

2020

Building and Sustaining Hope in the Face of Failure: Understanding the Role of Strategic Social Support

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Building and Sustaining Hope in the Face of Failure:

Understanding the Role of Strategic Social Support

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A dissertation proposal submitted in partial fulfillment

of the requirements for the degree of

Doctor of Philosophy

In

Industrial-Organizational Psychology

Seattle Pacific University

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Dedication

This dissertation is dedicated to all the people in my life that have been the source of my hope through each success and failure. I often say that life is a team sport, and this research further showed me how blessed I am to have such amazing sources of support on my team. The advice I got early on when starting my dissertation was to make this my own journey. I would like to add to that advice for future students by saying, *make this your own journey and if you carefully choose who will be along on that journey, this can also be a lot of fun.*

Acknowledgements

My dissertation explored the role of strategic social support on levels of hope. As I write these acknowledgements, I am caught reflecting on how many sources of love are in my life and from where my sense of hope for the future has and will continue to come.

I would like to thank my committee members for their dedication and investment. To Dr. Jama Rand and Dr. Katy Tangenberg, thank you for your encouragement and support for my topic. Your direction and guidance were extremely valuable throughout the process. To Dr. Rob McKenna, I am forever grateful for all of the lessons and conversations we have had over the years. Your vision and research are woven through this work and I am thankful for your leadership, conviction, and humanity.

A deepest thank you to my graduate school cohort and my research team. Your collaboration and challenges along the way was critical to my learning and success. A special thank you to Diana for afterwork video chats while we both juggled full-time jobs while finishing our dissertations, to Emily for getting me out of the house for breaks, and to Hilary for years of quesadillas and moral support. I would also like to thank Bobby for not only supporting my studies as a colleague, but also introducing me to my husband.

To the other 2 legs of the three-legged stool, my dearest friends Elise and Laura, you pushed, cared, spoke the truth, and made me laugh. While we have not lived in the same state, and at times the same continent, for over a decade you have been one of my greatest sources of support. You model what strong, independent in thought and action, and loving women can be. I believe it is rare to have someone in your life that is both a role model and a best friend – and I am blessed enough to have two of those women in

my life. I am honored and proud to call you part of my family and would never have been able to complete this journey without you.

My family has supported my pursuit of this doctorate since I was a young child. While I did not always know this would be the end path, my parents Ron and Kathy, have encouraged and supported me to learn and set the highest of academic goals while considering how I could give back in thanks for all that I have been given. Thank you for your support over the years and always believing in me. I would also like to thank my brother, Chad, for always going first and leading the way down this path. While we may be “different types of doctors” I am proud to have completed this work and share a title with you.

Finally, to my husband, Brett, you have stood by me through the writing of this dissertation from the beginning. From those days of exhaustion where you witnessed me putting orange juice in my coffee, to the fun escapes you planned to the ocean to give me a break from writing and work. Thank you for being my partner, making me laugh, and loving me for all that I am. You are one of the greatest reasons I am able to submit my dissertation as completion to my PhD and I will always be full of gratitude for your support.

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Abstract

The research on hope has focused on how individuals build and maintain hopeful emotions through their own successful attempts of achieving their goals using personal agency and pathways. Success in meeting the goal leads to higher levels of hope within an individual and an increased belief that they can achieve more difficult tasks, while failure leads to a decrease in levels of hope (Helland & Winston, 2005; Snyder, Rand, & Sigmon, 2002; Snyder, Shorey, Cheavens, Pulvers, Adams, & Wiklund, 2002; Snyder, Irving, & Anderson, 1991). The purpose of this study was to explore the moderating relationship of strategic social support on levels of hope despite ratings of experience with failure. The sample was sourced from participants in an online leadership development tool. Once outliers were removed and missing data was managed through multiple imputation, the final sample for this study was 573. The age range was 21 to 97 with 56.2% identifying as female. Moderation analyses were conducted using PROCESS macro for SPSS (Model 1 and Model 2). While interaction effects were insignificant, main effects for social support on levels of hope were significant ($B = 0.154, p = .007$). Furthermore, there was a significant main effect of relational strategic social support (emotional support, advocates, and sources of feedback) on levels of hope ($B = 0.141, p = .05$). Additional exploratory analyses found that both sources of feedback ($B = 0.141, p = .000$) and advocates ($B = 0.121, p = .0184$) had significant main effects on hope when assessed separately. The results of this study indicate that strategic social support may have a key role to play in building and sustaining levels of hope and be worth the

investment and effort to connect individuals with the sources of support they need to increase levels of hope.

CHAPTER I

Introduction and Literature Review

“Hope is being able to see that there is light despite all of the darkness” - Desmond Tutu.

The word hope is used across a variety of contexts and circumstances. A woman hopes that it will not rain on her camping trip. A cancer patient hopes for a successful treatment. A manager hopes that her solution will solve the product issue. Across these examples, the individuals are all hopeful for an outcome but the difficulty, level of risk, environment, and what it takes to achieve the hopeful results vary. What does it mean to have hope when the future is unpredictable, and the conditions can differ greatly? In 2010, Desmond Tutu responded to that question by stating that hope was “not something light like optimism”, but rather “hope is being able to see that there is light despite the darkness” (Solomon, 2010). This powerful statement speaks to the weight of what it means to be hopeful, even in the bleakest of situations. It is not something that is easy, or even natural, but it is practiced, sustained, and planned in even the most trying situations. Understanding what is required to build and maintain hope in the most difficult of situations may help a person prepare for and even be successful in passing through difficult circumstances.

