Effects of Strengths-Based Development on Self-Efficacy of Higher Education Professionals: A Mixed Methods Approach

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ABSTRACT

This study focuses on the self-efficacy of higher education professionals within a state in the southeastern United States and uses a sequential explanatory mixed methods design. The purpose of the quantitative phase was to determine if Generalized Self-Efficacy (GSE) was related to participation in a Strengths-Based Development (SBD) intervention. The quasi-experimental design utilized an experimental group and a control group for comparison. Quantitative analysis determined that the independent variables (race, gender, institution type, leadership level, or occupational area) had no significant predictive relationship to change in GSE. Despite this, paired-samples *t* tests indicated a significant change from GSE pretest to posttest across groups.

The study maximized the use of a follow-up qualitative phase to understand why this correlation existed and to more deeply understand the experiences that influenced the development of self-efficacy. Qualitative analysis provided support for Bandura's *Origins of Self-Efficacy* and offered two additional themes that emerged to explain how self-efficacy is developed within individuals. The participants indicated that they adapted personal strategies for developing self-efficacy including utilizing their faith, breaking things down into small steps, and possessing a positive attitude. Participants also articulated that their self-efficacy was built through their *Resilience Through Surviving* tough circumstances. Finally, participants articulated the belief that SBD increased their self-awareness and caused changes in their perception of strengths and their behaviors.

The findings of this mixed-methods study supported the use of SBD within institutions of higher education because of its influence on the self-efficacy of participants which increased self-awareness and changes in perceptions and behaviors. Suggested areas of future research include understanding if increases in GSE are sustained after extended periods of time and if increased GSE scores have other positive results, such as career success, career longevity, happiness, and supervisory satisfaction within the higher education environment.

Institutions of higher education should embrace and invest in SBD because it can have a positive influence on the self-efficacy of participants. Leaders and supervisors can build self-efficacy in others through recognizing the success of others (Positive Experiences), allowing themselves to be models for others as well as encouraging mentors within the organization (Social Modeling), offering timely feedback and encouragement to others (Social Persuasions), and coaching participants to rebound and persist through challenges, while celebrating those who were able to overcome challenges (Physiological State).

For SBD to be most beneficial, it needs to be incorporated into the regular business and communication of the organization. For example, organizations may assist supervisors and employees in learning and investing in the strengths of others by making it part of regular meeting agendas, professional development and orientation opportunities, and employee evaluations. Supervisors may utilize team mapping and complimentary partnerships in establishing project teams and committee structures.

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ACKNOWLEDGEMENTS

This has been a long journey; one that I doubted that I would ever take. This section is intended to acknowledge those who have had a part in helping me reach this goal. First, it has been humbling and heart-warming to experience the empathy and understand of many others who have already taken this journey. This includes some of my colleagues who have been supportive throughout this journey offering to help in various ways. I will surely try to find a way to pay it forward.

I would like to thank Dr. Herbert Fiester and Dr. Travis York who maintained high expectations and challenged me to think more despite my frustration. I am proud of my work and thankful for your support.

Despite the fact that they didn't understand it, my parents have been very supportive of me throughout this journey. Being an adult with my own family, one might imagine that support from my parents would not be needed, but it was greatly appreciated and motivated me to persist.

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Finally, I thank God for this blessed life and the opportunities he will continue to create.

Chapter I

INTRODUCTION

While institutions of higher education are known for innovation and change, the field of higher education faces tremendous challenges to adapt to changing political, economic, and technological demands. Universities are experiencing new pressures to reduce cost and increase productivity without compromising quality. In addition, higher education faces greater scrutiny to demonstrate accountability and good stewardship. These new pressures demand strong strategic leadership at the executive level and mid-management levels (Taylor & Machado-Taylor, 2010).

Within the next decade, higher education will face a shift in executive leadership as many current university leaders are Baby Boomers who will face retirement, creating a potential shortage in institutional leadership (Cook, 2012). This impending departure of leaders, coupled with the economic and political pressures facing higher education, have triggered hiring agents, trustees, and boards to look outside higher education for the next class of executive leaders who possess business and industry experience. However, these business leaders often lack academic or higher education experience (Mead-Fox, 2009). Despite this movement, some institutions remain dedicated to recruiting leaders from within the academy who possess the necessary expertise in education; however, these experienced educators often lack the vision and managerial experience to motivate and

mobilize the university community (Smith, Blixt, Ellis, Gill & Kruger, 2015). This concept contributes to a theory created by Laurence Peter known as the Peter Principle, which describes a management theory where the selection of a candidate for promotion is based on the candidate's performance and abilities in their current role, rather than the needs of the new role, causing employees to be promoted to their level of incompetence (Heylighen, 1993). Although internal leadership candidates may possess subject-matter expertise, educational leaders are often unprepared to assume the responsibilities of managing people, which requires maximizing the potential of their followers. This chapter provides an understanding of the background of the research, importance and need for the study, research purpose and questions, and definitions of the relevant terms used within the study.

Background of the Study

To understand the background of this study, it is important to understand the climate of Higher Education, the concept of self-efficacy, as well as the recent emergence of Positive Psychology and Strengths-Based Development (SBD).

Higher Education

Institutions of higher education face significant challenges that require effective and innovative leadership. "Academic leadership requires an unusual amount of creativity and ingenuity within an unusual amount of constraint. It also requires communication skills, social skills, and, of course, a bottom line of ironclad integrity, ethics, and good will for the success of the institution and all its members" (Davidson, p.

5, 2013). With growing public scrutiny and distrust for higher education, an effective leader must demonstrate his or her ethics (Eddy, Murphy, Spaulding & Chaudras, 1997; Kouzes & Posners, 2012; Smith et al., 2015). In addition, political influences within higher education leadership are a more significant part of the 21st century leader's responsibilities than previously known. Higher education leaders must navigate increasing pressures from state legislators, board of regents, accrediting bodies, alumni boards, parent groups, business and industry, and more. These political nuances require collaborative efforts to solve problems (Eddy et al., 1997; Wood, 1999). Finally, radical changes occurring in technology and learning influence higher education institutions to re-design delivery of education, which affects all aspects of the institution. These ethical, political, and technological considerations require higher education leaders to think strategically and demonstrate the necessity of collaborative relationships and an effort to maximize the individual potential of others.

Despite the need for reform, higher education has remained resistant to changes in traditional structures and processes and has received criticism for its rigidity (Cantor, 2012; Taylor & Machado-Taylor, 2010; Smith et al., 2015). Because reform has been difficult to accomplish, it is clear that institutions of higher education struggle with adjusting to change. Visionary, distributed leadership demands considering improved organizational and delivery structures, increasing academic freedom, improving ways of measuring performance and effectiveness, creating better business sector partnerships to identify new sources of income, and recognizing the increasing importance of the human

role in leadership as the way to solve the rigidity and stagnation problem in higher education (Drucker, 1990; Taylor & Machado-Taylor, 2010).

Amidst a call for reform in the traditional structures, delivery methods, and outcomes of universities, there is an anticipation of a significant turnover in the cadre of leadership. As of 2015, there are more than 4000 institutions of higher education in the United States. A large portion of higher education administrators are known as Baby Boomers, a generation that was born between 1946 -1964 (Baby boomer, n.d). Because Baby Boomers are facing retirement, there is an anticipation of a 50% turnover in the cadre of higher education leadership over the next 10 years (Betts, Urias, Betts, & Chavez, 2009). The anticipation of this turnover has resulted in an increased interest in succession planning within institutions to identify leaders who can create a sustainable vision that both accommodates the needed reforms and is embraced throughout the organization.

Self-Efficacy

When a person believes that he or she can accomplish something, the likelihood of the person actually accomplishing the task is increased. This theory, called Social Cognitive Theory, was considered by Albert Bandura in the mid-1960s. Bandura (1997) posits that a person's motivation, actions, and attitude are largely affected by the person's self-efficacy or belief that he or she can accomplish a task. This is not simply a hollow confidence intended to breed positive outcomes. Instead, self-efficacy assumes that an individual has the belief that he or she possesses the necessary traits or skills to carry out

the task. There are two types of self-efficacy regularly studied: Generalized Self-Efficacy and Task-Specific Self-Efficacy (Bandura, 2010). Task-Specific Self-efficacy focuses on the person's belief to accomplish a specific task. Examples of Task-Specific Self-Efficacy are Teacher Efficacy, Nursing Efficacy, and Leadership Efficacy. On the other hand, Generalized Self-Efficacy describes a person's belief that he possess the necessary skills to accomplish a wide variety of tasks.

Positive Psychology

The use of Positive Psychology and SBD has emerged in multiple settings including education and business environments because of the demonstrated positive impacts. Introduced in the late 1990s by psychologists and then-president of the American Psychological Association, Martin Seligman, Positive Psychology is a concept that upended historical psychological approaches to therapy by suggesting that clinicians and others focus on an individual's talents and positive attributes as the preferred strategy of treatment and personal development. Positive Psychology promotes the use of positive traits to reach goals, which is the basis and purpose of SBD.

Strengths-Based Development

During the same time-frame of 1995-2005, Donald Clifton, Tom Rath, and others at the Gallup organization, while studying human performance and development, created an early web-based assessment program designed to help respondents understand their greatest talents. Although later adjusted in 2002, the Clifton Strengths Finder has been utilized by more than 8 million people worldwide (Gallup, 2014). This web-based assessment consists of 177 paired responses that determine the Top 5 Strengths among 34 Strengths Themes. SBD consists of identifying personal talents, developing these talents into strengths through intentional exercises and activities, identifying the talents of others, learning how to encourage and nurture the development of other's *strengths*, and creating complimentary partnerships and teams based on strengths.

Statement of the Problem

Inexperienced leaders and administrators are not only unfamiliar with their own strengths but are also unfamiliar with the strengths of those they lead (Drucker, 2005). Because of this unawareness, leaders are unable to maximize the productivity or engagement of the employees or students they lead (Deci & Ryan, 2001). Poor leadership and management have a negative impact on employee engagement, job satisfaction, and employee burnout (Leary et al., 2013). In fact, Harter, Schmidt, and Hayes (2002) explain that 75% of working adults describe their supervisor as the most stressful aspect of their job. Conversely, positive employee engagement is correlated with improved employee health, good customer service, improved employee productivity, and fewer employee accidents.

Improved self-efficacy within the work environment offers several benefits to an employee (Lunenberg, 2011). Employees with higher self-efficacy are more likely to set high personal goals and, because of their self-efficacy, are more likely to achieve at higher levels. Because they are more confident in their abilities to be successful, employees with higher self-efficacy work harder to learn a new task and are more persistent when faced with challenges. These demonstrated benefits explain why Bandura and Locke (2003) suggest that self-efficacy is a powerful determinant of job performance.

The findings of this study suggests that the impending reforms facing higher education, the anticipation of a significant turnover in higher education leadership, and the impact of employee engagement could be mediated by increases in the self-efficacy

of higher education professionals. In addition, the findings of the study proposes SBD as an effective intervention for improving self-efficacy.

Purpose Statement and Research Questions

The purpose of the study was to determine the effect of SBD on the self-efficacy scores of higher education professionals and to identify factors that may contribute to the development of self-efficacy. Respondent strengths were determined through completion of the StrengthsFinder assessment, which served as the initiation of a SBD intervention. Self-efficacy scores were captured pre-intervention and post-intervention on the New Generalized Self-Efficacy instrument. This mixed methods explanatory design is intended to answer the following research questions:

Quantitative

1. What is the relationship between Generalized Self-Efficacy scores and participating in Strengths-Based Development for higher education professionals?
    a. Are there differences in pretest Generalized Self-Efficacy scores of higher education professionals based on the following characteristics: leadership level, occupational category, race, gender, and institutional type?
    b. Are there differences in posttest Generalized Self-Efficacy scores of higher education professionals based on the following characteristics: leadership level, occupational category, race, gender, and institutional type?

Qualitative

2. What perceived experiences, characteristics, or events influence self-efficacy of higher education professionals?
3. How does Strengths-Based Development influence the self-efficacy of higher education professionals?

Significance of the Research

Improved self-efficacy has the potential to have a positive influence on various aspects of the work environment. SBD provides a cost-effective way to improve employee engagement, and self-awareness, which can be beneficial during the anticipated transitional period in the leadership cadre of higher education institutions. Although previous research supports multiple positive attributes of SBD, there is no previous research on the effects of SBD on self-efficacy of higher educational professionals.

Increased self-efficacy has a positive influence on employee performance and motivation causing employees to set higher goals for themselves, be willing to exert more effort into achieving goals, and possess more tenacity with difficult tasks creating a more productive and efficient workforce (Lunenburg, 2011). Utilization of SBD can serve as an institutional framework and model for professional development training of supervisors, managers, and other professionals. Exploring how SBD influences self-efficacy can provide meaningful insight into employee recruitment, development and training, and performance (Buckingham & Coffman, 1999; Coffman, Gonzales-Molina, & King, 2002; Hodges & Clifton, 2004).

Although institutions of higher education purport to prepare the next generation of learners, citizens, leaders, and scholars, qualified leadership within the field of higher education is decreasing and current internal leadership development is lacking the contemporary skills necessary to manage people (Baby boomers, n.d.; Taylor & Machado-Taylor, 2010). Employing a SBD process provides opportunities 1) to develop cost-effective internal leadership programs rather than relying on external recruitment of educational leaders and 2) to increase employee engagement and self-efficacy.

Both public and private universities search for ways to minimize costs while maximizing output. Understanding the needs and desires of employees, known as social capital, is beneficial to organizations (Collins, 2010). SBD strategies suggest an innovative and cost-effective way to teach employees to maximize the potential of their own unique strengths. The personal and professional awareness gained through SBD is an effective form of professional development. After learning and understanding one's unique strength, a person is more likely to obtain the knowledge and skills to maximize these strengths (Clifton & Harter, 2003). In addition to increasing awareness of personal strengths, SBD offers employees a way to understand and leverage their peers' unique strengths so that opportunities for organizational success can be optimized. Finding a way to improve productivity and efficiency of organization members provides opportunities for better resource management.

Currently published research on SBD focuses on two primary realms: business and education. Within the business realm, SBD has been studied to determine the impact

on employee engagement, productivity, profitability, employee turnover, safety, customer-satisfaction, hope, well-being, and Self-Efficacy (Coffman et al., 2002; Collins, 2010; Harter & Schmidt, 2002; Kaiser & Overfeld, 2011; Kenkel & Sorenson, 2014; Kruger & Killham, 2007; Patterson, 2011; Walter, 2013). In addition, SBD has gained awareness on college campuses because of its demonstrated positive impact on academic self-confidence, personal relationships, and perception of individual abilities of college students (Anderson, Schreiner, & Shahbaz, 2004; Caldwell, 2009; Cave, 2003). Despite these successes, published research on the positive impacts of SBD on higher education professionals within colleges and universities is limited. Further, there is currently no published research on the impact of SBD on the self-efficacy of higher education professionals.

Definition of Terms

Throughout the study, there were various terms and concepts used, which require definition to provide clarity and context for their use within this study.

Leaders: In this study, leaders were operationally defined as higher education professionals serving in a faculty, staff, administrative, or support role.

Social Cognitive Theory: Much learning occurs as a result of observation within a social context and has been used to study learning, motivation, and achievement.

Self-Efficacy: An individual's belief that he or she possesses the necessary skills to accomplish a task. Within this study, Generalized Self-Efficacy was utilized.

Generalized Self-Efficacy: An individual's belief that he or she possess the skills to accomplish tasks across a wide variety of areas as opposed to one specific area such as teaching. Within this study, Generalized Self-Efficacy was measured with the New Generalized Self-Efficacy Scale created by Chen, Gully, and Eden (2001).

Clifton StrengthsFinder or StrengthsFinder: a web-based assessment developed by Donald Clifton and the Gallup Organization, which identifies an individual's *strengths*.

StrengthsQuest: A strengths-development process, which began with completing the StrengthsFinder assessment and included receiving a customized report regarding the respondent's Top 5 Strengths as well as recommended action items for further development.

Talent: According to Clifton, Anderson, and Schreiner, a talent is "a naturally recurring pattern of thought, feeling, or behavior that can be productively applied" (2006, p. 3). When carefully and intentionally developed, a talent can become a strength. However, without this intentionality, a talent may not develop into a strength.

Strength: "The ability to provide consistent, near-perfect performance in a given activity" (Clifton et. al, 2006, p. 4). Throughout his career, Donald Clifton identified hundreds of personal talent themes. Over time and significant data generation, these talent themes were reduced to 34 themes in 1999 which have been well-validated over the last 15 years (Asplund, Lopez & Hodges, & Harter, 2012).

Strengths-Based Development (SBD): The concept and strategy of identifying and developing the strengths of each individual to maximize effectiveness of a team or organization.

Summary

There is an impending "changing of the guard" within the higher education environment (Cook, 2012). In addition, the changing political culture requires a new style of leadership that encourages collaboration, creativity, and problem-solving (Davidson, 2013; Eddy et al., 1997; Taylor & Machado-Taylor, 2010). SBD, which originates from the concepts of Positive Psychology, has been demonstrated to produce positive results within both academic and business environments (Anderson, 2004; Cave, 2003; Clifton et al., 2006; Coffman et al., 2002; Collins, 2009; Frame, 2002; Harter & Schmidt, 2002; Jones-Smith, 2011; Kruger & Killham, 2007; Lopez & Louis, 2009; Patterson, 2011; Walter, 2013). This chapter provided an overview of the study, its relevant concepts, including a description of the current status of higher education leadership, and a context for understanding the importance of the study. Chapter 2 provides a review of the current literature leading up to SBD as well as the current research that supported the need for this study.

Chapter II

LITERATURE REVIEW

Higher education professionals face tremendous challenges and scrutiny to be more effective in creating graduates who can contribute to the needs of the workforce. At the same time, constituents of higher education are looking for institutions to increase efficiencies by lowering tuition costs while still accommodating the increasing number of students headed to college (Complete College America, 2014; Field, 2015; Johnson, 2011). Recognizing the myriad of stakeholders and influencers, which include federal and state governments, taxpayers, institutional faculty and staff, political leadership, economic development needs, parents, and students, the traditional expectations and responses of higher education professionals demand more effective leadership than ever before. These pressures are evident in the call for a change in the funding models of higher education to shift toward a performance-based funding model (Mangan, 2015). There is concern, however, about the preparedness of higher education professionals to adapt to increased organizational complexities and to be responsive to the need for changes in the higher education environment.

Although self-confidence has long been associated with strong leadership, a closer study of the concepts and effects of self-efficacy has emerged within the last 2 decades. Self-efficacy acknowledges that a person's motivation to attempt a task is

influenced by his personal belief that he can, in fact, accomplish the task. The concept of self-efficacy has been studied in the context of Social Cognitive Theory, which recognizes that individuals are aware of behaviors occurring around them and their learning is strengthened through these observations. The recognition and development of Social Cognitive Theory and self-efficacy have resulted in the creation of instruments designed to measure individual self-efficacy in specific tasks or over a generalized set of tasks.

Also emerging over the last decade is the field of Positive Psychology. The development of Positive Psychology challenged the earlier approach to psychology, which focused on discovering people's problems in hopes of "fixing" them. Instead, the field of Positive Psychology focuses on highlighting an individual's opportunities to overcome obstacles through the positive traits and abilities he or she possesses. This shift is accomplished through identifying, embracing, and developing the individual's strengths (Seligman & Csikszentmihalyi, 2000). Positive Psychology is effective because "positive emotions prompt individuals to engage with their environments and their activities, many of which were evolutionarily adaptive for the individual" (Csikszentmihalyi & Csikszentmihalyi, 2006, p. 88). The theory of Positive Psychology provides the rationale to explain why an individual gravitates toward certain college majors, career fields, and roles within organizations. This notion holds true for college administrators who often demonstrate an interest in educating and investing in the intellectual, physical, spiritual, social, and personal development of college students.

Grounded in the concept of Positive Psychology, Donald Clifton created an assessment instrument in 1998 known as the Clifton StrengthsFinder, designed to identify the most prevalent strengths within each individual. Having been adopted by the Gallup Organization and used by millions of people worldwide, the StrengthsFinder assessment and resources have contributed to a movement of professional development opportunities for individuals and organizations known as SBD. The use of SBD has contributed to the improvement in employee engagement, retention, productivity, and overall individual well-being (Towers Perrin Global Workforce Survey, 2007/2008). Used within business and higher education organizations, SBD has been demonstrated to have a significant impact on organizational culture and effectiveness in organizations that are now known as *Strengths-Based Organizations*. This organizational impact is a result of: (a) a focus on the unique strengths of members of the organization and (b) an urging for leaders to recognize individual strengths and align individual strengths with job function and role within the organization. SBD strategies provide an effective platform for higher education institutions and university leaders to develop effective leadership within the organization to address the challenges ahead.

This chapter provides a description of the potential linkage among the critical theories surrounding this study as illustrated in Figure 1. In addition, the chapter provides a historical review of the foundational concepts surrounding this study, including Bandura's Social Cognitive Theory, Seligman's Positive Psychology, and Donald Clifton's strengths approach. Also, the chapter will expand upon these

foundational concepts to include a description of SBD and Strengths-Based Leadership, offering evidence of their combined impact on performance, engagement, and productivity within various environments. Finally, a description of the opportunities available within the higher education environment to implement SBD practices with higher education professionals will be provided.

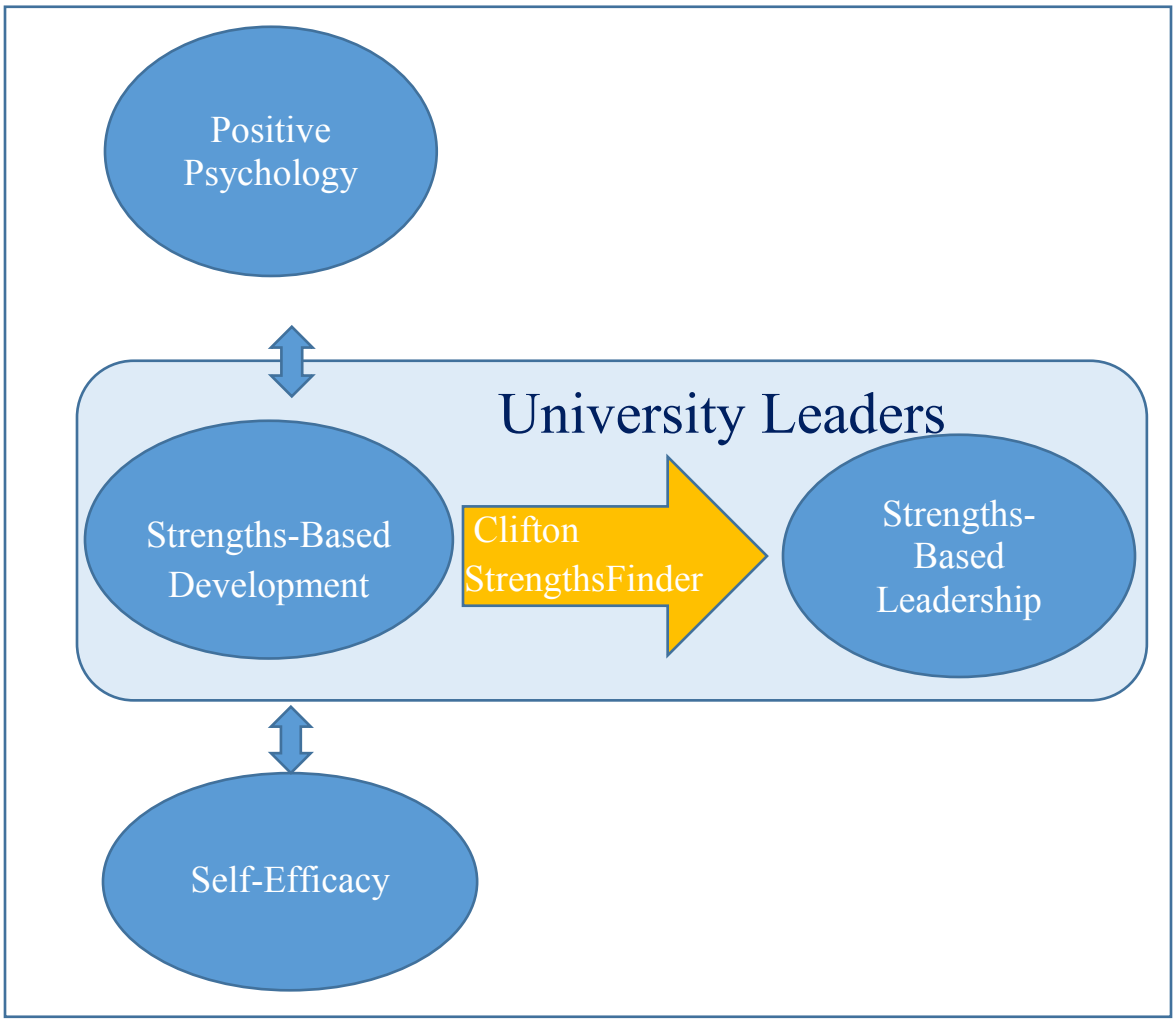


Figure 1 The Relationship of SBD and Self-Efficacy

Bandura's Social Cognitive Theory/Self-Efficacy

Mahatma Gandi once said, “If I have the belief that I can do it, I shall surely acquire the capacity to do it even if I may not have it at the beginning.” Such a belief in one’s ability to succeed demonstrates Bandura’s Social Cognitive Theory.

Albert Bandura is known as the creator of Social Cognitive Theory and the father of self-efficacy. In 1963, building off of the social learning theory of Miller and Dollard, Bandura and fellow psychologist R. H. Walters wrote *Social Learning and Personality Development,* where they considered the impact of experiences to reinforce personal behaviors. Bandura continued to study learning theory and, in 1977, wrote *Self-Efficacy: Toward a Unifying Theory of Behavioral Change,* which was the first such publication that recognized self-belief (Pajares, 2002). Bandura, however, continued his focus on the theory that humans reflect upon personal, behavioral, and environmental experiences when he wrote *Social Foundations of Thought and Action: A Social Cognitive Theory* in 1986.

Social Cognitive Theory suggests that people “automatically observe the behavior of those around us, process it, reflect on it, and then integrate it into our own behavior” (Davis, 2010, p. 164). According to Bandura, “people's level of motivation, affective states, and actions are based more on what they believe than on what is objectively true” (1997, p. 2). This is known as self-efficacy. Bandura’s research suggests that even when people understand that certain behaviors can and will yield certain results, it is not enough to motivate them to achieve, or even attempt to achieve, these goals. Instead, a

person must understand the behaviors that can yield a desired outcome and believe that he or she possess traits and skills necessary to achieve the goal (Bandura, 1986).

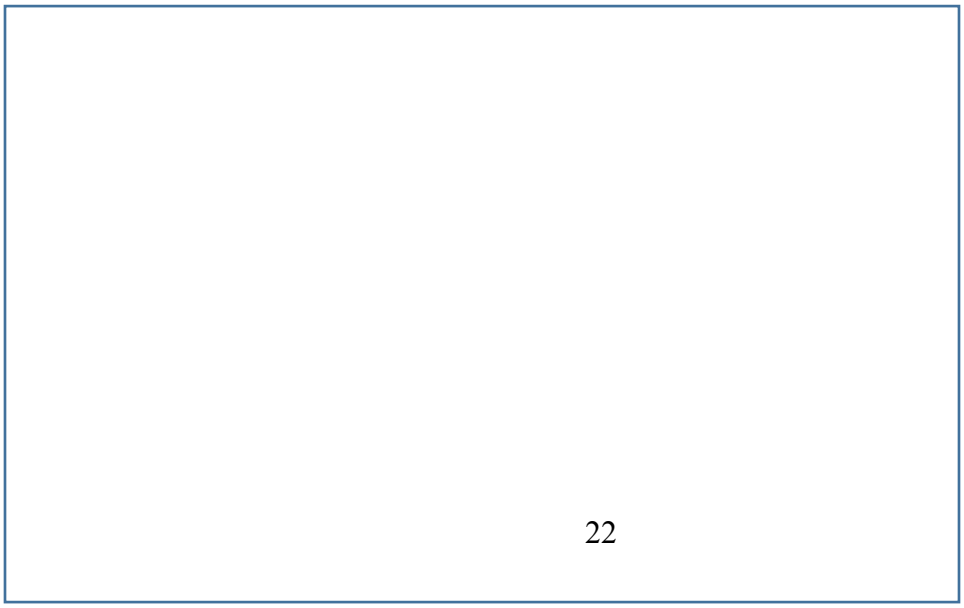
Often confidence and efficacy are confused for one another; however, Bandura explains how these terms differ. Confidence refers to "strength of belief, but does not necessarily specify what the certainty is about," while self-efficacy refers to "belief in one's agentive capabilities, that one can produce given levels of attainment." There are certainly correlations between self-confidence and self-efficacy that support the need for efficacy assessments to capture both "an affirmation of a capability level and the strength of that belief" (Bandura, 1997, p. 382). To clarify, self-efficacy can be an accurate predictor of self-confidence (Lightsey, Burke, Ervin, Henderson, & Yee, 2006).

Self-efficacy is influenced by locus of control, a concept introduced by psychologist, Julian Rotter (1989). Locus of control refers to an individual's belief that his or her actions are influenced by internal or external variables. An individual typically gains confidence in situations where the individual feels that he or she can influence internal or external variables.

Managers who provide opportunities for employees to challenge and expand their belief in their unique skills will strengthen the self-efficacy of those they supervise. In addition, managers support the development of self-efficacy by assisting employees to diagnose complex tasks as well as to apply and improve the skills necessary to accomplish the tasks. Managers can maximize the success of efficacy-building programs by offering workshops immediately prior to complex tasks yielding an effective, cost-

conscious method to boost productivity and employee efficacy (Judge & Bono, 2001). "Self-efficacy helps explain why some people who are considered to be extremely talented are often surpassed by less talented individuals having higher levels of self-efficacy" (Gibbs, 2009, p. 3). For example, a great writer may lack the confidence needed to reach his potential and be successful. The deficiency is not a result of writing skills, but instead, a deficiency in self-efficacy regarding his writing skills.

As illustrated in Figure 2, Bandura outlined four ways to develop self-efficacy through: (1) positive experiences, (2) social modeling, (3) social persuasions, and (4) physiological and emotional states (Bandura, 1987). The most effective of these ways is through a person's own positive experiences. Experiencing success boosts an individual's confidence in his or her abilities, especially when the success comes with perseverance after overcoming obstacles. For example, a first-generation college student is much more confident in his or her ability to complete a graduate degree once he or she has been successful in completing his or her undergraduate degree.



