intelligence, self-efficacy, and education level relate to engaging in volunteer activities to create social change. Correlation analyses and multiple linear regression helped determine the possible engagement in volunteer behaviors through the predictive elements of the five factors of emotional intelligence, education experienced in years, and self-efficacy. Because the research was quantitative, the independent variables of the five factors of emotional

intelligence, a measure of self-efficacy, and years of formal education completed are all quantifiable. Similarly, the dependent variable of volunteer activities can be numerically counted and quantifiable.

The correlational cross-sectional quantitative research design using multiple linear regression was chosen as the best type of analysis for this research after examining the relevant research literature, the variable types, and the structure of the research questions. The correlational cross-sectional methodology has similarly been used in educational psychology on the predictive variables of three educational interventions on mastery, maladaptive learning behavior, and academic achievement (Ranellucci et al., 2017). The multiple linear regression analysis model allowed me to assess the relationships of predictive variables on the criterion variable and was appropriate when two or more predictive variables and a continuous criterion variable were in the research (see Warner, 2013). This design was also useful to discover the predictive nature of individual variables on the criterion variable as well as seeking the predictive nature of combinations of independent variables on the criterion variable (Frankfort-Nachmias & Nachmias, 2008).

Methodology

The participants for the online survey were adults aged 18 or above living in the United States. The potential target population consisted of approximately 258.3 million people (Ogunwole et al., 2021). As Tocqueville (1838) originally made observations on the American public, and as the literature review and background drew information from national organizations such as the FAA (2022), FEMA (2021), and the U.S. Department

of Health and Human Services (2023), the target population for this research project were all adults living in the United States. Citizenship of the United States was not required, as the data supporting Tocqueville, the FAA, FEMA, and HHS did not require citizenship of its data reporting.

Sampling and Sampling Procedures

Potential participants in this research may have been recruited from members of third sector religious and non-religious groups, such as Hindu temples, Jewish synagogues, Muslim mosques, Catholic and Protestant churches, Unitarian Universalists, Sikh gurdwara, Jainist temples, and religious organizations participating in the ongoing national Poor People's Campaign (n.d.). Additional participants were solicited from student groups from Walden University. These various communities were located throughout the United States for possible participants in the online surveys. Participant inclusion in the data population was based on being an adult aged 18 years and above and currently living in the United States. Exclusion in my study were minors, at-risk populations, or adults living outside of the United States. Citizenship was not a requirement for participation. I wanted to focus on adults living in communities across the nation. In times of crises, a community may help one another regardless of origin or citizenry (Tocqueville, 1838).

The sampling method for my study was a convenience sample, meaning any participant who met the qualifications of my study were eligible to participate in the surveys. Although there was a risk of participants not representing the full spectrum of the adult population of the United States, the target population was large. Due to this

sample size and the limitations of advertising and recruitment costs, third sector organizations and the education organizations were used to recruit potential participants in the convenience sample.

Based on a G*Power calculation using an online a priori sample size calculator for multiple regression version 4.0, the anticipated effect size (f^2) = 0.15, the desired statistical power level will be 0.8, there are seven predictors, with an alpha level of 0.05, the sample size required for this research study was a minimum of 103 participants (see Soper, 2023). Although 103 participants are the minimum required to perform an adequate analysis, I hoped to have more participants provide data to increase the strength of my findings (see Anastasi & Urbina, 1997). Setting the anticipated effect size at .15, the beta at .8, and the alpha at .05 are standard settings for conducting psychological research with enough confidence and statistical power for credible findings in research (see Warner, 2013).

Procedures for Recruitment, Participation, and Data Collection

Participants eligible for this study were adults living in the United States. No at-risk or vulnerable populations were used. The invitation for participation was disseminated through online social media, internet message boards, networks of organizations participating or supporting community service activities, networks of nation-wide religious education groups, and from student organizations of Walden University. An informed consent online form was provided to all prospective participants and was required for participants to proceed with the surveys.

The data collection method included an online survey to measure general self-

efficacy, a survey to measure factors of emotional intelligence with each factor reported as a subscale, a survey to measure volunteer activities, and self-reported years of education completed. Data collection was obtained from an online hosting platform into SPSS data packets. Participants were able to choose to withdraw from participation in the surveys at any time. Once all survey items were completed, a final webpage stating my thanks for their participation was displayed, along with contact information contained in the online informed consent form. Debriefing participants on the results of my study was to occur at the conclusion of the dissertation process, and a copy of the finished dissertation was obtainable by participants if they chose. No other follow-up procedures were necessary.

Instrumentation and Operationalization of Constructs

The first section of the survey used the New General Self-Efficacy scale (NGSE) consisting of eight items based on the general self-efficacy scale of Bandura (Chen et al., 2001). The second section of the survey used the Brief Emotional Intelligence Scale (BEIS-10) consisting of 10 items to measure the five factors model of emotional intelligence created by Davies et al. (2010), based on the five content areas of the emotional intelligence scale from Salovey and Mayer (1990). The third section of the survey utilized a five-item volunteering scale which focused on self-reported types of volunteer activities (Rodell, 2013). The survey items were used to collect scale data measuring five factors of emotional intelligence, self-efficacy, years of education completed, and volunteering activities. The volunteering scale was used to measure the dependent variable data in the research; the NGSE, BEIS-10, and self-reported data on

years of education completed were used to measure the independent variables in the research.

The NGSE from Chen et al. (2001) was based on the general self-efficacy scale of Bandura (1986) and was an improvement of the Sherer general self-efficacy scale (SGSE) of Sherer et al. (1982). Where the SGSE focused on both elements of self-efficacy and self-esteem, Chen et al. chose to focus the NGSE on general self-efficacy alone. The NGSE consisted of eight items that best capture the 17 items of SGSE. The test-retest reliability coefficients were high for the NGSE, with $r_{t1-t2} = .65$, $r_{t2-t3} = .66$, $r_{t1-t3} = .62$. Chen et al. concluded that the eight item NGSE yielded a scale unidimensional, internally consistent, and stable over time. Principal component analyses were conducted for the eight NGSE items on three occasions, with $\alpha = .87$, $.88$, and $.85$ respectively.

The BEIS-10 was created to improve upon the existing Emotional Intelligence Scale (EIS) created by Schutte et al. (1998), which consisted of a 33-item self-report instrument to assess a participant's perception of their ability to appraise and regulate emotions in self and others and utilize emotions for problem solving. Davies et al. (2010) sought to relieve the response burden on participants while also creating an internet-based survey to collect data on EI. Higher response burdens tend to have lower levels of accuracy and completion rates as compared to less response burdensome instruments. Factorial validity was tested with 111 undergraduate student-athletes from universities in the United Kingdom, meeting the recommended population size of 100 or more for assessing the reliability of a psychometric questionnaire (Davies et al., 2010). The five-

factor model of EI was used with two items for each factor for an equal number of indicators. Davies et al. reported the CFI = .97, NNFI = .94, and RMSEA = .06. Davies et al. determined the content validity data indicated the factors of the BEIS-10 retained a degree of independence. The reliability of the BEIS-10 indicated relative stability over a 2-week period; however, a Pearson's correlation indicated a moderate correlation of < 0.8. In their discussion, Davies et al. stated actual EI remains relatively stable over time like IQ, but self-perception of emotional skills and abilities may be more transient.

Rodell's (2013) volunteering scale was a unique instrument that improved upon previous volunteering scales by focusing more fully on the intensity of volunteering rather than focusing on self-reported amount of money donated or total hours of labor volunteered. As Rodell (2013, p. 1279) pointed out, "the raw amount of time invested in volunteering does not equate with the intensity of effort in that time." The definition of volunteering used by Rodell (2013, p. 1279) was "giving time or skills during a planned activity for a volunteer group or organization," such as third sector organizations like charitable and nonprofit groups. Prior to Rodell's volunteer scale, the main instrument for measuring the amount of effort or finances donated was created by Gillath et al. (2005). Rodell put forth that measuring the intensity of volunteering would give a fuller account of both the motivation and intention rather than raw hours or dollars. Rodell pointed out that self-reported number of hours will not capture if a volunteer puts forth minimal effort while volunteering over several hours versus another volunteer who put forth a huge effort over a few hours. It was this sense of intensity that Rodell wanted to capture.

The reliability and validity tests performed by Rodell on the new volunteering

scale were established by using a sample of 782 undergraduate students from a large southeastern university. An online survey was used to record the participants' answers. A definition of volunteering was provided as part of the online survey. A confirmatory factor analysis was performed which indicated a good fit ($\chi^2 = 17.26$, CFI = .98, IFI = .98, SRMR = .01), which supported the scale's unidimensionality (Rodell, 2013). Convergent validity was measured by administering both Gillath et al.'s (2005) measure of specific volunteer activity measured in hours and Rodell's volunteer scale measuring volunteer intensity. Rodell found the scale measure of volunteering was positively correlated with numerical self-reporting of volunteer activities ($r = .64$). The coefficient alpha was .96. Rodell (2013) concluded these results provided evidence of construct validity of the developed volunteering measure.

In my study, the dependent variable of volunteer behaviors were scale data with a focus on volunteer frequency of activity, effort level, and amount of time. The independent variables of the five factors of emotional intelligence, self-efficacy, and years of education achieved were continuous. The NGSE measured a participant's general self-efficacy (Chen et al., 2001), the BEIS-10 measured a participant's five factors of emotional intelligence (Davies et al., 2010), and the Rodell (2013) volunteering scale measured a participant's volunteer activity, all necessary to measure the dependent and independent variables for my study. These three surveys were administered as an online survey. The items for my online questionnaire are in Appendix A. Permission to use the survey instrument are included in the appendix. All questions used for the content area of the survey underwent validation and reliability measures as indicated in each of

the respective articles from the authors associated with each instrument. Upon receiving IRB permission, but prior to utilizing any of these scales, I checked each scale's psychometric properties (i.e., Cronbach's alpha) applying my own data since reliability and validity are sample dependent.

Data Analysis Plan

The online survey for collecting data was open and available for two weeks to maximize opportunity to recruit enough participants. The data was then examined through the Statistical Program for Social Sciences software (SPSS), version 28 (IBM Corp., 2017). The data was reviewed for completeness. If any survey was incomplete, it was considered invalid and excluded from the overall data. If the threshold of 103 complete surveys was not met, the online survey would be made available for an extended period of two weeks for more participants and responses. The same venues of recruitment would be used for additional participants if needed.

Prior to running the linear regression analysis, the data was tested to determine if the data meets the multiple linear regression assumptions. The first assumption was only relevant variables will be included in the study. The literature review for my research identified three specific surveys, each of which focused on a specific variable of factors of emotional intelligence (Davies et al., 2010), general self-efficacy (Chen et al., 2001), and volunteering activities (Rodell, 2013). These surveys were designed to collect specific variable data, which were used to address the first assumption. The second assumption was that linear relationships between continuous variables existed. Linearity was checked through correlation tables through Pearson's r correlation, with additional

usage of scatterplots. The third assumption was that all continuous variables were normally distributed, which was checked by analyzing skewness and kurtosis. Checking the normal distribution of the dependent variable was visually inspected by verifying an approximate normal curve existed on the histogram charts. The fourth assumption was homoscedasticity, which was the homogeneity of variance. To test for equality of variances, I used Levene's test for departures from normality; if the result of the Levene's test was statistically significant, then the assumption of homogeneity of variance would be violated and the results for equal variances not assumed would be used (Warner, 2013). The violation of homoscedasticity was checked by use of the Breusch-Pagan Test for Heteroskedasticity, the Modified Breusch-Pagan Test for Heteroskedasticity, and an F Test for Heteroskedasticity (Warner, 2013). This assumption was to be met if the tests showed significance which would indicate heteroskedasticity was present, and homoscedasticity was violated. If these assumptions were violated, the results of the data collected would be reported and the data points would be tested for possible outliers and their effect on the model (Simkus, 2022). The model was to be run with and without any influential points or outliers. Similarly, it may have been necessary to increase the sample size for if n is sufficiently large, the Central Limit Theorem holds that with a large enough sample the results tend toward a normal distribution (Lumley et al., 2002).

The threat of multicollinearity was possible when using multiple linear regression modeling. Collinearity occurs when there is a strong correlation between the dependent variable and two or more independent variables (Warner, 2013). If collinearity occurred, the beta weights would not be statistically significant regarding the criterion variable, and

I would not know which predictor variables are important. To check for collinearity, I used Pearson's correlation matrix using the predictor variables in this study. The VIF was also analyzed for multicollinearity, where a VIF of 1 indicated variables not correlated, a VIF above 1 and below 5 indicated moderate correlation, and a VIF greater than 5 indicated variables are highly correlated (Warner, 2013). If this occurred, the coefficient estimates and *p*-values in the regression model were to be considered likely unreliable and reported as such.

There were four research questions used to investigate this proposed study.

RQ1-Quantitative: What is the relationship between the five factors of emotional intelligence and volunteerism among adults living in the United States?