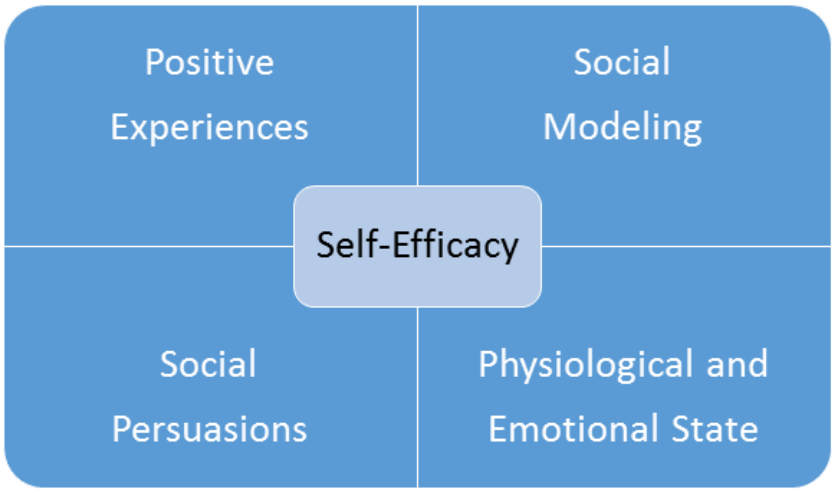


Figure 2 Self-Efficacy Development Method

The second way to develop self-efficacy is through seeing others do it, which is referred to as social modeling. To be effective, the model should be someone who is similar and relevant to the subject (Bandura, 1997). For example, a young man may have greater confidence in his ability to play baseball at the college or professional level if his older brother or parent experienced that same type of success compared to the confidence level of a teammate who possesses similar or greater talent but does not possess relevant social models.

Another method for building self-efficacy is through social persuasions, which is often experienced through receiving feedback from others known as encouragement and criticism. Encouragement and criticisms are examples of these important observations. For instance, children from emotionally supportive parents typically have greater confidence in their abilities leading to greater success.

Finally, a person's physiological and emotional state, which is seen through their moods and emotions, and how the person interprets these emotions influences their confidence in their abilities (Davis, 2010). A person's overall positive attitude can increase the likelihood of success just as a person's uncontrolled anxiety or fear can diminish the likelihood of success. Each of these concepts can influence self-efficacy and understanding how to foster the development of self-efficacy is an important goal for Positive Psychology and resilience because it leads to stronger career satisfaction and a happier life (Luthans, 2007).

Substantial research has been completed to demonstrate the impact of self-efficacy on the achievements of students in the areas of academic performance, athletic achievement, and overall well-being (Lane, Lane & Kyprianou, 2004; Pajares & Graham, 1999; Zimmerman & Schunk, 2003). In a study of 273 first-year middle school students, task-specific self-efficacy was the only motivation variable found to predict performance in mathematics at both the start and end of the year (Pajares & Graham; 1999). In a study of 205 post-graduate students, results indicated that self-efficacy mediated the relationship between performance accomplishments and academic performance suggesting that self-efficacy is a predictor of academic achievement (Lane et al., 2004).

Similarly, self-efficacy has been studied in work environments (Stajkovic & Luthans, 1998). In a meta-analysis of 114 self-efficacy studies, Stajkovic and Luthans present strong evidence that self-efficacy is positively correlated with work performance with a significant weighted average correlation of .38, in many environments, indicating

that "self-efficacy is a significant predictor of performance for each level of task complexity" (1998, p. 10). The results of the study, however, highlight that the complexity of a task and locus of control mediate this positive correlation and suggest that organizations focus strategies on improving human performance in self-efficacy and offer several specific suggestions.

There have been a limited number of studies on the self-efficacy of professionals within the educational environment. Several studies have focused on the impact of self-efficacy in teachers. One of these studies concluded that teachers who have high self-efficacy take greater roles with the curriculum (Guskey & Passaro, 1994) while another study among teachers suggests that those with high self-efficacy are more likely to utilize nontraditional teaching approaches (Gibson & Dembo, 1984). Within the college and university environment, there are even less studies completed. In an analysis of the empirical data of 56 leaders and 180 followers within Student Affairs divisions of community colleges in the eastern United States, self-efficacy was found to be a significant predictor of leader effectiveness (Woods, 2005).

Generalized Self-Efficacy

While self-efficacy describes an individual's perception of his or her ability to accomplish a task, Generalized Self-Efficacy (GSE) is defined as a person's "expectations that they can perform competently across a broad range which are challenging and which require effort and perseverance" (Tipton & Worthington, 1984, p. 545). GSE is a generalization of many domain-specific efficacy areas whereas Task-Specific Self-Efficacy measures self-efficacy related to specific tasks. Although Task-Specific Self-Efficacy has been demonstrated to be more reliable in predicting specific task behaviors and rebounding from failures of a specific nature (Bandura, 1997), GSE measures the individual's perception to accomplish a variety of tasks (Gibbs, 2009). GSE is typically more useful than Task-Specific Self-Efficacy in environments that present ambiguous or a wide range of expectations (Lightsey et al., 2006). Because the expectations and tasks of higher education administrators are broad, a focus on GSE was given priority within this study.

New Generalized Self-Efficacy Scale

The NGSE developed by Chen, Gully and Eden was chosen because of its demonstrated content validity and its "performance in a variety of work contexts" (Chen et al., 2014, p. 12). The self-efficacy score, as determined by the NGSE, will represent the dependent variable within the study. GSE analysis will be administered in pretest and posttest versions. GSE is a generalization of many domain-specific efficacy areas whereas task-specific self-efficacy measures self-efficacy related to specific tasks.

Although task-specific self-efficacy has been demonstrated to be more reliable in predicting specific task behaviors and rebounding from failures of a specific nature (Bandura, 1997), GSE measures the individual's perception to accomplish a variety of tasks (Gibbs, 2009). For these reasons, GSE was given priority within this study. There are several well-known and validated self-efficacy scales. The NGSE "consists of eight items that are rated on a 5-point scale with the anchors *strongly disagree* and *strongly agree* (Scherbaum, Cohen-Charash, & Kern, 2006, p. 1050).

In order to test the construct validity of the NGSE, Chen, Gully, and Eden tested the scale development by adding seven additional items to the current seven items that are on the NGSE. The additional seven items were created through a process similar to the creation of the original NGSE, which strongly referenced accepted GSE definitions by Gardner and Pierce (1998), Judge, Locke, and Durham (1997), and Judge, Erez, and Bono (1998) and was consistent with Eden's GSE conceptualization (2001).

Both Chen and Gully independently submitted an additional three to five new items to be considered in the instrument while Eden reviewed the additional items for clarity, consistency with theory, and redundancy. This resulted in an instrument containing 14 items measured on a 5-point Likert scale which was tested on 316 undergraduates in a 3-series test administration. In a correlational analysis, six items were identified as linearly redundant and were eliminated in an effort to avoid artificially inflating the internal consistency reliability estimate. The eight items that remained

offered the greatest face validity and high test-retest reliability for the eight item scale with alphas of 0.85 and 0.88 (Chen et al., 2001).

The content validity of the 8-item NGSE was measured by two independent panels of undergraduate and graduate students alongside the 10 Rosenberg self-esteem items, and the 17-item SGSE scale developed by Sherer et al. (1982). The SGSE is a GSE scale that demonstrates moderate to high internal consistency reliability, but has demonstrated low test-retest reliability despite its use in more than 200 studies (Chen et al., 2001). The combined 35-items were ordered randomly to avoid bias effect on the two independent panels that reviewed these items against established GSE definitions. Both of the independent panels supported the content validity of the NGSE items by sorting them as GSE; 98% of graduate students and 87% undergraduate students. In comparison, 54% and 64% of SGSE items were sorted as GSE by graduate and undergraduates respectively. This demonstrated the content validity of the NGSE as well as a comparison to the SGSE, which has been more widely used. The NGSE has been used in multiple languages and with various populations including mental health providers, deaf individuals, nurses, entrepreneurs, college students, faculty members, and university administrators. In addition, the NGSE has measured a variety of domains including job satisfaction, employee motivation, leadership styles, and more (Chen et al., 2001).

An expert known for his research and work in the concepts of self-efficacy, Albert Bandura (1997) created guidance regarding the construction of various self-efficacy scales. Bandura offered a collection of more task specific self-efficacy scales such as

teacher self-efficacy and parental efficacy. Bandura invited others to create task specific self-efficacy scales, but offered guidance in maintaining validity and reliability within the questions on the survey. Sherer et al. (1982) created one of the first General Self-Efficacy Scale (GSES) designed to be used in clinical, educational, and organizational settings. The GSES contain 17-items that were measure on a 5-point Likert scale. Scherbaum et al. (2006) explain that the GSES scale has received considerable criticism related to the low levels of internal consistency with some values as low as .70, which is below the generally accepted cut-off of .80 to indicate a strong consistency (Henson, 2001).

Schwarzer and Jerusalem (1995) created the General Perceived Self-Efficacy Scale (GPSES). This scale was primarily used outside the United States and has internal consistency coefficients ranging from .75 to .91, which was a significant improvement over the GSES. The GPSES offers 10 questions measured on a 4-point scale. However, Chen et. al. (2001) offered a new scale called the New Generalized Self-efficacy Scale (NGSE), which offers 8 questions measured on a 5-point scale and offers internal consistency coefficients of .85 - .90. In addition, the NGSE offers strong stability coefficients and a unidimensional factor structure making it the strongest measurement of GSE.

The NGSE has high internal consistency reliability within multiple studies including Chen et al. (2001) and Scherbaum et al. (2006). Test and retest coefficients were stable with the NGSE. In fact, when compared to Sherer's GSES, the NGSE shows

higher content validity as well making it a strong instrument to measure "one's overall competence to effect requisite performance across a wide variety of achievement situations" (Eden, 2001, p. 75). Although no instrument can provide complete reliability and validity, the NGSE has been found to offer the strongest reliability and validity scores of any other instrument in measuring GSE.

Positive Psychology

Positive Psychology began to gain exposure in the late 1990s and early 2000s when Martin Seligman, building off the earlier works and theories of Abraham Maslow, Carl Rogers, and Erich Fromm, focused his term of President of the American Psychologist Association (APA) on the concepts of Positive Psychology (Cherry, 2014). Positive Psychology is the study of positive emotions and behavior and its impact on happiness and well-being. Now known as the founder of Positive Psychology, Seligman encouraged those in the psychology field to nurture talents as a way to treat patients rather than focus on the abnormal and negative behaviors of others (Seligman & Csikszentmihalyi, 2000). Prior to this shift, the field of psychology was largely focused on disease response and trying to mitigate the problems that people faced as a result of shortcomings (Carr, 2011). Just as other forms of psychology, understanding the science that supports the theory of positive psychology assists in understanding its application.

The Science of the Brain

At birth, a child's brain contains over a hundred billion neurons. Many of these neurons send signals to other parts of the brain to make connections or synapses. Over the next 15 years, the human brain organizes these connections that are used often as well as those which are used less often. Over the next 10 years, these connections are refined even further strengthening some connections and allowing others to weaken, resulting in half of the number of synaptic connections as possessed at age 3. Dr. Harry Chugani, professor of neurology at Wayne State University Medical College, described this

process as, “the roads with the most traffic get widened. . . and the ones that are rarely used fall into disrepair.” There is significant debate about if these synapsis preferences are caused by inherited traits or from a child’s upbringing (Buckingham & Coffman, 1999; Coffman et al., 2002). Regardless, some connections, seen as unique personality traits, become more natural and smooth while others do not. This natural evolution does not mean that individuals cannot change after these smooth neurological connections are developed; however, intentional efforts must be exerted to overcome these underutilized connections. Clifton et al., (2006) and Rath and Conchie (2008), along with millions of followers, believe that focusing on overcoming these weaknesses will not be as productive as finding ways to maximize individual’s strengths and, therefore, urge individuals, leaders, and organizations to invest more in recognizing and maximizing strengths.

Peterson (2013) describes the four categories of Positive Psychology as (a) positive experiences, (b) positive individual characteristics, (c) relationships between and among people, and (d) the importance of larger institutions. Positive experiences describe the state of engagement when people are happy and satisfied with what they are doing. Positive individual characteristics refer to individual character strengths such as a passion for learning. Positive relationships refers to the importance of an individual’s relationships with others and the interconnectedness of people. Finally, it is important to understand how an individual influences groups such as families, communities, churches, businesses, and other organizations and, equally, to understand how these groups and

organizations influence individuals (Peterson, 2013). Through positive experiences, relationships, and organizations, individuals are able to meet challenges, address limitations, and experience personal growth, which leads to happier and healthier lives (Csikszentmihalyi & Csikszentmihalyi, 2006).

Although first utilized as a way to treat patients undergoing psychological and psychiatric treatment, Positive Psychology has gained momentum in other fields of personal and team development. Seligman predicted that "in this new century, Positive Psychology will come to understand and build those factors that allow individuals, communities, and societies to flourish" (2004, p. 8). Seligman and Csikszentmihalyi forecast that the "psychology of positive human functioning will arise, which achieves a scientific understanding and effective interventions to build thriving individuals, families, and communities" (2000, p. 14). This continued awareness and emergence of positive psychology is the basis of SBD and interventions.

Positive Psychology is gaining popularity on college campuses even becoming Harvard University's most popular class in 2006 (Goldberg, 2006). It has the opportunity to have a positive impact on organizational behavior (Lewis, 2011). Crabb (2011) noted three important individual engagement drivers that lead to improved employee engagement: focusing on strengths, managing emotions, and aligning purpose. Each of these strategies is consistent with the concepts of Positive Psychology.

Although the field of Positive Psychology focuses on what is good and the positive attributes an individual brings to life, it is intended "to be as concerned with

strength as with weakness" (Peterson, p. 4, 2008) and to be as concerned with helping the everyday person as well as the mentally ill (Seligman, 2004). In addition, Positive Psychology is not intended to be seen as a replacement for other forms of scientific psychology and will continue to be studied for on-going scientific evidence of effectiveness.

The Clifton Strengths-Finder

In 1998, Donald O. Clifton and Tom Rath, along with a team of scientists at the Gallup organization, created the online StrengthsFinder assessment, which was changed to Clifton StrengthsFinder in 2004 in honor of Dr. Clifton's life and death in 2003. Clifton, known posthumously as the father of Strengths-Based psychology, was honored by the APA with the Presidential Commendation in 2002, only one year before his death in 2003 (Gallup, 2014).

Clifton's strengths-approach is an effort to capture what is right with people and organizations and build upon that to create greatness (Buckingham, 2007). After decades of research focused on discovering the origins of human strength and development, the earliest version of the Clifton StrengthsFinder was created by Donald Clifton in 1999 (Louis, 2012) and refined by the Gallup Organization. The Clifton StrengthsFinder is a web-based assessment of talents and personality based on the concept of Positive Psychology. The instrument contains 177 pairs of responses, to which the respondent has 20 seconds to respond. Pairs of responses are presented at opposite ends of a continuum and the respondent is asked to place himself or herself on the continuum based on how each of the choices applies to or describes the respondent. The Clifton StrengthsFinder uses these 177 responses to determine the presence of 34 identified *Strength Themes*, which can be found in Appendix A.

An example of these anchored responses is "I get to know people individually" versus "I accept many types of people." The two options are not meant to be opposites of

each other and, instead, force the respondent to determine which option most strongly describes them (Asplund et al., 2012) as shown in Figure 3. Each question is associated with one or more of the 34 established *Strengths Themes*. "Thus, one response on an item can contribute to two or more theme scores. A proprietary formula assigns a value to each response category. Values for items in the theme are aggregated to derive a theme score" (Asplund et al., 2012, p. 5). The Clifton StrengthsFinder is published in more than 20 languages and more than 8 million people have completed the online personal assessment that measures personal talent (Asplund et al., 2012).

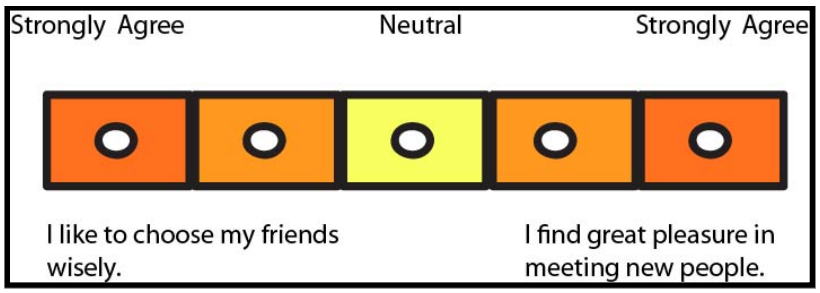


Figure 3 Example of StrengthsFinder Prompts

Content validity refers to how well the instrument addresses the subject or purpose of the study. Since the turn of the 21st century, the StrengthsFinder instrument has been widely used within spheres of leadership, business, and ministry. The realm of education, however, has been the primary setting for strengths development. With more than 8 million participants, the volume of respondents is significant. Finally, the StrengthsFinder assessment has been found congruent with other personality inventories such as the Five Factor Model, and the Sixteen Personality Factor Questionnaire (Louis, 2012).

Because items are paired, the assessment requires the respondent to assign a positive score to one option while simultaneously assigning a negative score to another, potentially unrelated, item option. This occurrence creates an ipsative comparison, which, according to Kaplan and Saccuzzo (1982), occurs when an individual is scored against himself/herself and assigns priority to the individual's needs. Ipsative comparison are also known as "forced choice comparisons." Because less than 30% of responses are scored ipsativey, the means and standard deviation demonstrated that ipsativity is not problematic (Asplund et al., 2012). Also, since single responses are counted multiple times, survey developers tested for issues of multicollinearity and have demonstrated the dataset as non-problematic through further confirmatory factor analysis and cluster analysis offering strong construct validity.

The Gallup Organization sponsored two independent samples to test the reliability of the instrument. Within the study, 46,902 respondents and a smaller sample of 2,219 respondents who were part of a test-retest were compared. The Cronbach's alpha between the two groups were very consistent. Within the test-retest study, 2,219 respondents were contacted to take the Clifton StrengthsFinder assessment but were not given the results of their assessment. Participants were assigned to one of three groups based on when they were asked to retake the test: 1 month, 3 months, and 6 months. The test-retest study demonstrated important consistencies (Asplund et al., 2012).

StrengthsQuest is the development process or journey that begins with completing the StrengthsFinder assessment, but it also includes receiving feedback regarding the

respondent's Top 5 Strengths themes and creating strategies for developing these *strengths* within the academic, career, or relationship environments. After completing the StrengthsFinder assessment, respondents receive a personalized Signature Theme Report, which lists their Top 5 Strengths as measured by their responses. Gallup's research indicates that the common trait of top achievers is their focus on their most dominant strengths rather than spreading their focus too thin. Because of the influence of Positive Psychology, the StrengthsFinder Signature Theme Report only lists the individual's five most dominant talent themes in the order of prominence along with a description of each of these five strengths themes. The Signature Theme Report was developed to facilitate success within the academic and work environments through the use and personal development of an individual's Top 5 Strengths (Asplund et al., 2012; Quinlan, Swain, & Vella-Brodrick, 2012). The Clifton StrengthsFinder is intended to "facilitate personal development and growth. . . . It is intended and used as a springboard for discussion with managers, friends, colleagues, and advisers and as a tool for self-awareness" (Asplund et al., 2012, p. 9). In addition, Gallup (2014), Clifton et al. (2006), and Rath and Conchie (2008) present a context for understanding each talent theme along with strategies for developing talents into strengths.

Clifton et al. (2006) posit several outcomes of adopting a Strengths-Based perspective. First, learning about a person's strengths provides answers regarding individual motivation. Understanding that the strength of Harmony is in an individual's Top 5 Strengths explains why the individual is concerned with how well members of the

group get along with each other and why the individual may be uncomfortable with conflict. Second, discovering a person's strengths points to the connections between personal achievement and strengths. For example, a person with the strength of Significance desires to align their work with tasks that he or she finds meaningful rather than a person with Achiever who takes great satisfaction in all accomplishments, big and small. Next, self-discovery increases optimism and renews personal enthusiasm to reach goals and provides a sense of direction. Simply increasing self-awareness can renew energy and realign purpose in daily work. Finally, increased awareness and understanding of personal strengths increases an individual's perceived potential and confidence level.

Studies have shown that strength-based intervention can have positive effects on individual happiness and fulfillment in adults, even without interpersonal contact (Seligman, 2004, Clifton et al., 2006). Within the last decade, numerous studies have been completed that indicate the positive impact that SBD has on the work environment including performance (Linley et al., 2010), retention (Stefanyszyn, 2007), engagement (Harter et al., 2002; Minhas, 2010), and health benefits (Wood, Linley, Maltby, & Hurling, 2010). Govindji and Linley (2007) conducted a study of 214 college students to examine self-esteem and self-efficacy and their impact on subjective and psychological well-being. The study indicated that participants who use their strengths reported higher levels of subjective and psychological well-being. In a repeated measures study using 240 college students, results indicated that application of *signature strengths* is associated

with improved goal progress and results in psychological need fulfillment and improved well-being (Linley et al., 2010).

There is significant research that documents the impact that SBD can have on participant behavior. Gallup facilitated a follow-up survey to 459 participants who completed the StrengthsFinder assessment 75 days earlier. This follow-up survey contained three specific survey questions measured on a 5-point Likert Scale designed to serve as indicators of behavioral change precipitated by SBD.

The first item was written to broadly measure the impact of strengths awareness on lifestyle. Fifty-nine percent of respondents agreed or strongly agreed with the statement, "Learning about my *strengths* has helped me to make better choices in my life." The second behavioral change survey item focused more specifically on individual productivity as an outcome measure, with 60% of respondents stating that they agree or strongly agreed with the statement, "Focusing on my *strengths* has helped me to be more productive." The third survey item is closely aligned with the field of Positive Psychology. Through this item, 63% of respondents indicated that they agreed or strongly agreed with the statement, "Learning about my *strengths* has increased my self-confidence" (Hodges & Clifton, 2004).

Self-efficacy has had similar positive impacts on participant behavior. One of the most impactful studies on self-efficacy was conducted by Judge and Hurst (2008). This longitudinal study focused on the self-efficacy of 7,660 men and women between the ages of 14 and 22 in 1979. These participants were followed for 25 years to measure

career success, job status, education, and health of the participants in 2004. The results of the study showed that those with higher self-confidence in 1979 had higher income levels and career satisfaction in 2004. Although the high self-confidence group started off with an average income of $3,500 higher in 1979 than the low self-confidence group, the variance continued to increase with the high-self-confidence group earning $12,821 more annually. When asked about the number of health problems that interfere with work, the group with lower self-confidence in 1979 reported three times as many health problems 25 years later compared to the high self-confidence group. Even more surprising, the high self-confidence group reported fewer health problems in 2004 than in 1979. These studies indicate that it is important for leaders to know their own strengths and help others uncover and understand their own strengths. The evidence suggest that individuals and organizations will experience increased growth as a result.

Strengths-Based Development

The concept of using an individual's strengths to promote success and happiness, known as Strengths-Based Development, originates from Positive Psychology. Seligman (2004) explains that the value of SBD is not simply in identifying or classifying strengths, but, instead in applying strengths. Understanding how to employ a strength within an environment creates new opportunities for personal development and growth. Govindji and Linley (2007) explain that use of strengths, rather than simply knowledge, can have a predictive relationship to improved individual well-being. Once an individual

understands how to use his or her strengths, obstacles seem less intimidating and challenging, giving way to increased confidence in personal abilities.

The great management and business theorist, Peter Drucker, explained that "it takes far more energy to improve from incompetence to mediocrity than to improve from first-rate performance to excellence" (Drucker, 2005, p. 2). Drucker, known as the father of modern management, noted that people spend a disproportionate amount of time on fixing their weakness rather than building on their strengths. Rath and Conchie (2008) explain that much more is accomplished in moving strong talents to even stronger strengths rather than focusing on fixing areas of weakness. This simple shift in focus is the basis of SBD.

SBD for the individual focuses on three stages illustrated in Figure 4: identification, integration, and behavioral changes (Clifton & Harter, 2003). Completing the StrengthsFinder instrument is the first step in SBD. This assessment offers feedback regarding the participant's talent themes and is the initial step toward identifying personal strengths and increasing self-awareness. The Signature Themes Report offers suggestions regarding development activities for individual talents.

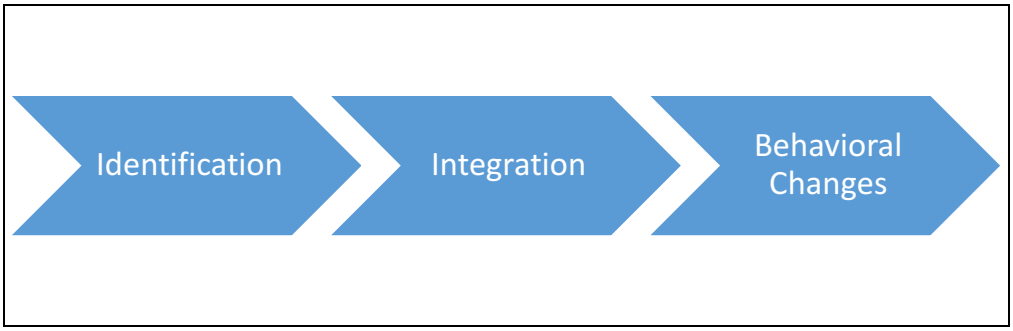


Figure 4 Stages of Strengths-Based Development

The identification stage of SBD involves realizing talents and strengths as areas of excellence while understanding what these strengths look like when applied in personal and professional realms. Often when sharing *strengths* with others, participants gain a deeper understanding of their talents, facilitating an acceptance these *strengths* as special and unique. Learning about *strengths themes* assists in "consciously thinking about how performance can be maximized if behaviors and talents are aligned, adding necessary knowledge and skills, and actively using the talents whenever possible" (Hodges & Clifton, 2004, p. 6). There are two main reasons why participants struggle with identifying and accepting their Top 5 Strengths. First, people do not realize that a strength recognized by StrengthFinder is actually a strength. Instead, individuals may have even previously viewed the trait as a potential weakness. Second, even if an individual understands and views the identified strength in a positive light, the individual does not believe that the trait is unique to him or her. The individual may believe, instead, that everyone, or at least most people, possess this trait.

As participants gain self-awareness regarding their *strengths*, they are able to explain and connect personal behavior indicating that the participant is integrating strengths knowledge into his or her behavior. Once individuals are able to understand how their successes are tied to their unique *strengths themes*, they report greater satisfaction and productivity (Hodges & Clifton, 2004). Individuals can identify strengths through various methods including spontaneous reactions, yearnings, rapid learning, and

satisfaction (Buckingham & Clifton, 2001). Spontaneous reactions are seen as natural reflexes and can demonstrate a specific talent such as a person who naturally introduces themselves to others. Yearnings reveal areas of personal interest such as a desire to learn a new language. Areas of strength can be identified when an individual learns a new skill rapidly. Finally, individuals may realize a strength through the satisfaction gained when participating in an activity. For example, offering a speech may create great satisfaction for someone with the talent of *WOO*, which is an acronym for winning others over.

Once the individual has a solid understanding of his or her *strengths*, SBD can focus on recognizing the *strengths* of others, forming complementary partnerships, and team mapping. These areas greatly expand the participant's *strengths* awareness and knowledge required to maximize their *strengths* within their professional and personal relationships. Improved relationships and interactions with others offer participants a renewed framework for communication. This evolution of SBD is illustrated in Figure 5.

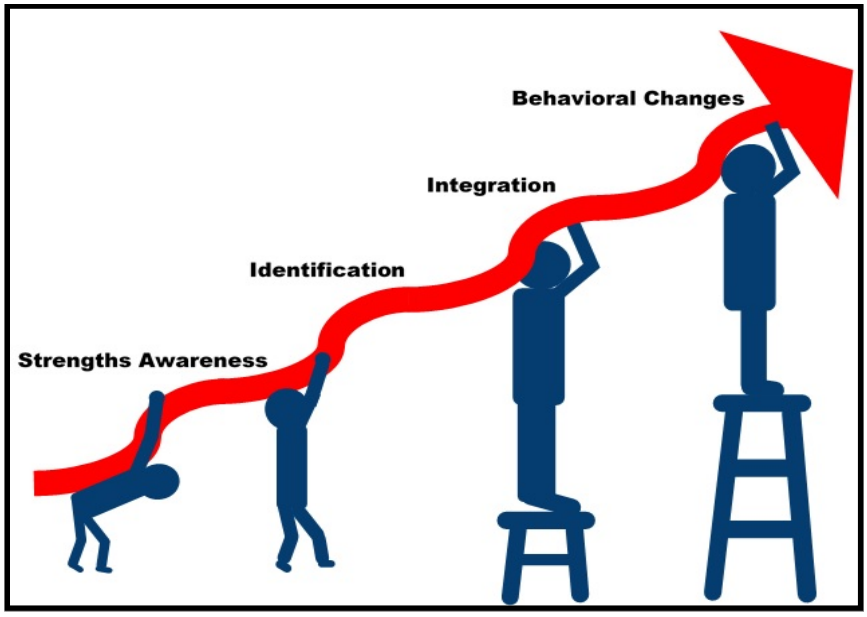


Figure 5 Self-Efficacy Development Methods

There are many books that tailor SBD to individual roles and professions such as employees (Buckingham & Clifton, 2001), sales teams (Smith & Rutigliano, 2003), students (Clifton et al., 2006; Jones-Smith, 2011), faith-based organizations (Winseman, Clifton, & Liesveld, 2004), and organizational leaders (Buckingham & Coffman, 1999; Coffman et al., 2002; Rath & Conchie, 2008). The main focus of StrengthsQuest is discovering personal *strengths* and developing these *strengths* within the academic, career, and relationship realms.

SBD has expanded to include complementary *strengths* interactions and team interactions. In addition, SBD includes Strengths-Based Leadership, which focuses on investing in *strengths*, maximizing the *strengths* of others, and leading others with *strengths*. Because of its effectiveness, SBD has gained popularity over the last decade

and its use has been widened from college students to teachers, nurses, customer service representatives, sales teams, managers, and other business and education leaders (Hodges & Clifton, 2004).

SBD has been used in the corporate workplace setting to influence employee engagement, team-building, and productivity. The Toyota North American Parts Center in California used SBD with their associates and managers in an effort to build effective work teams. Within a year of the SBD sessions, per-person productivity increased by 6% compared to the previous 3 years of productivity increases and decreases of less than 1%. In addition, two teams that participated in more intensive SBD realized a 9% productivity increase over a 6 month period (Hodges & Clifton, 2004).