H_{01} – There is no relationship between factors of emotional intelligence and volunteerism among adults living in the United States.

H_{A1} – There is a relationship between factors of emotional intelligence and volunteerism among adults living in the United States.

RQ2-Quantitative: What is the relationship between self-efficacy and volunteerism among adults living in the United States?

H_{02} – There is no relationship between self-efficacy and volunteerism among adults living in the United States.

H_{A2} – There is a relationship between self-efficacy and volunteerism among adults living in the United States.

RQ3-Quantitative: What is the relationship between education level and volunteerism among adults living in the United States?

H_{03} – There is no relationship between education level and volunteerism among adults living in the United States.

H_{A3} – There is a relationship between education level and volunteerism among adults living in the United States.

RQ4 – Quantitative: Do the observed scores of emotional intelligence factors, self-efficacy, and education level, individually or in linear combination, predict volunteerism among adults living in the United States?

H_{04} – The observed scores of emotional intelligence factors, self-efficacy, and education level, individually or in linear combination do not predict volunteerism among adults living in the United States.

H_{A4} – The observed scores of emotional intelligence factors, self-efficacy, and education level, individually or in linear combination do predict volunteerism among adults living in the United States.

The statistical test I used to answer these research questions was multiple linear regression modelling using the statistical software package SPSS version 28 (IBM Corp., 2017). The formula I used for the multiple linear regression was $\hat{Y} = b_0 + b_1X_1 + b_2X_2 + b_3X_3 + b_4X_4 + b_5X_5 + b_6X_6 + b_7X_7$. The criterion variable of the Rodell volunteering score was coded as \hat{Y} . The predictor variables were represented by X 's as follows: appraisal of own emotions (X_1), appraisal of others' emotions (X_2), regulation of own emotions (X_3), regulation of others' emotions (X_4), utilization of emotions (X_5), general self-efficacy (X_6), and years of education (X_7).

To investigate the research questions and test the hypotheses, four separate linear

regression analysis models were conducted. As with linear regression models, correlation analysis of the variables was performed for each research question and regression model. The first model analyzed the predictive relationship between the factors of emotional intelligence as measured with the BEIS-10 and the volunteerism score. The second model analyzed the predictive relationship between self-efficacy as measured with the NGSE and the volunteerism score using simple linear regression. The third model analyzed the predictive relationship between the participants' years of education completed and the volunteerism scale using simple linear regression. The fourth and final model of my research analyzed the predictive relationships of the overall assessment scores. The entire linear regression model was evaluated by means of the *F*-ratio and corresponding *p*-value of the model for significance. The *t*-value and *p*-values in the coefficients table were analyzed to determine which predictor variable, if any, had a significant predictive relationship with the criterion variable.

Threats to Validity

Threats to validity are areas that may disrupt or invalidate research. To address these threats, I describe how I planned to deal with internal and external threats, threats to statistical conclusions, and the ethical procedures I planned.

Internal Validity

Threats to internal validity are actions or attitudes on the part of the researcher which taint the results of research, such as researcher biases, beginning with foregone conclusions about the research, or when the researcher omits data in order to alter the data results for certain outcomes (Creswell & Creswell, 2018). Additional internal threats

to validity may come from the participants in the research as well (Creswell & Creswell, 2018). If participants in the research wished to sway the research outcomes and overinflate experiences or under-report data, then the whole research result may be skewed.

In this research, I planned to guard against threats to internal validity in several steps. I was to guard against the aspects of researcher bias by having no foregone conclusion of the outcome. The research results came from the data of cases that were completed by participants in the research. The data collection tool was an internet delivered questionnaire accessible to any adult living anywhere in the United States, preventing the researcher from influencing the participants' responses. I wanted to learn in my study about the influences on volunteering. I therefore kept my own biases and preconceived ideas about influences on volunteering in check. In other words, I followed the data, the whole data, and nothing but the data. To guard against the internal threat to validity coming from the participants, I assumed people participating in my study and questionnaire were answering with honesty and integrity. Participants were volunteering to participate in a voluntary questionnaire about volunteering, and therefore I trusted the participants' honesty and integrity in doing so.

External Validity

There were two main threats to external validity for my study, the first being sampling bias and the second being the Hawthorne effect (Creswell & Creswell, 2018; Chiesa & Hobbs, 2008). Sampling bias threatens validity when the researcher samples specific participants who exhibit certain characteristics which may invalidate the results.

Similarly, sampling bias may occur when the research overgeneralizes the results for the larger population. The Hawthorne effect threatens validity when the participants are influenced by the observations or expectations of the researcher (Chiesa & Hobbs, 2008). In other words, participants in the research questionnaire may emphasize or deemphasize responses because of perceived expectations of the researcher.

Sampling bias was mitigated by recruiting participants from a variety of possible venues, such as through requests to national third-sector organizations which may include non-profit or religious institutions, university student organizations, and websites directed at a national audience as opposed to a specific region. Additionally, I reported the results of my research in the next chapter and indicated the results were from the particular recruited sample; results might not be typical for all populations.

The Hawthorne effect occurs when the researcher observes the participants in a research project and the act of observation itself influences the results (Roethlisberger & Dickson, 1939). In Hawthorne's original experiments for improving the output of work in a factory, Hawthorne observed that increasing the level of light likewise increased the worker output; and when the light level was decreased in another population, the work output also increased in the experimental observation period (Chiesa & Hobbs, 2008). When the experiments were concluded, the worker output returned to normal in both cases. I guarded against the Hawthorne effect by having a generalized request for participants in my research and specifically excluding any language that might communicate expectations of outcomes. Similarly, since the recruitment of participants was from a large geographic area, i.e., adult residents in the United States, and the

questionnaire being online and accessible anywhere with an internet connection, the risk of participants communicating expectations with each other was minimized.

Statistical Conclusion Validity

The statistical conclusion validity for my research was secure when I avoided calculating results which create either a Type I or Type II error. A Type I error occurs when a null hypothesis is erroneously rejected (Warner, 2013). In other words, results were concluded to be significant, but the results were obtained by chance occurrence, or results were a false positive for the null hypothesis. When the null hypothesis is rejected, the researcher is claiming that the chain of circumstances establishing a change in the dependent variable has occurred when in actuality the chain has not been established. To guard against this type of commission error, I set my level of significance and effect size to a standard level α common to psychological research (Warner, 2013). A Type II error occurs when a conclusion on the effect of the research was not recognized when an effect truly existed. To guard against a Type II error, the statistical tests needed to have a high enough power level, represented by β with a statistical power set to $< 80\%$ (Warner, 2013).

Ethical Procedures

In order for my research to proceed, I sought approval from Walden University's IRB, including approval from my dissertation committee on my research proposal. This ensured that my research design did not violate any ethical standards of research or treatment and recruitment of participants in my research.

Prior to participation in the online survey, all volunteer participants needed to

read through an online consent form worded with Walden University's IRB approved verbiage. Participant consent of participation was required prior to the online survey being administered. If participants chose not to give their consent, the online survey was not administered.

The ethical standards for the recruitment of participants and storage of data as set forth in the Ethical Principles of Psychologist and Code of Conduct from the American Psychological Association (2017) were followed for my research. No at-risk populations were recruited for participation. All participants verified they meet the minimum requirements for participation of being an adult and living within the United States. The recruitment of participants used an online format requesting participation and explanation of the purpose and procedures of the questionnaire, the volunteer nature of the participation, meaning participants could cease participation at any time without penalty, and no deception was used in the research procedures or practice. There was no monetary incentives used to elicit participation; only the offer to participate in a psychological experiment. Initial data gathered from participants remained in a secured website until all willing participants submitted the questionnaires. After the data collection, data and case information was kept on a secured password and biometric protected computer accessible only by the researcher. A secured copy of data was kept in a fireproof lockbox separate from the main computer storage. No personal identifiable information was gathered from the anonymous online survey; therefore, confidentiality of participants was ensured. Upon completion of this dissertation, participants may receive the results of overall research after the research is concluded via use of Scholarworks, a searchable publication

of Walden University research.

Summary

The purpose of this study was to determine if a predictive relationship existed between a person's five-factors of emotional intelligence, level of self-efficacy, years of education completed and acts of volunteerism. In order to investigate the types of relationships between variables, my research design for this correlational cross-sectional quantitative study was to determine if participants' five-factors of emotional intelligence, self-efficacy, and education level related to volunteering, through the use of correlation analyses and multiple linear regression. Participants in this research were recruited from members of third sector religious and non-religious groups. Additional participants were solicited from student groups from Walden University. The sample population was approximately 253.8 million adults living in the United States. A sample size of 103 was calculated using an online G*Power calculator with the anticipated effect size (f^2) = 0.15, the desired statistical power level was 0.8, there were seven predictors, with an alpha level of 0.05. I discussed how internal and external threats to validity were to be handled, such as ensuring researcher bias was held in check and not engaging in targeted sampling bias in recruiting only participants who exhibit characteristics favorable to my research. In order for my research to proceed, I sought approval from Walden University's IRB, including approval from my dissertation committee for my research proposal. This ensured that my research design did not violate any ethical standards of research or treatment and recruitment of participants in my research.

Chapter 4: Results

The purpose of this correlational quantitative study using correlation analyses and multiple linear regression was to determine if participants' factors of emotional intelligence, self-efficacy, and education level related to engaging in volunteer activities to create social change. As a way of investigating the research purpose of my study, I created and used four particular research questions. The first three research questions were designed to take each independent variable individually and determine its relationship with the dependent variable of volunteering. The final research question was designed to take all independent variables, individually or in linear combination, and determine their relationships with the dependent variable of volunteering.

In this chapter I describe the data collection used for my study, along with the recruitment practices used, descriptions of the demographics, and how the sample related to the larger population. I report with descriptive statistics that appropriately characterize my sample. I evaluate the statistical assumptions as appropriate to my study. I report my statistical analysis of findings, organized by research questions and hypotheses, including exact statistics associated with probability values, confidence intervals around the statistics, and describe the effect sizes of the relationships between and among the variables. To illustrate my findings, I include both tables and figures representing the statistical analyses.

Data Collection

The data collected for my study were gathered from a four-part survey designed to capture the independent variables of education achieved in years, level of self-efficacy,

the five factors of emotional intelligence, and the dependent variable of volunteer activities. After obtaining Walden IRB's approval for my study, I crafted the anonymous survey using the online platform SurveyMonkey. I used the Walden IRB's language for a consent page, which was designed for use with anonymous survey data gathering. Recruitment messages were disseminated through social media platforms and to professional contacts in national third sector organizations. The anonymous online survey was open and available for participation from September 22, 2023, to October 6, 2023, in accordance with my research plan as detailed in Chapter 3. Response and participation data were received from across the United States, with a 2-week open period resulting in 1,667 cases. There were no discrepancies in the data collection plan as outlined in Chapter 3.

Once the survey was closed, 1,667 cases were received. I reviewed each case for completeness of responses. As outlined in my research plan, any cases that had missing responses were eliminated from my sample population, resulting in 1,401 complete cases. The final number of complete cases far exceeded the minimum sample size of 103 cases which was calculated using an online G*Power analysis with an a-priori sample size calculator for multiple regression. The anticipated effect size (f^2) = 0.15, with the desired statistical power level at 0.8, with seven predictor variables, and an alpha level of 0.05 (Soper, 2023). The settings of an anticipated effect size at 0.15, the beta at 0.8, and the alpha at 0.05 are standard settings for conducting psychological research with enough confidence and statistical power for credible findings in research (Warner, 2013).

The demographic characteristics of the final 1,401 cases were measured using

age, gender, household income, and region. Of the 1,401 cases, 1,159 participants answered extra questions on demographics that were not required for the main survey. The reporting of demographics from the sample was based on the 1,159 participants who chose to divulge their information. The demographics questions gathered information on age, household income, gender, and region of participation.