SBD has also been closely tied to employee engagement on the Q12 Assessment, which contains 12 questions designed to measure employee engagement. A 2001 meta-analysis of 300,000 employees in 51 companies demonstrates that work units scoring above the median on the Q12 question, "opportunity to do what I do best" experience higher probabilities of success on productivity, customer loyalty, and employee retention (Harter & Schmidt, 2002). Clifton and Harter (2003) conducted an analysis of 65 organizations involved in employee engagement interventions; four of these organizations utilized SBD interventions while 61 organizations did not utilize SBD interventions. The experimental group utilizing SBD interventions experienced an increase in employee engagement from year one to year two (d = .65) and an even greater increase from year 1 to year 3 (d = 1.15). In addition, per-employee productivity

increased more than $1,000. Follow-up analysis with those who participated in SBD interventions reported an increased understanding of their fellow employees and attributed SBD for this improved understanding and respect.

SBD has been used with hospital staff to address significant issues with turnover, low morale, and employee engagement. St. Lucie Medical Center employed SBD at a point when the hospital's employee engagement ranked in the bottom quartile of the Gallup organization's database. However, within two years of employing SBD interventions, St. Lucie's employee turnover had declined by 50%, patient satisfaction had increased by 160%, and the hospital ranked in the top quartile of the Gallup organization's database (Black, 1997).

Evidence suggests that SBD has a positive impact on self-confidence and self-efficacy. Two hundred and twelve students at UCLA completed a pretest-posttest study regarding strengths awareness, direction for the future, and level of confidence with an intermediate classroom intervention with a *strengths* coach. Posttest scores indicate significantly higher scores on the posttest, a .23 standard score increase, over the pretest (Stajkovic & Luthans, 1998).

Among the existing research on SBD and self-efficacy in the educational arena, the primary focus has been on middle-school, high-school, and college students. One study focused on the relationship between knowledge and application of SBD and self-efficacy of educational administrators. The population of this study, however, was educational administrators in urban school districts in Southern California (Waters,

2009). This researcher found very little research on educational administrators in the higher education environment, which is the focus of this study. While academic success, attendance, personal motivation, and achievement have been the focus of SBD in the educational realm (Anderson, 2005; Cave, 2003; Clifton et al., 2006; Frame, 2002; Jones-Smith, 2011; Lopez & Louis, 2009), SBD has been demonstrated to have a positive impact on hope, well-being, and confidence levels of participants culminating in positive employee engagement (Akinbobola & Adeleke, 2012; Collins, 2009; Cullen, 2001; Key-Roberts, 2014).

Strengths-Based Leadership

Peter Drucker claimed that trying to improve areas of weakness was less effective than focusing on one's strengths. "It takes far more energy and work to improve from incompetence to mediocrity than it takes to improve from first rate performance to excellence" (2005, p. 4). Despite this observation, most managers and supervisors focus on the former, resulting in a waste of energy, resources, and time. In a 2007 Gallup poll, 68% of U.S. employees claim that in their current job, they are not given the opportunity to "do what they do best every day" (Rath & Conchie, 2008, p. 12).

Organizations and managers who focus on developing the strengths of their employees yield positive results. In a Gallup survey of 1,010 working adults, only 30% of respondents strongly agreed that their organization is committed to building the strengths of each associate; however, 56% of those also stated that their current job brings out their most creative ideas. Conversely, out of the respondents who strongly

disagreed that their organization is committed to bringing out the strengths of each associate, only 10% stated that their current job brings out their most creative ideas. There is no doubt that leaders and managers play a role in how employees view the organization's commitment to strengths of the individual (Krueger & Killham, 2007).

SBD can offer a new language and context for organizational behavior through the implementation of Strengths-Based Leadership. Although SBD gained significant momentum in the last decade, the last five years have resulted in a significant increase in organizational use of SBD via Strengths-Based Leadership. Many organizations have found considerable success in using Strengths-Based Leadership to improve their organizational culture, productivity, and results (Kenkel & Sorenson, 2014; Robison, 2007). For example, instead of hiring personnel for specific tasks and organizational purposes, Facebook recruits the best talent in their industry and spends time and effort matching these personnel to projects based on their skills. In addition, Facebook engineers are required to rotate to a new assignment approximately every 18 months. Demonstrating their commitment to aligning individual strengths with projects, Facebook encourages individuals to form and work in teams around projects of personal interest (Walter, 2013). Companies such as 3M and Google facilitate organizational cultures that promote SBD by providing work time to pursue innovative ideas.

In an effort to better understand what makes the most successful teams, the Gallup organization established four distinct domains of leadership strengths: executing, influencing, relationship building, and strategic thinking. The 34 StrengthsFinder themes

cluster into these four leadership domains as listed in Appendix B. Although it is not important that individuals possess *strengths* in each of the four domains, the most successful teams are well-represented with *strengths* across these four domains (Rath & Conchie, 2008). Those with *strengths* within the Executing Domain know how to make things happen while those who lead with *strengths* in the Influencing Domain have the ability to communicate ideas to a broader audience. People who lead with Relationship Building *strengths* are able to maintain a cohesive group while those with Strategic Thinking leadership skills are able to create a vision for what could be (Rath & Conchie, 2008).

As leaders within an organization, managers have the most opportunity and responsibility for engaging employees and improving employee well-being (Kenkel & Sorenson, 2014; Robison, 2007). One of the keys to Strengths-Based Leadership is to recognize that maximizing the potential for an organization is linked to understanding the people involved in the organization "so that you can make use of their strengths, their ways of working, and their values" (Drucker, 2005, p. 8). According to Rath and Conchie (2008), strength-based leaders invest in their own strengths and the strengths of others, surround themselves with the right people, maximize their teams, and understand their followers' needs. Investing in *strengths* requires leaders to adopt and utilize a *strengths* language and to regularly find opportunities to discuss and discover how their own *strengths* and the *strengths* of others are demonstrated. Strengths-Based leaders focus on strengths-building rather than weakness-fixing or expecting an employee or

follower to become more well-rounded (Hodges & Clifton, 2004). The Strengths-Based Leader considers each person's strengths when determining tasks, assignments, and organizational role. In addition, the Strengths-Based Leader encourages all team members to learn more about their own strengths, as well as the strengths of those around them. Strengths-Based leadership recognizes the advantage of a well-rounded team and encourages others to create *complementary partnerships* (Rath & Conchie, 2008). Finally, Strengths-Based Leaders understand the needs of their followers. According to a study by Gallup of 10,000 followers, there are four clear needs of followers: trust, compassion, stability, and hope (Rath & Conchie, 2008). For an employee to feel trust for his or her leader, the leader must have spent effort in getting to know the follower authentically. Trust increases speed and efficiency in the workplace because there is less time spent getting to know one another. Demonstrating concern and understanding of an employee demonstrates compassion.

In an ever-changing environment, followers need to feel stability from their leader, which can be accomplished by transparency and clarity of goals. "Followers want stability in the moment and hope for the future" (Rath & Conchie, 2008, p. 88). Hope is a powerful motivator and, when absent, can negatively impact confidence and engagement. When hope is absent, followers become discouraged and disengaged. Leaders are often consumed with reacting to problems rather than initiating opportunities of hope.

Strengths-Based Leaders focus on managing individuals in a way that creates the best results for the organization. People who utilize their strengths every day are six times more likely to be engaged in their job than their counterparts (Rath & Conchie, 2008). In fact, managers who focus on an employee's strengths, will rarely encounter an actively disengaged employee. Employees who receive *strengths* feedback are less likely to leave their organization and managers who adopt Strengths-Based Leadership within their organization create teams that focus on *strengths*, boosting productivity, and significantly increasing profitability (Asplund et al., 2012; Robison, 2007). Strength-based leaders "don't ignore employee weaknesses, but fixing them isn't their primary focus" (p. 9). Instead, they work to leverage the employee's strengths (Robison, 2007).

Resistance to Strengths-Based leadership. In his *Ethics* about what is good and virtuous, Aristotle noted that ineffectiveness is characterized by either too little of a quality or too much of it, making it very difficult to attain. Others warn that managers should maintain self-awareness regarding use and application of their *strengths,* being cautious about strengths overuse (Kaiser & Overfeld, 2011; Kaplan & Kaiser, 2009). Two studies completed within the last decade have indicated that improved strengths awareness is positively related to manager performance up to a certain point. After a certain point, improved strengths-awareness provides no further improvement in manager performance and could even result in a drop in performance (Benson & Campbell, 2007; Le, Oh, Robbins, Ilies, Holland, & Westrick, 2011). These studies found that excessive use of a particular *strength* can cause performance problems and lead to ineffectiveness. In

addition, the over-focus on *strengths* can enable managers to ignore areas where improvement may not only be warranted, but also be effective. Such overuse of *strengths* have led some critics to warn of such *lop-sided leadership* (Kaiser & Overfeld, 2011; Kaplan & Kaiser, 2009)

Summary

The historical evolution of Bandura's Social Cognitive Theory, Seligman's Positive Psychology, and Clifton's Strengths-Based Development have culminated in effective and impactful professional development opportunities. Social Cognitive Theory and Positive Psychology are the foundation of Clifton's Strengths-Based Development theory, which has seen considerable success in the business sector as well as the education sector, causing many organizations to become known as Strengths-Based organizations. Current research suggests that self-efficacy has a strong relationship to work-performance and positively influences performance, productivity, and well-being. Based on the literature, there is evidence to suggest that the needs of employees, which includes self-efficacy, can be met with the contributions of SBD. Although SBD has demonstrated positive impacts in several industries, its use in higher education environments have been limited to application with students leaving an unfilled opportunity with higher education professionals.

Chapter III

METHODOLOGY

This study used a sequential explanatory mixed methods design (Creswell & Plano Clark, 2011). The purpose of the study was to determine if Generalized Self-efficacy (GSE) is influenced by participation in a Strengths-Based development (SBD) intervention and to understand why this correlation existed or did not exist. This chapter discusses the mixed-methods research design, including a description of the participants, instrumentation, intervention, data collection, and data analysis of the quantitative and qualitative research phases. Finally, the chapter covers the reliability and validity of the research instruments and the known limitations of the study.

Research Questions

Quantitative

1. What is the relationship between Generalized Self-Efficacy scores and participating in a Strengths-Based Development for higher education professionals?
    a. Are there differences in pretest Generalized Self-Efficacy scores of higher education professionals based on the following

characteristics: leadership level, occupational area, race, gender, and institutional type?

b. Are there differences in posttest Generalized Self-Efficacy Scores of higher education professionals based on the following characteristics: leadership level, occupational area, race, gender, and institutional type?

Qualitative

2. What perceived experiences, characteristics, or events influence self-efficacy of higher education professionals?
3. How does Strengths-Based development influence the self-efficacy of higher education professionals?

Research Design

The methods associated with quantitative analysis are expressions of the mathematical relationship between the two variables. In regards to this study, the quantitative methods were intended to demonstrate if there was a correlation between SBD and change, specifically improvement, in GSE. The mathematical representation of the data not only indicates if there is a correlation, but also demonstrates the strength of the correlation. Based on previous findings of the correlations between self-efficacy and race and gender, these variables were used within this study (White, 2008; Young, 2015). In addition to race and gender, additional participant variables including institutional type, occupational area, and leadership level were used in this study. These variables

were chosen because of their relevance to the higher education environment and were used to understand if the intervention was more or less effective among sub-populations of higher education professionals.

Quantitative research methods require the creation of a null hypothesis. Within this study, the quantitative data analysis provided evidence of the practical effect of the treatment within the study, which was SBD. However, it did not tell the whole story of why a correlation may exist.

Qualitative research designs allowed the researcher to receive rich data that described the variables in more detail than quantitative analysis alone, creating a different lens to understanding the phenomenon. "Qualitative methods facilitate study of issues in depth and detail" (Patton, 2002, p. 14). Further, quantitative analysis was not limited by predetermine categories, and therefore allowed for responses that were emergent. Often, the unbridled nature of qualitative research methods can lead to unforeseen results and outcomes. Despite these advantages, qualitative research methods typically focus on a smaller number of cases, limiting the external generalizability of the findings.

Mixed methods studies should be used (1) when qualitative or quantitative research alone will not adequately answer the question or (2) when using one type of analysis further explains or explores the results gathered in the primary research process (Creswell & Plano-Clark, 2011). Both of these qualifications described the purpose and needs of this study. A qualitative analysis alone could not address the purpose of this study, which was to determine if GSE was influenced by participation in SBD, as it could

not provide evidence that a correlation or pattern in the relationship between SBD and GSE existed or did not exists within the population. Similarly, the quantitative analysis could not provide the necessary platform for exploring how and why the presence or absence of a correlation between participation in SBD and GSE scores existed. Although neither quantitative nor qualitative research alone could produce a sufficient and comprehensive response, a combination of these approaches assisted in mediating weaknesses of each individual research method. Moreover, the synthesis of these two types of data allowed a more rich analysis that provided evidence to suggest how and why a change occurs. For these reasons, it was appropriate to utilize a mixed methods sequential design to answer the research questions. A visual representation of this research design is notated as QUAN → qual. This represents the use of quantitative analysis as not only the first analysis method used within the study, but also the method that carried more significance within the study. Because the results of quantitative phase determined the direction of the inquiry within the qualitative phase, the quantitative phase was given priority. Finally, the results of the quantitative analysis were necessary in order to pursue the answers to Research Question 2 and Research Question 3.

Bryman (2006) offers a list of 16 reasons to utilize a mixed methods approach. At least five of these reasons fit the approach of this study and are presented in Table 1 along with a description of their purpose within this study.

Table 1

Reasons for Mixed Methods Approach

Design Justification	Bryman's (2006) Descriptions	Purposes within this study
Offset	Refers to the suggestion that the research methods associated with both quantitative and qualitative research have their own strengths and weaknesses so that combining them allows the researcher to offset their weaknesses	Quantitative research will address the qualitative limitations such as personal bias while qualitative research will address limitations in understanding the participants' voices and the context of the experience.
Completeness	Refers to the notion that the researcher can bring together a more comprehensive account of the area of inquiry in which he or she is interested if quantitative and qualitative research are employed	If the quantitative strands indicate the presence of a significant change, the qualitative phase will allow exploration into the participant experience. The results of the two phases may support one another or may simply provide two separate views.
Different Research Questions	Refers to the argument that quantitative and qualitative can each answer different research questions	RQ1 will explore if a quantitative difference exists based on the independent variable whereas RQ2 and RQ3 will explore how and why these differences exist or not.
Explanation	Refers to when one is used to help explain findings generated by the other	If the quantitative analysis indicates that a difference exists in the pre-test posttest scores, the qualitative analysis may provide anecdotal evidence, which supports the quantitative analysis.
Context	Refers to the cases in which the combination is rationalized in terms of qualitative research providing contextual understanding coupled with either generalizable, externally	The emergent nature of this study will complement the understanding of the context of participant's experiences.

	valid findings or broad relationships among variables uncovered through a survey.

Quantitative research does not always reflect the context of the participant's experiences, nor does it include the participant's voice. Although qualitative research methods address these limitations of a quantitative approach, qualitative research has other limitations including a higher likelihood of personal bias. In addition, qualitative analysis cannot be as easily generalized because its implications are typically narrowly focused (Creswell & Plano Clark, 2011). The lack of generalizability can leave the reader questioning how the findings can apply in other settings. One advantage of using a mixed method approach was that the weaknesses of the qualitative and quantitative approaches offset one another. Therefore, a mixed methods design was most practical for this study as it allowed the use of multiple forms of inquiry to fully answer the research questions.

The first phase of this study collected quantitative data, which was explored and within the qualitative phase (Creswell & Plano Clark, 2011). The mixed methods design utilized a sequential explanatory design, which reflected the purpose and questions of the study. Although this study utilized a fixed mixed methods design where the quantitative and qualitative methods were predetermined, there were some questions that emerged based on the results of the quantitative research. Creswell and Plano Clark (2011) suggest that an explanatory mixed methods design follow four steps:

1) Design and Implement the Quantitative Phase
2) Analyze results of the Quantitative Phase

3) Design and Implement the Qualitative Phase

4) Interpret the Connected Results

Mixed methods, sequential design can be more time consuming as it requires the quantitative data collection period to end prior to the commencement of the qualitative data collection; however, the additional time and effort required to implement the qualitative phase was justified by the deeper understanding of the data collected.

Phase I: Quantitative Research Design

The quantitative phase of the study utilized a pretest-posttest, quasi-experimental approach to explore the relationship between the independent variable (e.g., SBD) and dependent variable (e.g., GSE). Although true randomized controlled experimental designs allow for increased generalizability, they are not always practical. If random sampling is not possible or practical, quasi-experimental design is most effective. To offer increased external generalizability, a comparison group of higher education professionals was used within this study.

Participants

The target population for this study was higher education professionals within a state in the southeastern United States. Within this quasi-experimental design, there was an experimental group and a comparison group. Because it was not randomly assigned, the comparison group was not a true control group.

In order to maximize the number of responses, the target population for this quasi-experimental design, all higher education administrators within a state in the southeastern

United States, were invited to participate in the experimental Group and intervention. Similarly, all higher education administrators within a state in the southeastern United States were invited to participate in the comparison group (Appendix C). Individuals who elected to participate in both groups were assigned only to the experimental group. According to the 2013 IPEDS data, there were 69,810 people constituting this population representing 92 institutions. This information provided an estimate of the population size.

Recruitment

Participants in the quantitative phase were contacted via email list-servs, professional colleagues, and professional development consortiums. Recipients of this invitation received information regarding the risks and benefits associated with participation in either the SBD intervention or the less intrusive, less time-consuming GSE survey. Gatekeepers for various campuses and professional development consortiums were contacted to encourage participation (Appendix D and E). Participants of both the experimental and comparison groups completed the demographic survey along with the GSE pretest survey (Appendix F). Participants in the experimental group, however, received additional instructions regarding access and instructions for the StrengthsFinder assessment and SBD workshop and activities (Appendix G). Reminders regarding completion of activities and assessments were sent throughout the study to encourage completion.

Experimental Group

Participants in the experimental group were self-selected. These participants completed the SBD intervention including guidance and instruction regarding SBD theory. The SBD intervention included activities designed to further participant's recognition, knowledge, and use of their Top 5 Strengths. All threats and limitations of the study, including the significant time and commitment required for participation, were disclosed to potential participants in advance of their involvement in the SBD. Fortunately, SBD continued to gain support as a legitimate and productive professional and personal development tool. It was important for the composition of the experimental group to mirror the composition of the population as closely as possible so that the results could be analyzed to determine if they could be generalized towards the population.

Comparison Group

Participants in the comparison group were selected using stratified sampling procedures. Stratified sampling can be challenging because it requires that the researcher know the demographic information in order for it to be reflected in the stratified sample. The population of higher education administrators at non-profit institutions in within a state in the southeastern United States was 69,810 (IPEDS, 2013). The characteristics of each group included and were prioritized in the following order: institution type, gender, race, leadership level, and, occupational area.

The primary purpose of the comparison group was to compare demographic information and GSE scores to those of the self-selected experimental group to determine if these characteristics (e.g., pretest GSE scores and demographic information) within the

self-selected experimental group differed from the same characteristics of the comparison group. This information was useful in determining the generalizability and representativeness of the results. In addition, identifying the similarities between the experimental and comparison group assisted in measuring and comparing the results between the two groups.

Data Collection

Participants in the comparison and experimental groups completed an informed consent and a questionnaire that collected demographic data and the NGSE pretest (Appendix F). Given the intention to compare five unique variables shown in Table 2, a target sample size of 150 was established for the experimental group. This number could be accommodated within the OLS regression model as the general rule of thumb requires 20-30 observations for each explanatory variable used within the model without compromising the significance of results (Cross Validated, 2010).

Table 2

Independent Variables (Thematically Grouped)

Demographics		
Gender		Race
Leadership Position		
Level		Area
Institutional Control		
Public	Private	Technical

The first survey was administered to the experimental group and comparison group to collect demographic information along with information about occupational area and leadership level of the participants. The second part of the first survey collected responses to the 8-items on the NGSE. These items were measured on a 5-point Likert scale with a minimum total score of 8 and a maximum total score of 40. The mean of the total GSE score are presented in Chapter 4 along with observations regarding mean differences between categories.

Experimental group participants completed the StrengthsFinder assessment, which consists of 177-paired responses stimulating participants to choose their placement preference on a 5-point continuum with two anchored options that indicate *Strongly Describes Me*. Although not utilized as a measurement of change in GSE scores, the Clifton StrengthsFinder served as an essential instrument within the SBD intervention since completion of the StrengthsFinder assessment was the primary building block of SBD. Administrator rights granted through Gallup provided access to all completed StrengthsFinder assessments along with each participant's Top 5 Signature Strengths. The StrengthsFinder assessment was web-based and the URL, access code, and login instructions were sent via email to participants. This allowed the data received to be stored securely and easily accessed by the researcher for use in Excel and SPSS.

Finally, the third instrument used within the study was a GSE posttest and survey, which contained the previously described 8-item NGSE along with additional questions regarding the participant's perception of the impact of SBD on the participant's personal,

professional, and leadership development (Appendix H). Again this data was collected via web-based survey, which allowed for secure access and easy accessibility for download into Excel and Statistical Package for the Social Sciences (SPSS). To encourage a high response rate, respondents received reminder emails regarding completion of the three data collection phases of the study.

Intervention

The SBD intervention consisted of an on-line assessment followed by two self-reflection assignments, which participants (experimental group) completed prior to the 4-hour in-person training workshop. The StrengthsFinder instrument identified, for each participant, the Top 5 Signature Strength themes among 34 identified talent themes. Participants received notification regarding their *strengths* and access to descriptions of their Top 5 Signature Strengths immediately after completing the StrengthsFinder assessment.

These workshops, offered in multiple settings/locations, were designed to accommodate as many participants as possible. The SBD workshop included a description and discussion regarding the philosophy of positive psychology and SBD. Throughout the intervention, reflection and awareness activities built upon and referenced the Top 5 Strengths descriptions of each participant, along with their associated *strengths* domain. The discussions, activities, and reflections throughout the 4-hour training course focused on four areas: 1) recognition of *strengths*, 2) validation of *strengths*, 3) development of *strengths*, and 4) leadership strategies utilizing a Strengths-

Based approach (Appendix I). After the completion of the SBD intervention, participants (experimental group) completed the GSE posttest. Analysis of the quantitative data informed the selection of individuals for interviews to explore trends demonstrated in the quantitative data.

Data Analysis

In order to analyze the quantitative data, the following five steps were followed: preparing the data, exploring the data, analyzing the data, representing the data, and validating the data (Creswell & Plano Clark, 2011). To prepare the data for analysis, data entry errors were addressed, including missing data that occurred during any of the three stages of quantitative data collection. Where data was incomplete, I determined how the missing data could impact the results. Missing data that represented identifying information about the participant's institutional affiliation was determined based on email address.

Descriptive statistics of the population, experimental group, and comparison group are presented in Chapter 4. The self-selected sample was described on relevant and available data such as total number of participants, gender, race, leadership level, and occupational area. Descriptive information about the experimental group was compared to the descriptive information of the comparison group. Descriptive information about the experimental group was analyzed to determine if the experimental group was representative of the population on relevant variables.

The completion of the 8-item NGSE posttest produced mean scores for each item to be presented along with any observed differences by category; however, more importantly, the posttest scores were compared to the pretest scores for each participant. The third instrument also captured each participant's perception of the personal, professional, and leadership development impact of SBD. This feedback was offered on a 5-point Likert scale as well. Both descriptive and inferential statistics were presented in a summary and table form. Effect sizes and confidence intervals offered insight regarding the practical results (Creswell & Plano Clark, 2011). In addition, the data was reviewed to determine if it was distributed normally. This information was represented by mean and variance tests. Similarly, the NGSE numerical scores of each group were compared using a One-Way Analysis of Variance (ANOVA).

To answer Research Question 1, the mean GSE pretest scores of higher education professionals in the experimental group were compared to the mean GSE scores of those in the comparison group using a *t* test to determine if a difference existed and if the difference was statistically significant. Since the independent variables were represented as categorical data, the mean GSE pretest scores of each categorical group were compared by utilizing a One-Way Multivariate Analysis of Variance (MANOVA). The MANOVA allowed the multiple dependent variables to be compared while still controlling for correlations that existed between dependent variables. This analysis allowed for the comparison of mean GSE pretest scores of experimental group respondents based on institutional type, gender, race, leadership level, and occupational

area in order to answer Research Question 1a. To answer Research Question 1b, the mean GSE posttest scores of the experimental group were tested against the mean GSE posttest scores of the same group using the One-way ANOVA.

In order to analyze the data needed to answer Research Question 1a and Research Question 1b, an ordinary least squares regression (OLS regression) was used because it could accommodate the scale data. The OLS regression analysis allowed the dependent and independent variables to be entered into a model in order to determine the direct effect and interaction effects of the independent variables while controlling for each variable. OLS regression was able to "minimize the sum of the squared vertical deviations of the squared values from the regression line" (Wilson & Keating, 2012, p. 28). This equation is demonstrated by $Y = a + bX$. In order to utilize the OLS regression, the dependent variable data must be ordinal or scale data. The OLS regression assumed the following:

1. The mean value of the dependent variable (X) was a linear function of the independent variable (Y).
2. The distribution of the independent variables demonstrated homoscedasticity.
3. Dependent variables were independent of one another.
4. There was a normal distributions of probability of errors.

The R^2 was presented to explain the amount of variation in the dependent variable, which could be explained by the model and will evaluate the fit of the model.

Further analysis of the GSE pretest and posttest scores were conducted. The paired samples *t* test explored the change in GSE between pretest and posttest to compare the means of the GSE pretest and GSE posttest scores of the experimental group participants within subjects. If a significant change occurred in GSE posttest scores, it could be explored to understand the strength and direction of the change.

Phase II: Qualitative Research Design

The second phase of this explanatory sequential mixed methods design was the qualitative phase. As characteristic of other explanatory sequential designs, the qualitative phase "is designed so that it follows from the results of the first, quantitative phase" (Creswell & Plano-Clark, 2011, p. 71). Because the qualitative phase of this mixed methods design was responsive to the results of the quantitative data analysis, the qualitative research methods were developed with emergent design flexibility. Emergent design flexibility allowed the qualitative data collection to serve a dual-purpose to answer the qualitative research questions focusing on how self-efficacy is influenced, as well as to concentrate on understanding the results of the quantitative phase.

Participants

Within the qualitative research phase, the sample was not intended to be representative of the population. Instead, a smaller sample of the quantitative sample was purposefully chosen using extreme case sampling to focus on the illuminative cases (Patton, 2002). Focusing on illuminative cases facilitated an understanding of the conditions that exemplified excellence. The sample size utilized in a qualitative research

study must be sufficient enough to provide in-depth information about the phenomenon while preventing unnecessary redundancy. In order to explain and explore the quantitative results, individuals included in the qualitative sample of this study were selected from participants in the quantitative phase.

A minimum expected sample size was recommended for planning and budgetary purposes and was "based on expected reasonable coverage of the phenomenon" (Patton, 2002, p. 246). The minimum expected sample size for the qualitative phase of this study was eight participants. By concentrating on the extreme cases, it allowed the researcher to focus on the phenomenon of the study, GSE. This focus allowed an in-depth interview and analysis with cases that represented a significant change in GSE scores as well as cases that represented no change in GSE scores between pretest and posttest. Including less than eight participants in the qualitative sample would not have allowed a sufficient variety of responses to develop common themes. Although a minimum expected sample size of eight participants was established for the proposal, the actual sample size was expanded based on the emergent nature of the explanatory mixed methods design. The sample size was increased in order to continue the analysis of the independent variables in the quantitative analysis that were available in the extreme case samples.

Extreme case sampling strategies were based on the logic that "lessons may be learned about unusual conditions or extreme outcomes that are relevant to improving more typical programs" (Patton, 2002, p. 232). Although individual quantitative sample participants were solicited from all universities and colleges within a state in the

southeastern United States, clusters of individuals from multiple institutions elected to participate. This occurred because specific university teams or departments elected to use the SBD workshop as a professional development opportunity. Extreme case sampling allowed the qualitative sample to be selected from those who have experienced a significant change in GSE as well as those who did not represent a change in GSE, avoiding one sidedness and facilitating a comparison of interviews of different groups. The use of extreme case sampling allowed the researcher to present the justification and anticipated effects of SBD on GSE as well as note its shortcomings or limitations (Patton, 2002). Extreme case-sampling offered the researcher an opportunity to "develop a richer, more in-depth understanding of a phenomenon and to lend credibility to one's research account" (Johnson, 2006).

Choosing the Qualitative Cases

Although the focus of this study was the to explore the relationship between SBD and self-efficacy of higher education administrators, the specific purpose of the qualitative research phase was to understand how these experiences influenced the development of self-efficacy. In addition, the qualitative phase provided an opportunity to demonstrate the interface between the quantitative phase and the qualitative phase by exploring if any of the independent variables of the quantitative phase impact how SBD influences self-efficacy. The Qualitative Research questions for this study are listed below:

RQ2: What perceived experiences, characteristics, or events influence the development of the self-efficacy of higher education professionals?

RQ3: How does Strengths-Based development influence the self-efficacy of higher education professionals?

To understand the experiences, characteristics, and events that influence the development of self-efficacy, the focus of the qualitative study was on cases that experienced a change in self-efficacy between the pretest and posttest as well as the cases that indicated no change in GSE between the pretest and posttest. Concentrating on these illuminative and extreme cases facilitated an exploration of the conditions that influence self-efficacy.

Extreme Changes in Self-Efficacy

In analyzing the pretest and posttest GSE scores of the experimental group, the cases that resulted in the largest numerical change in GSE scores were noted. There were nine cases that exhibited a gain greater than 6 units; however, these cases only represented four occupational areas and three leadership levels. An additional eight cases had a gain of 6 units so these cases were also included in the illuminative cases.

This resulted in 17 total cases that exhibited a gain of 6 units or more between the GSE pretest and GSE posttest scores. Although not all of the independent variable levels were represented in the top 17 cases, this sample represented 6 of the 8 leadership levels and 5 of the 7 occupational areas. Because the quantitative data in this study indicated a significant difference based on the independent variables (gender, race, institutional type,

leadership level, and occupational area), the illuminative cases were reviewed for the presence of the independent variables.

Of the 17 cases, 4 of these cases were the only representative of either a leadership level and/or an occupational area, so these cases were included in the qualitative sample. These four cases represented technical institutions and private institutions. The next cases were chosen from the cases that represented public institutions while also representing leadership levels and occupational levels not already included. This added an additional two cases. These six individuals were initially chosen to participate in semi-structured interviews. However, one participant retired from the institution and declined the request for an interview. Therefore, another participant case was added that represented the same institutional type, gender, and leadership level. These participants represented 5 of the 8 leadership levels, 4 of the 7 occupational areas. In addition, these six participants represented all three institution types and both males and females and are represented in Table 3.

Table 3

Qualitative Sample Selection regarding Change in GSE

Participant	Occupational Area	Leadership Level	Institution Type	Gender
Brian	2	4	Technical	M
Jackie	5	6	Public	F
George	5	4	Private	M
Phil	3	1	Technical	M
Kristy	5	7	Public	F
Harris	1	6	Technical	M

No Change in Self-Efficacy

Cases that resulted in no change in GSE scores were also examined. There were 34 cases that indicated no change in total GSE score. These 34 cases represented 8 technical institutions, 3 private institutions, and 23 public institutions. Because there were more cases from which to select qualitative interview samples, I was able to intentionally select cases that were representative of institution types, leadership levels, occupational areas, and genders.

Of the three private institution cases, one had incomplete information and was removed, leaving one female and one male case. One of these cases was also the only representative of the 5th leadership level listed as Associate/Assistant Directors/Department Head. Both of these private institution cases were included in the qualitative sample as they represented different leadership levels and occupational areas.

Within the eight technical institutions represented in the sample, there were two female cases and six male cases. One of the female cases had incomplete information in the leadership level. The remaining female case was included in the qualitative sample. Noting the leadership levels and occupational areas already represented in these cases, the remaining public institution cases were selected to represent leadership levels and occupational areas not already represented in the previously selected cases. Through this selection process, the selected cases represent two technical institutions, two private institutions, two public institutions, six of the seven leadership areas, and five of the

seven occupational areas. In addition, the six cases chosen included four females and two males and are presented in Table 4.

Table 4

Qualitative Sample Selection Regarding No Change in GSE

Participant	Occupational Area	Leadership Level	Institution Type	Gender
Lauren	5	5	Private	Female
Stacy	7	3	Private	Male
Haley	4	4	Public	Female
Susan	1	7	Public	Female
Steven	4	2	Technical	Male
Terry	2	6	Technical	Female

Data Collection

In this qualitative phase, I explained the quantitative results and explored participant experiences to understand the factors that influence self-efficacy. During the qualitative phase, each individual participated in one-one-one, semi-structured interviews that were recorded. These interviews were utilized to explore themes that influenced self-efficacy and assisted in drawing further explanatory details regarding the effect of SBD on the self-efficacy of higher education professionals.

Instrumentation

The researcher was considered an instrument for the qualitative phase of the study. The interaction between the data-gatherer and the interviewee was integral since the interviewer was the primary data collection instrument (Seidman, 2006). Detailed information via the facilitation of individual semi-structure interviews was gathered, giving more context to the data than in the quantitative phase of the study.

The primary qualitative method used within this study was the face-to-face semi-structured interview lasting approximately 60 minutes each. Patton explains that qualitative interviewing "begins with the assumption that the perspective of others is meaningful, knowable, and able to be made explicit" (2002, p. 340). The semi-structured interview strategy ensured that the same concepts were explored within each interview. Open-ended questions established "the territory to be explored while allowing the participant to take any direction he or she wants" (Seidman, 2006, p. 84). The semi-structure interview design, however, allowed freedom to explore spontaneous inquiry

within a particular focus area. Interviews were audio recorded and transcribed for analysis.

Interview questions utilized subjective, impartial, and open-ended questions. To minimize confusion, I used singular questions that did not merge multiple questions or answers (Patton, 2002). Questions featuring presupposition were utilized throughout the interview guide. These questions gained rapport with the interviewee by making assumptions (Patton, 2002). For example, the question, "can you explain how these strengths are displayed within your current professional role?" assumed that the participant believed that his or her *strengths* were displayed in their professional role. Often, these assumptions can normalize respondent behavior and elicit more genuine response. The interviewer requested that interviewees provide examples and stories in order to understand the participant's unique experience. I limited my own narrated experience as to avoid having an influential effect on the participants' responses.

The semi-structured interview was steered by the Interview Guide, which was made up of six to eight pre-determined, but open-ended questions (Appendix J). Seidman (2006) cautions researchers who utilize interview guides to avoid restricting participant answers to fit into the structure and timing of the interview guide. These questions were created with sensitivity to the need for detail while trying to balance the need to avoid being too intrusive with interviewees. The Interview Guide included an introduction and description of each set of questions. In addition to the questions listed on the Interview Guide, I presented the preliminary results of the quantitative data

analysis and investigated respondent's interpretation of these results through the addition of extra questions. The use of the interview guide allowed for better time management regarding participant interviews.

Many qualitative researchers believe that a qualitative approach should emerge through the research rather than be predetermined (Maxwell, 2013). However, Miles and Huberman (1994) contend that some pre-structuring may be beneficial in focusing qualitative information for comparability by eliminating unrelated data. Although this study utilized a fixed mixed methods design, there were some questions that emerged based on the results of the quantitative research.

Once the quantitative data collection was completed, I analyzed the findings in order to refine the interview questions during the qualitative data collection. Because the null hypothesis was not rejected during the quantitative analysis of the first research question comparing independent variables, I adopted questions designed to understand how self-efficacy is developed and the impact of SBD on self-efficacy of the individual. In addition, because the quantitative analysis of the second research question demonstrated a significant difference in the pretest and posttest scores of participants, I explored factors that may have a stronger influence on self-efficacy. Participants were given the opportunity in the GSE posttest to explain the experiences or personal characteristics that influenced their self-efficacy and the influence that SBD has on self-efficacy of the individual. Most of the participants provided answers to these questions

that were illuminative. Therefore, several questions were added to the Interview Guide to follow up on these descriptions.

Interviews were prepared for analysis primarily through transcribing the audio recordings of the interviews and any observational notes into text format. After each semi-structured interview, a contact summary form was used to collect and summarize general data.

Analytic Procedures

With qualitative analysis, it is most effective to begin the data analysis process as soon as data collection begins (Miles & Huberman, 1994; Seidman, 2006). The intentional overlap between data collection and data analysis offered the researcher the opportunity to course-correct early on and allowed the researcher to fill in data gaps that might have existed. For example, the researcher adjusted the interview guide to include an introduction that recapped the individual's Top 5 Signature Strengths.

The Constant Comparison Method was utilized in answering Research Question 2 and Research Question 3. This method of analysis gave flexibility to answer questions that emerged from prior analysis (Boeije, 2002). The Constant Comparative Method is characterized by its constant and repetitive analysis of qualitative data. Through the cyclical analysis process, data was coded and categorized to demonstrate similarities and differences. Demonstrated in his 2002 analysis of the experiences of Multiple Sclerosis patients and spousal care providers, Boeije (2002) proposed a more-structured adaptation of Glaser and Strauss' Constant Comparative Method (1967). Boeije's multi-step

approach suggested a more purposeful approach to the qualitative analysis than the traditional Constant Comparative Method by focusing "on comparisons between interviews conducted to answer research questions" rather than the use of other forms of external data such as document analysis (Boeije, 2002, p. 408). By outlining the proscribed data analysis structure, other researchers can determine the validity and application of the analysis and results. Utilizing Boeije's multi-step approach, the data analysis for Research Question 2 and Research Question 3 followed four steps, which are outline in Table 5.

Table 5

Description of Qualitative Comparison Steps

	Types of Comparisons	Analysis Activities	Purpose
Step 1	Comparison with a single interview	Open Coding	Determine if participant's answers consistent throughout the interview? Determine if participant offers contradictions in examples of earlier statements? Determine if participant offers supporting examples of earlier statements?
Step 2	Comparison between interviews within the same group	Axial Coding	Search for indicators and characteristics Establish the variables/criteria to confirm similarities. Determine or confirm which interviews are similar. Narrow categories of similarity
Step 3	Comparison of interviews between groups	Develop phenomenon and concepts	Interviews from different groups are compared regarding phenomenon
Step 4	Comparing cases for patterns and relationships	Determining criteria for establishing patterns and relationships	Look for patterns; combine codes and categories connecting themes

Comparing the data within each interview allowed me to determine if the participant's answers were consistent throughout the interview or if some answers conflicted with or contradicted earlier responses. Similarly, I noted if the participant

reiterated or offered additional support for earlier responses within the interview. Although each participant's Top 5 Signature Strengths were reviewed at the beginning of the interview, the participants offered examples of their *strengths* throughout the interview, giving credibility to their agreement or disagreement with their identified Top 5 Signature Strengths. Within the Constant Comparison Method, "comparisons that are highly regarded increase the internal validity of the findings" (Boeije, 2002, p. 393) while homogenous samples can indicate strong external validity when generalized with similar populations and phenomenon.

On-going analysis is characteristic of qualitative analysis and "coding is a good device for supporting that analysis" (Miles & Huberman, 1994, p. 66). Coding, a method of organizing the information gathered into categories, assisted with selecting important data. "If you don't know what matters, everything matters" (Miles & Huberman, 1994, p. 55). Codes do not simply scan words, but are usually "attached to 'chunks' of varying size – words, phrases, sentences, or whole paragraphs" (Miles & Huberman, 1994, p. 56). I determined some a priori descriptive codes, but the need for additional inferential codes materialized during the analysis phase. For example, I anticipated using a code related to *awareness* (AWA) and to further break this code down to *self-awareness (SAWA)* and *awareness of others (AWAO)*. These codes needed to be further developed into comments that were *positive (AW-POS*) and *negative (AW-NEG*). I developed operational definitions of each code, which also evolved from the analysis. Since I was the only researcher within the study, it was not necessary to perform check coding.

Because of the explanatory nature of the research, the initial coding lead to pattern coding where a larger number of codes were reduced to a smaller number of codes or themes including themes, explanations, relationships, and theoretical concepts. Taking data from words offered in interviews to themes developed through pattern coding reduced the amount of data and allowed it to be shaped (Miles & Huberman, 1984). I highlighted vignettes based on participant responses. Vignettes are short narratives that cover a specific focus of a participant's response (Seidman, 2006). In addition, participant responses were developed into profiles and were presented in the interpretation of the data.

Descriptive, thematic, and analytic coding techniques were utilized. Because Research Question 2 and Research Question 3 elicited responses regarding the perceived origins of self-efficacy, the descriptive coding regarding these questions were established using a-priori codes. Coding occurred on a linear timeline where the data was initially coded for descriptive information while subsequent reviews of the data focused on identifying themes within the descriptive codes. Finally, analytical codes emerged from the descriptive and thematic codes.

Because qualitative analysis is an on-going process, I used memoing as an analysis technique. According to Glaser, memoing is "the theorizing write-up of ideas about codes and their relationship as they strike the analyst while coding (1978, p. 83). Miles and Huberman (1994) suggest that the researcher begin memoing as soon as data collection begins and to stop whatever the researcher is doing to take down the memo

without concern for censorship. Next, observations were put into memos during the data collection to capture my gut reaction to participant responses and behaviors. The use of various levels of coding along with memoing strengthened the trustworthiness of the qualitative data collection and analysis because the reader could trace the conceptual evolution of the data analysis.

Ethical Considerations

Upon approval from the Institutional Review Board of Valdosta State University (Appendix J), email requests were sent to higher education professionals requesting their participation in the GSE survey, which was used to establish a comparison group. Prior to beginning the first survey, participants were reminded of the minimal risks and time commitment involved in study. Utilizing an Interview Guide ensured that I treat interviews consistently, introducing questions in a manner that prepared respondents for the interview questions through opening and explanatory statements.

The preference of semi-structured interviews served as a sensible compromise to protect the human subjects involved while providing an opportunity to maintain the desired naturalistic design (Patton, 2002). Prior to the initiating the interview, participants were informed that the interview would be recorded for later transcription and participants, again, received notification of participant risks and time commitment. Each sample participant was able to choose to keep their identity confidential via use of a pseudonym or to "own their own story" by utilizing their actual identity (Patton 2002, p. 411). The latter option will not be offered for cases that may compromise the identity of other study participants.

Points of Interface

The study used a mixed-methods sequential explanatory design to answer the research questions and, therefore, contained several points of interface. First, participants from the qualitative phase were taken from the quantitative participants. Using

participants in the qualitative phase who had participated in the quantitative phase strengthened the validity of the study. Second, results obtained in the quantitative study were used to influence questions used in the semi-structured interviews of the qualitative phase. Finally, per the purpose of mixed-methods research (Creswell & Plano-Clark, 2011), data collected during the quantitative indicated the presence of a statistically significant change while the data collected during the qualitative phases explained the presence of this phenomenon as well as provided support for the relationship between the independent variables and change in GSE. Data from the quantitative and qualitative study are presented in the final conclusions of the study.

Limitations

Despite designing the study to moderate limitations, there were multiple potential limitations of this study. As mentioned earlier, mixed-methods designs are more time consuming and require more human and financial resources to complete the planning and implementation processes. The number of participants in the study were limited by these resources. The SBD intervention required a significant time commitment for the participants. This time commitment likely impacted recruitment and participation in the SBD intervention. Because the SBD interventions were delivered in-person at multiple locations, this process was time-consuming for me, as the researcher, as well.

The NGSE relied on self-rated responses. Strauss (2005) explains that individuals who have a desire to impress others may inflate self-reported scores. This phenomenon is more likely when protecting or enhancing their self-esteem. This may have resulted in

bias in the reporting of GSE and the responses received within the semi-structured interviews.

In addition, quasi-experimental designs can generate concerns regarding internal validity. Even when a positive change occurred between the pretest and posttest analysis, it was difficult to attribute the intervention, alone, as causing the changes to the dependent variable, GSE. Although the change in GSE may not be attributed to the intervention, changes in GSE demonstrate that a relationship existed between the independent and dependent variables and additional support and deeper understanding were gained through the follow up qualitative phase.

To address limitations regarding participation in the intervention as part of a quasi-experimental design, GSE scores of the comparison group were established separate from soliciting participating in the SBD intervention. This prevented the disqualification of any qualified professionals from participating in the intervention while still facilitating a comparison group to measure the generalizability of the results of the intervention analysis.

As with most qualitative research, the limited number of participants impeded the external generalizability of the findings; however, the purpose of the qualitative strand was to explain and explore the results found in the quantitative strand. Therefore, it provided internal generalizability regarding the same population used within the quantitative strand. The validity of the qualitative phase of the study cannot be predicted by the methods. Instead, the evidence produced within the study determined the validity.

"Methods are only a way of getting evidence that can help you rule out these threats" (Maxwell, 2013, p. 121). Within qualitative research, the validity is often conceptualized as the quality and credibility of the research.

Researcher's Position

I have approximately 20 years of experience working in higher education, including various roles in the Student Affairs division from entry level, mid-level, and upper level leadership. Through each of these positions in Student Affairs, the mission and focus was on student learning. Through promotions, my professional responsibilities increased requiring an acknowledgement of the importance of a broadened focus to include supervision and leadership of other professionals.

While investigating best practices for student success in 2006, I was introduced to Strengths-Based learning. Although relatively new, the concept and practice of Strengths-Based learning provided a great framework for meaningful dialogue, learning, and reflection with students. Over the last 10 years, I expanded my knowledge of Strengths-Based learning through additional research, workshop participation, and the facilitation of Strengths-Based workshops. More recently, the focus of my SBD has been on university faculty, staff, and leadership offering more than 120 hours of training since 2012. Although I support SBD as a method of professional development, my authentic curiosity has encouraged my exploration of the participants' experiences.

Summary

The purpose of the study was to determine the effect of SBD on the Self-Efficacy of higher education professionals. The study was a sequential mixed methods explanatory design with the quantitative phase taking priority. Sample participants held a current professional position within the Higher Education environment. The StrengthsFinder assessment and the NGSE assessment were the primarily instruments utilized within the study. Several quantitative statistical methods were used including comparing descriptive statistics and performing a One-Way ANOVA, a MANOVA, OLS Regression analysis, and a paired-samples *t* test. The quantitative results were used to influence the questions used within the qualitative phase of the study. Semi-structured interviews outlined by the Interview Guide provided qualitative feedback regarding the influence of SBD on self-efficacy. The purpose of the study was to understand the effects of SBD on the self-efficacy of higher education professionals, which included understanding how self-efficacy is influenced within this population. Both results were analyzed to develop the final analysis of the study.

Chapter IV

FINDINGS

This chapter presents the findings of both the quantitative and qualitative phases of the study. First, the quantitative analysis is presented including the descriptive statistics of the participants involved followed by the results of the pretest and posttest data analysis to address the first research question, "What is the relationship between Generalized Self-Efficacy scores and participating in Strengths-Based development for higher education professionals?" including a comparison of participant GSE pretest and posttest scores based on the leadership level, occupational area, gender, race, and institutional type.

Next, the qualitative findings are presented, including the analysis of 12 semi-structured interviews with participants from the first phase. Interview data is presented to address the second research question to understand how personal experiences and characteristics influence the development of self-efficacy. The third research question explores the influence SBD has on self-efficacy. This analysis presents emergent these created through the qualitative analysis of the participant interviews.

Quantitative

A Strengths-Based intervention was used to educate participants about the value of building on one's *strengths* to achieve success. The control group only participated in

the GSE pretest to measure their Generalized Self-Efficacy while the experimental group completed the GSE pretest, a StrengthsFinder assessment resulting in the identification of their Top 5 Strengths, a 4-hour SBD workshop, and a GSE posttest. The experimental group and comparison groups were compared on the relevant dependent variables to determine if any differences existed in their GSE pretest scores. Finally, the GSE pretest and posttest scores of the experimental group were compared to determine if a significant change occurred.

Data Screening

Data was screened to address missing data and address data accuracies. If an individual response was missing more than 2 responses from the 8-question GSE test, it was removed. There were 14 cases excluded for this reason. The remaining cases had complete responses on all 8 questions of the GSE pretest. Four cases were identified as duplicate cases within the posttest and were removed. Each of these duplicate cases had similar responses and identical posttest sum scores, which was the primary focus of the posttest data analysis. The data was explored and it was determined via the tests for normality that the data was approximately normal as indicated in Table 6. The data were explored for outliers using the outlier labeling rule (Hoaglin & Iglewitcz, 1987) and indicated a lower demarcation point of 22.1 resulting in the removal of one case. Cases were categorized as members of either the experimental group or comparison group based on their completion of all eight questions on the GSE posttest.

Table 6

Tests of Normality

	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
pretestsum	.131	267	.000	.947	267	.000

a. Lilliefors Significance Correction

Experimental group participants were self-selected into the study and were recruited via email solicitations to key institutional gatekeepers. Two hundred and twenty-five participants volunteered to participate in the SBD process; however, 17 of those participants did not attend the scheduled Strengths-Based workshop and another 30 did not complete the GSE posttest. Therefore, the resulting sample included 178 participants within the experimental group. Ten of the 17 participants that did not attend the SBD workshop did complete the GSE pretest; therefore, these cases were added to the 78 cases included within the comparison group. Finally, one case was removed from the comparison group because the participant was not employed full time at a higher education institution within the state.

Who Are The Participants?

The population of the study was full-time employees at accredited non-profit higher education institutions within a state in the southeastern United States. According to the 2013 IPEDS data, there are 69,810 people constituting this population representing 92 institutions. The National Center for Education Statistics requires that all institutions receiving financial funding or enrolling students receiving financial aid submit institutional data regarding its students, faculty, and staff.

After removal of incomplete cases, the experimental group contained 178 participants; 124 females, 53 males, and 1 person who did not indicate their gender. The comparison group contained 88 participants; 63 females and 25 males. Although 6 classes of race were captured in the demographic study, most categories were represented by only a few cases. Therefore, race was categorized into *White* and *Persons of Color*. There was a significant difference in the proportion of females and Caucasians represented in the experimental and comparison groups than is represented in the population as shown in Table 7.

Table 7

Gender and Race Comparison

	Gender				Race			
	Female		Male		*White*		*Persons of Color*	
	#	%	#	%	#	%	#	%
Population	38397	55%*	31413	45%	43587	63%*	26149	37%
Experimental	124	70%	53	30%	155	87%	23	13%
Comparison	61	70%	25	30%	73	85%	13	15%

	Gender				RACE			
	Female		Male		Causasian		Non Caucasian	
	#	%	#	%	#	%	#	%
Population	38397	55%	31413	45%	43587	63%	26149	37%
Experimental	63	71%	25	28%	75	85%	13	15%
Comparison	126	70%	53	30%	157	87%	23	13%

Significant at the $p \leq .001$ level

The experimental group participants represented public institutions (n = 122 or 68%), private institutions (n = 33 or 18%), and technical institutions (n = 25 or 14%). The comparison group contained 32 participants representing public institutions (60%), 13 participants representing private institutions (25%), and 7 participants representing technical institutions (13%). Institution type could not be determined for 36 participants because this question was not specifically asked on the GSE pretest. Participants from the comparison group (n = 88) and experimental group (n = 180) were classified by institution type according to the name and/or email address when provided. A summary of these groups is listed in Table 8.

Table 8

Institutional Type Comparison

	Institutional Type					
	Public		Private		Technical	
Population	44389	64%	19816	28%	5605	8%
Experimental	32	60%	13	25%	7	13%
Comparison	120	68%	33	18%	25*	14%

	Gender				RACE			
	Female		Male		Causasian		Non Caucasian	
	#	%	#	%	#	%	#	%
Population	38397	55%	31413	45%	43587	63%	26149	37%
Experimental	63	71%	25	28%	75	85%	13	15%
Comparison	126	70%	53	30%	157	87%	23	13%

Significant at the $p \leq .001$ level

The occupational areas and leadership levels of the experimental group and comparison group were captured and are presented in Table 9 and Table 10.

Table 9

Occupational Area Comparison

Occupational Areas	Control		Experimental	
	#	%	#	%
Academic Affairs	21	24%	38	21%
Business Affairs	7	8%	21	12%
Executive Leadership	1	1%	3	2%

Information Technology	8	9%	16	9%
Student Affairs	19	22%	47	27%
University Relations	13	15%	11	6%
Other	18	21%	41	23%

Table 10

Leadership Level Comparison

Leadership Levels	Control		Experimental	
	#	%	#	%
Executive	5	6%	8	5%
Upper Level Management	6	7%	17	10%
Middle Administration	9	10%	10	6%
Directors & Dept Heads	14	16%	37	21%
Assc/Asst Dir. & Dept Heads	8	9%	12	7%
Coordinators & Other Professions	29	33%	54	31%
Adminstrative & Office Support	11	13%	31	18%
Other	5	6%	8	5%

The independent variables within this study are gender, race, institutional type, leadership level, and occupational area. Using a *t* test, the demographic information of the comparison group was compared to those of the self-selected experimental group to determine if the independent variables within the self-selected experimental group differ from the same characteristics of the comparison group. It was determined that no significant differences existed in these variables. The comparison group, N = 88, had 36 participants whose institution type was not provided and could not be determined by the researcher. Despite this, there was no reported significant difference in the percentage of participants based on institutional type. From this, it can be assumed that the self-selected experimental group is not significantly different than the comparison group on these demographic variables of gender or institutional type.

GSE Pretest Analysis

In order to address the first research question regarding differences in pretest self-efficacy scores of higher education professionals based on the independent variables, the differences in mean GSE pretest scores were compared to establish if any of the independent variables have an effect on GSE. Within the GSE pretest survey, participants were asked about their prior experience with SBD. Of the 266 total respondents, only 30% indicated that they had previous SBD and 78% of these reported having less than 2 hours of previous SBD training. Using a one-way ANOVA to compare the mean GSE pretest scores of all participants, there was no significant difference between those who had previous SBD experience and those who did not ($F(1,264) = 2.37$, $p = .125$). This findings showed that participants who had prior SBD experience did not differ from those who had no prior SBD experience on their GSE pretest scores. This could suggest that even if a change was found in SBD experience, it may not have a lasting impact on GSE. Also, this finding could suggest that any changes in GSE scores that occurred were likely a result of their participation in this SBD experience.

Analysis of Other Independent Variables on GSE pretests

The GSE pretest mean scores of all participants were compared based on gender using a one-way ANOVA. No significant difference was found ($F(2,262) = 1.22$, $p = .30$). Female participants had a mean score of 33.93 ($SD = 3.27$) while male participants had a mean score of 34.56 ($SD = 3.18$). In addition, the GSE pretest means of the participants were compared based on eight leadership levels using a one-way ANOVA.

No significant difference was found ($F(7,256) = 1.25$, $p = .276$). Although participant leadership levels ranged from entry level support staff to experienced executive level professionals, the participants GSE pretest scores did not differ significantly based on leadership level. These findings of no significant difference suggest that GSE is not different based on gender or leadership level. If a difference were found later in the GSE posttest scores based on one of these characteristics of gender and leadership level, it may suggest that SBD had a different effect on participants based on these characteristics.

The GSE pretest means of the participants were compared based on institution type using a one-way ANOVA. Again, no significant difference was found ($F(3,227) = 1.54$ $p = .21$). Public institution participants had a mean score of 34.00 ($SD = 3.14$), private institution participants had a mean score of 34.39 ($SD = 3.52$), and technical institution participants had a mean score of 35.19 ($SD = 3.29$). Similarly, the finding of no significant difference established that participants had similar GSE scores regardless of institution type. If GSE posttest scores differ based on institution type, it may suggest that SBD is more or less effective with some institution types.

Significant Difference in GSE pretest Scores Based on Occupational Area.

The GSE pretest scores of the participants were compared based on their occupational area using a one-way ANOVA. A significant difference was found among the occupational areas ($F(6,255) = 2.76$, $p = .013$). Tukey's HSD was used to determine the nature of the differences between the occupational areas. This analysis revealed that participants who were from Student Affairs areas scored lower in GSE ($M = 33.21$, $SD =$

2.97) than participants from Information Technology areas (M = 35.80, SD = 3.01). Participants from the remaining areas were not significantly different from these groups or each other. Establishing that participants from Information Technology areas had significantly higher GSE pretest scores than participants from Student Affairs set a baseline for comparison to posttest GSE scores to understand if the SBD intervention had an equal impact on these groups.

Comparing the Experimental Group and the Comparison Group on GSE Pretest

The GSE pretest scores of the comparison group were compared to GSE pretest scores of the experimental group to determine if there were any differences in these scores prior to the intervention, the SBD process. An independent-samples *t* test was calculated comparing the mean scores of the GSE pretest scores of the comparison group and the experimental group. No significant difference was found ($t(264) = -.1.09$, $p = .236$). The mean of the comparison group ($M = 33.81$, $SD = 3.10$) was not significantly different from the mean of the experimental group ($M = 34.27$, $SD = 3.32$) suggesting that, although participants were self-selected, the experimental group was not significantly different from the comparison group in regards to GSE pretest score as asked in Research Question 1a. Therefore, any significant changes in posttest analysis was assumed to be related to the SBD intervention.

GSE Posttest Analysis

In order to answer, "Are there differences in posttest Self-Efficacy scores of higher education professionals based on the independent variables," the differences in mean GSE posttest scores were compared based on the independent variables to establish if any of these variables have an effect on GSE. The mean of the GSE posttest total score of the experimental group was 35.08 with a $SD = 3.13$ as compared to the mean GSE pretest scores of all participants which was 34.12 with a $SD = 3.25$.

Analysis of Other Independent Variables on GSE Posttests

The GSE posttest means of all participants were compared based on gender using a one-way ANOVA. No significant difference was found ($F(1,177) = 2.39$, $p = .124$). Female participants had a mean score of 34.85 ($SD = 3.17$) while male participants had a mean score of 35.64 ($SD = 3.03$). This demonstrated that SBD did not impact one gender more or less than another. The GSE posttest means of all participants were compared based on race using a one-way ANOVA. Again, no significant difference was found ($F(1,178) = 1.95$, $p = .659$). *White* participants had a mean score of 35.04 ($SD = 3.22$) while *Persons of Color* had a mean score of 35.35 (= 2.48). This finding suggested that SBD did not impact one race more or less than another. Rather, any impact of SBD could be expected to affect *Persons of Color* and *White* persons equally. In addition, the GSE posttest means of the participants were compared based on eight leadership levels using a one-way ANOVA. No significant difference was found ($F(7,171) = 1.176$, $p = .319$) suggesting that SBD is likely to have an equal impact across leadership levels. Any differences in GSE posttest scores were not related to the participant's gender, race, or leadership level.

Finally, the GSE posttest means of the participants were compared based on institution type using a one-way ANOVA. No significant difference was found ($F(2,177) = 1.57$ p = .211). Public institution participants had a mean score of 34.97 ($SD = 3.30$), private institution participants had a mean score of 34.73 ($SD = 2.70$), and technical institution participants had a mean score of 36.08 ($SD = 2.72$). The GSE posttest scores of the participants were compared based on their occupational area using a one-way

ANOVA. No significant difference was found among the occupational areas ($F(6,171) = 1.36$, $p = .234$). Therefore, differences in GSE posttest scores were not related to institution type, or occupational area of the participants.

Additional GSE Posttest Analysis

Even though most of the independent variables within the study did not indicate significant difference in mean GSE pretest scores, these independent variables were also compared against the mean GSE posttest scores. Multiple One-Way ANOVAs were calculated to examine if the independent variables had an effect on the GSE posttest scores. No significant effect was found for any of these variables on the GSE posttest. Levene's test supported the null hypothesis that the error of variance of the dependent variable was equal across groups at .763. Therefore, the null hypothesis was accepted and there was no difference in the posttest GSE scores of higher education professionals based on these variables as asked in Research Question 1b.

Regression Analysis

An OLS regression was conducted to determine if the independent variables were significant predictors of posttest scores. The regression equation was not significant ($F(5, 171) = 1.31$, $p = .265$) with an R^2 of .192. There was no significant difference in the posttest scores based on the independent variables, which suggested that these variables were not a significant predictor of posttest scores. In addition, an OLS regression was calculated to determine if the same variables were a significant predictor of change in GSE pretest and posttest scores. The regression equation was not significant ($F(5, 170) = .985$, $p = .428$) with an R^2 of .168. Membership in one of these groups, such as institution type, or possession of certain characteristics, such as gender did not improve or decrease the participant's likelihood of being influenced by SBD.

Comparing GSE Pretest to GSE Posttest Scores

The paired samples *t* test compared the means of the GSE pretest and GSE posttest scores of the experimental group participants within subjects to determine if the SBD intervention made a statistically significant difference in the scores. The mean on the GSE pretest was 34.15 (*SD* = 3.55), and the mean of the posttest was 35.08 (*SD* = 3.13). A significant increase from pretest to posttest was found (t(179) = -3.45, p = .001). This indicated that the mean GSE posttest score of experimental group participants was significantly different from the GSE pretest. Further analysis of z-scores showed that changes in participant GSE pretest scores and posttest scores that had an increase larger than 4.5 were more than 1 standard deviation (*SD* = 3.62) higher than the mean change of 0.93. Twenty-six participants experienced a change larger than 4.55. This finding of a significant difference in individual GSE pretest and posttest scores suggested that SBD has an impact on the GSE scores of participants. Considering the previous findings of no significant differences among independent variables, this suggests that SBD can impact GSE scores regardless of the race, gender, leadership level, occupational area, or institutional type.