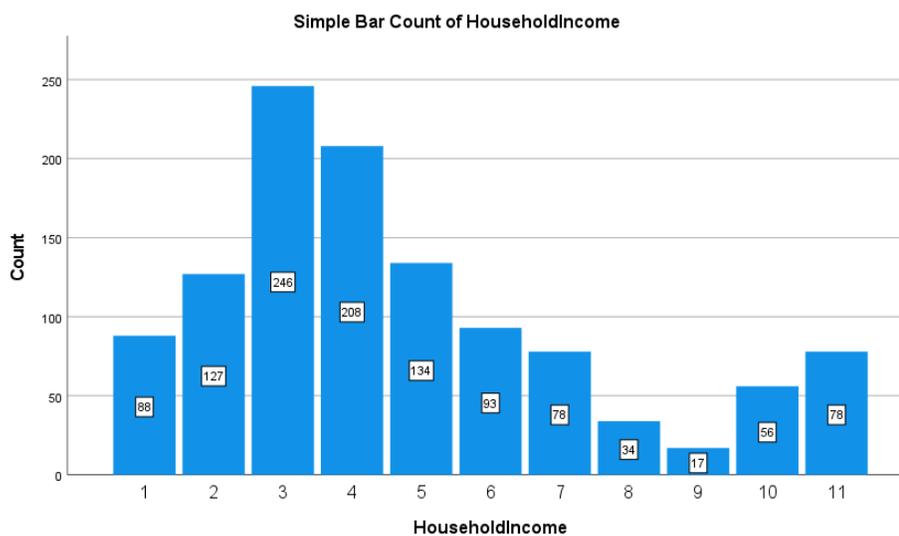
The age characteristics were categorized as 18 to 29, 30 to 44, 45 to 60, and above 60. The gender characteristic was categorized as male or female. The household income was categorized as \$0 to \$9,999; \$10,000 to \$24,999; \$24,000 to \$49,000; \$50,000 to \$74,999; \$75,000 to \$99,999; \$100,000 to \$124,999; \$125,000 to \$149,999; \$150,000 to \$174,999; \$175,000 to \$199,999; \$200,000 and above, with a category of prefer not to answer, and all figures expressed in United States Dollars (USD). The regions of the participants were categorized as East North Central, East South Central, Middle Atlantic, Mountain, New England, Pacific, South Atlantic, West North Central, and West South Central. The overall data set of 1,159 cases was determined to be generally representative of adults living in the United States through specific data gathered on the demographics of the sample.

Gender demographics for the sample were found to be 459 males and 700 females. The age distribution of the 1,159 cases was similar in the 18-19 and over 60 category as well as the 35-44 and 45-60 category, with most being in the 45- to 60-year-old category. No one under 18-years-old participated in this study. See Table 1 for details.

Table 1*Frequency of Age*

| Age in years | Frequency | Percent | Cumulative Percent |
|--------------|-----------|---------|--------------------|
| 18 to 29 | 225 | 19.4 | 19.4 |
| 30 to 44 | 330 | 28.5 | 47.9 |
| 45 to 60 | 369 | 31.8 | 79.7 |
| Above 60 | 235 | 20.3 | 100 |

The mean household income reported for the sample was in the range of \$50,000 to \$75,000, ($n = 1,159$; $mean = 4.77$), which matches the U.S. Census Bureau's most recent finding of average U.S. household income as of the time of writing this study (U.S. Census Bureau, 2022). See Figure 1 for details.

Figure 1*Bar Count of Household Income*

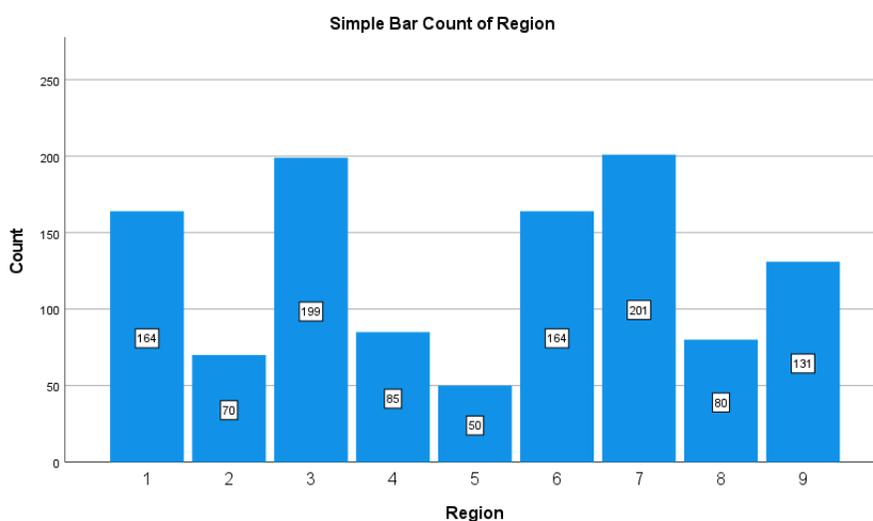
The regional data of respondents demonstrates the overall data set was representative of all parts of the United States. With the areas of demographic

information on the sample participants similar to the larger population of adults living in the United States, namely household income and regional representation, the overall sample was representative of the larger population of adults living in the United States.

See Figure 2 for details.

Figure 2

Bar Count of Region



Results

The average years of education completed was 4.8 ($SD = 2.35$). The data for education years completed was continuous with responses divided into years of education ranges, namely 1 to 6 years, 7 to 8 years, 9 to 10 years, 11 to 12 years, 13 to 14 years, 15 to 16 years, 17 to 18 years, 19 to 20 years, and 21 or more years. With an average response being 4.8, that translated to approximately 13 to 14 years of education completed by the average respondent to my survey. This result is similar to data on education completed from the U.S. Census Bureau (2022a) with more than half (52.8%)

of the U.S. general population has achieved some college by age 25. See Table 2 for more information.

Table 2

Years of Education

| | Frequency | Percent | Cumulative Percent | <i>N</i> |
|----------------|-----------|---------|-----------------------|----------|
| 1 to 6 years | 150 | 10.7 | 10.7 | 1401 |
| 7 to 8 years | 151 | 10.8 | 21.5 | 1401 |
| 9 to 10 years | 209 | 14.9 | 36.4 | 1401 |
| 11 to 12 years | 280 | 19.9 | 56.3 | 1401 |
| 13 to 14 years | 207 | 14.8 | 71.2 | 1401 |
| 15 to 16 years | 165 | 11.8 | 82.9 | 1401 |
| 17 to 18 years | 39 | 2.8 | 85.7 | 1401 |
| 19 to 20 years | 52 | 3.7 | 89.4 | 1401 |
| 21 years + | 148 | 10.6 | 100 | 1401 |

The average score for self-efficacy was reported at 17.22 ($SD = 6.08$). The volunteer scale mean score for the sample was recorded at 14.72 ($SD = 5.86$). The overall emotional intelligence mean score for the sample was recorded at 25.48 ($SD = 3.92$). To report the factors of emotional intelligence used in my study, appraise own emotions had a mean of 7.74 ($SD = 1.38$), appraise others' emotions had a mean of 4.37 ($SD = 1.43$), regulation of own emotions had a mean of 4.36 ($SD = 1.38$), regulation of others' emotions had a mean of 4.79 ($SD = 1.59$), and utilization of emotions had a mean of 4.23 ($SD = 1.43$). The volunteer scale mean score was reported at 14.72 ($SD = 5.86$). See Table 3 for more information.

Table 3*Self-Efficacy, Factors of Emotional Intelligence, and Volunteers*

| | <i>N</i> | Range | Minimum | Maximum | Mean | SD | Variance |
|-----------------|----------|-------|---------|---------|-------|------|----------|
| Self-Efficacy | 1401 | 32 | 8 | 40 | 17.22 | 6.08 | 37.00 |
| EI Overall | 1401 | 28 | 16 | 44 | 25.48 | 3.92 | 15.39 |
| Appraise Own | 1401 | 8 | 2 | 10 | 7.74 | 1.38 | 1.90 |
| Appraise Others | 1401 | 8 | 2 | 10 | 4.37 | 1.43 | 2.06 |
| Regulate Own | 1401 | 8 | 2 | 10 | 4.36 | 1.38 | 1.91 |
| Regulate Others | 1401 | 8 | 2 | 10 | 4.79 | 1.59 | 2.52 |
| Utilize EI | 1401 | 8 | 2 | 10 | 4.23 | 1.43 | 2.05 |
| Volunteers | 1401 | 20 | 5 | 25 | 14.72 | 5.86 | 34.29 |

Assumptions of Multiple Linear Regression Models

Before performing any of the multiple linear regression analyses, I evaluated the assumptions pertinent to multiple linear regression, which were linearity, homoscedasticity, multivariate normality, independence, and multicollinearity. The assumption for linearity was assumed, as there exists a linear relationship between each predictor variable and the response variable. The assumption of homoscedasticity was assumed as the residuals have constant variance at every point in the linear model, as tested with an analysis of the studentized residuals against the unstandardized predicted values of the multiple linear regression model. The assumption of independence was assumed as all data cases were independent as were the variables themselves. The assumption for multicollinearity was assumed as none of the predictor variables were highly correlated with each other. The assumption of multivariate normality was assumed with a caveat. If the other assumptions are met, the estimates of linear regression will still

be unbiased and consistent despite violations of normality (Ernst & Albers, 2017). With large sample sizes like the one used in this research, the sampling distributions will approximate normal, even if the distribution of errors is not normal according to the central limit theorem (Ernst & Albers, 2017). Even with violations of normality assumed, the linear regression model is robust with adequate power for analysis (Ernst & Albers, 2017).

To test the assumption that the variables used in my study were normally distributed and able to be used in multiple linear regression analyses, I inspected both skewness and kurtosis of each variable. Normal distribution would have an acceptable skewness value between -3 and +3, and an acceptable kurtosis value between -7 and +7 (George & Mallery, 2014). The skewness and kurtosis for years of education was normally distributed, with a skewness of .47, indicating the distribution was right-skewed, and a kurtosis of -.57. The variable of self-efficacy had a skewness value of .95, indicating the distribution was right-skewed, and a kurtosis of 1.23, being normally distributed. The variable for factors of emotional intelligence had an overall skewness of .42, indicating the distribution was right-skewed, and a kurtosis of .98, being normally distributed. The variable for volunteer activities had a skewness value of .14, indicating the distribution was slightly right skewed, and a kurtosis of -.88. See Table 4 for more information.

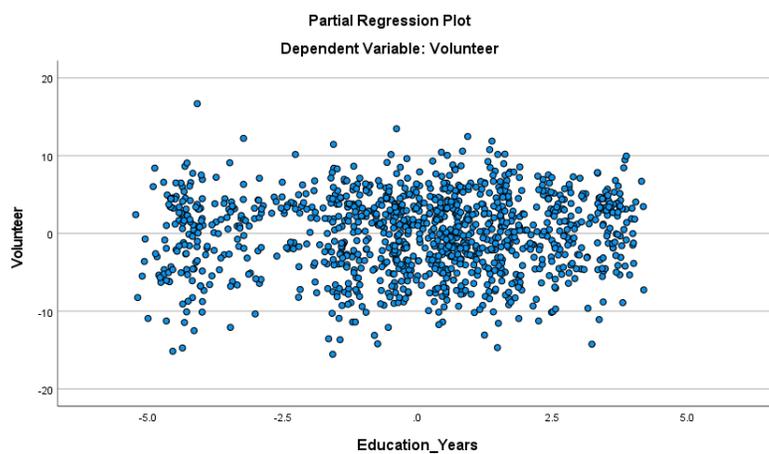
Table 4*Normal Distribution Measures*

| | Skewness | Std. Error | Kurtosis | Std. Error |
|---------------|----------|------------|----------|------------|
| Education | .47 | .07 | -.54 | .13 |
| Self-Efficacy | .91 | .07 | 1.14 | .13 |
| Factors of EI | .32 | .07 | .72 | .13 |
| Volunteer | .14 | .07 | -.88 | .13 |

The assumption of linearity is determined when the criterion variable has a linear relationship with the predictor variables, which for my study were volunteering as the criterion variable and education in years, self-efficacy, and factors of emotional intelligence as the predictor variables. I examined each partial regression scatterplot for all multiple linear regression models and determined the predictor variables indicated a linear relationship. The partial regression scatterplot for education in years model is displayed in Figure 3, the partial regression scatterplot for self-efficacy is displayed in Figure 4, the partial regression scatterplot for the factors of emotional intelligence of appraise own emotions, appraise of others' emotions, regulation of own emotions, regulation of others' emotions, and utilization of emotions are displayed in Figures 5, 6, 7, 8, and 9, respectively.