Qualitative

While the first phase provided data analysis to explore the relationship between SBD and Generalized Self-Efficacy in Higher education professionals, the second phase included qualitative data regarding participants' experiences and perspectives about the development of their self-efficacy and how SBD effects self-efficacy. Twelve semi-

structured interviews were conducted with participants from the first phase. Each interviewee held a full-time position within a higher education institution in state. Six of the participants experienced a significant change in GSE scores between the pretest and posttest while six of the participants experienced no change in GSE scores. Of the 12 participants in the qualitative sample; six were male and six were female. These 12 participants were distributed evenly among the three institution types represented in the study. Each of these interviews followed the semi-structure interview guide and lasted approximately 1 hour.

The interviews were, first, transcribed and reviewed against the recordings for accuracy. Next, each transcribed interview was coded using codes that were both a-priori and additional codes which emerged in the analysis. The initial codes were used to create pattern codes, through which themes began to develop. Consistent with the constant comparative method (Glaser & Strauss, 1967), the pattern codes and themes were compared between interviews and participant type to determine if common themes emerged between groups of participants and/or among participants. The codes used in the analysis of the interviews are listed in Table 11.

Table 11

Examples of Codes Used

Codes	Explanation
	Strengths
Affirm-pos	Affirm Strengths in Positive ways
Affirm-neg	Affirm Strengths in Negative ways
Affirm-exa	Affirm with an Example - unprompted
	Self-Efficacy Development
PEX	Positive Experiences
SM	Social Modeling
SP	Social Persuasions
PES	Physiological or Emotional State
Conf-oth	Confidence of Others
LOC	Locus of Control
	Change Discussed
Change-perc	Change in Perception since SBD
Change-beh	Change in Behavior since SBD
Change-sup	Change in Supervisory perception
Change-rel	Change in Relationship with others
Aware-self	Self-Awareness
Aware-others	Awareness of Others
	Challenges in Role
Chall-sup	Challenge of Supervising Others
Chall-w-o	Challenge of Working with Others
Chall-balance	Challenge of Work-Life Balance

After the coding of the interview was completed, participant profiles were created to capture my thoughts and perceptions regarding the interview data. This process allowed me to better understand the participants' experiences regarding the development of self-

efficacy and SBD. The next sections present the following information about the participants:

1. Participant profiles including institutional type, position title, occupational area, gender, years of experience in Higher Education, and GSE pretest and posttest scores.
2. Responses related to Research Question 2: What perceived experiences, characteristics, or events influence the development of your self-efficacy?
3. Responses related to Research Question 3: How does Strengths-Based Development influence self-efficacy?
4. A description of the emergent themes to address Research Question 2 and 3

Participant Profiles

There were 12 participants in the qualitative sample; 6 that indicated no change in GSE between the pretest and posttest and 6 that indicated a change of 6 or more between the pretest and posttest. A table of each participant interviewed along with other independent variable information appears as Table 12. To better understand and capture each participant's experiences, an individual profile was created for each participant that captured their responses.

Table 12

Participant Profile Table

Case	Case ID	Gender	Inst. Type	Position	Occupational Area	Leadership Level	SD	GSE Pretest	SD	GSE Posttest
Brian	RL	M	Private	Assistant Professor	Academic Affairs	Faculty	-0.61	(32)	1.25	(39)
George	GB	M	Private	Director of Career Services	Student Affairs	Director	-0.33	(33)	1.57	(40)
Haley	HC	F	Public	Assistant CIO	IT	Dept. Head	-0.61	(32)	-0.98	(32)
Harris	KK	M	Technical	Research Analyst	Business Affairs	Director	-1.17	(30)	0.29	(36)
Jackie	JS	F	Public	Licensed Psychologist	Student Affairs	Coordinator	-2.58	(25)	-0.66	(33)
Kristy	KKJ	F	Public	Staff Associate	Student Affairs	Office Admin.	-0.33	(33)	1.25	(39)
Lauren	LB	F	Private	Assistant Director of Student Life	Student Affairs	Dept. Head	-0.33	(33)	-0.66	(33)
Phil	PS	M	Technical	Chief Operating Officer	Exec. Leadership	Executive	-0.61	(32)	0.93	(38)
Stacy	SH	M	Private	Director of Athletics	Other	Middle Admin.	0.80	(37)	0.61	(37)
Steven	SF	M	Technical	Chief Information Officer	IT	Upper Admin.	1.64	(40)	1.57	(40)
Susan	SM	F	Public	Program Specialist	Academic Affairs	Office Admin.	1.08	(38)	0.93	(38)
Terry	TH	F	Technical	Director of Purchasing	Business Affairs	Coordinator	0.23	(35)	-0.03	(35)

Research Question 2

The second research question seeks to understand the experiences, characteristics, or events that influence participant self-efficacy. Within the GSE posttest, participants were asked, "what experiences or personal characteristics have had the largest impact on your self-efficacy?" This question was not required, but most participants offered rich responses allowing the researcher to follow up on these responses during the semi-structured interview. During the interview, participants were asked, "On the posttest, you indicated that [insert previous response] had the most significant impact on your self-efficacy, can you explain how this (experience/characteristic) influenced your self-efficacy?" In addition, some participants offered insights regarding how their self-efficacy was influenced during earlier questions within the interview.

Brian

Brian views his strongest strength Positivity as a core value. He explained that he has been able to see his successes, which also contribute to his self-efficacy. Because of his experience, he explained that "I've had some time to establish myself here, I've gained enough experience for people to value my opinion more so I have a little bit more stake in the game. When I say something, people are [listening]. He offered an example of leading an initiative regarding a change in the graduate curriculum and explains that "some of my characteristics aligned my well for that challenge."

Brian said that his self-efficacy is influenced by the feedback he receives in the workplace. He felt that the more he is able to "help out," the more it increases his self-efficacy. When someone tells him he is doing a good job or has a good idea, it motivates

him. He added that it is important to receive this type of feedback on a regular basis. Brian explained that his self-efficacy is higher within the responsibilities of his department rather than larger responsibilities in the University.

Brian showed that some of his self-efficacy comes from his will and tenacity to achieve goals. However, he would not allow his pursuit of a goal to have a negative impact on others, especially those he works with.

George

George's self-efficacy was most influenced by his physiological and emotional state. He explained that he was abused as a child and had no self-confidence or self-esteem. George clarified several turning points in his life where he was challenged by someone saying that he can't do something and that this challenge leads him to work hard at it. George described that he was not a good student before college and that he did not have a good home life. When he was 19 years old, he enlisted in the Navy. Upon leaving, his mother told him, "I just want you to know that you'll never amount to anything you ever do for your entire life." When he went into the Navy, George worked hard and achieved. Later, he went to a 2 year school and worked hard and succeeded.

Despite these successes, George explained that he started at a large 4-year school and no longer worried about the negative rhetoric of his mother, but began questioning "Can I do this? I'm afraid that I can't." He stated that he continued to work hard and did see success, which again had a positive impact on his self-efficacy.

At this point in George's career, he described that seeing good things happen and receiving affirmation that he is having a positive impact has the largest effect on his self-

efficacy. George stated that it was the statement by his mother that drove him to succeed and states "this was a really good thing that happened to me. It really straightened my life out."

In his position, George said that he observes people who are told that they are not good enough for something and he observed that, after a while, "you start to buy into that." George stated that some people "use a negative experience to initiate a need to prove something." George explained that his self-efficacy "happened little bits and pieces at time" with several successes. George explained that he gains self-efficacy through perseverance.

Haley

Haley's self-efficacy has been built through surviving tough situations and "overcoming challenges outside of my comfort zone and being able to adapt and achieve some level of winning." She explained that she became a parent sooner than she had planned and soon after the birth of her first child, her husband had a mental breakdown, requiring her to step up and take more responsibility. Even more recently, Haley described that she survived bad circumstances at work where she felt attacked. "Because of what I had dealt with in the past, I wasn't as afraid to take that on."

Surviving these tough experiences also created a resilience and perseverance in Haley. "Being able to adapt and take a different perspective when things don't go as planned has had a large impact on my self-efficacy. . . It doesn't look like we wanted it to look, but we'll get through it, we'll survive." Haley stated that her self-efficacy allows

her more freedom to accept who she is. "Since taking the test, I have gotten a lot more comfortable."

Harris

Harris believed that he can sometimes still struggle with confidence, but he gains confidence when he recalls the times that he has succeeded and when other's had confidence in him. Harris's self-efficacy originates from situations where other's displayed confidence in him. One of Harris's college math professor's told him that as a math major "you should have confidence to solve any problem or overcome any problem whether its math related or remodeling your kitchen." This professor's confidence in him also contributed to Harris's self-efficacy. This professor further explained that "you can train yourself to solve more complicated problems or overcome more challenges and so forth. And that really helped me to just become more confident in everything really. . . Maybe it was just someone giving me permission to be confident." Harris also remembered that he won the faculty award, which demonstrated other people's confidence in him. Next, Harris has gained self-efficacy through achieving success. Harris explained that finishing his graduate degree and even his undergraduate degree increased his self-efficacy. He stated that "the whole process was helping build a lot of confidence."

Finally, Harris explained that he gains confidence by breaking difficult tasks down into manageable steps. "The only way you can get anything done is to just keep moving forward. So that's what I try to do is do something because if you don't do anything, you'll never get anything done." Harris explained that his self-efficacy is important to his work because he knows that he can figure out the solution to a problem.

Jackie

Jackie said that she builds her efficacy through experiencing successes. Jackie believed that she typically is able to achieve her goals and views these achievements as "evidence that I can." Also, Jackie described herself as perseverant and motivated and credits her drive and work ethic with making her successful. Finally, Jackie credited her Connectedness or faith that things will work out how they were meant to work out. "Well, if it's meant to happen, it'll happen." She explained that her belief in a higher purpose and a belief that things will work out. . . If it's in God's plan for my life then it will happen. So I just try to rest in that place of trust that it'll all be ok."

Jackie explained an example of trying to get into a post-doc program at UGA. She said that she waited too late to complete her application and did not get in the first year, but the letter told her to re-apply so she did re-apply the following year and was accepted. Jackie did not view the rejection as a failure – just a re-direction. "it was a not now." "I felt like I would have gotten a yes had I just had my proposal done." Jackie described herself as having a positive attitude and credits this attitude with allowing her to accomplish more. She explained that she takes intentional actions such as yoga or taking a walk, that are "aimed at improving my mood."

Kristy

Kristy explained that her self-efficacy was both negatively and positively affected by her divorce. At the beginning of the divorce, she did not get along with her ex-husband, which resulted in a significant impact on her self-efficacy and hopefulness about her future. However, Kristy believed that she worked through this tough

relationship, which initially seemed impossible. Kristy described her relationship with ex-husband now as positive and healthy. Working through this relationship issue has resulted in a feeling of achievement, which she says has a positive impact on her self-efficacy.

Kristy explained that having kids also affected her self-efficacy. Kristy also mentioned that when she has stayed up all night with her small child or there is too much to do, it has a negative impact on her self-efficacy because she was not able to work at the best of her ability because "your heart is somewhere else." Kristy stated that getting her current job had a positive impact on her self-efficacy. She explained that she loves working at the University.

Lauren

Lauren stated that her Positivity has contributed to her success. She explained that when looking for a job out of college, she applied for everything "because I was like "well, why can't I do it? And I think in interviews it is a very good quality to have when interviewing because I was able to [sic] it comes across very well to employers when you're positive and they can tell you would be a good team player." Lauren also explained that her Positivity helps with her "drive to accomplish things. She said that "being able to succeed and build your confidence and making sure that you are in the right field and can succeed in the future" contributed to the development of her self-efficacy. Lauren explained that she has an identical twin sister that Lauren described as one of the most intelligent people she knows. Lauren acknowledged that her sister is more intelligent than Lauren is. In addition, they had similar undergraduate degrees of

psychology and sociology. Lauren said that her sister's personality is very different from hers. Lauren explained that when her sister sees a problem, she sees "all the things that could go wrong." Lauren said that she tries to encourage her sister to apply for graduate school, but her sister is "worried about what if she doesn't get a job after that and she's more in debt." Lauren said that these fears prevent her from achieving success and explained that her sister has an undergraduate degree and continues to work as a barista. Lauren stated that her sister "keeps selling herself short because she doesn't have the Positivity to look and say 'it will work out, I'll make it work out." Lauren explained that her sister doesn't feel confident and is prevented from achieving because of this lack of confidence. This story was a great example of how a positive attitude is linked to higher chances of success.

Lauren explained that hearing her colleagues encourage her made a big difference in validating her career choice. "I didn't even know if my measure of success was the correct one. . . That helped me to know I was doing a good job and ease my nervousness a little bit." Finally, being able to "do things my own way" and hearing her supervisor tell her that she did a good job helped her self-efficacy.

Phil

Phil recalled multiple early success stories, including awards and promotions that he credited with giving him confidence in his abilities. Phil described one particular experience in high school where he achieved a goal that he wanted. This goal took significant work. "I focused like a laser beam. . . and I eventually did win that award. It

made me realize if you do the right things, if you prepare well enough, you actually really are capable of anything."

Phil also explained that he has a strong belief in his communication skills and talents, including networking with others. "Nowadays when I'm faced with a situation, I feel like it gives me confidence. And you go through situations like that time in and time out and I think it gives you confidence that you do have the ability to do that." Phil goes on to explain, "I feel like if I focus on something I can force it to happen, particularly if it's a finite amount of material." Although most of his *strengths* were easy to acknowledge, Phil further explained that he was "pleasantly surprised" by his Arranger. He was encouraged to see this strength identified in him. This gave him confidence.

Stacy

Stacy described his childhood growing up as overweight with divorced alcoholic parents. He explained that he was bullied regularly. He believed this experience made him feel that he has to "win to feel equal. . . I have to be successful to be on par." Stacy says that this adversity during his childhood gave him confidence in the challenges that he can overcome.

When asked about how effective he is at attaining goals or addressing difficulties, Stacy explained,

> that he has to deal with controlled variables vs. non-controlled variables because when you set goals there's certain things you can control in achieving these goals and certain things you can't. . . so things that I can control, I'm very pleased with

our ability to attain goals. When I set goals based on what others say that they are going to do and they don't do that, I get extremely upset.

In response, Stacy attempted to be very creative in how he uses the resources allocated to him in order to achieve success. Stacy observed that this level of good management is seen less frequently in education than in business and believes this is due to a lack of training regarding managing others.

Stacy explained that his belief and faith in God is an area where he derives a lot of self-efficacy. His faith tells him that God will help him through anything. Therefore, he believed that he is not working alone in any effort. Also, Stacy believed that overcoming difficulties has built much of his self-efficacy. He explained that failures can breed confidence. "I don't know how you become confident unless you go through a lot of failure. It's really arrogance more than confidence if you haven't failed." Stacy explained that he has had lots of failures early in his career and these failure taught him how to do things right. Stacy says that he now "hates" failing and it is the fear of failure that drives him to be successful.

Steven

Steven had confidence that he could influence his team and constituents to believe in his abilities and he believed that he gains the trust of others through showing his successes. "We've built a reputation with all the successes we've had." Steven believed that to lead successfully, he needed to communicate his vision and get others to "own it" by finding a champion. Finding a champion increased his confidence that he and his team can overcome obstacles.

Steven attributed his self-efficacy to his "self-motivation, determination, and initiative to get things done," which he believed was innate. He stated that he felt comfortable taking risks and encouraging others to take risks. Steven explained that he was given opportunities to take risks early. He had opportunities to "take ownership and lead the effort." He explained that he wanted to be on the "building edge or a leading edge, rather than waiting for everybody else to do it right." He explained, "I know nobody's doing that yet, but that's what we're going to do and now everybody's doing it."

Steven described his philosophy of failure. "One of the first things I tell my guys now, one of our first rules is 'if you break it, you fix it' and we'll be here to help you. . . I encourage them to go take chances." Steven said that he believed in "failing and failing fast. If it doesn't work, great, let's go do something else. As long as we're making success more often than our failures and we're getting the big things right, it's OK to fail." When asked about his failures, Steven readily offered several examples of projects that did not achieve their intended outcomes and quickly offers an explanation of each. However, he did not dwell on these and quickly moved onto "Plan B." Steven explained that "getting there is more important always than the path we take. So just because this path gets log jammed doesn't mean we can't find another way."

Steven believed that he and his team can accomplish goals through repeatedly trying new things and not giving up. Personally, Steven believed that he can accomplish most anything he wants to through many attempts. He explained that some things he

hasn't accomplished was simply because something else was a priority. Some goals he simply needed to postpone.

Steven explained that his self-efficacy was influenced by several key people starting with his dad, who he described as entrepreneurial. He credited his childhood martial arts teacher who taught him to always keep moving and be productive. The teacher explained that it is important to always maintain a positive approach and belief that you can accomplish your tasks.

Steven also referenced a physics teacher in college who told him that "anybody can be good at what they do. You want to be an exponent of your craft." Steven believed that this requires taking risks. "You're never going to come up with a bug win unless you take some risks. It just doesn't happen."

Steven referenced a boss who told him one day that the team relied on his input to make a specific decision. This boss referred to him as a "natural leader" and this made a significant impact on him, causing him to realize that the can make a big impact. "I don't remember the date, but [remember] him pointing that out at one of our meetings enacted that change." From this experience, Steven explained that he realized that he didn't have to hold a position of authority to be a leader. He had an important influence on others.

Steven explained several job opportunities where he was given the freedom to build something. He explained that experiencing those successes had a positive effect on his self-efficacy. Further, Steven mentioned several people in his life and career that have had confidence in his abilities. Their confidence in him gave Steven more confidence in his abilities.

Without prompt, Steven offered several examples of how he and his team were able to achieve success through taking risks. He explained that in his team's largest successes, they were able to achieve some quick successes, "quick capital returns," which set them up for larger successes and created trust.

Some of his early influences encouraged Steven to take risks, which, he explained, led to an increased self-efficacy. "I have been blessed to have many opportunities to tackle large, complex projects. Many were successful; some were failures. I've had the ability to work through failures, make corrections, salvage the projects or turn it into a success. These experiences have given me the confidence to know that I can succeed."

Susan

Susan found yoga training to have a more positive influence on her self-efficacy and described this advanced training as a "pivotal turn" in her mentality. Susan explained that the advanced levels of yoga involve dualism of believing in God and that God is part of everything. Susan explained that this change in her thinking led her to be more positive, be a better role model for her daughter and to be more conscious about her own thought process and how she treats others.

Susan claimed that she "needs others affirmation." In talking about her positivity strength, Susan talked about hearing other people affirming her *strengths*. "I just hear it. In my review, in what people tell me. . ." Susan stated that she brought up the *strengths* training with her sister and it made her consider if Susan and her sister both have

Strategic in order to deal with their mom. Susan explained that her mother has a mental illness and she and her sister struggle with handling her.

Terry

Terry explained that her son has *Down's syndrome* and she is able to celebrate the small things that he is able to accomplish, which is characteristic of one of her Top 5 Strengths, Developer. Although she thought that this talent is natural for her, she believed that her son's circumstances have fortified this strength.

Terry has a strong faith "in a higher power" and believes strongly that there is a purpose behind each thing that happens. Because of her faith in God, Terry explains that "no matter what, I will get through it and no matter what there's a reason for it. It's what gets me through dealing with difficult challenges like that, knowing no matter what we're going to get through it and there's a reason behind it.

Terry's explained that her self-efficacy was largely influenced by her grandmother's influence. Terry explained that her grandmother, who she lived with, had a significant influence on Terry. She was able to watch how her grandmother responded to challenges. Therefore, her grandmother's faith influenced Terry's faith.

Terry's grandmother provided encouragement to her, especially at times when she most needed it. She explained that when her son was born, Terry's grandmother said,

> Don't you worry about that. God does things for a reason and you don't know what his reason is for giving you this particular son. But, maybe he gave him to you because he knows you're going to be able to take care of

him and make sure he's ok. So don't worry about what they're saying right now because it's going to be ok in the end.

Terry explains that her grandmother also encouraged her to leave Savannah and move to Atlanta saying, "you just have to go out there and do it and believe that you can." Her grandmother's confidence in her gave Terry more confidence in herself.

Having a child with *Down's syndrome* has influenced Terry to believe that big things can be accomplished through celebrating small things. Terry further explained how many steps it took for her son to learn how to walk. This experience created a tenaciousness in her spirit. Terry explained that because of the resilience developed through challenges, she believed that she has the ability to stay focused on her goals and keep working on achieving small steps. In a conversation about getting a college degree, Terry explained to her daughter that "it doesn't matter how you get there, as long as you get there."

Terry stated that her faith, which was influenced by her grandmother, showed her that "no matter what obstacles, you just keep forging forward and it will work out." Because her faith tells her that things are going to work out, Terry continued to persist towards achieving a goal. Terry stated that "no matter on the good days, the bad days, or the terrible days, I'm going to get through this day and it's going to be OK in the end."

Research Question 3

The third research question explored the participants' perceptions of how SBD influences self-efficacy. In the early part of the interview, participants were asked more general questions about their SBD experience through questions, such as

- *Please describe your Top 5 strengths in your own words.*
- *Can you describe your experience from your SBD?*
- *What descriptions or activities within the SBD were most influential/meaningful to you?*

Some participants were able to offer responses to these general questions that explained how SBD affected their self-efficacy. Because these questions were less obtrusive, answers were more authentic

Within the GSE posttest, participants were asked "How has SBD influenced your self-efficacy?" Again, this question was not required. The researcher was able to follow up on these responses during the semi-structured interview. Finally, participants were asked, "How, if at all, do you think your participation in the SBD program affected your self-efficacy?"

Brian

Brian explained that one of the challenges that he faces in his current role is "a lack of mentoring, a lack of direction, and a lack of support." He explained that when he is teaching his classes, no one checks on him or evaluates what he is teaching or how he is teaching it. "Who knows what I'm doing, who knows what I'm teaching." Brian suggested that it would be helpful to have more feedback from various levels of leadership – low, mid, and upper and that SBD could be a very effective tool for individuals and organizations, but "it would be difficult to use something like that without some significant clarification and understanding" as well as "transparency of why we're implementing it."

He explained that the philosophy of SBD encouraged him to "concede" some weakness areas that weren't harmful. Brian said that once he was more aware of his *strengths*, he was able to see how they have helped him be successful. This new realization increased his confidence level and encouraged him to speak up sooner when he feels that he can contribute.

George

George explained that he could easily affirm all five of his *strengths*. The 5th *strength,* Strategic, was one that he was surprised to learn about, even though he can identify it in his personality. He stated that "once in a while, somebody will say something to you and you think, 'I've never thought about it like that." George explained that he views the word "strength" as stating that you have an advantage or are better than someone else and he explained that "people are all special, but I don't think that you're any better than I am." George believed like he uses all of his *strengths* regularly, but believed that one particular strength, Empathy, he used most often in his role as a career counselor.

One of the challenges that George faces in his role is when students come in to his office and they "didn't get what they wanted and they weren't thinking about anything else and they breakdown." George explained that in order to overcome a challenge or difficulty, he needs to "buy into it," but he believes that rarely is there an obstacle that he can't get over. George explained that SBD creates more self-awareness.

Haley

Haley affirmed each of her *strengths*, but explained that she was disappointed with them initially, preferring to possess other *strengths* instead. "In the beginning it was sort of a shock to see some of this, but it was more like being presented with the truth." Haley easily gave examples of how she sees her *strengths,* such as Adaptability, Deliberative, and Harmony, used in her approach to her job. Haley stated that other people could also point out areas where her *strengths* are demonstrated.

One of the challenges that Haley faces is being a woman in a predominantly male industry and the stereotypes she experiences from her colleagues. "It appears ok for them to have that tough exterior. When I bring it, it's something completely different. . . I'm the woman, the girl. Of course, I'm not going to cause a ruckus. So when I do, that becomes an issue."

Another challenge for Haley was managing people who are very technically focused. Also, she experienced challenges in learning the group and building trust. Haley stated that she had the ability to see the big picture and adjust her goals accordingly. She explained how her team set five goals for the year, but Haley realized during that time that they would not be able to reach the second goal because she yielded the necessary resources to another priority outside of her team. "It was a loss for our team, but was a win for the larger group."

Haley explained that when faced with a difficult situation, she needed time to think. Once she had time to think about the problem, she typically sought advice from those she trusts, wanting them to "poke holes to help me make up my mind." Haley appreciated the honest feedback of others that she trusts. Haley described SBD as a "huge

return on investment" and explained that she wants to have more of her team participate in the SBD instrument. Haley explained that she also can affirm the strengths of others that she knows.

SBD helped Haley to see how other people's traits are strengths for them and to understand other's people's perceptions. "Taking it with people I work with has been helpful, especially in coming up with disagreements. It's easier to say we're disagreeing because of this." She gave examples of conflicts that occur and how she is able to understand why others have a different approach or priorities.

Since taking the instrument and participating in the SBD in December, Haley said, "I find myself thinking back to this a lot of times and saying 'I'm stronger in this or I'm not as strong in that." SBD helped Haley to shift her perspective on skills that she possesses that are often characterized as "soft." Haley was now able to sees these as a way to contribute to her team. "My soft skills are really strong. . . Since I have come to value these, I see them differently than I did before." Haley said that she has "come to embrace these things [*strengths*] and how they work together as a team." Haley stated that "moving forward, I've learned to balance my *strengths* and leadership role."

Harris

Harris quickly affirmed his *strengths* and how they are used in his current role. "I knew I was a Learner. . . In fact, I have been working on a process modeling; modeling different processes in the school. . . This also satisfies my analytical." Harris described his *strengths* as a "perfect fit for my job."

Harris explained that SBD helped put his "strengths into words. I understand them a little better." He explained that SBD made him more aware of his strengths, although he could not be sure that they were created out of his math training and experience of if he was drawn to math because of his strengths.

Harris seemed very comfortable with challenges and seems to look at challenges in a positive way, as an opportunity to solve a problem. He explained that working to solve a problem is something he learned in math. Harris described that he is most rewarded when working to solve problems that have not been solved before or if he can use them in a new context. Harris explained that he is typically more effective at challenges and reaching goals that are new and different rather than repetitive. Goals that are repetitive or something he has already accomplished previously were more difficult to achieve because his interest is less.

Jackie

Jackie was able to discuss and confirm each of her Top 5 Strengths. She was able to offer examples of these *strengths* throughout her interview without prompt. Jackie explained that, prior to SBD, she saw these *strengths* as characteristics, not strengths. Instead, she thought that "hard-working" and "perseverance" were her strengths.

Jackie's challenges were related to balancing personal and professional needs and responsibilities. Jackie explained how the SBD encouraged her to view these characteristics as strengths rather than weaknesses. "If I can see these as weaknesses then I can't use them as strengths. To shift the viewpoint and focus on how it can be a strength I think really impacts self-efficacy."

Jackie was approaching a life transition period and referenced that she learned to leverage her *strengths* to make herself happy in her current role by introducing new challenges which feed her Futuristic *strength*. I have incorporated "Futuristic vision into my job so I can feel more satisfied with where I am." Jackie said that her behavior change was hard to pin point. She frequently referenced that she believed that SBD "plants the seed" and most of the change occurs subconsciously.

Kristy

Although she was respectful and compliant to participate in this follow up interview, it was clear throughout the interview that Kristy did not understand or believe that SBD or knowledge about *strengths* had any impact on her work or self-efficacy. Kristy stated that she doesn't believe in spending time learning information that does not seem relevant. She offers an analogy, "If you're going to be a lawyer, and you need your English and Math class, but you've got to take Art. . . What's the purpose? Why is a lawyer taking art classes? I never understand that."

Kristy had taken the StrengthsFinder instrument and participated in the workshop previously. She had three different *strengths* in her previous experience, which was almost 5 years ago. Kristy focused a lot on which *strengths* she did not possess in her Top 5 Strengths per the StrengthsFinder instrument and seemed envious of *strengths* that her colleagues possessed. Kristy affirmed three of her *strengths* (Positivity, Achiever, and Includer) and did not affirm two others (Learner and Input). Kristy explained that her Positivity is described as "my glass is always half full."

Kristy stated that she does not understand how it benefits people to "talk more about themselves. I just don't see how this is benefiting me anywhere." In speaking about how SBD was used as a professional development activity, Kristy said "I just feel like you're here to do a job, and you do it and even if you don't get along with people, you just do what you're supposed to do and go on about your business."

Lauren

Lauren stated that she agrees with her *strengths*. Throughout the interview, Lauren provided examples of how these *strengths* were used in her current role. She viewed her strongest *strength*, Positivity, as part of her personality, but was surprised to learn and view it as a strength. Lauren used the word "frustrated" several times in describing how others view and respond to her. She explained that her relationship with others present the largest challenges in her current role. Lauren described many people that she has difficulty working with as having "strong personalities" and describes her feelings as "frustrated" when working with them. She referenced her supervisor as a "strong personality" as well as several of the student leaders that she worked closely with. Although she did not supervise any professional staff, when considering how she worked with her student leader with a "strong personality," Lauren said that she planned to meet with the leader and explained "how she can change her personality" to be more effective.

Lauren believed that she will use SBD to make some changes to her leadership, but wasn't as sure about how or when she might achieve some of her other goals such as getting her doctorate and obtaining a new position. Lauren explained that she would like

to become a Vice President of Student Services one day, but she did not know what intermediate positions or experience that she might need to obtain it. She said that she felt that after time and experience she could meet the responsibilities associated with a Vice President but she seemed concerned about how she would have the influence that she sees her Vice President possessed.

Lauren's experience with SBD had an impact on how she viewed her *strengths* and attributes. She stated that the biggest lessons learned through SBD was increased "self-understanding." Lauren stated that she did not have "to tone myself down" to be successful and described this is as a new realization.

Phil

Phil affirmed his Top 5 Strengths. He explained that his "cognitive skills seem to be clicking on all cylinders when I have my Positivity engaged." Phil stated that Positivity is his strongest *strength* and was a significant part of who he was. Phil demonstrated an awareness of how his *strengths* affect his own emotions and responses. He described several circumstances where circumstances could negatively impact his Empathy and Positivity and that this impact can seem devastating.

Phil has experienced using a similar instrument called Emergenetics in identifying areas of strength and talent. He was very complimentary of the instrument, but felt like StrengthsQuest was a simpler method. Phil described that one of the challenges that he had experienced in his current role was building trust with others. He believed that SBD helped his team to understand each other better. Another challenge in his current role was that team members were very mission driven and were invested in the institution's

mission. Therefore, "there's so much passion in it sometimes, the stakes are higher. . . at some point, you're not going to get it right and I think it hurts more." Phil explained that he believed that he can use his *strengths* to "help people with their challenges as it relates to being part of a mission-driven organization."