Figure 3

Partial Regression Scatterplot of Education in Years

**Figure 4**

Partial Regression Scatterplot of Self-Efficacy

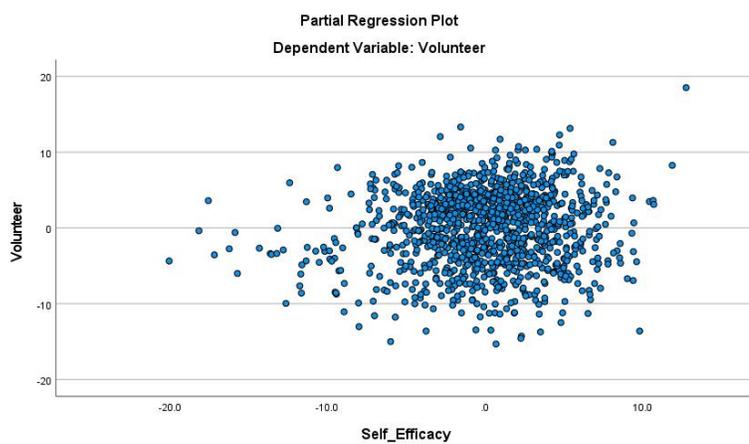
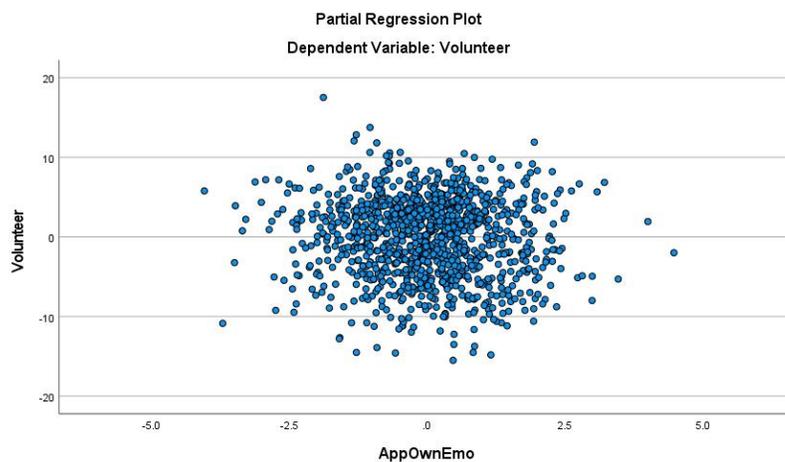


Figure 5

Partial Regression Scatterplot for Appraise Own Emotions

**Figure 6**

Partial Regression Scatterplot for Appraise Others' Emotions

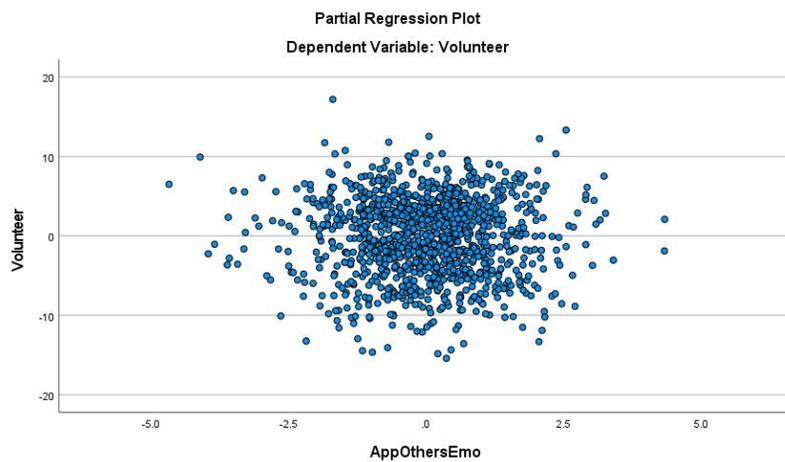
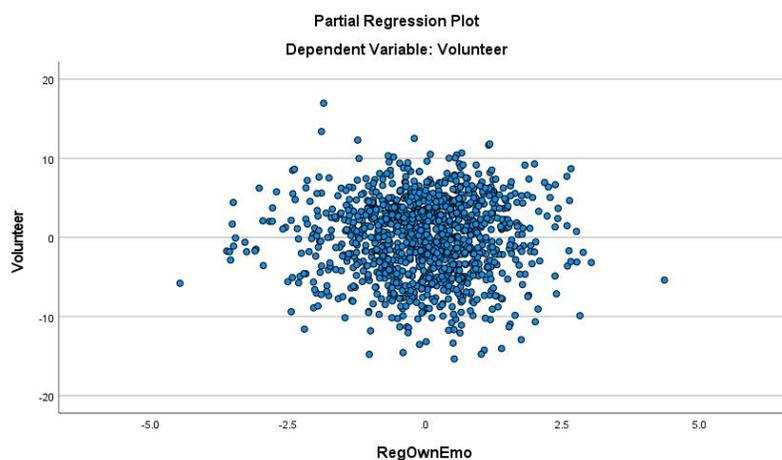


Figure 7

Partial Regression Scatterplot for Regulate Own Emotions

**Figure 8**

Partial Regression Scatterplot for Regulate Others' Emotions

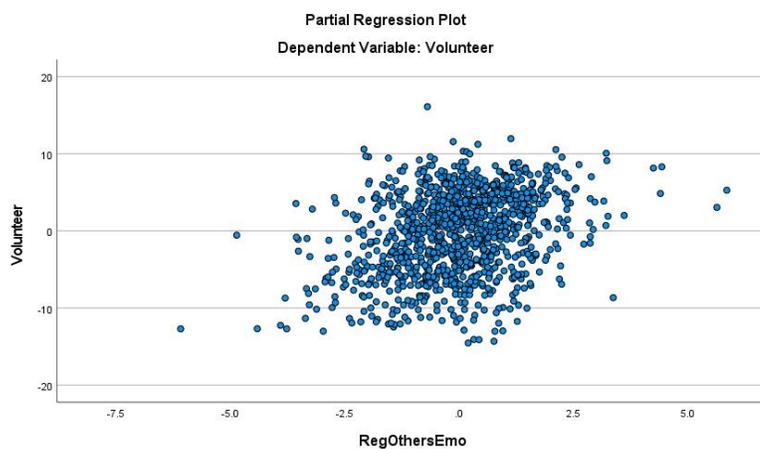
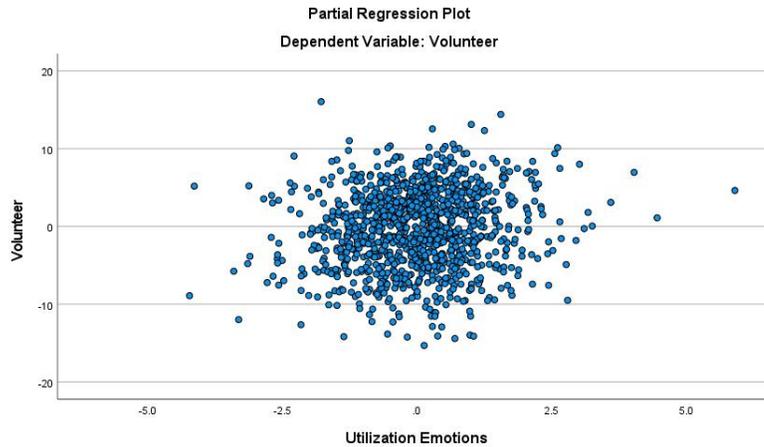
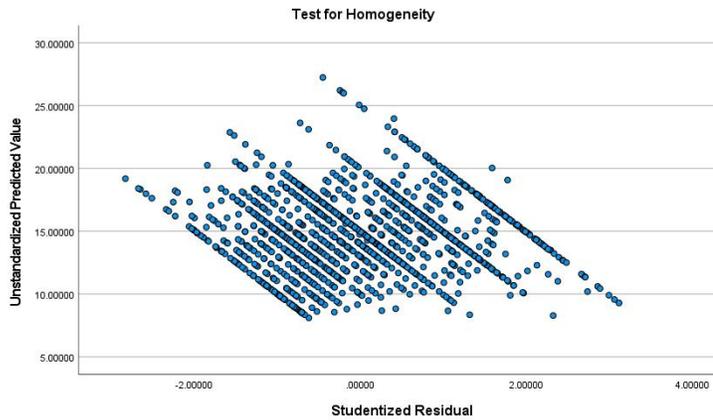
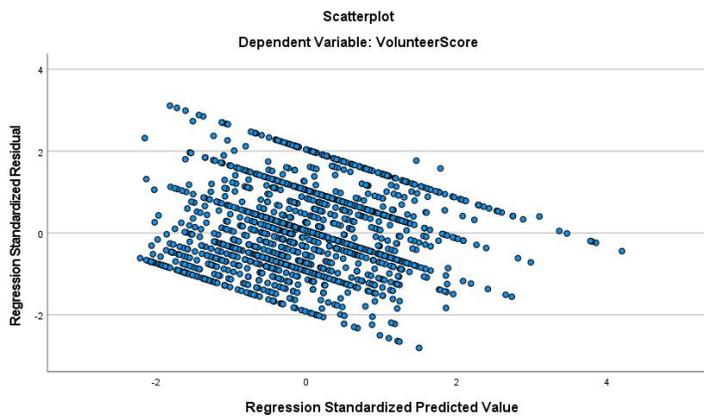


Figure 9

Partial Regression Scatterplot for Utilization of Emotions



The assumption of homoscedasticity was tested by conducting an analysis of the studentized residuals against the unstandardized predicted values of the multiple regression model, as well as analyzing the interaction of the regression standardized predicted values against the regression standardized residuals. The studentized residuals against the unstandardized predicted values are shown in Figure 10. The regression standardized predicted value against the regression standardized residual using the dependent variable of volunteering is displayed in Figure 11. Homoscedasticity was assumed.

Figure 10*Test for Homogeneity***Figure 11***P-P Plot of Volunteering via Education, Self-Efficacy, and Emotional Intelligence*

Additionally, the normality of distribution of scores was tested by visually examining the histogram, *p-p* plots, and *q-q* plots for each multiple linear model. All four histograms indicated robust correlations, and all *p-p* plots and *q-q* plots indicated a strong tendency of data towards a center line. Therefore, each model was determined to be normally distributed. Please see Figure 12 for the overall histogram model. Figure 13

displays the overall p - p plot model which indicates the variables fall closely and consistently around the expected Y and X intercepts, approximating normal distribution.

Figure 14 displays the overall q - q plot model of the unstandardized predicted values with the observed values against the expected normal values, approximating normal distribution.

Figure 12

Histogram of Volunteering via Education, Self-Efficacy, and Emotional Intelligence

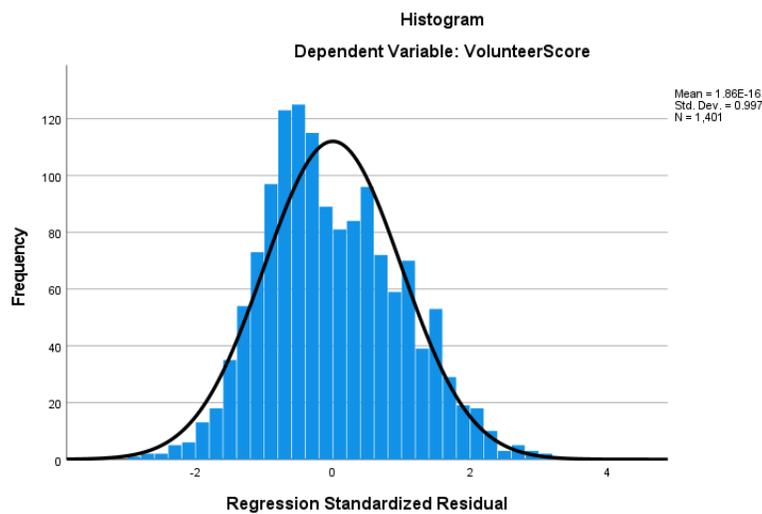


Figure 13

P-P Plot of Volunteering via Education, Self-Efficacy, and Emotional Intelligence

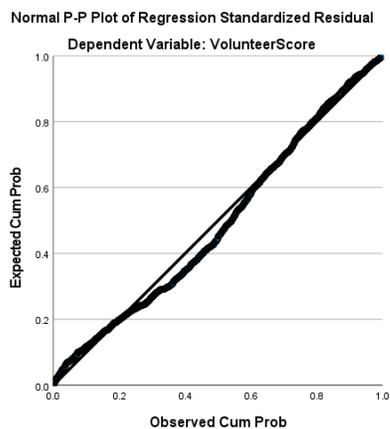
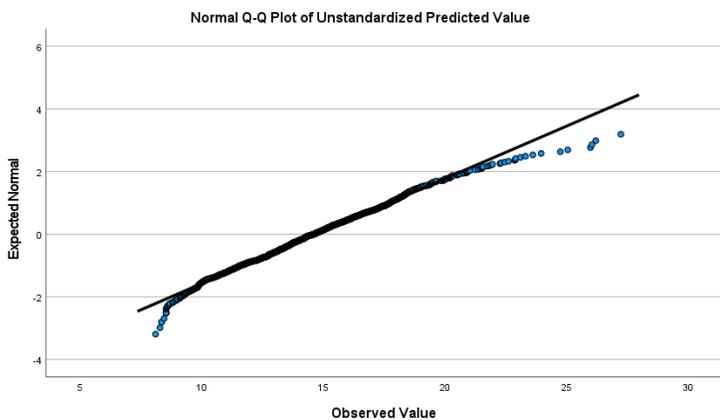


Figure 14

Normal Q-Q Plot of Unstandardized Predicted Value



The assumption for multicollinearity was tested with the use of the VIF. I used a conservative VIF score between ± 2.5 (Johnston et al., 2018). Multicollinearity exists if a strong correlation exists between two or more independent variables. If the VIF scores were higher than ± 10 , it could indicate the variables measured were redundant with the other variables. A VIF of ± 5 could indicate concern, while a score of ± 2.5 is acceptable

(Johnston et al., 2018). All VIF scores in my research were between 1.85 and 1.02, which indicated a low concern for multicollinearity. Therefore, the assumption was upheld that multicollinearity did not exist in my research variables. See Table 5 for the results.