SBD has made Phil realize how much his *strengths* affect him. This new understanding provided an explanation for why he can be brought down or negatively impact by external circumstances. "I now know why I was having such a difficult time. Basically, those muscles were being worked harder than ever." SBD helped Phil to

> learn more about these five areas. I think what has happened, it has enlarged my fuel tank a little bit more. It's reminded me to play to these strengths more. If I'm having a bad day, I need to go back to this and remember what my number one strength is and employ it. Whether it's doing things personally or professionally, we have a lot of arrows in our quiver and you've reminded me what the best areas are. I think I'll access them a lot faster and quicker now because you reminded me what my good ones are. . . I've redoubled my efforts in producing even more Positivity and Empathy, which I think will bode well for the future.

Phil stated that he now realized situations where others have relied on his *strengths* to support them individually. He described leading his team during an economically tough time when the institution's future was uncertain. He stated that he realized that people would ask him how he felt about things rather than how he thought about things. Phil believed that people were dependent upon his Positivity to bring hope

to the team. Phil also explained how he used his Empathy to "bring people together on issues because there is a lack of Empathy on either side."

Stacy

Stacy agreed that the *strengths* described him well. He currently supervised 10 people directly. He believed "managing people" was a large part of his role. He valued a diversity of ideas, personalities, and strengths as a way to build a successful team. Stacy stressed the value of communication with those he supervises. He explained that clarifying expectations and offering regular feedback to others was essential to managing or leading others. Stacy also believed that a good manager was able to get others to believe in and "emotionally connect with the mission and the purpose of the institution."

Stacy explained that dealing with administration who do not follow through on their promises was his largest challenge or frustration in his current role. In his opinion, this lack of follow through spoke to the organizations integrity and character. Stacy also mentioned "managing people" as a challenge, but he felt very competent in meeting this challenge.

Stacy explained that he is "very confident" in his ability to achieve goals when he was able to control the variables such as people and money. Conversely, when he was not able to control the variables, he was not always able to achieve goals and this issue was very upsetting to him. In response, Stacy attempted to be very creative in how he used the resources allocated to him in order to achieve success. Stacy observed that this level of good management was seen less frequently in education than in business and believed this was due to a lack of training regarding managing others. Stacy explained

that self-efficacy helped him to prioritize and "not waste time on the small stuff anymore." He described that without self-efficacy, a person can find themselves getting distracted by the trivial things. "There's not a job I couldn't do and do well at a championship level."

Stacy agreed that his Top 5 Strengths described him well. His Responsibility *strength* to stand out the most. Stacy believes that all of his *strengths* center on "getting things done." He also describes how each of his Top 5 Strengths suited his career choice well, giving him opportunities to stand out.

Stacy believed that the value of SBD was in validating what you know about yourself. SBD helped to develop more confidence by validating "what I thought is true about myself. And that I should lean on those *strengths* and try to have people around me that can help carry the bucket that I'm weaker in."

Steven

Steven wanted to understand enough about the people he works with to know how to connect with them relationally and professionally. He credited his relationships with others as a strategy of success as a leader as he feels successful in motivating others. Steven explained that he "tries to be a student of incentives for people and find out what makes them tick."

Steven supervised four people directly with 16 in his direct department and another 150 team members under these areas. He described himself as a highly motivated person. Steven affirmed each of his Top 5 Strengths and could easily give multiple examples of how he used his *strengths* in his professional and personal life.

Steven spoke of gaining a new understanding of how to see others *strengths*. He spoke of the need to "pair up with." He "needs someone" to possess some of the *strengths* that he was missing. As a supervisor, he desired to understand those he supervised better so that he can understand their motivations. "A lot of times, it is finding what their *strengths* are and how I can utilize those people. . . they need to exercise those *strengths* for them to feel like they're getting something done."

One of the challenges that Steven experienced in his role was maintaining the relationships needed to influence others. He spoke of the need to visit with his staff in the field often enough to maintain a good repo ire while also maintaining the relationships with those above him who he needed to build trust and confidence. Another challenge was identifying how to work with different people. His strategy was to find out what incentivized them and to communicate his expectations. Changes in personnel presented another challenge. Steven mentioned that his institution experienced several retirements of key people in leadership. Learning how to relate to new supervisors was challenging. Another challenge that Steven experienced in his role was making decisions that reflected the big picture and conveying to others the priorities and where they fit in.

Steven explained that SBD developed an "increased awareness of the things I'm good at has given me the things I can focus on." SBD encouraged Steven to seek out people that have the things that I lack. Steven explained how he has used information about his colleagues and supervisors' *strengths* to understand how to communicate with them. He referenced his newest supervisor who Steven learned doesn't want to hear about the details.

Susan

Susan was very nervous about the interview and showed signs of discomfort throughout the interview. She explained that she was reluctant to participate in the assessment because she does not enjoy analyzing herself. Susan confirmed the presence of each of her Top 5 Strengths identified by StrengthsQuest. She was able to confirm examples of how these *strengths* were seen in her behaviors, but she did not seem to feel that these *strengths* contributed to success.

Susan explained that one of the challenges in her professional role was in handling "drama" within the department. She explained that because of the make-up of her department, there was a lot of drama that she ends up hearing. Susan explained that she would rather not know some of this information because it caused her to worry about how the issues will affect everyone.

Susan also referenced a challenge in supervising her staff. Susan explained that she felt that she had the right people in the right positions except for one person who needed to retire because she was not able to do her job anymore. Susan explained that this caused other people to try to do her job for her and Susan had advised these people to allow the person to do her own job or retire.

Terry

Terry currently supervised six people directly on her team. In her current role, Terry recently used her *strengths* to "take a leap of faith" on adding two new people to her staff that did not have the most experience and knowledge, but exhibited what she referred to as "ummph power." Terry realized that not everyone would feel comfortable

taking this risk, but her *strengths* gave her confidence in her ability to develop her staff to be effective. Terry explained that her Top 5 Strengths identified by the StrengthsFinder instrument "fit me to a T. . . If I had read all of these before, I would have picked all five because it is me."

Despite the fact that she was able to choose her staff, Terry described her new staff as one of the challenges of her current role. The new staff required additional attention and effort from her, but Terry believed that it would pay off. She explained how she set and achieved her goal to become the director of her department. SBD increased Terry's self-awareness of her *strengths* and how she can be misunderstood. She also explained that it helped her to have a better awareness of others stating "now I know how to approach it differently to get the results that I need to get. . . it was an aha moment."

Discussion of Themes

From the axial and pattern coding of the qualitative data, there was significant support for Bandura's Theory of the *Origins of Self-Efficacy*, which was referenced in the Literature Review section. This theory provided the existing theoretical framework for the first part of this analysis by outlining four ways self-efficacy is developed, which was the focus of Research Question 2. Participant responses fit well within the four factors that influence self-efficacy suggested by Bandura: Positive Experiences, Social Modeling, Social Persuasions, and Physiological and Emotional State. This construct is further described below.

Bandura's Origins of Self-Efficacy

Positive Experiences

According to Bandura, the most effective method for improving self-efficacy is through Positive Experiences. Positive experiences are defined as a person's ability to master a skill or achieve success. Having positive experiences increases self-efficacy while not achieving success, or failing, can lower self-efficacy (Davis, 2010).

Ten of the twelve participants referenced Positive Experiences as a significant influence on their self-efficacy. Steven explained that, throughout his career, he was given the freedom to try to succeed in an environment where it was safe to fail. Although he recalled some of the failures, he vividly recalled the successes. "I have been blessed to have many opportunities to tackle large, complex projects. Many were successful, some were failures. I've had the ability to work through failures, make corrections, salvage the projects or turn it into a success. These experiences have given me the confidence to know that I can succeed."

In his interview, Stacy explained that he has experienced many failures and many successes. He clarified that failures can breed confidence. "I don't know how you become confident unless you go through a lot of failures. It's really arrogance more than confidence if you haven't failed." Phil recalled multiple early successes, including awards and promotions that he credited with giving him confidence in his abilities. Phil explained two early successes in high school where he focused his efforts on achieving a specific goal. Through these two experiences, Phil realized that his confidence was increased even more when he realized that he needed to master a finite set of tasks.

Steven also explained that his previous successes have had a large impact on his self-efficacy. Finally, Harris explained that he gained confidence in his professional abilities after he received his graduate degree. He explained that "the whole process was helping build a lot of confidence."

The participants' descriptions of success and how it impacts their self-efficacy fit within Bandura's position that positive experiences, especially in the face of adversity, have a significant impact on a person's self-efficacy. In fact, even surviving a tough circumstance was viewed as a positive experience. Several of the respondents referenced tough situations, such as a divorce, having a child with Down's syndrome, being abused as a child, having an alcoholic parent, and caring for a parent with a mental illness as having a positive impact on their self-efficacy simply because of their ability to survive it.

Social Modeling

Social Modeling refers to the influence that occurs as a result of having a role model who is relevant and known to the participant. Observing others perform tasks allows the person to absorb the experiences vicariously. Steven described several people who had a positive impact on his own self-efficacy. First, Steven described his dad as entrepreneurial and believed this had influenced his own desire to take risks. Second, Steven mentioned his martial arts teacher who taught him through role-modeling to maintain a positive approach to the tasks. Next, Steven explained that his physics teacher who told him, "anybody can be good at what they do. You want to be an exponent of your craft." It was not just the inspiration that these words conveyed, but Steven viewed

him as someone trying to be the best. Steven explained that being great requires taking risks and says, "You're never going to come up with a big win unless you take some risks. It just doesn't happen."

Terry explained that her own self-efficacy was influenced by her grandmother, who raised her. Terry said that she was able to witness how her grandmother responded to challenges. Terry also stated that her grandmother's faith influenced her own faith, indicating the importance of social modeling.

Social Persuasions

Encouragements and criticisms also have an impact on an individual's self-efficacy. Positive feedback from other strengthens self-efficacy while negative feedback weakens self-efficacy. Although positive feedback and encouragement may sound similar to positive experiences, it is important to note that positive feedback does not always equal success which defines positive experiences.

Five of the participants referenced receiving positive encouragement from others as having an impact on their self-efficacy. Brian explained that his self-efficacy is strongly influenced by the feedback of others. He explains that he is greatly impacted by the instructor evaluations he receives each year. In addition, Brian recalled an opportunity where he was able to create a program to benefit his colleagues and he vividly remembers several of his colleagues who affirmed how beneficial the program was for them. This incident had a significant impact on his self-efficacy of his responsibilities in his academic department.

Although it is not the largest part of her self-efficacy, Susan explained that other people's affirmation was important to her. Lauren, who is early in her professional career explained that she does not have many positive successes to draw from yet. Instead, Lauren offered that she was reliant on encouragements and affirmation from her colleagues to build her self-efficacy.

Categorized as a subset of the social persuasions theme, several of the participants credited knowing that other people exhibited confidence in their abilities had an impact on their self-efficacy. Harris explained that his math teacher told him that he should have the ability to work out any problems because of his training as a mathematician. Also, the faculty members selected Harris to receive a performance award, which showed Harris that they believed in his abilities. Harris said that the confidence others had in him was influential to his own self-efficacy, especially early in his career.

Terry explained that, when she faced with difficult challenges and decisions, her grandmother offered confidence in Terry's ability to handle the challenges. Terry explained that her grandmother's confidence in her helped her develop confidence in herself that she could handle the challenges. Finally, Steven explained that his early supervisors showed their confidence in his abilities and this confidence of others influenced his own self-confidence. Steven stated that his boss told him one day that the team relied on Steven's input and referred to Steven as a "natural leader." Steven says, "I don't remember the date, but him pointing that out at one of our meetings enacted that change in me."

Physiological and Emotional State

Physiological and Emotional State describes a person's physical and emotional state and how that state influences his or her actions. Susan referenced her advanced yoga training as a "pivotal" point in the development of her self-efficacy. She explained that it made her more conscious of her thought process, her breathing, and how she treats others. Although Susan appeared to be self-conscious about how others perceive her, it seemed that Susan's Self-Efficacy was most rooted in resilience created through handling a difficult family situation.

Steven resilience was seen in his perspective regarding failure. "One of the first things I tell my guys now, one of our first rules is "if you break it, you fix it' and we'll be here to help you." Steven said that he believes in failing and failing fast. "As long as we're making successes more often than our failures and we're getting the big things right, it's OK to fail." Steven felt that he can accomplish most anything he wants to through many attempts. Harris explained that "the only way to get things done is to just keep moving forward. So that is what I try to do is do something because if you don't do anything, you'll never get anything done."

Emergent Themes

From the axial and pattern coding, four emergent themes emerged that represent the qualitative data of the sample participants. To address Research Question 2, four emergent themes were found to describe the perceived experiences, characteristics, or events that influence the self-efficacy of the participants. These themes are Breaking Things Down, Positive Attitude, Faith, and Resilience Created Through Surviving. In addition, three additional themes emerged to address Research Question 3, regarding how

SBD effects self-efficacy, which are Increased Self-Awareness, and Changes in Perceptions, and Changes in Behaviors.

Theme 1 - Breaking Things Down

Three of the participants pointed to breaking things down into smaller steps as a strategy for influencing their confidence and ability to be successful. Terry explains that although her faith in God was the source of her resilience, she believed that the task of planning also contributed to her success. There are "definite steps that I can see I can achieve and I can check off and say 'I've done this' so that helps me get where I'm going to go on my goal."

Harris also possessed persistence and resilience to complete tasks and reach goals. He described his strategy of breaking large goals into smaller tasks; "writing things down and trying to do one thing at a time," explaining that it helped him to "just keep moving forward." He was confident that he can figure out the solution.

Phil offered that if he "can focus on something, I can force it to happen, particularly if it's a finite amount of material." To explain this, Phil gave an early example where he needed to learn a large amount of information that deterred many others from trying. During this situation, Phil realized that as long as he could determine what needed to happen, he could achieve it. He explained that "it made me realize if you do the right things, if you prepare well enough, you are actually capable of anything. . . And nowadays when I am faced with a situation I feel like it gives me confidence and you go through situations like that time in and time out and I think it gives you confidence that you do have the ability to [achieve goals]." In addition to the experiences

described above which are categorized as physiological and emotional states, there are several sub-themes that emerged to define Physiological and Emotional State including 1) positive attitude, 2) faith, and 3) resilience created through surviving.

Theme 2 - Positive Attitude

Three participants explained that their positive attitude allowed them to approach challenges with a hopeful attitude. One of Lauren's Top 5 Strengths is Positivity, which describes a person's natural ability to have a positive mindset. This Strength is also characterized by the person's ability to influence others because of their positivity. This Positivity provided a resiliency that allowed Lauren to believe there was always hope. Lauren explained that she has an identical twin sister, who attended a similar college and obtained a similar undergraduate degree to hers. Lauren described her sister as one of the smartest people she knew, but stated that her sister did not have the same Positivity strength. Instead, Lauren's sister viewe "unknown" variables as obstacles. Lauren explained that "she keeps selling herself short because she doesn't have that positivity to look and say, 'it will work out, I'll make it work out." Similarly, Phil has Positivity as one of his Top 5 Strengths and explained that this allows him to have hope in bleak circumstances. Phil explained that he had realized that others depended on his positive perspective to bring hope to the team. He believed that this is one of his roles on a team.

Although Jackie did not have Positivity in her Top 5, she explained that her positive attitude led her to believe that she could accomplish more. When offering an example of how she typically achieved her goals, Jackie told a story of trying to get into a doctoral program. She explained that she waited too long to complete her application and

did not get in the first year, but the letter told her to re-apply so she did the following year and was accepted. In describing this situation, it was clear that Jackie never viewed the first response as a rejection. When asked about the rejection notice, Jackie said that "it was not a failure, just a re-direction."

Each of these individuals described how their positive attitude has helped them to avoid simply accepting failure and bad circumstances and allowing those circumstances to affect their self-efficacy. Rather, they approached challenges with the attitude that they can and will accomplish their goals.

Theme 3 - Faith

Stacy's primary method of self-efficacy development was through his faith and belief in God. Stacy explained that his faith tells him that God will help him through anything. Therefore, he believed that he was not working alone in any effort.

Terry explained that her faith in God contributed to her self-efficacy. She believed that there was a purpose behind everything that happened and that God would not give her a challenge that she could not handle. "No matter what, I will get through it and no matter what there's a reason for it. It's what gets me through dealing with difficult challenges like that, knowing no matter what we're going to get through it, and there's a reason behind it."

When asked about strategies that she used to minimize difficulties, Jackie explained that she just believed "it wasn't meant to happen." Jackie further explains, "If it's in God's plan for my life, then it will happen. So I just try to rest in that place of trust that it'll all be OK." Also, Susan credits her advanced yoga training with initiating a

"pivotal turn" in her mentality. Susan explains that the advanced levels involve dualism of believing in God and that God is part of everything. Susan explains that this change in her thinking has led her to be more positive, be a better role model for her daughter, and be more conscious about her own thought process and how she treats others.

Having faith in something larger allowed these participants to have confidence that there was a larger and deeper purpose to the daily circumstances they face. This response increased the participant's self-efficacy because they are more confident that they can accomplish what is purposely put in front of them.

Theme 4 - Resilience through Surviving

Six participants explained their self-efficacy was influenced by their experience of surviving and thriving during a difficult time. Although Bandura purports that positive experiences have a positive impact on self-efficacy while negative experiences have a negative impact on self-efficacy, several participants explain that surviving tough circumstances created a resilience that helped to build their self-efficacy.

Upon leaving to enlist in the Navy, George reported that his mother told him, "I just want you to know that you'll never amount to anything you ever do for your entire life." He explained that this challenged him to work hard and, in return, he experienced many success. George described his mother's challenge and his successes despite her, as a "turning point" in his life. He said that the statement by his mother drove him to succeed and stated, "this was a really good thing that happened to me. It really straightened my life out." George explained that his self-efficacy was built "little bits and pieces at a time" from overcoming difficulties and being required to rely on himself.

This self-reliance created a confidence in his skills and abilities. Because of this, George believed that he has the ability to persist and endure through difficulties

Haley explained that becoming a parent sooner than she had planned and subsequently, handling her husband mental breakdown, gave her more confidence, which she was able to use in handling a tough situation a few years later in her career. Haley's self-efficacy was built through positive experiences of surviving tough situations. In referencing her ability to handle a negative situation in her work environment, she said "overcoming challenges outside of my comfort zone and being able to adapt and achieve some level of winning. . . Because of what I had dealt with in the past, I wasn't as afraid to take that on. . . Being able to adapt and take different perspectives when things don't go as planned has had a large impact on my self-efficacy . . . it doesn't look like we wanted it to look, but we'll get through it. We'll survive."

Stacy discussed surviving the experience of being an overweight child with an alcoholic parent as having a large impact on his confidence level. He also explained that he was bullied significantly as an overweight child and this spurred him to "prove others wrong." When asked about attaining goals, Stacy believed that his experiences with successes and failures provided him the confidence to believe "there's not a job I couldn't do and do well at a championship level." Finally, when asked about experiences that contributed to her self-efficacy, Susan discussed the challenge of dealing with her mother who has a mental illness and Kristi described her divorce as one of the largest impacts on her self-efficacy.

Participants explained that creating personal strategies such as relying on their faith, breaking tasks down, and possessing and maintaining a positive attitude contributed to the development of their self-efficacy. For many, surviving and thriving through difficult circumstances greatly influenced their self-efficacy. These four emergent themes provide answers to Research Question 2.

RQ3: How Does SBD Influence Self-Efficacy

In addition to the previous themes, three themes emerged to describe the participants' perception of how SBD influences Self-Efficacy. These Emergent Themes were Increased Self-Awareness, Change in Perception of Strengths, and Change in Behavior.

Theme 5 - Increased Self-Awareness

One of the stated purposes of SBD is self-awareness, which is the foundation of further personal development. Most of the participants pronounced that their SBD opportunity contributed to their self-awareness. Jackie believed that SBD showed her and reminded her of the "things I'm good at. I know that I'm good at them, the test shows me I'm good at them, then I'm going to feel more of a sense of self-efficacy."

Brian stated that SBD explained some of his strengths "in a new way" that encouraged him and allowed him to "concede some weakness areas" that do not detract from his ability to succeed. Lauren stated that SBD increased her "self-understanding" while Terry stated that SBD increased self-awareness and reminded her how she can be misunderstood.

Harris said that SBD helped him put his "*strengths* into words and understand them a little better." Stacy said that SBD validated "what I thought I thought is true about myself and that I should lean on those *strengths* and try to have people around me that can help carry the bucket that I'm weaker in." Steven explained that SBD developed an "increased awareness at the things I'm good at and have given me the things I can focus on" while Phil stated that he was "pleasantly surprised" by some of his *strengths* and explains that this gave him more confidence.

Theme 6 - Change in Perception of Strengths

During the interviews, participants were able to describe changes that occurred in their perception of their *strengths*. These changes in perception focused on the participants themselves. Several participants, including George explained that the description of his *strengths* provided new realizations about what he previously viewed as simply personality characteristics.

Jackie explained that she affirmed that she possessed the *strengths* that were identified in her StrengthsFinder assessment, but previously described these as characteristics rather than *strengths*. "None of them were shocking. . . it was like 'no, I'm totally that way,' but it didn't feel like a strength. That was the little twist for me." Instead, Jackie only saw the ways that these characteristics [*strengths*] interfered with her contentment. Now, Jackie felt as if she "can figure out how to use it as a strength. . . . After the training, it was like 'ok, maybe instead of seeing this as a weakness, see it more as a strength [speaking of her futuristic strength]' and that has helped. . . If I see these as weaknesses then I can't use them as *strengths*. To shift the viewpoint and focus on how

it can be a strength really impacts self-efficacy." Jackie went on to explain that she was at a transition point in her personal life and has considered making a career change. In considering her new awareness of her *strengths*, she had, instead, considered how to take actions to make herself happy in her current position. She found new, creative programs to initiate to allow herself to feel more satisfied.

Several participants explained that the change in perceptions that occurred through SBD empowered them. Lauren stated that SBD showed her that she does not have "to tone down" to be successful while Haley said that, since her SBD, "I find myself thinking back to this a lot of times saying 'I'm stronger in this or I'm not as strong in that. Haley stated that she previously viewed some of these characteristics as "soft," but now saw them as a way to contribute to her team. "My soft skills are really strong. . . since I have come to value these, I see them differently than I did before."

Brian and Phil explained how learning more about their *strengths* showed them how their *strengths* have led to previous successes. Once he learned more about his *strengths*, Brian was able to understand how they have helped him be successful and could name these examples.

Phil stated that SBD made him realize how others have relied on his *strengths* to support them and he realized how much his *strengths* affected him both negatively and positively.

> I think what has happened, it has enlarged my fuel tank a little bit more. It's reminded me to play to these strengths more. If I'm having a bad day, I need to go back to this and remember what my number one strength is

and employ it. Whether it's doing things personally or professionally, we have a lot of arrows in our quiver and you've reminded me what the best areas are. I think I'll access them a lot faster and quicker now because you reminded me what my good ones are.

Participants also reported changes in perception of others through the SBD experience. Steven explained that he seeks to understand what motivates his colleagues and supervisors and explained that SBD provided new awareness of others' *strengths*. Terry stated that SBD increased her awareness of others stating "now I know how to approach it differently to get the result I need to get. . . it was an aha moment." Haley believed that taking SBD with her colleagues was helpful to understand their perspectives. She gave examples of conflicts that occurred and explained how she was better able to understand other's approaches and priorities.

Theme 7 - Change in Behavior

In addition to changes in perception, participants also described changes that occurred in their behavior as a result of SBD. Brian explained that the new realization of his *strengths* per SBD increased his confidence level and encouraged him to speak up sooner when he felt that he can contribute. Haley stated that moving forward, "I've learned to balance my *strengths* and my leadership role." She believed that SBD has a positive impact on her self-efficacy, which allowed her more freedom to accept who she is. "Since taking the test, I have gotten a lot more comfortable."

Steven explained that SBD encouraged him to "seek out people that have the things I lack." Steven explained how he has used *strengths* information about his

colleagues and supervisors to understand how to more effectively communicate with them. Phil stated that he has "redoubled my efforts in producing even more productivity and empathy, which I think will bode well for the future. . . I think it's really important for, not just leaders, but people all up and down the chain of command in any organization to take the time to reflect and do something like this."

Summary

This chapter presented the quantitative results of the first phase of the study including the descriptive statistics of the participants as well as the GSE pretest and posttest scores. Participant GSE scores of various groups were compared and presented to address the first research question, "What is the relationship between self-efficacy scores and participating in Strengths-Based development for higher education professionals?"

Next, the qualitative findings are presented, including the analysis of 12 semi-structured interviews with participants from the first phase. The qualitative study sample included participants who represent public, private, and technical institutions in the selected state and represents participants who experienced a substantial change in self-efficacy scores from the pretest to posttest as well as participants who experienced no change in self-efficacy score. The chapter provided profiles of each participant in the qualitative sample describing how their self-efficacy was influenced and describing the influence SBD had on their self-efficacy. The qualitative analysis section presented discussion of eight research themes constructed from the interview data collected in this study. Chapter 5 will provide a discussion of the findings and research questions, a

comparison of these findings with previous research, the limitations and implications of this study, and final conclusions of the study.

Chapter V

SUMMARY AND CONCLUSIONS

The impending challenges facing higher education leaders coupled with the anticipation of a significant turnover will require capable leadership and employee engagement for the future (Cook, 2012; Mead-Fox, 2009; Taylor & Machado-Taylor, 2010). Within the business workforce, Strength-based Development (SBD) has been shown to be related to increased employee engagement, productivity, profitability, employee turnover, safety, customer-satisfaction, hope, well-being, and self-efficacy (Coffman et al., 2002; Collins, 2009; Harter & Schmidt, 2002; Kaiser & Overfeld, 2011; Kenkel & Sorenson, 2014; Kruger & Killham, 2007; Walter, 2013). SBD has garnered attention on college campuses because of its demonstrated impact on confidence in academics, personal relationships, and perception of individual abilities of college students (Anderson et al., 2014; Caldwell, 2009; Cave, 2003). Despite these successes, extant research on the relationship between SBD and the higher education professionals is limited.

The purpose of this study was to determine the effect of SBD on the self-efficacy of higher education professionals at non-profit public, private, and technical institutions within a state in the southeastern United States. A sequential mixed methods explanatory approach was utilized (Creswell & Plano Clark, 2011) to explore the effect of a SBD intervention. Generalized Self-Efficacy scores were captured pre-intervention and post-

intervention on the New Generalized Self-Efficacy (NGSE) instrument. The following research questions were used to guide this study:

1) What is the relationship between Generalized Self-Efficacy scores and participating in Strengths-Based Development for higher education professionals?
    a) Are there differences in pretest Generalized Self-Efficacy scores of higher education professionals based on the following characteristics: leadership level, occupational category, race, gender, and institutional type?
    b) Are there differences in posttest Generalized Self-Efficacy scores of higher education professionals based on the following characteristics: leadership level, occupational category, race, gender, and institutional type?
2) What perceived experiences, characteristics, or events influence the development of the self-efficacy of higher education professionals?
3) How does Strengths-Based development influence the self-efficacy of higher education professionals?

Review of the Literature

Self-Efficacy

The concept of self-efficacy—defined by Albert Bandura (1986)—has primarily been studied within Bandura's context of Social Cognitive Theory. From this lens individuals are aware of behaviors occurring around them, and their learning is strengthened through these observations. Bandura's research indicated that even when people understand that certain behaviors can yield particular results, that knowledge alone is not enough to motivate them to achieve, or attempt to achieve, the intended

goals. Rather, a person must understand the behaviors that can yield desired outcomes while also holding the belief that they possess ability to achieve those behaviors that will yield those outcomes.

Bandura outlined four ways to develop self-efficacy: (1) positive experiences, (2) social modeling, (3) social persuasions, and (4) physiological and emotional states (Bandura, 1997). The most effective of these ways is through a person's own positive experiences. Experiencing success boosts an individual's confidence in his or her abilities, especially when the success comes with perseverance after overcoming obstacles. For example, a first-generation college student is much more confident in his or her ability to complete a graduate degree once he or she has been successful in completing his or her undergraduate degree.

The second way to develop self-efficacy is through seeing others achieve success, which is referred to as social modeling. To be effective, the model should be someone who is similar and relevant to the subject (Bandura, 1997). For example, a young man may have greater confidence in his ability to play baseball at the college or professional level if his older brother or parent experienced that same type of success compared to the confidence level of a teammate who possesses similar or greater talent but does not possess relevant social models.

Another method for building self-efficacy is through social persuasions, which is often experienced through receiving feedback from others known as encouragement and criticism. Encouragement and criticisms are examples of these important observations.

For instance, children from emotionally supportive parents typically have greater confidence in their abilities leading to greater success.

Finally, a person's physiological and emotional state, which is seen through their moods and emotions, and how the person interprets these emotions influences their confidence in their abilities (Davis, 2010). A person's overall positive attitude can increase the likelihood of success just as a person's uncontrolled anxiety or fear can diminish the likelihood of success. Each of these concepts can influence self-efficacy and understanding how to foster the development of self-efficacy is an important goal for Positive Psychology and resilience because it leads to stronger career satisfaction and a happier life (Luthans, 2007).

Substantial research has been conducted to demonstrate the impact of self-efficacy on the achievements of college students in the areas of academic performance, athletic achievement, and overall well-being (Lane et al., 2004; Pajares & Graham, 1999; Zimmerman & Schunk, 2003). In a study of 205 post-graduate students, results indicated that self-efficacy mediated the relationship between performance accomplishments and academic performance, suggesting that self-efficacy is a predictor of academic achievement (Lane et al., 2004). Self-efficacy, however, not only improves the achievements of college students, it has also been studied in work environments (Stajkovic & Luthans, 1998). In a meta-analysis of 114 self-efficacy studies, Stajkovic and Luthans present strong evidence that self-efficacy is positively correlated with work performance with a significant weighted average correlation of .38, in many environments indicating that "self-efficacy is a significant predictor of performance for

each level of task complexity" (1998, p. 10). One of the most influential studies on self-efficacy was conducted by Judge and Hurst (2008). In their longitudinal study, they focused on the self-efficacy levels of 7,660 men and women between the ages of 14 and 22 starting in 1979. Participants were followed for 25 years measuring career success, job status, education, and health of the participants in 2004. The results indicated that those with higher self-confidence in 1979 had disproportionately increase income levels and career satisfaction in 2004. Although the high self-confidence group started off an average of $3,500 higher in 1979 than the low self-confidence group, the variance continued to increase with the high-self-confidence group earning $12,821 more annually. When asked about the number of health problems that interfered with work, the group with lower self-confidence in 1979 reported three times as many health problems 25 years later as compared to the high self-confidence group. Even more surprising, the high self-confidence group reported fewer health problems in 2004 than in 1979. These studies support the importance of higher education professionals knowing and understanding their own strengths, as well as helping others to uncover and utilize their own strengths.