Table 5

Coefficients of the Volunteer Scale

| | Collinearity Statistics Tolerance | VIF |
|---------------------------|-----------------------------------|------|
| Appraise own emotions | .62 | 1.61 |
| Appraise others' emotions | .63 | 1.60 |
| Regulate own emotions | .57 | 1.75 |
| Regulate others' emotions | .61 | 1.64 |
| Utilize emotions | .54 | 1.85 |
| Education in years | .98 | 1.02 |
| Self-efficacy | .61 | 1.63 |

Tests Reliability Cronbach's Alpha

To test for reliability, I utilized the Cronbach's alpha using SPSS to ensure internal consistency with survey items, specifically self-efficacy with eight items, factors of emotional intelligence with two items for each of the five factors, and the volunteer scale with five items. Each item for the variables of self-efficacy, factors of emotional intelligence, and volunteerism used a 5-point Likert scale from "strongly agree" to "strongly disagree." A random sample of 660 cases were selected for the Cronbach's alpha, of which 659 were complete cases for inclusion. The participants each completed the online consent form and anonymous online survey. The survey items tested were for variables from the BEIS-10 (Davies et al., 2010), the NGSE (Chen et al., 2001), and the Rodell (2005) Volunteer scale. The factors of emotional intelligence with 10-items had a Cronbach's alpha of $\alpha = .85$, scale statistics with a mean of 22.25 ($SD = 5.31$), which indicated a high level of internal consistency. The 8-item NGSE measuring self-efficacy

had a Cronbach's alpha of $\alpha = .91$, with scale statistics mean of 16.72 ($SD = 5.23$), which indicated a high level of internal consistency. The Rodell (2005) Volunteer scale of 5-items had a Cronbach's alpha of $\alpha = .96$, with scale statistics mean of 15.02 ($SD = 5.78$), which indicated a high level of internal consistency. Refer to Tables 6 for more information.

Table 6

Scale Statistics for Cronbach's Alpha

| | N of items | Mean | SD | Cronbach's Alpha | N |
|-----------------|------------|-------|------|------------------|-----|
| BEIS-10 | 10 | 22.25 | 5.31 | .85 | 659 |
| NGSE | 8 | 16.72 | 5.23 | .91 | 659 |
| Volunteer Scale | 5 | 15.02 | 5.78 | .96 | 659 |

I further analyzed the results of Cronbach's alpha for each section of variables to ensure each item used in the different variables were contributing to the entire outcome of that variable. In other words, I checked to ensure each test item positively contributed to the overall score for each variable by analyzing Cronbach's alpha if each test item was deleted from that overall score. The 10-items for factors of emotional intelligence gathered from the BEIS-10 (Davies et al., 2010) indicated an overall Cronbach's alpha of $\alpha = .85$. Each of the 10-items if deleted would not raise the Cronbach's alpha beyond $\alpha = .85$. I concluded that each test item for factors of emotional intelligence were pertinent to the overall variable score. Please see Table 7 for an illustration of this analysis.

Table 7*Item-Total Statistics for Factors of Emotional Intelligence*

| | Scale Mean if Item Deleted | Scale Variance if Item Deleted | Corrected Item- Total Correlation | Cronbach's Alpha if Item Deleted |
|---------|-------------------------------|-----------------------------------|--------------------------------------|-------------------------------------|
| Item 1 | 20.00 | 25.94 | .48 | .84 |
| Item 2 | 20.28 | 25.28 | .59 | .83 |
| Item 3 | 20.01 | 24.82 | .60 | .83 |
| Item 4 | 20.05 | 25.29 | .57 | .83 |
| Item 5 | 20.12 | 25.30 | .52 | .83 |
| Item 6 | 19.92 | 25.37 | .50 | .83 |
| Item 7 | 19.61 | 24.78 | .47 | .84 |
| Item 8 | 20.13 | 25.06 | .57 | .83 |
| Item 9 | 20.13 | 25.24 | .56 | .83 |
| Item 10 | 20.13 | 24.99 | .60 | .83 |

The next element of my survey was for the variable of self-efficacy, obtained by using the NGSE (Chen et al., 2001) with 8-items. The overall Cronbach's alpha was $\alpha = .91$. Each of the 8-items if deleted would not raise the Cronbach's alpha beyond $\alpha = .91$. I concluded that each test item for self-efficacy was pertinent to the overall variable score. Please see Table 8 for more information.

Table 8*Item-Total Statistics for Self-Efficacy*

| | Scale Mean if Item Deleted | Scale Variance if Item Deleted | Corrected Item- Total Correlation | Cronbach's Alpha if Item Deleted |
|--------|-------------------------------|-----------------------------------|--------------------------------------|-------------------------------------|
| Item 1 | 14.55 | 20.86 | .65 | .90 |
| Item 2 | 14.58 | 21.11 | .76 | .89 |
| Item 3 | 14.72 | 21.52 | .73 | .89 |
| Item 4 | 14.68 | 20.71 | .76 | .89 |
| Item 5 | 14.65 | 20.05 | .73 | .89 |
| Item 6 | 14.72 | 21.33 | .71 | .90 |
| Item 7 | 14.54 | 21.32 | .65 | .90 |
| Item 8 | 14.64 | 21.71 | .66 | .90 |

The final element of my survey to check was the variable for volunteering using Rodell's (2005) 5-item scale. The overall Cronbach's alpha for volunteering was $\alpha = .96$.

I concluded that each test item for volunteering was pertinent to the overall volunteering score as each item if deleted would not raise Cronbach's alpha beyond $\alpha = .96$. Please see Table 9 for more information.

Table 9

Item-Total Statistics for Volunteering

| | Scale Mean if Item Deleted | Scale Variance if Item Deleted | Corrected Item-Total Correlation | Cronbach's Alpha if Item Deleted |
|--------|----------------------------|--------------------------------|----------------------------------|----------------------------------|
| Item 1 | 11.96 | 22.04 | .89 | .96 |
| Item 2 | 12.14 | 21.60 | .89 | .96 |
| Item 3 | 11.95 | 21.47 | .90 | .96 |
| Item 4 | 12.00 | 21.54 | .90 | .96 |
| Item 5 | 12.02 | 21.34 | .91 | .95 |

Data Analysis Findings

This study consisted of four research questions, with each research question requiring its own detailed analysis which included correlation analyses and multiple linear regression analyses. The first three research questions were used to investigate each independent variable by itself and its relationship to the dependent variable. The fourth research question was crafted to investigate all independent variables and their predictive relationship with the dependent variable.

Research Question 1

To examine the first research question, I conducted a multiple linear regression analysis to evaluate if the predictor variables of factors of emotional intelligence predicted volunteerism. The factors of emotional intelligence measured were appraising own emotions, appraising others' emotions, regulating own emotions, regulating others' emotions, and utilizing emotions. All variables were significantly and positively

correlated with each other except appraising own emotions which indicated a negative correlation, ranging from small correlations to large correlations. As a categorical definition, a small Pearson's correlation is defined as .10 to .29, a moderate Pearson's correlation is defined as .30 to .49, and a large Pearson's correlation is defined as .50 and above. The results of the correlation analyses are listed on Table 10.

Table 10

Correlations for Factors of Emotional Intelligence

| | | Volunteer | AOwnE | AOthrE | ROwnE | ROthrE | UE |
|--------|-----------------|-----------|-------|--------|-------|--------|-------|
| Vol | Pearson | 1 | -.22 | .27 | .30 | .47 | .38 |
| Vol | Sig. (2-tailed) | | <.001 | <.001 | <.001 | <.001 | <.001 |
| AOwnE | Pearson | -.22 | 1 | -.49 | -.51 | -.40 | -.43 |
| AOwnE | Sig. (2-tailed) | <.001 | | <.001 | <.001 | <.001 | <.001 |
| AOthrE | Pearson | .27 | -.49 | 1 | .43 | .47 | .47 |
| AOthrE | Sig. (2-tailed) | <.001 | <.001 | | <.001 | <.001 | <.001 |
| ROwnE | Pearson | .30 | -.51 | .43 | 1 | .43 | .53 |
| ROwnE | Sig. (2-tailed) | <.001 | <.001 | <.001 | | <.001 | <.001 |
| ROthrE | Pearson | .47 | -.40 | .47 | .43 | 1 | .56 |
| ROthrE | Sig. (2-tailed) | <.001 | <.001 | <.001 | <.001 | | <.001 |
| UE | Pearson | .38 | -.43 | .47 | .53 | .56 | 1 |
| UE | Sig. (2-tailed) | <.001 | <.001 | <.001 | <.001 | <.001 | |

Note: Correlation is significant at the .01 level (2-tailed).

Variables: Volunteering, Appraising Own Emotions, Appraising Others' Emotions, Regulating Own Emotions, Regulating Others' Emotions, Utilizing Emotions.

N = 1,401

The model summary for this first multiple linear regression showed a statistically significant result with $F(5, 1395) = 90.95, p = <.001$. The R^2 for this model was .25, which indicated a large effect size. In other words, approximately one in four people who have good emotional intelligence will likely volunteer. The complete results of this model are in Table 11.

Table 11*Model Summary Factors of Emotional Intelligence*

| Model | <i>R</i> | <i>R</i> ² | Adjusted <i>R</i> ² | Std. Error of Estimate | <i>R</i> ² Change | <i>F</i> Change | df1 | df2 | <i>Sig. F</i> Change |
|-------|----------|-----------------------|-----------------------------------|------------------------------|---------------------------------|--------------------|-----|------|-------------------------|
| 1 | .50 | .25 | .24 | 5.10 | .25 | 90.95 | 5 | 1395 | <.001 |

Note. Predictors: (Constant), Utilizing Emotions, Appraising Own Emotions, Appraising Others' Emotions, Regulating Own Emotions, Regulating Others' Emotions.

The standardized β coefficients indicated the contribution of each predictor variable of each factor of emotional intelligence on the overall score. The results indicated three of the five factors were significant, specifically regulating own emotions, regulating others' emotions and utilizing emotions ($p < .05$). The other two factors of emotional intelligence, specifically appraising own emotions, and appraising others' emotions, did not indicate significance for the model ($p > .05$). The factor of regulating own emotions was found to be statistically significant with $\beta = .34$, 95% *CI* [.10, .59], $p = .01$, which indicated regulating own emotions had the smallest impact of the significant coefficients on volunteerism and had a moderate effect size. For every unit of increase in the factor of EI for regulating own emotions, an increase of .34 points on the volunteer scale was predicted, holding all other variables constant. The factor of regulating others' emotions was found to be statistically significant with $\beta = 1.36$, 95% *CI* [1.14, 1.57], $p = <.001$, which indicated regulating others' emotions had the largest impact of the significant coefficients on volunteerism and had a large effect size. For every unit of increase in the factor of EI for regulating others' emotions, an increase of 1.36 points on the volunteer scale was predicted, holding all other variables constant. The factor of utilizing emotions was found to be statistically significant with $\beta = .57$, 95% *CI* [.32, .82],

$p = <.001$, which indicated utilizing emotions had the second largest impact of the significant coefficients on volunteerism and had a large effect size. For every unit increase in the factor of EI for utilizing emotions, an increase of .57 points on the volunteer scale was predicted, holding all other variables constant. The results are listed on Table 12.

Table 12

Coefficients^a Factors of Emotional Intelligence

| Model | Unstandardized β | Coefficients SE | Standardized Coefficients β | t | Sig. | 95% <i>CI</i> for β Lower Bound | 95% <i>CI</i> for β Upper Bound |
|-----------|---------------------------|--------------------|--------------------------------------|-------|-------|---|--|
| Constant | 2.93 | 1.47 | | 2.0 | .05 | .05 | 5.81 |
| A own E | .15 | .12 | .04 | 1.23 | .22 | -.09 | .40 |
| A Othrs E | .04 | .12 | .01 | .35 | .72 | -.19 | .28 |
| RegOwnE | .34 | .13 | .08 | 2.72 | .01 | .10 | .59 |
| RegOthrE | 1.36 | .11 | .37 | 12.45 | <.001 | 1.14 | 1.57 |
| UE | .57 | .13 | .14 | 4.51 | <.001 | .32 | .82 |

Note. Dependent Variable: Volunteering; Predictors: Appraising Own Emotions, Appraising Others' Emotions, Regulating Own Emotions, Regulating Others' Emotions, Utilizing Emotions.

Research Question 2

To examine the second research question, I conducted a multiple linear regression analysis to evaluate if the predictor variable of self-efficacy predicted volunteerism. The variables of self-efficacy and volunteering were both significantly and positively correlated with each other, measuring a moderate correlation at .33 with a significance of $p = <.001$.

The model summary for this second multiple linear regression showed a statistically significant result with $F(1, 1399) = 175.75, p = <.001$. The R^2 for this model was .11, which indicated a moderate effect size. In other words, approximately one in ten

people who have good self-efficacy will likely volunteer. The complete results of this model are in Table 13.

Table 13

Model Summary Self-Efficacy

| Model | <i>R</i> | <i>R</i> ² | Adjusted <i>R</i> ² | Std. Error of Estimate | <i>R</i> ² Change | <i>F</i> Change | df1 | df2 | <i>Sig.</i> <i>F</i> Change |
|-------|----------|-----------------------|--------------------------------|------------------------|------------------------------|-----------------|-----|------|-----------------------------|
| 2 | .33 | .11 | .11 | 5.52 | .11 | 175.75 | 1 | 1399 | <.001 |

Note. Predictors: (Constant), Self-Efficacy.

The standardized β coefficients indicated the contribution of the predictor variable on the score of volunteering. The results indicated self-efficacy was statistically significant ($p = <.05$), with $\beta = .32$, 95% *CI* [.27, .37], $p = <.001$. This means for every unit increase in self-efficacy, an increase of .32 points on the volunteer scale was predicted, holding all other variables constant. The results are listed on Table 14.

Table 14

Coefficients^a Self-Efficacy

| Model | Unstandardized B | Coefficients SE | Standardized Coefficients B | <i>t</i> | <i>Sig.</i> | 95% <i>CI</i> for β Lower Bound | 95% <i>CI</i> for β Upper Bound |
|---------------|------------------|-----------------|-----------------------------|----------|-------------|---------------------------------------|---------------------------------------|
| Constant | 9.18 | 0.44 | | 20.71 | <.001 | 8.31 | 10.05 |
| Self-Efficacy | 0.32 | 0.02 | 0.33 | 13.26 | <.001 | 0.27 | 0.37 |

Note. Dependent Variable: Volunteering; Predictor: Self-Efficacy

Research Question 3

To examine the third research question, I first conducted a correlation analysis between volunteering and education in years. There was a statistically significant positive correlation; however, it was a very small correlation measuring .09 with a significance of

$p = <.001$. I conducted a multiple linear regression analysis to evaluate if the predictor variable of education in years predicted volunteerism.

The model summary for this third multiple linear regression showed a significant small result with $F(1, 1399) = 10.94, p = <.001$. The R^2 for this model was .01, which indicated a small effect size. This would indicate education plays significance for 1 in 100 people who volunteer. For every unit increase in education years, an increase of .01 points on the volunteer scale was predicted, holding all other variables constant. This result will further be discussed in detail in Chapter 5. The complete results of this model are in Table 15.

Table 15

Model Summary Education Years

| Model | R | R^2 | Adjusted R^2 | Std. Error of Estimate | R^2 Change | F Change | df1 | df2 | Sig. F Change |
|-------|-----|-------|----------------|------------------------|--------------|------------|-----|------|-----------------|
| 3 | .09 | .01 | .01 | 5.84 | .01 | 10.94 | 1 | 1399 | <.001 |

Note. Predictors: (Constant), Education Years.

Research Question 4

The fourth research question was designed to use all the independent variables, individually or in linear combination, to predict the outcome of the dependent variable, specifically to determine if factors of EI, self-efficacy, and education in years could predict the outcome of volunteering. The model summary for this fourth multiple linear regression showed a statistically significant result with $F(7, 1393) = 69.90, p = <.001$. The R^2 for this model was .26, which indicated a large effect size. In other words, approximately one in four people who have good emotional intelligence and self-efficacy

will likely volunteer. The complete results of this model are in Table 16. All variables had significant correlations ranging from small to moderate.

Table 16

Model Summary Overall

| Model | <i>R</i> | <i>R</i> ² | Adjusted <i>R</i> ² | Std. Error of Estimate | <i>R</i> ² Change | <i>F</i> Change | df1 | df2 | Sig. <i>F</i> Change |
|-------|----------|-----------------------|--------------------------------|------------------------|------------------------------|-----------------|-----|------|----------------------|
| 4 | .51 | .26 | .26 | 5.05 | .26 | 69.90 | 7 | 1393 | <.001 |

The standardized β coefficients indicated the contribution of each predictor variable of each factor of emotional intelligence, self-efficacy, and education in years on the overall score. The results indicated five of the overall seven predictors were significant ($p = <.05$), specifically education, self-efficacy, appraising own emotions, regulating others' emotions, and utilizing emotions. The other two predictors, specifically appraising others' emotions and regulating own emotions were not statistically significant ($p = >.05$). The factor of education in years was found to be statistically significant with $\beta = .19$, 95% *CI* [.07, .30], $p = .001$, which indicated a small effect size. For every unit of increase in education in years, an increase of .19 points on the volunteer scale was predicted, holding all other variables constant. The factor of self-efficacy was found to be statistically significant with $\beta = .11$, 95% *CI* [.05, .16], $p = <.001$, which indicated a small effect size. For every unit of increase in self-efficacy, an increase of .11 points on the volunteer scale was predicted, holding all other variables constant. The factor of appraising own emotions was found to be statistically significant with $\beta = .25$, 95% *CI* [.001, .49], $p = .05$, which indicated a moderate effect size. For every unit of increase in

appraising own emotions, an increase of .25 points on the volunteer scale was predicted, holding all other variables constant. The factor of regulating others' emotions was found to be statistically significant with $\beta = 1.32$, 95% *CI* [1.10. 1.53], $p = <.001$, which indicated a large effect size. For every unit of increase in regulating others' emotions, an increase of 1.32 points on the volunteer scale was predicted, holding all other variables constant. The factor of utilizing emotions was found to be statistically significant with $\beta = .48$, 95% *CI* [.23, .73], $p = <.001$, which indicated a large effect size. For every unit increase in utilizing emotions, an increase of .48 points on the volunteer scale was predicted, holding all other variables constant. The results of this multiple linear regression model indicated a significant contribution by five of the seven independent variables, namely education in years, self-efficacy, appraising own emotions, regulating others' emotions, and utilizing emotions, to the prediction of the criterion variable of volunteering. The variables of appraising others' emotions and regulating own emotions did not significantly contribute to the prediction of volunteering. In the next chapter, I discuss possible implications and suggest factors which may have contributed to the non-significant factors results. The results are listed on Table 17.

Table 17*Coefficients^a Overall*

| Model | Unstandardized β | Coefficients Std. Error | Standardized Coefficients β | <i>t</i> | Sig. | 95% CI for β Lower Bound | 95% CI for β Upper Bound |
|------------------|------------------------|-------------------------|-----------------------------------|----------|-------|-----------------------------------|-----------------------------------|
| Constant | .81 | 1.52 | | .54 | .59 | -2.16 | 3.78 |
| A own E | .25 | .12 | .06 | 1.97 | .05 | .001 | .49 |
| RegOthrE | 1.32 | .11 | .36 | 12.09 | <.001 | 1.10 | 1.53 |
| UE | .48 | .13 | .12 | 3.76 | <.001 | .23 | .73 |
| Self-Efficacy | .11 | .03 | .11 | 3.81 | <.001 | .05 | .16 |
| AOthrE | .02 | .12 | .004 | .13 | .90 | -.22 | .25 |
| ROwnE | .21 | .13 | .05 | 1.63 | .10 | -.04 | .46 |
| Education in Yrs | .19 | .06 | .08 | 3.22 | .001 | .07 | .30 |

Note. Dependent Variable: Volunteering; Predictors: Appraising Own Emotions, Regulating Others' Emotion, Utilizing Emotions, Self-Efficacy, Appraising Others' Emotions, Regulating Own Emotions, Education Years.

Summary

In this chapter, I presented the results of each of the four research questions. The purpose of this study was to determine if a statistically significant relationship existed between the five factors of emotional intelligence, self-efficacy, and education in years, on volunteer activities, the strength of the relationships, and the predictability of volunteer activities. Multiple linear regression models, using factors of emotional intelligence, self-efficacy, and education in years as predictors and the volunteer activities as the criterion variable, were implemented. Out of the data received, 1,401 cases were used for the analysis in this research. The requirements for participating in this research were adults 18 years or older and living in the United States. All multiple linear regression models in this research were tested and met the assumptions of linearity, homoscedasticity, normality, and multicollinearity. The survey questions used from the

BEIS-10, NGSE, and Rodell Volunteer Scale were each tested for relevance and reliability.

The first research question inquired as to the relationship between the five factors of emotional intelligence and volunteerism among adults living in the United States. The null hypothesis that no relationship existed between the five factors of emotional intelligence and volunteerism among adults living in the United States was rejected. The multiple linear regression model indicated a robust and significant relationship did exist and was able to predict the outcome of volunteerism.

The second research question inquired as to the relationship between self-efficacy and volunteerism among adults living in the United States. The null hypothesis that no relationship existed between self-efficacy and volunteerism among adults living in the United States was rejected. The multiple linear regression model indicated a robust and significant relationship existed and was able to predict the outcome of volunteerism.

The third research question inquired as to the relationship between education and volunteerism among adults living in the United States. The null hypothesis that no relationship existed between education and volunteerism among adults living in the United States was rejected. There was a statistically significant very small positive correlation found between volunteerism and education years. The multiple linear regression model indicated a minor significant relationship existed and was able to predict the outcome of volunteerism.

The fourth and final research question inquired as to the relationship between the five factors of emotional intelligence, self-efficacy, and education in years, individually

or in linear combination, could predict volunteerism among adults living in the United States. The null hypothesis that these variables could not predict volunteerism was rejected. The overall multiple linear regression model indicated a robust and significant relationship both individually and in linear combination with the variables of education years, self-efficacy, appraising own emotions, regulating others' emotions, and utilizing emotions, could indeed predict volunteerism among adults living in the United States. The two remaining variables of appraising others' emotions and regulating own emotions did not demonstrate a statistically significant predictive relationship with volunteerism from the data collected for this research, although both of these variables did have an overall moderate correlation with volunteering.

In the next chapter, I interpret the findings from the research, discuss implications of the results from this research, discuss limitations of the research study, along with providing recommendations for further study in regard to increasing volunteerism in the United States to create positive social change.

Chapter 5: Discussion, Conclusions, and Recommendations

The purpose of my research study was to determine if volunteering could be predicted by measuring a person's self-efficacy, factors of emotional intelligence, and years of education one had. To assess this, I employed a correlative quantitative study using correlation and multiple linear regression to determine the predictive relationship between factors of emotional intelligence, self-efficacy, and education, individually or in linear combination, on volunteering. A call for participation in a survey designed to measure those elements went out across the United States through social media, national third sector organizations, and networks of professionals in different fields. In a matter of days, I received over 1,600 responses to the survey, of which 1,401 valid cases were used in this research. I also received plenty of follow-up emails and social media posts from participants stating how important this research study was, and how happy they were to support this research.

Volunteerism is at an all-time low in the United States (Wilkins et al., 2019). In some communities in the United States, the shortfall in volunteers for third sector organizations has negatively impacted social services and community support for those in need (Sims et al., 2020). Public funding and support for third sector organizations has declined over the recent years, placing more burden for social services on localities to stretch services with less money (Osili et al., 2019). The need for urgent and emergency public and community services increased in the past years with the unprecedented rise in the number of natural disasters in both frequency and amount of devastation (Garcia-Navarro, 2018). This research study sought an answer to increase volunteerism through

understanding the relationship of factors of emotional intelligence, self-efficacy, and education. The key finding from this research is a confirmed large and significant predictive relationship does exist between factors of emotional intelligence, self-efficacy, and education on volunteerism. Factors of emotional intelligence, self-efficacy, and education, individually and in linear combination, predicted an increase in volunteerism. Increasing emotional intelligence and self-efficacy through a social learning environment should increase volunteerism among adults in communities and organizations in the United States.

Interpretation of the Findings

One of the pillars of the theoretical framework used for this research was Thriving with Social Purpose (TSP), focusing on expanding a motivation systems theory (MST), which began as an educational psychology tool to improve learning outcomes incorporating personal agency beliefs, educational design, and self-identity to produce a sense of social purpose and well-being (Ford & Smith, 2007). TSP was based on the interaction of a person's self-efficacy, emotional intelligence, and personal identity (Ford & Smith, 2007). My research study was influenced by Ford and Smith's view that education, self-efficacy, and emotional intelligence could lead to motivation in volunteering. This study identified a predictive relationship where increasing self-efficacy, emotional intelligence, and education, such as a formal social learning environment as described by Ford and Smith (2007), would likewise result in increasing volunteerism to create social change. Ford and Smith put forth that in TSP a person would incorporate emotional intelligence and self-efficacy through a learning

environment to create purpose and engage in creating meaningful social change. The strength of TSP to create that purpose and enhance self-identity has a parallel in my research results in that volunteerism was shown to have a significant and positive predictive relationship with the very elements that formed TSP to create social change. Therefore, it is reasonable to conclude the research findings of this current study should likewise result in increasing volunteerism to meet the ever-increasing need for volunteers in the United States.