There have been a limited number of studies completed on self-efficacy that focus on professionals within educational environments and most of these have concentrated on the K-12 environments. The finding of one such study showed that teachers who have high self-efficacy take greater roles with the curriculum (Guskey, 1994), while findings of another study among teachers suggested that those with high self-efficacy are more likely to utilize nontraditional teaching approaches (Gibson & Dembo, 1984) indicating

that greater self-efficacy can lead to greater risk-taking. Within the college and university environment, there have been even fewer studies completed targeting professionals, as most have concentrated on college students. In an analysis of the empirical data of 56 leaders and 180 followers within student affairs divisions of community colleges in the eastern United States, self-efficacy was found to be a significant predictor of leader effectiveness (Woods, 2005).

Generalized Self-Efficacy

While self-efficacy describes an individual's perception of his or her ability to accomplish a task, Generalized Self-Efficacy (GSE) is defined as an individual's confidence that they be successful in completing challenging tasks across a broad range of tasks requiring perseverance (Tipton & Worthington, 1984). GSE is typically more useful than Task-Specific Self-Efficacy in environments that present ambiguous or a wide range of expectations (Lightsey et al., 2006). Because the expectations and tasks of higher education administrators are broad, a focus on GSE was given priority within this study.

Positive Psychology

The field of Positive psychology has emerged over the last 2 decades and focuses on highlighting an individual's opportunities to overcome obstacles through the positive traits and abilities he or she possesses. This task is accomplished through identifying, embracing, and developing the individual's strengths (Seligman & Csikszentmihalyi, 2000). Positive Psychology is effective because "positive emotions prompt individuals to engage with their environments and their activities, many of which were evolutionarily

adaptive for the individual" (Csikszentmihalyi & Csikszentmihalyi, 2006, p. 88). The theory of Positive Psychology provides the rationale to explain why an individual gravitates toward certain college majors, career fields, and roles within organizations. This notion holds true for college administrators who often demonstrate an interest in educating and investing in the intellectual, physical, spiritual, social, and personal development of college students.

In his research, Crabb (2011) noted three important individual "engagement drivers" that lead to improved employee engagement: focusing on strengths, managing emotions, and aligning purpose. Each of these strategies is consistent with the concepts of Positive Psychology. In 1998, Donald Clifton created an assessment instrument known as the Clifton StrengthsFinder, designed to identify the most prevalent strengths within each individual. Grounded in the theory of Positive Psychology and having been adopted by the Gallup Organization, the use of the StrengthsFinder assessment instrument and resources have contributed to a movement of professional development opportunities for individuals and organizations known as SBD.

Strengths-Based Development

Understanding how to employ a strength within an environment creates new opportunities for personal development and growth (Govindji & Linley, 2007). Further, Govindji and Linley (2007) explain that use of strengths, rather than knowledge alone, can lead to improved individual well-being. Once an individual understands how to use their strengths, obstacles seem less intimidating and challenging, giving way to an increased confidence in personal and professional abilities. Peter Drucker (1990), known

as the father of modern management, noted that people spend a disproportionate amount of time on fixing their weakness rather than building on their strengths. Rath and Conchie (2008) explained that much more is accomplished in moving strong talents to even stronger strengths rather than focusing on fixing areas of weakness, which is consistent with the philosophy of SBD.

To date, more than 8 million people have taken the StrengthsFinder assessment sponsored by Gallup (2014). Within the last decade, numerous studies demonstrate the positive impact that SBD has on the work environment including performance (Linley et al., 2010), retention (Stefanyszyn, 2007), engagement (Harter et al., 2002; Minhas, 2010), and health (Wood et al., 2010). Govindji and Linley (2007) conducted a study of 214 college students to examine self-esteem and self-efficacy and their impact on subjective and psychological well-being. The study indicated that participants who used their strengths reported higher levels of subjective and psychological well-being. In a repeated measures study using 240 college students, the researcher concluded that application of signature strengths is associated with improved goal progress and results in psychological need fulfillment and improved well-being (Linley et al., 2010).

There is ample research that documents the positive impact that SBD can have on participant behavior. In a follow-up survey to 459 participants by Gallup, participants indicated that SBD has an effect on behavioral changes. Fifty-nine percent of respondents agreed or strongly agreed with the statement, 'Learning about my strengths has helped me to make better choices in my life.' Sixty percent of respondents agree or strongly agreed that, 'Focusing on my strengths has helped me to be more productive.'

Sixty-three percent of respondents indicated that they agreed or strongly agreed, 'Learning about my strengths has increased my self-confidence (Hodges & Clifton, 2004, p. 9).

Corporate Setting

SBD has also been used in the corporate workplace setting to influence employee engagement, team-building, and productivity. The Toyota North American Parts Center in California used SBD with their associates and managers in an effort to build effective work teams (Hodges & Clifton, 2004). Within a year of the SBD sessions, per-person productivity increased by 6% compared to the previous 3 years of productivity increases and decreases of less than 1%. In addition, two teams that participated in more intensive SBD realized a 9% productivity increase over a 6-month period.

SBD has been used with hospital staff to address significant issues with turnover, low morale, and employee engagement. St. Lucie Medical Center employed SBD at a point when the hospital's employee engagement ranked in the bottom quartile of the Gallup organization's database. Within 2 years of employing SBD interventions, however, St. Lucie's employee turnover had declined by 50%, patient satisfaction had increased by 160%, and the hospital ranked in the top quartile of the Gallup organization's database (Black, 1997).

A pretest-posttest study conducted by Stajkovic and Luthans (1998) of 212 students at UCLA showed that SBD has a positive impact on self-confidence and self-efficacy. The focus of this study was on strengths awareness, direction for the future, and level of confidence using an intermediate classroom intervention led by a strengths coach

Posttest scores indicated significantly higher scores over the pretest. Among the existing research on SBD and self-efficacy in the educational field, the primary focus has been on middle-school, high-school, and college students. One study, however, focused on the relationship between knowledge and application of SBD and self-efficacy of educational administrators. The population of this study, however, was educational administrators in urban school districts in Southern California (Waters, 2009).

Others warn that managers should maintain self-awareness regarding use and application of their strengths, being cautious about strengths overuse (Kaiser & Overfeld, 2011; Kaplan & Kaiser, 2009). Two studies completed within the last decade have indicated that improved strengths awareness is positively related to manager performance up to a certain point. After a certain point, improved strengths-awareness provides no further improvement in manager performance and could even result in a drop in performance (Benson & Campbell, 2007; Le et al., 2011). These studies found that excessive use of a particular strength can cause performance problems and lead to ineffectiveness. In addition, the over-focus on strengths can enable managers to ignore areas where improvement may not only be warranted but also be effective. Such overuse of strengths have led some critics to warn of such *lop-sided leadership* (Kaiser & Overfeld, 2011; Kaplan & Kaiser, 2009).

Method

A mixed-methods quasi-experimental design (Creswell & Plano Clark, 2011) was used for this study to understand the correlation between SBD and change in GSE, how self-efficacy is influenced, and how SBD impacts self-efficacy. The independent

variables within this study were gender, race, institution type, leadership level, occupational area. The quantitative phase was used to explore the correlation between SBD and change, specifically improvement in GSE, while the qualitative phase allowed the quantitative results to be further explained and explored. To increase external generalizability, a comparison group of higher education professionals was used within the quantitative phase.

Quantitative Sample

The population for this study was higher education professionals in non-profit public, private, and technical institutions of higher education in a state within the southeastern United States. Participants in the quantitative phase were contacted via email list-servs, professional colleagues, and professional development consortiums. Participants who agreed to participate in the SBD intervention were placed in the experimental group while those who were unable to participate in this intervention were included in the comparison group, creating self-selected experimental and comparison groups. The experimental group contained 178 participants representing public, private, and technical institutions. Participants from the comparison group (n = 88) and experimental group (n = 180) were classified by institution type according to the name and/or email address, when provided are described in Table 13 and 14.

Table 13

Gender and Race Comparison

	Gender				RACE			
	Female		Male		Causasian		Non Caucasian	
	#	%	#	%	#	%	#	%
Population	38397	55%	31413	45%	43587	63%	26149	37%
Experimental	63	71%	25	28%	75	85%	13	15%
Comparison	126	70%	53	30%	157	87%	23	13%

Table 14

Institutional Type Comparison

	Institutional Type					
	Public		Private		Technical	
Population	44389	64%	19816	28%	5605	8%
Experimental	32	60%	13	25%	7	13%
Comparison	122	68%	33	18%	25	14%

Quantitative Data Collection and Analysis

The pretest survey was administered to the experimental group and comparison group to collect demographic information along with information about occupational area and leadership level of the participants. The second part of the pretest survey collected responses to the 8-items on the NGSE, which is measured on a 5-point Likert scale with a minimum total score of 8 and a maximum total score of 40.

Experimental group participants completed the StrengthsFinder assessment, which was used as the cornerstone of the SBD process. After completion of the 4-hour SBD intervention, experimental group participants completed the GSE posttest survey, which contained the previously described 8-item NGSE along with additional questions regarding the participant's perception of the impact of SBD on the participant's personal, professional, and leadership development (Appendix H). This data was collected via web-based survey, which allowed for secure access and easy accessibility for download into Excel and SPSS.

Qualitative Sample

Within the qualitative phase, 12 members of the experimental group were selected to participate in semi-structured interviews. Each interviewee held a full-time position within a higher education institution in the state. Because the quantitative data in this

study indicated a significant difference based on the independent variables (gender, race, institutional type, leadership level, and occupational area), the illuminative cases were reviewed for the presence of the independent variables. Although not all of the independent variable levels were represented in the top 17 extreme cases, this sample represented 6 of the 8 leadership levels and 5 of the 7 occupational areas.

Within the qualitative sample, six of the participants experienced a significant change in GSE scores (a change of 4.5 units or more) between the pretest and posttest while six of the participants experienced no change in GSE scores. Of the 12 participants in the qualitative sample; 6 were male and 6 were female. These 12 participants were distributed evenly among the 3 institution types represented in the study. Participants are described in Table 15.

Table 15

Participant Profiles

Case	Case ID	Gender	Inst. Type	Position	Occupational Area	Leadership Level	SD	GSE Pretest	SD	GSE Posttest
Brian	RL	M	Private	Assistant Professor	Academic Affairs	Faculty	-0.61	32	1.25	39
George	GB	M	Private	Director of Career Services	Student Affairs	Director	-0.33	33	1.57	40
Haley	HC	F	Public	Assistant CIO	IT	Dept. Head	-0.61	32	-0.98	32
Harris	KK	M	Technical	Research Analyst	Business Affairs	Director	-1.17	30	0.29	36
Jackie	JS	F	Public	Licensed Psychologist	Student Affairs	Coordinator	-2.58	25	-0.66	33
Kristy	KKJ	F	Public	Staff Associate	Student Affairs	Office Admin.	-0.33	33	1.25	39
Lauren	LB	F	Private	Assistant Director of Student Life	Student Affairs	Dept. Head	-0.33	33	-0.66	33
Phil	PS	M	Technical	Chief Operating Officer	Exec. Leadership	Executive	-0.61	32	0.93	38
Stacy	SH	M	Private	Director of Athletics	Other	Middle Admin.	0.80	37	0.61	37
Steven	SF	M	Technical	Chief Information Officer	IT	Upper Admin.	1.64	40	1.57	40
Susan	SM	F	Public	Program Specialist	Academic Affairs	Office Admin.	1.08	38	0.93	38
Terry	TH	F	Technical	Director of Purchasing	Business Affairs	Coordinator	0.23	35	-0.03	35

Qualitative Data Collection and Analysis

In the qualitative phase, 12 individuals participated in one-on-one, recorded, semi-structured interviews. These interviews were utilized to explore themes that influenced Generalized Self-Efficacy and followed the semi-structure interview guide (Appendix J), lasting approximately 1 hour. Interview transcripts were coded using codes that were both *a priori* and emergent. Consistent with the constant comparative method, initial codes were used to create pattern codes, which compared between interviews and participant type to determine if common themes emerged between groups of participants and/or among participants (Glaser & Strauss, 1967). After the coding of the interviews was completed, individual participant profiles were created to capture thoughts and perceptions regarding the interview data, allowing a better understanding of the participants' experiences regarding Generalized Self-Efficacy and SBD.

Instrumentation

New Generalized Self-Efficacy Scale

The primary instrument used within this study was the New Generalized Self-Efficacy Scale (NGSE). Developed by Chen, Gully and Eden, the NGSE was chosen because of its demonstrated content validity and its "performance in a variety of work contexts" (2014, p. 12). The NGSE "consists of 8 items that are rated on a 5-point scale with the anchors *strongly disagree* and *strongly agree*" (Scherbaum et al., 2006, p. 1050) and has a minimum total score of 8 and a maximum total score of 40. The NGSE has been utilized to measure job satisfaction, employee motivation, leadership styles, and more (Chen et al., 2001).

Results and Discussion

Quantitative

After removal of incomplete cases, the experimental group contained 179 participants while the comparison group contained 88 participants. Using a *t* test, it was determined that no significant difference existed in the independent related to demographic information between the experimental group and the comparison group suggesting that the groups were similar despite the self-selection of the experimental group. GSE pretest scores were compared based on the independent variables to establish if any of these variables had an effect on GSE. There was no significant difference found in GSE pretest scores of participants based on these variables. The ANOVA, however, indicated a significant difference among participant's pretest GSE scores based on occupational area ($F(6,255) = 2.76$, $p = .013$). Tukey's HSD was used to determine the nature of the differences between the occupational areas, which revealed that participants who were from Student Affairs areas scored significantly lower in GSE ($M = 33.21$, $SD = 2.97$) than participants from Information Technology areas ($M = 35.80$, $SD = 3.01$). This may reflect the specialized and technical skills focus within IT versus the more broad responsibilities within Student Affairs domains. Participants from the remaining areas were not significantly different from these groups or each other.

The GSE pretest scores of the comparison group were compared to those of the experimental group to determine if there were any differences in these scores prior to the intervention. The independent-samples *t* test indicated no significant difference ($t(264) = -.1.09$, $p = .236$). Despite self-selection, the experimental group's GSE pretest score was

not statistically different from the comparison group. Therefore, changes in posttest analysis can be assumed to be related to the SBD intervention.

In order to understand if the variables affected GSE posttest scores, these scores were compared based on each of the variables using a one-way ANOVA. Each analysis indicated no significant difference signifying that any differences in GSE posttest scores were not related to the participant's gender, race, leadership level, occupational area, or institution type. In addition, an OLS Regression indicated that the variables were not significant predictors of posttest scores.

To answer Research Question 1b, the mean GSE pretest score of the experimental group was tested against the mean GSE posttest score of the same group using a paired samples *t* test. The mean of the pretest was 34.25 (*SD* = 3.32) and the mean of the posttest was 35.08 (*SD* = 3.14). A significant increase from pretest to posttest was found ($t(178) = -3.27$, $p < .001$). Further analysis of z-scores showed that changes in participant GSE pretest scores and posttest scores demonstrating an increase larger than 4.5 unit change were more than 1 standard deviation (*SD* = 3.62) higher than the mean change of 0.93. Twenty-six participants experienced a change larger than 4.5 units, which is more than 1 standard deviation above the mean. Considering the previous findings of no significant differences among independent variables, I concluded that SBD can impact GSE scores of some individuals regardless of the race, gender, leadership level, occupational category, or institutional type.

After identifying the six participants who experienced no change in GSE, I observed that four of these participants had high GSE pretest scores leaving little to no

room for improvement. Therefore, an ad hoc test was conducted comparing the change in pretest and posttest GSE scores between those who had GSE pretest scores below the mean and those who had scores above the mean. There were 84 participants included in the below average group while 81 participants were included in the above average group. Fourteen cases were excluded from these two groups because participants had scores equal to the mean score of 34. Participants in the below average group had a mean change of +2.62 while those who had a pretest GSE below average had a mean change of -0.73, highlighting that participants with a lower GSE pretest score experienced a more significant change than those with a high GSE pretest score. Participants with a high pretest GSE score saw no change or even negative change. This finding supports previous theories that, after a certain point, strength-awareness could be limited or even result in negative gains in manager competency (Benson & Campbell, 2007; Le et al., 2011). This finding also suggests that those with a high GSE pretest score may have self-corrected as a result of increased self-reflection and self-awareness gained through SBD.

The purpose of quantitative phase of this study was to determine if SBD had an effect on the Generalized Self-Efficacy of higher education professionals. Numerous studies have supported the influence of self-efficacy to attaining goals (Akinbobola & Adeleke, 2012; Anderson, 2005; Clifton et al., 2006; Collins, 2009; Hodges & Clifton, 2004; Jones-Smith, 2011; Key-Roberts, 2014; Lopez & Louis, 2009; Waters, 2009). The quantitative findings showed a significant change between the pretest and posttest Generalized Self-Efficacy scores across the group. In addition, significant changes were indicated in individual Generalized Self-Efficacy scores, and these changes were equal

across leadership categories, occupational areas, gender, race, and institutional type suggesting that Generalized Self-Efficacy can be developed and improved through SBD.

Qualitative

The purpose of the qualitative phase of this study was to understand the characteristics and experiences that influence the development of Generalized Self-Efficacy and to understand if SBD influenced the development of Generalized Self-Efficacy. Four of the six participants who indicated no significant change in GSE scores had pretest scores of 35 or higher out of 40. Three of these participants were 1 standard deviation higher than the mean of the GSE pretest. This observation suggested that these participants already had high Generalized Self-Efficacy, which limited the potential room for improvement in GSE posttest scores. Conversely, those participants who showed significant change or improvement in GSE scores were slightly under the mean of GSE pretest scores indicating that there was more room for improvement to occur.

From the axial and pattern coding of the qualitative data, there was significant support for Bandura's Theory of the *Origins of Self-Efficacy*, which was referenced in the Literature Review section. This theory provided the existing theoretical framework for the first part of this analysis by outlining four ways self-efficacy is developed, which was the focus of Research Question 2. Participant responses fit well within the four factors that influence self-efficacy suggested by Bandura (1997): Positive Experiences, Social Modeling, Social Persuasions, and Physiological and Emotional State. This construct is further described below.

Bandura's Origins of Self-Efficacy

Positive Experiences. Ten of the twelve participants referenced Positive Experiences as a significant influence on their self-efficacy. Some participants even referenced overcoming negative circumstances as a positive experience that strongly influenced their self-efficacy. Stacy, explained that he has experienced many failures and many successes, stating that failures can breed confidence. Several of the respondents referenced tough situations, such as a experiencing a divorce, having a child with Down's syndrome, being abused as a child, having an alcoholic parent, and caring for a parent with a mental illness as having a positive impact on their self-efficacy simply because of their ability to survive it. Recognizing that surviving these types of experience can increase self-efficacy, supervisors and peers should consider that rewarding efforts of perseverance can contribute to the development of self-efficacy.

Social Modeling. Many of the participants described other people who influenced their self-efficacy through Social Modeling. Terry stated that her own self-efficacy was influenced by her grandmother, who raised her explaining that she was able to witness how her grandmother responded to challenges. Terry also stated that her grandmother's faith influenced her own faith thus indicating the importance of Social Modeling. Steven described multiple people who served as models that influenced his self-efficacy. In both of these cases, the people who had the most positive Social Modeling influence were people who held close relationships with the participant. This finding reiterates the importance of mentors within the professional environment.

Social Persuasions. Five of the participants referenced receiving positive encouragement from others as having an impact on their self-efficacy. Brian stated that his self-efficacy

is strongly influenced by the feedback of others. He explained the importance of instructor evaluations as an example of feedback that influences his self-efficacy. In addition, Brian recalled an opportunity where he was able to create a program to benefit his colleagues and vividly recalls several of his colleagues who affirmed how beneficial the program was for them. This instance had a significant impact on his self-efficacy regarding his responsibilities within his academic department.

Having a person of influence offer encouragement or criticism can affect the development of self-efficacy and, conversely, negative feedback can diminish self-efficacy. Whether it comes from an instructor to a student or from a student to an instructor, this encouragement and criticism is often referred to as feedback. Both were offered as examples from participant interviews. Although positive feedback and encouragement may sound similar to positive experiences, positive feedback does not always equal success which defines positive experiences.

Physiological and Emotional State. Physiological and Emotional State describe a person's physical and emotional state and how the ability to cope with stressors and challenges allows participants to be able to bounce back. Susan referenced her advanced yoga training as a "pivotal point" in the development of her self-efficacy. She explained that it made her more conscious of her thought process, her breathing, and how she treats others. Multiple participants referenced their faith and resilience as factors that influenced their self-efficacy and encouraged them to persist in challenging situations. Although others may be skeptical of the validity of faith, recognizing their contribution to self-efficacy is important.

Emergent Themes

From the axial and pattern coding, four emergent themes emerged that represent the qualitative data of the sample participants. To address RQ2, two emergent themes were found to describe the perceived experiences, characteristics, or events that influence the self-efficacy of the participants. These themes are *Personal Strategies to Improve Self-Efficacy* and *Resilience Created through Surviving*. In addition, two additional themes emerged to address RQ3, regarding how SBD effects self-efficacy, which are Increased Self-Awareness, and Changes in Perceptions and Behaviors.

Theme 1 – Personal Strategies to Improve Self-Efficacy

Eight of the twelve participants offered specific strategies they employ to improve their self-efficacy including relying on faith, breaking things down, and keeping a positive attitude.

Four participants described faith as a strategy for improving their self-efficacy. Stacy stated that his primary method of self-efficacy development was through his faith and belief in God. Stacy explained that his faith tells him that God will help him through anything. Therefore, he believed that he was not working alone in any effort.

Similarly, Jackie credited her Connectedness or faith that things will work out how they were meant to work out stating "well, if it's meant to happen, it'll happen." Also, Susan credits her advanced yoga training with initiating a "pivotal turn" in her mentality. Susan explains that the advanced levels involve dualism of believing in God and that God is part of everything. Susan explains that this change in her thinking has led her to be more positive, be a better role model for her daughter, and be more conscious

about her own thought process and how she treats others. Finally, Terry believed that there was a purpose behind everything that happened and that God would not give her a challenge that she could not handle. "No matter what, I will get through it and no matter what, there's a reason for it. It's what gets me through dealing with difficult challenges like that, knowing no matter what, we're going to get through it, and there's a reason behind it." Having faith in something larger allowed these participants to have confidence that there was a larger and deeper purpose to the daily circumstances they face. Because they were more confident that they could accomplish what was purposely put in front of them, faith is used as a strategy to increase self-efficacy.

Three participants pointed to the strategy of breaking things down into smaller steps as a strategy that influenced their confidence and ability to be successful. Terry explained that the task of planning contributed to her success. There are "definite steps that I can see I can achieve and I can check off and say 'I've done this,' so that helps me get where I'm going to go on my goal." Harris also described his strategy of breaking large goals into smaller tasks; "writing things down and trying to do one thing at a time," explaining that it helped him to "just keep moving forward." Using these strategies, Harris was confident that he can figure out the solution. Finally, Phil described one particular experience in high school where he achieved a goal that he wanted. This goal took significant work. "I focused like a laser beam. . . and I eventually did win that award." Phil stated, "I can force it to happen, particularly if it's a finite amount of material."

Two other participants explained being able to maintain a positive attitude allowed them to approach challenges with hopefulness and confidence. One of Lauren's Top 5 Strengths is Positivity, which describes a person's natural ability to have a positive mindset. This Strength is also characterized by the person's ability to influence others because of their positivity. This Positivity allowed Lauren to believe there was always hope. Lauren explained that she has an identical twin sister who attended a similar college and obtained a similar undergraduate degree. Lauren described her sister as one of the smartest people she knew, but stated that her sister did not have the same Positivity strength. Instead, Lauren explained that her sister viewed unknown variables as obstacles. Lauren explained that "she keeps selling herself short because she doesn't have that Positivity to look and say, 'it will work out, I'll make it work out." Lauren believed that her own positive attitude would provide an advantage over her sister, who she viewed as possessing similar experiences. Jackie explained an example of trying to get into a post-doc program at UGA. She explained that she waited too late to complete her application and did not get in the first year, but the letter told her to re-apply so she did so the following year and was accepted. Jackie did not view the rejection as a failure – just a re-direction. Rather than hearing a rejection, Jackie described the response as "it was a not now. I felt like I would have gotten a 'yes' had I just had my proposal done." This positive attitude propels Jackie to believe that she can accomplish more.

This emergent theme of *Personal Strategies to Improve Self-Efficacy* was demonstrated in participants who experienced a significant change in GSE scores as well as participants who experienced no change in GSE scores. Also, there were no obvious

indicators that gender, institution type, occupational area, or leadership level were overrepresented within this theme.

Theme 2 - Resilience through Surviving

Six participants explained their self-efficacy was influenced by their experience of surviving and thriving during a difficult time. Upon leaving to enlist in the Navy, George reported that his mother told him, "I just want you to know that you'll never amount to anything you ever do for your entire life." He explained that this challenged him to work hard and, in return, he experienced much success. George described his mother's challenge and his successes despite her, as a "turning point" in his life, even stating "this was a really good thing that happened to me. It really straightened my life out." He said that the statement by his mother drove him to succeed. George explained that his self-efficacy was built "little bits and pieces at a time" from overcoming difficulties and being required to rely on himself. This self-reliance created a confidence in his skills and abilities.

Haley explained that becoming a parent sooner than she had planned and, subsequently, handling her husband's mental breakdown, gave her more confidence, which she was able to use in handling a tough situation a few years later in her career. Haley's self-efficacy was built through positive experiences of surviving tough situations. In referencing her ability to handle a negative situation in her work environment, she explained that overcoming and adapt to challenges has contributed to her success. "Because of what I had dealt with in the past, I wasn't as afraid to take that on. . . Being able to adapt and take different perspectives when things don't go as planned has had a

large impact on my self-efficacy . . . it doesn't look like we wanted it to look, but we'll get through it. We'll survive." Haley explained that surviving these previous difficulties provided confidence that assisted her to handle future challenges.

Kristy explained that her self-efficacy was both negatively and positively affected by her divorce. At the beginning of the divorce, she did not get along with her ex-husband, which resulted in a significant impact on her self-efficacy and hopefulness about her future. However, Kristy believes that she worked through this tough relationship, which initially seemed impossible. Kristy describes her relationship with ex-husband now as positive and healthy. Working through this relationship issue has resulted in a feeling of achievement, which she says has a positive impact on her self-efficacy.

Susan hypothesized that perhaps some of her Top 5 Strengths were adapted in response to the need to handle her mother who Susan describes as difficult. "Because we had to practice it [Strategic] our whole lives because she [mom] is fun to deal with." Susan explained that her brother did not learn how to deal with their mother and, therefore, he doesn't come around. Susan explained that her mother has mental illness but is unaware of it.

Stacy discussed surviving the experience of being an overweight child with an alcoholic parent as having a large impact on his confidence level. He also explained that he was bullied significantly as an overweight child, and this challenge spurred him to "prove others wrong." When asked about attaining goals, Stacy believed that his

experiences with both successes and failures provided him the confidence to believe "there's not a job I couldn't do and do well at a championship level."

Finally, Terry described how having a child with *Down's syndrome* has influenced her perspective because it has shown her how to celebrate the small things that he is able to accomplish. Terry further explained how many steps it took for her son to learn how to walk and credits this experience with creating "a tenaciousness in my spirit."

Participants explained that creating personal strategies such as relying on their faith, breaking tasks down, and possessing and maintaining a positive attitude contributed to the development of their self-efficacy. For many, surviving and thriving through difficult circumstances greatly influenced their self-efficacy. These two emergent themes provide answers to Research Question 3.

Theme 3 - Increased Self-Awareness

Ten of the participants explained that SBD contributed to their self-awareness. Jackie believed that SBD showed her and reminded her of the things she is good at, which influenced her self-efficacy. Similarly, Haley said since taking the instrument and participating in the SBD in December, "I find myself thinking back to this a lot of times and saying 'I'm stronger in this or I'm not as strong in that."

Brian stated that SBD explained some of his strengths "in a new way" that encouraged him and allowed him to "concede some weakness areas" that do not detract from his ability to succeed while Harris said that SBD helped him put his "strengths into words and understand them a little better." George and Lauren agreed that SBD increased

their self-awareness while Terry stated that SBD increased self-awareness by reminding her how she can be misunderstood when over-using her strengths.

Stacy said that SBD validated "what I thought is true about myself, and that I should lean on those strengths and try to have people around me that can help carry the bucket that I'm weaker in." Steven explained that SBD developed an "increased awareness at the things I'm good at and have given me the things I can focus on" while Phil stated that he was "pleasantly surprised" by some of his strengths and explained that this gave him more confidence because he knew his team depended on his strengths to achieve success.

Theme 4 - Changes in Perceptions and Behaviors

During the interviews, participants were able to describe changes that occurred in their perception of their strengths and the strengths of others. Both Jackie and George indicated that SBD caused a change in their perception of their own strengths. George explained that the description of his strengths provided new realizations about what he previously viewed as simply personality characteristics.

Jackie affirmed that she affirmed that she possessed the strengths that were identified in her StrengthsFinder assessment, but previously described these as characteristics rather than strengths. "None of them were shocking. . . it was like 'no, I'm totally that way,' but it didn't feel like a strength. That was the little twist for me." Instead, Jackie previously only saw the ways that these characteristics, called Strengths, interfered with her happiness. In considering her new awareness of her strengths, Jackie instead figured out how to take actions to make herself happy in her current position. Now, Jackie felt as if she "can figure out how to use it as a strength. . . After the training, it was like "ok, maybe instead of seeing this as a weakness, see it more as a strength [speaking of her futuristic strength] and that has helped. . . If I see these as weaknesses, then I can't use them as strengths. To shift the viewpoint and focus on how it can be a strength really impacts self-efficacy." She found new, creative programs to initiate within her department, allowing her to feel more satisfied.

Lauren stated that SBD showed her that she does not have "to tone down" to be successful while Haley said that, since her SBD, "I find myself thinking back to this a lot of times saying 'I'm stronger in this or I'm not as strong in that." Haley stated that she

previously viewed some of these characteristics as "soft," but now saw them as a way to contribute to her team. "My soft skills are really strong. . . since I have come to value these, I see them differently than I did before."

Not only did participants indicate that SBD has changed their perceptions of their own strengths, participants also reported that SBD caused changes in their perception of others. Steven explained that he seeks to understand what motivates his colleagues and supervisors, and he explained that SBD provided new awareness of others' strengths, even using it to understand the priorities of his new supervisor. Terry stated that SBD increased her awareness of others. "Now I know how to approach it differently to get the result I need to get. . . it was an aha moment." Stacy indicated a renewed interest in "positioning himself with others who compliment areas" in which he is weak.