A key finding from my research was the significant interaction between the variables of emotional intelligence, self-efficacy, and education. All three variables were positively correlated with relationships from moderate to strong. Similarly, all three of those variables were necessary in tandem to demonstrate a significant and large effect in predicting a positive change in increasing volunteerism. As discussed in Chapter 2, self-efficacy is a belief that one can successfully perform an activity, yet belief and actuality may differ (Miller, 2008). To predict an increase in volunteerism, all three elements of education, self-efficacy, and emotional intelligence were shown to be interactively necessary. Self-efficacy alone showed a moderate significant influence on predicting volunteerism while adding education and factors of emotional intelligence increased that significant influence greatly.

The social learning theory of Bandura (1986) also influenced this research study. Bandura put forth that the learner, the learning environment, and the educator interacted mutually, similar to the mutual interaction of cognition, learning environment, and behavior in what Bandura referred to as triadic reciprocity, each element influencing and

being influenced by the others. Thinking and learning are more than skills to be learned; thinking itself is context-dependent (Willingham, 2008). The results of my research indicated that education, self-efficacy, and emotional intelligence were integral parts of predicting an increase in volunteerism. This research study sought to investigate if exposure to a social learning environment measured in years rather than in academic degrees would significantly contribute to predicting an increase in volunteerism. Education did have a significant impact on emotional intelligence, self-efficacy, and volunteerism. The size and strength of education's relationship and impact will further be discussed in this chapter's section on limitations.

Previous studies also demonstrated a potential link between emotional intelligence and self-efficacy (Black et al., 2018), which was demonstrated in the research results of this study. A positive strong correlative relationship exists between self-efficacy and emotional intelligence overall, with a Pearson Correlation of 0.55, $p < .001$. In the overall multiple regression model from research question four, self-efficacy and emotional intelligence together were shown to have a large and significant predictive relationship with volunteerism, $F(6, 1394) = 79.29, p < .001, R^2 = 0.25$.

Both Bandura (1986, 1997) and Wilkins et al. (2019) suggested that self-efficacy may increase volunteer behavior. Bandura's statement on the increase was directly related to both the social learning environment to enhance a person's ability to create social change, as well as Bandura's work on self-efficacy and the ancillary benefit of potentially increasing volunteerism and engaging in social change. Wilkins et al. studied online behavior, self-efficacy, and the translation of virtual behavior to real world

experiences of collective action to create social change. The research results from my study indicated that self-efficacy has a predictive relationship with volunteerism, which expands the studies of Bandura and Wilkens et al.. As self-efficacy and education predict an incremental increase in volunteerism, the ideas of Bandura and Wilkens et al. may come to fruition with further recommendations for future research into actualizing the predictions into serviceable action of volunteerism.

The findings from my research study also reinforce the findings of previous research confirming the positive predictive relationship between both self-efficacy and volunteerism and education and volunteerism. Further, studies have demonstrated that emotional intelligence increased over time through education using literary fiction with emotive writing (Mar et al., 2009; Mar, 2011a, 2011b). Mar (2011a, 2011b) demonstrated how emotional intelligence increased significantly through individual study and small-group interactions in a collaborative learning environment. The findings of my research study likewise confirmed the important correlative relationship between emotional intelligence and education, and the subsequent predictive relationship emotional intelligence and education have with predicting an increase in volunteerism. Although not the initial research emphasis of Mar et al. (2009) and Mar (2011a, 2011b), increasing volunteerism through increasing emotional intelligence through education is a logical extension of their work, the potential of which was demonstrated as a significant possibility from my research results.

Another finding in this research study was confirming the effectiveness and validity of the three different measures used in this research, namely the NGSE for self-

efficacy (Chen et al., 2001), BEIS-10 for factors of emotional intelligence (Davies et al., 2010), and Rodell Volunteer Scale (Rodell, 2013). The Cronbach's alpha test measured both reliability of each test overall and tested each item individually on the surveys to ensure all test items positively contributed to the overall score for each test. The results of the Cronbach's alpha indicated results of high reliability along with each test item's importance in the overall score for each variable. I therefore recommend the BEIS-10 for measuring the five factors of emotional intelligence, the NGSE to measure general self-efficacy, and the Rodell Volunteer Scale for measuring self-reported volunteer behavior and activities.

Limitations of the Study

An interesting finding occurred while analyzing the variable for education in years. The collected data from respondents to the survey indicated people with 21 or more years of education outnumbered people with 16 to 17 years of education by a ratio of more than three to one. I intended to focus on years exposed to social learning environments rather on successfully completing a degree at a certain level. However, I received feedback from some participants that the question on years of education completed was the hardest question on the survey. Reported data in this research for education in years indicated 56.3% of the survey population had 12 or less years of education. The United States Census Bureau (2022b, February 24) reported in 2022 that 37% attained 12 or less years of education, with 63% of people in the U.S. having completed some college or more. In the data I received, less than half of respondents reported having some college or more. I concluded the survey item asking for years of

education completed might have been misinterpreted to mean at what age was one when education was complete (i.e., 21 years or older in age instead of 21 or more years of education). That possibility would explain the large number of responses for 21+ years of education in the data received for this research study. The U.S. Census Bureau reported approximately 2% of the general U.S. population have more than a master's or professional degree. I therefore recommend if this study were to be repeated, the question for education should be measured by academic degree rather than years of education completed.

Research question three in this research study sought to discover a predictive relationship between education in years and volunteerism. The results of the multiple regression indicated a significant yet tiny positive predictive relationship $F(1, 1399) = 10.94, p = <.001$, with $R^2 = .01$. Research cited in the literature review from Chapter 2 indicated a strong relationship exists between education and self-efficacy (e.g., triadic reciprocal interactions, Bandura, 1997), and education and emotional intelligence (cf. Mar, 2011b; Sigmar et al., 2012). The key relationships between these three variables were present in my research; however, the element of education had a very minor role to play in the predictive relationship of emotional intelligence, self-efficacy, and education on volunteerism.

An additional limitation of this study was an inability to provide participants in the survey with a debrief of the results of their BEIS-10 scores in the five factors of emotional intelligence, and the results of the NGSE self-efficacy score. Learning the scores of emotional intelligence and self-efficacy would have been a nice bit of

information for the participants. However, limitations of the information gathering structure of the online survey platform did not include an advanced function of providing immediate feedback and data on how each participant scored from their responses. From the social media platform where I placed announcements requesting participation, I received postings back asking for results in emotional intelligence and self-efficacy from several of the respondents. The online consent form informed participants that the results of the research study would be available for anyone to review by searching the online platform of Scholarworks, a searchable publication of Walden University research. However, the final form of my research results will be in the publication of this dissertation in total and will not have any individualized results available for the anonymous participants in the online survey. The anonymity itself would be prohibitive to provide a debrief to respondents other than immediate feedback provided by the online survey platform. However, the technology and skill to perform such an online service is beyond my technical abilities.

The limitation of subjective self-reported data was something to be factored into the results of this research study. The Rodell Volunteer Scale (Rodell, 2013) was self-reported volunteer behavior and activity. There was no mechanism to objectively confirm a respondent's actual volunteer behavior or activity. If a respondent chose to report volunteer behavior occurred very frequently despite an actual occurrence of very infrequently, this research study did not have the means to objectively verify that report. The anonymous element of the survey used for this research prohibited such objective verification of respondent's disclosed answers. However, the respondents' answers

overall were measured to be authentic as responses fell within expectations as demonstrated by the Cronbach's alpha tests for relevance and validity.

Recommendations

As described earlier in discussing the theory of Thriving with Social Purpose, it is recommended that an educational design focusing on increasing emotional intelligence specifically in the areas of appraising own emotions, regulating others' emotions, and utilizing emotions, as well as increasing self-efficacy be studied and implemented to determine the practical effects of the results of this research study. As TSP began as an educational psychology tool to improve learning outcomes through personal agency, emotional intelligence, and self-identity, developing an adult education curriculum designed with the elements of TSP should find success in the learning outcomes of increasing emotional intelligence and self-efficacy through a social learning environment.

The study by Gehlbach and Mu (2021) incorporated TSP as a conceptualizing motivation for students to engage in perspectives taking of others. Perspective taking itself is a key skill in ability-based growth of emotional intelligence (Mayer et al., 2008; Chapin, 2015). Sigmar et al. (2012) developed an educational strategy in teaching business communication courses where experiential based learning activities were employed to engage students in scenarios to act out complex interactions. With these previous examples, certainly an adult educational event could be planned along similar lines to increase learning outcomes of growth in emotional intelligence and self-efficacy.

It is further recommended that an educational focus to increase emotional intelligence and self-efficacy in the United States may need to include the insights from

Hoyt et al. (2018) as discussed in Chapter 2 of this research. Hoyt et al. (2018) studied how viewpoints from politically liberal and conservative affiliations influenced motivations for engaging in volunteerism. Hoyt et al. (2018) noted that both sides of the political spectrum in the United States engaged in volunteerism; it was the motivation itself that was the key difference between the two groups. Hoyt et al. (2018) determined that political liberals were motivated for volunteerism by exposure to messages describing distributive injustice in wealth and health care, such as disparities among sexes, public funding for education by property taxes, hindrances in accessing civic needs such as urban food deserts or urban health care deserts. Hoyt et al. (2018) determined that political conservatives were motivated for volunteerism by exposure to messaging that focused on inequality in wealth due to procedural injustice, such as burdensome taxation or systematic withholding of earned income which may impact key social services like a properly funded police, fire, and emergency services.

With the study of Hoyt et al. (2018) in mind, my own research results suggest that increasing education, emotional intelligence, and self-efficacy will predict an increase in volunteerism, a focus of the education to increase emotional intelligence and self-efficacy may need to include the political emphases of both liberal and conservative interests to fully engage in creating positive social change and deliver the volunteers needed to fulfill urgent social needs. As Ertas (2015) pointed out, increasing adult education with an inclusion of political issues and legislative agendas from a multitude of viewpoints can support an engaged populace and a healthy democracy.

The factors which influence volunteering and creating social change are myriad

and legion. Early in this research study, I brought up Elad-Strenger's (2016) recommendation to investigate additional variables that might influence prosocial behavior, to help learn of the complexities of causes, and to understand that prosocial behavior is not mono-causal for collective action. The factors studied in this research, of finding the predictive relationships of self-efficacy, emotional intelligence, and education on volunteerism were elements Elad-Strenger (2016) had not considered. I therefore continue the call to investigate additional factors that influence prosocial behavior which can ultimately create positive social change for the future. Think of what we know now, and imagine what we might learn tomorrow (Sagan, 1997).

Implications

An implication of this research study, namely using education, self-efficacy, and emotional intelligence to increase volunteerism, may successfully impact positive social change through increased volunteerism if the education includes an emphasis on the subjective perception of volunteerism that highlight and build social acceptance of volunteer behavior. Tankard and Paluck (2016) put forth a study in how social norm perceptions can enhance volunteerism to create social change through influencing the subjective perception of communal norms through intentional approaches in adult education. The implications of Tankard and Paluck (2016) and the use of the predictive relationship of education, self-efficacy, and emotional intelligence on increasing volunteerism may produce a beneficial research endeavor in the future.

A hallmark of Bandura's (1977) social learning theory emphasizes how all knowledge is socially constructed, meaning that knowledge itself is shaped, understood,

and defined by the culture in which it resides. The results of this research study of the predictive relationships of self-efficacy, emotional intelligence and education on increasing volunteerism is fertile ground for designing adult educational events which can maximize a social learning environment with an intentional focus on increasing the factors of emotional intelligence for appraising own emotions, regulating others' emotions, and utilizing emotions. These specific three factors of emotional intelligence seem to have the strongest predictive relationship towards increasing volunteerism. Likewise, with an intentional emphasis on creating subjective perceptions on the positive aspects and social acceptance of volunteerism (e.g., Tankard & Paluck, 2016), and the use of collaborative learning to increase both general self-efficacy and emotional intelligence (i.e., Mar 2011a, 2011b), then increasing volunteerism should result with positive effects for creating social change.

The philosopher Immanuel Kant (1993, p. 30) in the 19th century urged that helping others is a moral imperative, that we “act only according to that maxim whereby you can at the same time will that it should become a universal law.” Two millennia earlier, the philosopher Aristotle (1975) put forth to be a good person, one must do good things. The research results in this study indicate that volunteerism can significantly increase through increasing self-efficacy, emotional intelligence, and education. Increasing volunteerism is something we must do (Kant, 1993). The theory of unified responsibility (TUR) put forth that volunteer behavior is an alignment of an individual sense of self-concept and behavior (Dutta-Bergman, 2004). TUR brings together both Aristotle and Kant; yet the actualization of TUR can be actualized in volunteering.

Increasing self-efficacy (e.g., self-concept), emotional intelligence, and education predict an increase in volunteer behavior, the alignment of a person's sense of unified responsibility.