In addition to changes in perception, participants also described changes that occurred in their behavior as a result of SBD. Brian explained that the new realization of his strengths per SBD increased his confidence level and encouraged him to speak up sooner when he felt that he can contribute. Haley stated that moving forward, "I've learned to balance my strengths and my leadership role." She believed that SBD has a positive impact on her self-efficacy, which allowed her more freedom to accept herself. "Since taking the test, I have gotten a lot more comfortable."

Steven explained that SBD encouraged him to "seek out people that have the things I lack" and explained how he has used strengths information about his colleagues and supervisors to understand how to more effectively communicate with them. He contrasted how his previous supervisor had different communication needs than his new

supervisor. Phil stated that "I redoubled my efforts in producing even more productivity and empathy, which I think will bode well for the future. . . I think it's really important for, not just leaders, but people all up and down the chain of command in any organization to take the time to reflect and do something like this."

In answering Research Question 3, participants described how SBD resulted in increase to their self-awareness and changes to their perception of their own strengths and the strengths of others. These changes in perceptions resulted in changes in behaviors. Most of the participants, including those who indicated no significant change in GSE scores, indicated that SBD contributed to their self-awareness. Most participants also explained that SBD resulted in a change in their perception of strengths. Some of these changes described the participants' perception of themselves empowering them to use their strengths more productively. Participants also described that SBD influenced their perception of others' strengths. This change encouraged participants to alter how they approached co-workers and supervisors. Finally, indicating that a change in perception can result in a call to action, participants from both groups described changes that occurred in their behavior as a result of SBD.

Quantitative and Qualitative Findings

The quantitative findings indicate that SBD has a significant positive relationship with Generalized Self-Efficacy scores of higher education professionals and this relationship occurred without regard to race, gender, occupational area, leadership level, and institutional type. Per the sequential mixed-methods design, the qualitative sample was selected from the quantitative sample and was based on extreme case samples to

include 6 participants who experienced a pretest-posttest change of 6 or more units and 6 participants who experienced no change. To understand this finding more deeply, the qualitative analysis explored participant responses to understand how self-efficacy is developed and if SBD has an impact on self-efficacy. As an additional point of interface, the results obtained in the quantitative study influenced the questions used in the semi-structured interviews in an effort to provide a more thorough answer to the research questions.

The results of the qualitative phase of this study confirmed the concept developed by Bandura regarding the *Origins of Self-Efficacy*. All twelve participants described that their self-efficacy was developed through one or more of the following methods: Positive Experiences, Social Modeling, Social Persuasions, and Physiological and Emotional State. Despite this finding, there were no common trends regarding which of Bandura's suggested *Origins of Self-Efficacy* development were most effective for specific participants. This could be an opportunity for future research.

In reviewing the GSE pretest scores, only four of the participants had a GSE score above the mean value of 34. These four participants held positions in higher education environments for more than 5 years with three of the four participants holding positions in higher education for 10-20 years. This finding suggests that professional experience may contribute to high GSE or it could suggest that high GSE contributes to professional longevity. The three participants with less than 5 years of experience had GSE pretest scores lower than the mean. Interestingly, the two participants with more than 20 years of experience also had GSE pretest scores below the mean. Although this finding is

inconclusive, a correlation may exist between professional experience and self-efficacy, providing an opportunity for further exploration and research.

In reviewing the GSE posttest scores, nine of the participants had a GSE score above the mean value. The three remaining participants were all females. Although the quantitative analysis did not indicate a significant difference in the GSE posttest scores of males versus females, the qualitative analysis indicated that females had lower GSE pretest and posttest scores than male participants. Also, the gains between GSE pretest and posttest scores were greater among males.

Based on participant responses, my analysis led me to uncovered two emergent themes that explain how self-efficacy is developed. These themes were *Personal Strategies to Develop Self-Efficacy* and *Resilience Through Surviving*. Three of the four participants who referenced faith as a strategy for developing self-efficacy were in the no change group, however, each of these three participants possessed a GSE pretest score higher than the mean. These shared characteristics suggest that the strategy of faith has a substantial influence over a person's self-efficacy, an even stronger impact than SBD.

Although eight of the twelve participants offered *Personal Strategies to Improve Self-Efficacy*, four participants did not offer a Personal Strategy for Improving Self-Efficacy and each of these participants had a GSE posttest score higher than the mean value. Three of the four participants who did not offer a Personal Strategy for Improving Self-Efficacy did credit Surviving Through Resilience as a method for self-efficacy development.

Six participants offered specific stories of struggling through tough circumstances to initiate self-efficacy development. I could not determine if the remaining six participants had experienced comparable tough circumstances, but these participants did not articulate this as an experience that effected the development of their self-efficacy. Because tough circumstances were frequently reported, I concluded that the ability to reflect upon tough situations may be used to build resilience and propel self-efficacy. This finding highlights the importance of this reflection opportunity for self-efficacy development.

In addition to the two themes that emerged to explain how self-efficacy is developed, two additional themes emerged to describe how SBD effects self-efficacy. These additional themes were Increased Self-Efficacy and Changes in Perceptions and Behaviors. The qualitative results showed that 10 out of the 12 participants indicated that SBD increased their self-awareness. The significant change in GSE as a result of SBD is likely a result of the increase in self-awareness experienced by participants.

Both participants who experienced a change in GSE scores, as well as those who did not experience a change in GSE, demonstrated that SBD increased their self-awareness. Upon further review of those who did not indicate a change, I discovered that four of those participants had a GSE pretest higher than the mean. Those with high GSE pretest did not have the potential to experience a significant change in GSE scores as compared to those with mean scores or scores below the mean.

In addition, the two participants who did not indicate an increase in self-awareness as a result of SBD, Kristy and Susan, held positions within the Office

Administrator and Support Staff leadership level. Consistent with personnel in these areas, neither of these participants held a degree higher than an Associate's degree. The remaining 10 participants held positions that require college degrees ranging from Bachelor to Doctorate with the majority holding Master's degrees. Considering this observation, I concluded that participants who did not hold a college degree may not possess a similar interest in gaining new perspectives in non-technical areas such as personal and professional development. This lack of interest in personal and professional development may be due to a lack of promotion opportunities without obtaining a Bachelor's degree. Conversely, I speculate that higher education professionals with promotion opportunities may value professional development and be more receptive to increasing their self-awareness.

Finally, nine participants explained that their SBD instigated changes in their perceptions and behaviors. Each of these participants also explained that SBD increased their self-awareness suggesting increased self-awareness precipitates changes in perceptions and behavior, which can have a pervasive impact on those with whom they work and lead.

Conclusions and Implications for Practice

Using a mixed-methods approach, I explored if SBD had an influence on the self-efficacy of higher education professionals. The results in this study showed that SBD can have a positive influence on GSE scores and indicated that this impact is likely to occur regardless of participant's race, gender, institution type, occupational area, or current leadership level. Additional ad hoc analysis showed that SBD has a stronger influence on

those with low self-efficacy. Institutions of higher education should embrace and invest in SBD because it can have a positive influence on the self-efficacy of participants, especially those who do not currently have high self-efficacy. In addition, SBD can also have a positive benefit to those who already have high self-efficacy, as it prompts them to be more self-aware and to recognize and productively utilize the strengths of their peers, supervisors, and team members. Further, participants expressed that SBD increased their self-awareness and caused changes in their perceptions of their strengths and the strengths of others, supporting Hodges and Clifton (2004) who contend that learning about strengths themes assists in understanding how to maximize performance by aligning talents and knowledge and employing these talents regularly.

Even when a significant change in GSE was not demonstrated, participants expressed that SBD inspired changes in their perception and behavior of co-workers and those who they lead. Leaders and supervisors can build self-efficacy in others through recognizing the success of others (Positive Experiences), allowing themselves to be models for others as well as encouraging mentors within the organization (Social Modeling), offering timely feedback and encouragement to others (Social Persuasions), and coaching participants to rebound and persist through challenges, while celebrating those who were able to overcome challenges (Physiological State).

As suggested in previous research, organizations can find multiple positive results from using SBD (Kenkel & Sorenson, 2014; Robison, 2007). For SBD to be most beneficial, it needs to be incorporated into the regular business and communication of the organization. For example, organizations may assist supervisors and employees in

learning and investing in the strengths of others by making it part of regular meeting agendas, professional development and orientation opportunities, and employee evaluations. Supervisors may utilize team mapping and complimentary partnerships in establishing project teams and committee structures. Finally, since higher education professionals are all in the business of developing students, students will benefit indirectly from SBD as well. Given the previous research regarding the value of self-efficacy and the finding of the influence of SBD in this study, current university leaders should consider investing in the development of their own self-efficacy as well as the development of the self-efficacy of others.

There are several promising areas of future research that are recommended as a result of this study. Additional exploration could be performed to understand if increases in GSE are sustained after extended periods of time and if higher GSE scores have other positive results, such as career success, career longevity, happiness, and supervisory satisfaction within the higher education environment. Although the results of this study supports Bandura's theory regarding the *Origins of Self-Efficacy*, additional research could explore if the value or effectiveness of these methods can be predicted for particular individuals based on participant age, experience level, background, race, and gender. Finally, the results of this study suggest that participants who indicate faith as a strategy for improving self-efficacy have a higher self-efficacy. This exploration could have important implications for faith-based institutions and organizations.

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APPENDIX A:

CliftonStrengths Quick Reference Card

CliftonStrengths™ Quick Reference Card

Achiever	People especially talented in the Achiever theme have a great deal of stamina and work hard. They take great satisfaction from being busy and productive.
Activator	People especially talented in the Activator theme can make things happen by turning thoughts into action. Once a decision is made, they want to act quickly.
Adaptability	People especially talented in the Adaptability theme prefer to "go with the flow." They tend to be "now" people who take things as they come and discover the future one day at a time.
Analytical	People especially talented in the Analytical theme search for reasons and causes. They have the ability to think about all the factors that might affect a situation.
Arranger	People especially talented in the Arranger theme can organize, but they also have a flexibility that complements this ability. They like to figure out how all of the pieces and resources can be arranged for maximum productivity.
Belief	People especially talented in the Belief theme have certain core values that are unchanging. Out of these values emerges a defined purpose for their life.
Command	People especially talented in the Command theme have presence. They can take control of a situation and make decisions.
Communication	People especially talented in the Communication theme generally find it easy to put their thoughts into words. They are good conversationalists and presenters.
Competition	People especially talented in the Competition theme measure their progress against the performance of others. They strive to win first place and revel in contests.
Connectedness	People especially talented in the Connectedness theme have faith in the links between all things. They believe there are few coincidences and that almost every event has a reason.
Consistency	People especially talented in the Consistency theme are keenly aware of the need to treat people the same. They try to treat everyone in the world with consistency by setting up clear expectations and adhering to them.
Context	People especially talented in the Context theme enjoy thinking about the past. They understand the present by researching its history.
Deliberative	People especially talented in the Deliberative theme are best described by the serious care they take in making decisions or choices. They anticipate the obstacles.
Developer	People especially talented in the Developer theme recognize and cultivate the potential in others. They spot the signs of each small improvement and derive satisfaction from these improvements.
Discipline	People especially talented in the Discipline theme enjoy routine and structure. Their world is best described by the order they create.
Empathy	People especially talented in the Empathy theme can sense the feelings of other people by imagining themselves in others' lives or others' situations.

Focus

People especially talented in the Focus theme can take a direction, follow through, and make the corrections necessary to stay on track. They prioritize, then act.

Futuristic	People especially talented in the Futuristic theme are inspired by the future and what could be. They inspire others with their visions of the future.
Harmony	People especially talented in the Harmony theme look for consensus. They don't enjoy conflict; rather, they seek areas of agreement.
Ideation	People especially talented in the Ideation theme are fascinated by ideas. They are able to find connections between seemingly disparate phenomena.
Includer	People especially talented in the Includer theme are accepting of others. They show awareness of those who feel left out, and make an effort to include them.
Individualization	People especially talented in the Individualization theme are intrigued with the unique qualities of each person. They have a gift for figuring out how people who are different can work together productively.
Input	People especially talented in the Input theme have a need to collect and archive. They may collect information, ideas, history, or even relationships.
Intellection	People especially talented in the Intellection theme are characterized by their intellectual activity. They are introspective and appreciate intellectual discussions.
Learner	People especially talented in the Learner theme have a great desire to learn and want to continuously improve. In particular, the process of learning, rather than the outcome, excites them.
Maximizer	People especially talented in the Maximizer theme focus on strengths as a way to stimulate personal and group excellence. They seek to transform something strong into something superb.
Positivity	People especially talented in the Positivity theme have an enthusiasm that is contagious. They are upbeat and can get others excited about what they are going to do.
Relator	People especially talented in the Relator theme enjoy close relationships with others. They find deep satisfaction in working hard with friends to achieve a goal.
Responsibility	People especially talented in the Responsibility theme take psychological ownership of what they say they will do. They are committed to stable values such as honesty and loyalty.
Restorative	People especially talented in the Restorative theme are adept at dealing with problems. They are good at figuring out what is wrong and resolving it.
Self-Assurance	People especially talented in the Self-Assurance theme feel confident in their ability to manage their own lives. They possess an inner compass that gives them confidence that their decisions are right.
Significance	People especially talented in the Significance theme want to make a big impact. They are independent and sort projects based on the level of influence it will have on their organization and others around them.
Strategic	People especially talented in the Strategic theme create alternative ways to proceed. Faced with any given scenario, they can quickly spot the relevant patterns and issues.

Woo	People especially talented in the Woo theme love the challenge of meeting new people and winning them over. They derive satisfaction from breaking the ice and making a connection with another person.

APPENDIX B:

4 Strengths Domain

4 Strengths Domains

Executing	Influencing	Relationship Building	Strategic Thinking
Achiever	Activator	Adaptability	Analytical
Arranger	Command	Developer	Context
Belief	Communication	Connectedness	Futuristic
Consistency	Competition	Empathy	Ideation
Deliberative	Maximizer	Harmony	Input
Discipline	Self-Assurance	Includer	Intellection
Focus	Significance	Individualization	Learner
Responsibility	Woo	Positivity	Strategic
Restorative		Relator	

APPENDIX C:

Participation Solicitation for Higher Education Supervisors

Dear Higher Education leader,

Great leaders know their own talents and develop those talents into applied strengths. They build relationships with others who have complementary strengths, and learn to identify the talents of others. Strengths-Based Development provides a context for understanding others and leading with strengths.

You are invited to participate in a Strengths-Based Development workshop featuring the StrengthsFinder inventory. This workshop is most effective with teams and units, but also provides significant professional and personal development for the individual participant.

This Strengths-Based Development opportunity is available at no cost to you or your team. The Strengths-Based Development workshop can be arranged to occur at a time and location that is convenient for your team. Prior to the workshop, each participant will receive an access code and be asked to complete the StrengthsFinder assessment, an online assessment created by the Gallup Organization, which takes approximately 30-40 minutes to complete. In addition, two short surveys will be offered to all participants, each requiring less than 10 minutes to complete.

This professional development opportunity is part of a research project focused on higher education leaders. Your participation and responses throughout the process will be secured and kept confidential.

If you or your unit is interested in participating in this Strengths-Based Development workshop or have questions regarding this opportunity, you may contact Alyson Paul at Alyson.paul@ung.edu or 706-974-5238.

Why is Strength-Based Development important for my unit?
Strengths grow best in the context of relationships, teams, and organizations (Lopez, 2012). An individual can learn about what his or her top strengths are, but understanding 1) the importance of an individual's strengths to others and 2) how these strengths are demonstrated from the perspective of others increases the value of strengths-awareness exponentially.

Seventy-five percent of employees describe their supervisor as the most stressful aspect of their job. On the other hand, employee engagement is correlated with improved employee health, good customer service, improved employee productivity, and fewer employee accidents (Harter, Schmidt, and Hayes, 2002). Strength-based development leadership can have a positive impact on hope, well-being, confidence levels of employees resulting in increased employee

engagement (Akinbobola & Adeleke, 2012; Collins, 2010; Cullen, 2001; Key-Roberts, 2014).

APPENDIX D:

Participation Solicitation and Informed Consent

Dear Participant,

Strengths-Based development can serve as an effective professional development opportunity for supervisors, managers, and leaders. Exploring how Strengths-Based development impacts self-efficacy can provide meaningful insight into employee recruitment, development and training, and performance (Bandura, 1997). You are invited to participate in a Strengths-Based development and training session designed to improve your knowledge and awareness of your strengths as well as the strengths of others.

Your participation in this study is completely voluntary and confidential. You are encouraged to respond accurately and honestly to each question. Your name and identifying information will kept confidential and will only be used by the principal researcher of this study. Your responses will only be matched to your subsequent responses.

Eligibility

If you are 18 years or older, a full-time or part-time employee at a higher education institution, you are eligible to participate in this survey.

Survey Administration

Participation in the Strengths-Based training opportunity will take approximately 4-5 hours to complete including approximately 45 minutes to take the Clifton StrengthsFinder. Immediately upon completion of the Clifton StrengthsFinder, participants will receive an electronic report of their Top 5 strengths. Although this online assessment typically costs $10/participant, the researcher will provide an access code at no cost to the participant in exchange for their participation. Participants will be asked to complete a short follow up survey at the completion of the Strengths-Based training opportunity.

before you give your consent to participate in this study, please read the following statements and ask any questions you may have to ensure that you understand the expectations of your participation.

Alyson Paul has informed me about the nature of this research study.

My participation in this study is completely voluntary.

I understand that if I choose to participate in this study, I am committing to complete the StrengthsFinder assessment, participate in Strengths-Based development training activities, and a follow up survey (approximately 5 minutes)

I understand that my responses will remain confidential. Neither my organization nor my supervisors will have access to my responses and no identifiable information will be released.

The only individuals who will have access to the raw data regarding this survey are Alyson Paul and her dissertation committee chair.

I understand that there are no risks associated with this study, nor any compensation.

This study has been exempt from Institutional Review Board (IRB) Review in accordance with Federal regulations. The IRB, a university committee established by federal law, is responsible for protecting the rights and welfare of research participants. If you have concerns or questions about your rights as a research participant, you may contact the IRB administrator at 229-333-7837 or irb@valdosta.edu

If you have any questions or concerns regarding this study, please contact Alyson Paul at 706-974-5238.

Signature of Participant

Printed Name:

APPENDIX E:

Pretest

PRETEST

Name:

Gender:

- Male
- Female
- Undisclosed

Race:

- African/ African American
- Asian/Asian American
- Caucasian/White
- Hispanic
- Multiracial
- Native American
- Pacific Islander
- Other

Do you have any previous experience with StrengthsFinder or StrengthsQuest?

- Yes
- No

Do you have any previous experience with StrengthsQuest, StrengthsFinder, etc.?

- Minimal experience - I have taken the StrengthsFinder assessment previously, but do not remember most of my previous Top 5 Strengths and have spent less than 2 hours of StrengthsQuest activities, conversation, or training.
- Moderate experience - I have taken the StrengthsFinder assessment previously and remember most of my previous Top 5 strengths, but have spent less than 2 hours of StrengthsQuest activities, conversation, or training.
- Significant experience - I am somewhat familiar with StrengthsQuest and have spent between 2-10 hours of StrengthsQuest activities, conversation, or training.
- Advanced experience - I am very familiar with StrengthsQuest and have spent more than 10 hours of StrengthsQuest activities, conversation, or training.

How many years have you worked in Higher Education?

- Less than 5 years
- Between 5-10 years
- Between 10-20 years
- Between 20-30 years
- More than 30 years

How many years have you been in your current position?

- Less than 3 years
- Between 3-5 years
- Between 5-10 years
- Between 10-15 years
- More than 15 years

Please indicate the area of the University that your position is most closely associated.

- Business Affairs (HR, Physical Plant, etc.)
- Academic Affairs
- Information Technology
- Student Affairs/Enrollment Management
- Development, Public Relations, Alumni Relations, External Affairs
- Other

Please indicate the area of the University that your position is most closely associated.

- Executive (President & Vice Presidents)
- Upper Administration (Deans and Associate/Assistant VPs)
- Middle Administration (Associate/Assistant Deans and Directors)
- Directors and Department Heads
- Associate/Assistant Directors/Department Heads
- Coordinators & other Professionals
- Office Administrators, Clerical & Support Staff
- Other

Q3.1. To what extent does each statement describe you? Indicate your level of agreement by marking the appropriate response on the right.

Read each of the statements below and select the response that best fits your personal belief.

I will be able to achieve most of the goals that I have set for myself.

- Strongly Agree
- Agree
- Neutral
- Disagree
- Disagree Strongly

When facing difficult tasks, I am certain that I will accomplish them.

- Strongly Agree
- Agree
- Neutral
- Disagree
- Disagree Strongly

In general, I think I can obtain outcomes that are important to me.

- Strongly Agree
- Agree
- Neutral
- Disagree
- Disagree Strongly

I believe I can succeed at most any endeavor to which I set my mind.

- Strongly Agree
- Agree
- Neutral
- Disagree
- Disagree Strongly

I will be able to successfully overcome many challenges.

- Strongly Agree
- Agree
- Neutral
- Disagree

- Disagree Strongly

I am confident that I can perform effectively on many different tasks.

- o Strongly Agree
- o Agree
- o Neutral
- o Disagree
- o Disagree Strongly

Compared to other people, I can do most task very well.

- o Strongly Agree
- o Agree
- o Neutral
- o Disagree
- o Disagree Strongly

Even when things are tough, I can perform quite well.

- o Strongly Agree
- o Agree
- o Neutral
- o Disagree
- o Disagree Strongly

The researcher is conducting a study on how Strengths-Based development impacts self-efficacy for supervisors, managers, and leaders. You are invited to participate in a Strengths-Based development and training session designed to improve your knowledge and awareness of your strengths as well as the strengths of others.

Are you interested in participating in this study?

Providing your name will allow the researcher to match your pretest responses to later inquiries.
Name:

Email (optional)

APPENDIX F:

Email Instructions for Strengths-based Development

EMAIL INSTRUCTIONS FOR STRENGTHS-BASED DEVELOPMENT

Dear Participant-

Thank you for agreeing to participate in the Strengths-Based development study involving a Strengths-Based development workshop.

Getting Started

In order to complete the StrengthsQuest inventory, you will need to go the website at http://www.strengthsquest.com and click on register. Once you have entered your personal information, you will need to enter the Access Code provided at the bottom of this email. This access code is unique for each individual.

This inventory will take between 30-40 minutes. Please set aside enough time to finish the assessment without taking a break. Once you have completed the assessment, the site will allow you to print of a report of your Top 5 Strengths. Please print a copy of your Strengths Report for use within your Strengths-Based training workshop, which will be held MONTH, DATE, YEAR at LOCATION.

Access Code: xxxxxxxxxxxxxx

If you have any problem with this code, please let me know.

Sincerely,

Alyson Paul

Alyson.Paul@ung.edu

706-974-5238

APPENDIX G:

Posttest Survey

POSTTEST SURVEY

To go to all participants who complete the Strengths-Based training activities (GSE posttest and follow up)

Dear participant-

Thank you for participating in the Strengths-Based training intervention. Strengths-Based development can serve as an effective professional development opportunity for supervisors, managers, and leaders. Exploring how Strengths-Based development impacts self-efficacy can provide meaningful insight into employee recruitment, development and training, and performance (Bandura, 1997).

Read each of the statements below and select the response that best fits your personal belief.

I will be able to achieve most of the goals that I have set for myself.

- Strongly Agree
- Agree
- Neutral
- Disagree
- Disagree Strongly

When facing difficult tasks, I am certain that I will accomplish them.

- Strongly Agree
- Agree
- Neutral
- Disagree
- Disagree Strongly

In general, I think I can obtain outcomes that are important to me.

- Strongly Agree
- Agree
- Neutral
- Disagree
- Disagree Strongly

I believe I can succeed at most any endeavour to which I set my mind.

- Strongly Agree
- Agree
- Neutral
- Disagree
- Disagree Strongly

I will be able to successfully overcome many challenges.

- Strongly Agree
- Agree
- Neutral
- Disagree
- Disagree Strongly

I am confident that I can perform effectively on many different tasks.

- Strongly Agree
- Agree
- Neutral
- Disagree
- Disagree Strongly

Compared to other people, I can do most task very well.

- Strongly Agree
- Agree
- Neutral
- Disagree
- Disagree Strongly

Even when things are tough, I can perform quite well.

- Strongly Agree
- Agree
- Neutral
- Disagree
- Disagree Strongly

What experiences and/or personal characteristics have had the largest impact on your self-efficacy?

How has Strengths-Based Development influenced your self-efficacy?

(Optional)
Name
Current Title

APPENDIX H:

Strengths-based Development Workshop Outline

STRENGTHS-BASED DEVELOPMENT WORKSHOP OUTLINE

Instructions for Workshop
Ask participants to bring their reports to the session.

If possible, read through your signature themes and highlight areas that you can easily identify in yourself. Also, if possible, have someone who knows you well read through your themes and offer examples of when one or more of these themes have been a strength for you.

Supplies
Powerpoint
Placards
Pens with broad/wedge tip to use in writing on the placards.
Several lists of themes
Name tags

Introduction

- Outline of workshop
- Concepts of Positive Psychology
- What's Wrong With People?
- What is StrengthQuest?
    - Background on instrument
    - Strength Rules
    - Myths about Strengths
- Basic premise of StrengthsQuest
    - Talents
    - Strengths
        - Exercise – Talent Line-up (10 minutes)

Your Strengths (the Individual)

- What does the Top 5 mean
- Description of 34 Strengths
- Using Your Strengths Everyday
- Understanding and Respecting Talent Differences
- Break – 10 minutes
    - Barrier labels
    - Barrier Labels activity – 10 minutes
- Affirming My Talents

Complimentary Partnerships

- Purpose
- Examples
- Exercise

Team Development

- Employee Engagement
- What does your team look like?
    - Executing – make things happen
    - Influencing – reach a broader audience
    - Relationship building – provide glue to hold team and relationships together
    - Strategic Thinking – are able to see what COULD be.
- Use in functional areas
- Alignment with Unit Mission

APPENDIX I:

Interview Guide

INTERVIEW GUIDE

Qualitative Research Questions

RQ3: What perceived experiences, characteristics, or events influence self-efficacy?

RQ4: How does the Strengths-Based development influence self-efficacy?

Introduction

Thanks you for agreeing to participate in this interview regarding your experience in the Strengths-Based Development (via StrengthsQuest training). The information gathered through these interviews will be used to explain or follow up on the previous quantitative portion of the study.

This data is part of the research process for my dissertation process. My intent is to explore your experience with Strengths-Based development and your GSE results. However, these results will only be presented using a pseudonym rather than using any information that would be personally identifiable.

As we go through the interview today, please feel free to ask questions of me as well or request clarification of any question. The purpose of this interview is to understand your experiences and insights regarding Strengths based development and self-efficacy.

Any questions before we get started? OK, let's get started.

Start – Warm-up

Before we get started, let's review your Top 5 Strengths. (Researcher will have participants Top 5 Strengths per the StrengthsFinder inventory). Please describe your Top 5 strengths in your own words.

- Can you explain how these strengths are displayed within your current professional role?
- Which of your Top 5 Strengths do you believe is strongest?

Previous SBD Experience

A subjective open-ended question –

Did you have any prior experience with Strengths-Based development?
If so, describe.
The Strengths-Based development experience you participated in included taking the StrengthsFinder inventory and participating in a 3-hour workshop. I would like to understand your thoughts and experience during this process?

- What parts of the SBD experience most surprised you?
- How do you anticipate these might be used in the future?
- How do you think your strengths may help you solve problems in the future?

Difficulties

- This next set of questions addresses your feelings and experiences during difficult/challenging times/situations.
- Describe some of the difficulties you experience in your current role?
- In your opinion, how effective are you in attaining goals or addressing areas of difficulties
- What strategies do you use to minimize these difficulties? And How?

Self-Efficacy

As you may know by now, one of the foci of this study is self-efficacy, which is described as one's belief in his/her own capabilities to produce given levels of attainment. This next set of questions is aimed directly at understanding your perspective regarding self-efficacy and SBD.

- What experiences or attributes have the most significant impact (positive or negative) on the development of your self-efficacy?
    - Participants were asked "what experiences or personal characteristics have had the largest impact on your self-efficacy?" on the GSE posttest. If answered, the participant's answer to this question will be prompted.
    - On the posttest, you indicated that _____ had the most significant impact on your self-efficacy, can you explain how this (experience/characteristic) influenced your self-efficacy?
- How do you believe that self-efficacy impacts your daily work?
- Describe your confidence in your Strengths.
- What role do your strengths play?
- Participants were asked, "How has SBD influenced your self-efficacy?" on the GSE posttest. The participant's answer to this question will be prompted.
    - On the posttest, you explained _____, can you explain how a deeper understanding and exploration of your strengths affect inspire new strategies for your current role?

Now, let me ask you to think about any changes you see in yourself as a result of participation in the SBD program. (pause)

- How, if at all, do you think your participation in the SBD program affected your self-efficacy?

    - If applicable only:
        - Can you describe your experience from your SBD?
        - What descriptions or activities within the SBD were most influential/meaningful to you?
        - What did you learn through your SBD experience?
        - How will SBD impact your daily work? Is this realistic or aspirational?

That covers the things I wanted to ask. Is there anything that you care to add? What should I have asked you that I didn't think to ask?

APPENDIX J:

Institutional Review Board Protocol Exemption Report

Institutional Review Board (IRB)
for the Protection of Human Research Participants

PROTOCOL EXEMPTION REPORT

PROTOCOL NUMBER:	**IRB-03262-2015**	**INVESTIGATOR:**	**Alyson Paul**
PROJECT TITLE:	**Effects of Strengths-Based Development on the Self-Efficacy of Higher Education**		

This research protocol is **exempt** from Institutional Review Board oversight under Exemption Category(ies) :1&2. You may begin your study immediately. If the nature of the research project changes such that exemption criteria may no longer apply, please consult with the IRB Administrator (irb@valdosta.edu) before continuing your research.

ADDITIONAL COMMENTS/SUGGESTIONS:

Although not a requirement for exemption, the following suggestions are offered by the IRB Administrator to enhance the protection of participants and/or strengthen the research proposal:

NONE

☐ If this box is checked, please submit any documents you revise to the IRB Administrator at irb@valdosta.edu to ensure an updated record of your exemption.

Elizabeth W. Olphie 9/16/15
Elizabeth W. Olphie, IRB Administrator Date

Thank you for submitting an IRB application.
Please direct questions to irb@valdosta.edu or 229-259-5045.

Revised: 12.13.12