Many of the national and local third sector agencies and organizations expressed interest in learning the results of this research study, which is quite understandable as the need for volunteers continues to increase while the volunteer pool decreases (Sims et al., 2020). I also received social media postings on the websites where the survey used for this research study was advertised of interest in the results of this research study as neighborhood civic and social groups try to increase the volunteers for providing and fulfilling direct local social needs. This research study represents the first phase of creating positive social change by increasing volunteers in the United States. The next phase would logically be to develop an adult education curriculum specifically designed to focus on increasing emotional intelligence and self-efficacy in a social learning environment through collaborative learning engagement, as supported by the research findings from this study. The predictive relationships demonstrated in this research study are now demonstrated; the practical application of those predictive relationships is the next step to creating social change. The implications for the results of this research study can impact organizations and institutions nationally to locally.

Higher learning institutions, universities, and colleges are placing a greater emphasis on creating social change. A question of the efficacy of that emphasis seeks to be answered if the lessons of creating social change translate beyond the classrooms of higher learning; does the lesson last? Although the answer to that necessary question is

beyond the scope of this research study, still the research results from this study can go a long way to reenforcing the educational experiences of learning to create that social change through volunteering at events or with agencies and organizations specifically focused on providing the necessary relief to those in need or providing the services to the underserved.

Conclusion

This research project was inspired several years ago when I was working at a third sector organization in the Midwest of the United States. I volunteered to be an adult leader for a high-school summer youth project working with Habitat for Humanity. A large and powerful hurricane had ravaged the south-Atlantic coastal states in the U.S. and had left a wake of death and devastation. A story of the storm's aftermath caught my attention where two towns in relative proximity to one another experienced different results from the storm. One town was more affluent and built on higher ground experienced record flooding in parts of the town. The other town, an historic town established in 1865 by freed slaves, was built on much lower ground and was more economically challenged. The result was loss of life on a large scale, with 80% of the town buildings and homes underwater from 29 feet of floodwater, devastating the community's largely poverty-stricken population (Hurricane Matthew Recovery Costal Resilience Center, 2017, June 16; Armstrong, 2019).

As tragic as this story was, I led that summer youth group to participate in a Habitat for Humanity project focused on the more devastated town. When I arrived in that area, the only passable roads were through the more affluent town. I saw houses well

underway with repairs, and the town's infrastructure seemed on its way to recovery. That experience was juxtaposed with a stark view of the town downstream where barely any volunteers or aid organization workers were present; in the town most devastated, the aid and workers were least present. I wondered how more people could be encouraged to volunteer, people who were so close, yet so far away. That question remained with me like a splinter in my mind. One member of the youth group asked me where all the adults were to help. An aid organization had previously marked the devastated houses with a red spray-painted X indicating deceased were inside. There were a lot of X's that we saw along each street. There were so few adults left, not to mention the missing and deceased children.

I now have an answer to my burning question. To increase volunteerism, an intentional adult learning event designed along the lines of TSP with a collaborative social learning environment specifically designed to emphasize the social, individual, and communal benefits of volunteerism focusing on increasing self-efficacy and emotional intelligence will help fill the ranks of that most valuable resource of volunteers to help create social change. The research results from this study enhance those foundational studies which came before; Bandura's (1977; 1986; 1997) work with the social learning environment and self-efficacy, TSP of Ford and Smith (2007), Salovey and Mayer's (1990) work with the factors of emotional intelligence, all lending key information for this research study to come to fruition. I echo the sentiments of Isaac Newton (1675), "If I have seen further, it is by standing on the shoulders of giants."

Alexis de Tocqueville's (1838) observations of the United States included his

descriptions of American life being robust and communal, where citizens gladly volunteered to help each other out. Perhaps that was a romanticized account, recorded by the French diplomat to this new nation of the U.S.; but perhaps volunteerism was prevalent enough that acts of volunteerism were not considered rare or out of place in the early communities of the United States. I cannot say if the citizenry of the young U.S. had more self-efficacy or emotional intelligence than citizens in our time. However, because of this research study, I now know that volunteerism can be predictably increased through increasing education, self-efficacy, and emotional intelligence with individuals, communities, and organizations today. The results of this research study indicated the effect size of the predicted relationships among the variables was 25%, or 1 in 4. Some may suggest that the number of volunteers engaging in volunteer activities will only be 1 in 4 students of the adult education program designed from the results of this study may seem trivial, that 3 in 4 students will ultimately not volunteer. On the contrary, increasing volunteerism by 1 in 4 people can create such great social change, with increased services provided to those in need, increasing communities served, increasing the health and wellness of many, and the social and communal good of all.

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Appendix A: Questionnaire Items

Section 1: Years of Education Achieved

| | | | | | | | | |
|--|--------|---------|----------|----------|----------|----------|----------|------------|
| How many years of formal education have you completed? | | | | | | | | |
| 1 to 6 | 7 to 8 | 9 to 10 | 11 to 12 | 13 to 14 | 15 to 16 | 17 to 18 | 19 to 20 | 21 or more |

Section 2: Self-Efficacy - relates to one's estimate of one's overall ability to perform successfully in a wide variety of achievement situations

| | | | | |
|---|----------|----------------------------|-------|----------------|
| I will be able to achieve most of the goals that I have set for myself. | | | | |
| Strongly Disagree | Disagree | Neither Agree nor Disagree | Agree | Strongly Agree |

| | | | | |
|--|----------|----------------------------|-------|----------------|
| When facing difficult tasks, I am certain that I will accomplish them. | | | | |
| Strongly Disagree | Disagree | Neither Agree nor Disagree | Agree | Strongly Agree |

| | | | | |
|--|----------|----------------------------|-------|----------------|
| In general, I think that I can obtain outcomes that are important to me. | | | | |
| Strongly Disagree | Disagree | Neither Agree nor Disagree | Agree | Strongly Agree |

| | | | | |
|--|----------|----------------------------|-------|----------------|
| I believe I can succeed at most any endeavor to which I set my mind. | | | | |
| Strongly Disagree | Disagree | Neither Agree nor Disagree | Agree | Strongly Agree |

| | | | | |
|--|----------|----------------------------|-------|----------------|
| I will be able to successfully overcome many challenges. | | | | |
| Strongly Disagree | Disagree | Neither Agree nor Disagree | Agree | Strongly Agree |

| | | | | |
|--|----------|----------------------------|-------|----------------|
| I am confident that I can perform effectively on many different tasks. | | | | |
| Strongly Disagree | Disagree | Neither Agree nor Disagree | Agree | Strongly Agree |

| | | | | |
|--|----------|----------------------------|-------|----------------|
| Compared to other people, I can do most tasks very well. | | | | |
| Strongly Disagree | Disagree | Neither Agree nor Disagree | Agree | Strongly Agree |

| | | | | |
|---|----------|----------------------------|-------|----------------|
| Even when things are tough, I can perform quite well. | | | | |
| Strongly Disagree | Disagree | Neither Agree nor Disagree | Agree | Strongly Agree |

Section 3: Factors of Emotional Intelligence

3.1: Appraisal of own emotions

| | | | | |
|--------------------------------|--------|-----------|-------|------------|
| I know why my emotions change. | | | | |
| Almost Never | Rarely | Sometimes | Often | Very Often |

| | | | | |
|--|--------|-----------|-------|------------|
| I easily recognize my emotions as I experience them. | | | | |
| Almost Never | Rarely | Sometimes | Often | Very Often |

3.2: Appraisal of others' emotions

| | | | | |
|--|--------|-----------|-------|------------|
| I can tell how people are feeling by listening to the tone of their voice. | | | | |
| Almost Never | Rarely | Sometimes | Often | Very Often |

| | | | | |
|---|--------|-----------|-------|------------|
| By looking at their facial expressions, I recognize the emotions people are experiencing. | | | | |
| Almost Never | Rarely | Sometimes | Often | Very Often |

3.3: Regulation of own emotions

| | | | | |
|---|--------|-----------|-------|------------|
| I seek out activities that make me happy. | | | | |
| Almost Never | Rarely | Sometimes | Often | Very Often |

| | | | | |
|----------------------------------|--------|-----------|-------|------------|
| I have control over my emotions. | | | | |
| Almost Never | Rarely | Sometimes | Often | Very Often |

3.4: Regulation of others' emotions

| | | | | |
|--------------------------------|--------|-----------|-------|------------|
| I arrange events others enjoy. | | | | |
| Almost Never | Rarely | Sometimes | Often | Very Often |

| | | | | |
|---|--------|-----------|-------|------------|
| I help other people feel better when they are down. | | | | |
| Almost Never | Rarely | Sometimes | Often | Very Often |

3.5: Utilization of emotions

| | | | | |
|--|--------|-----------|-------|------------|
| When I am in a positive mood, I am able to come up with new ideas. | | | | |
| Almost Never | Rarely | Sometimes | Often | Very Often |

| | | | | |
|---|--------|-----------|-------|------------|
| I use good moods to help myself keep trying in the face of obstacles. | | | | |
| Almost Never | Rarely | Sometimes | Often | Very Often |

Section 4: Volunteering - giving time or skills for a volunteer group or organization

| | | | | |
|---|--------|-----------|-------|------------|
| I give my time to help a volunteer group. | | | | |
| Almost Never | Rarely | Sometimes | Often | Very Often |

| | | | | |
|---|--------|-----------|-------|------------|
| I apply my skills in ways that benefit a volunteer group. | | | | |
| Almost Never | Rarely | Sometimes | Often | Very Often |

| | | | | |
|--|--------|-----------|-------|------------|
| I devote my energy toward a volunteer group. | | | | |
| Almost Never | Rarely | Sometimes | Often | Very Often |

| | | | | |
|--|--------|-----------|-------|------------|
| I engage in activities to support a volunteer group. | | | | |
| Almost Never | Rarely | Sometimes | Often | Very Often |

| | | | | |
|--|--------|-----------|-------|------------|
| I employ my talent to aid a volunteer group. | | | | |
| Almost Never | Rarely | Sometimes | Often | Very Often |

Appendix B: Permission to Use the NGSE

**New General Self-Efficacy Scale**

PsycTESTS Citation:

Chen, G., Gully, S. M., & Eden, D. (2001). New General Self-Efficacy Scale [Database record]. Retrieved from PsycTESTS. doi: 10.1037/t08800-000

Test Shown: Full

Test Format:

The measure's 8 items are rated on a 5-point Likert-type scale from strongly disagree (1) to strongly agree (5).

Source:

Chen, Gilad, Gully, Stanley M., & Eden, Dov. (2001). Validation of a new general self-efficacy scale. *Organizational Research Methods*, Vol 4(1), 62-83. doi: 10.1177/109442810141004, © 2001 by SAGE Publications. Reproduced by Permission of SAGE Publications.

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Appendix C: Permission to Use BEIS-10

**Brief Emotional Intelligence Scale**

PsycTESTS Citation:

Davies, K. A., Lane, A. M., Devonport, T. J., & Scott, J. A. (2010). Brief Emotional Intelligence Scale [Database record]. Retrieved from PsycTESTS. doi: <https://dx.doi.org/10.1037/t06713-000>

Instrument Type:

Rating Scale

Test Format:

Items on the Brief Emotional Intelligence Scale are rated on a 5-point Likert scale anchored by 1 = "strongly agree" to 5 = "strongly disagree."

Source:

Reproduced by permission from Davies, Kevin A., Lane, Andrew M., Devonport, Tracey J., & Scott, Jamie A. (2010). Validity and reliability of a Brief Emotional Intelligence Scale (BEIS-10). *Journal of Individual Differences*, Vol 31(4), 198-208. doi: <https://dx.doi.org/10.1027/1614-0001/a000028>

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Appendix D: Permission to Use Rodell's Volunteer Scale

Re: Request Use of Volunteering Scale for Educational Psychology Dissertation Research

JR Jessica B. Rodell [REDACTED]     
Mon 11/16/2020 1:55 PM
To: Dan Clark

Hi Dan. Thank you for reaching out. Yes, please feel free to use the volunteering survey questions!

Jessica

Jessica B. Rodell, Ph.D.
William H. Willson Distinguished Chair, Management
PhD Program Coordinator (Organizational Behavior)
University of Georgia | Terry College of Business
[REDACTED]

Appendix E: G*Power Sample Size Calculator Results

 A-priori Sample Size Calculator for Multiple Regression

This calculator will tell you the minimum required sample size for a multiple regression study, given the desired probability level, the number of predictors in the model, the anticipated effect size, and the desired statistical power level.

Please enter the necessary parameter values, and then click 'Calculate'.

| | | |
|---|-----------------------------------|---|
| Anticipated effect size (f^2): | <input type="text" value="0.15"/> |  |
| Desired statistical power level: | <input type="text" value="0.8"/> |  |
| Number of predictors: | <input type="text" value="7"/> |  |
| Probability level: | <input type="text" value="0.05"/> |  |
| <input type="button" value="Calculate!"/> | | |
| Minimum required sample size: 103 | | |

▶ Related Resources

 Formulas  References  Related Calculators  Search