Over the past few decades, the research on hope has focused on how individuals build and maintain hopeful emotions through their own successful attempts of achieving their goals. A person looks to change their current state and reach an outcome using personal agency and by identifying pathways to reach this goal (Snyder, 2004). Success in meeting the goal leads to higher levels of hope within an individual and an increased belief that they can achieve more difficult tasks, while failure leads to a decrease in levels

of hope (Helland & Winston, 2005; Snyder, Rand, & Sigmon, 2002; Snyder, Shorey, Cheavens, Pulvers, Adams, & Wiklund, 2002; Snyder, Irving, & Anderson, 1991). Hope, as a goal-directed cognitive theory, has been associated with increased levels of well-being (Magaletta & Oliver, 1999), psychological adjustment, academic and athletic performance, as well as medical recovery (Snyder, 2002). High hope individuals tend to be more convicted when it comes to their work goals, perceiving them as a challenge that they can overcome. Furthermore, these individuals tend to be more collaborative and adaptive in their work relationships, and more resilient when dealing with anonymity and stress (Luthans & Jensen, 2002).

When much of the research to date is reviewed, readers are left with the idea that building and sustaining hope should be quite easy: $\text{Hope} = \text{Willpower} + \text{Way-power}$ (Snyder, 2004). Willpower is the desire and internal agency and Way-power is the paths identified to achieve desired outcomes. Simply stated, continue succeeding and you will build hope, increasing positive outcomes. However, if having hope were this basic, individuals would be more likely to have and maintain it at high levels.

Considering the insights of Tutu, hope is not simply a frivolous concept, but rather a profound force that may be most powerful when circumstances are at their darkest. This may imply if individuals only experienced successful attempts in life, with no failure or darkness, there would be no need for hope. What if failure or moments of darkness or even the possibility of hopelessness, are necessary in any conversation about hope? Research suggests that experience of failure is a necessary consideration for development (e.g., emerging leadership development, McCall, 1998; Moxley, 1998), and likely a necessary condition for understanding hope.

If hope is important for multiple positive outcomes (wellness, personal disposition, and health factors (Smith & Christakis, 2008; Snyder et al., 1991; Snyder, 2000; Snyder, 2002; Snyder et al., 2002), while at the same time failure is a necessity, what makes it possible for an individual to grow, maintain, and sustain hope in moments that are difficult? How does a person in the presence of imminent failure remain hopeful and determined to keep trying to meet their goal?

In the presence of the real possibility of failure and moments or seasons of darkness in life, what are the contributors to hope? What are the conditions and who are the people that influence individual perceptions of hope for the future? Certain parts of that answer would lie in the support from others; those who encourage and build a sense of efficacy even in the worst situations. Success and belief in one's abilities does not necessarily occur in a vacuum as is implied in the current models of hope. This strictly individualized goal-setting model of hope is largely reliant on the experience and goal achievement of the person and ignores the inherently relational aspects of what it means to be human and how a person is complex and holistic in their makeup and development (McKenna & Wenzel, 2015). Being relational is not the same as being extroverted in that it transcends personality traits; it captures the necessary connection to others that can even impact identity. For that reason, it is likely that hope is also inherently relational. Avolio, Gardner, Walumbwa, Luthans, and May (2004) suggested that hope may be built in individuals by being around other hopeful people. In addition, emerging research on the impact of social support on hope in the field of medicine suggests that people who had social support while receiving treatment also had higher levels of hope and an increased likelihood of recovery (e.g., Weis, Robert, Speridakos, & Elena, 2011).

Understanding the social aspects and sources of social support that garner and sustain hope will allow for greater support and intentional growth of hope for individuals.

The following sections will provide a theoretical and empirical evidence for how hope is built and maintained despite failure experiences by the presence of strategic social support. First, the theory of hope will be reviewed; including definitions, philosophical and theoretical underpinnings, and background of how hope has been examined thus far. Second, the empirically supported connection between perceived failure experiences and the outcomes on levels of hope will be outlined. Third, the components of social support will be explained and the existing theoretical support for the relationship between social support and hope will be reviewed. Finally, this literature review will propose how the presence of strategic social support impacts levels of hope despite an individual's perceived failure experience.

Understanding Hope: Definition, Philosophy, and Theoretical Perspectives

Hope Defined. Hope is anchored in positive psychology (Seligman, 2002) and is described as the ability to pursue and attain desires despite barriers (Helland & Winston, 2005; Snyder, Rand, & Sigmon, 2002; Snyder, Shorey, Cheavens, Pulvers, Adams, & Wiklund, 2002). As examined and defined by Snyder, Irving, and Anderson, (1991) “hope is a positive motivational state that is based on an interactively derived sense of successful (a) agency (goal-directed energy), and (b) pathways (planning to meet goals)” (p. 287). Within this model, stressful and surprise events act as barriers to be overcome by the hopeful person through utilization of pathways designed to reach the outcome, and personal agency to achieve the goal. Individuals who have higher levels of hope are able to overcome these barriers and achieve their goals, and through successful goal

completion, efficacy is built to increase hope in attaining future goals (Snyder et al., 1991; Snyder et al., 1996; Snyder, 2002).

Hope is also presumed to be a measurable theory that captures plans, resources, and directions required to achieve objectives (Helland & Winston, 2005; Snyder, 2002). However, just as important to the theories of hope as achieving the desired outcome, is how one goes about reaching the endpoint. A person can employ an avoidance method of goal attainment, which focuses on setting goals to keep negative consequences from occurring or delaying their appearance (Snyder, 2002). Or, one can utilize a positive approach to achieving the goal they try to attempt a novel goal without prior experience, preserve or maintain a current situation, or promote the advancement of a goal that has already been set in motion (Snyder, 2002).

Based on the definition and goal strategies above, the current concepts of hope are anchored on individually driven goal-setting and attainment theories. One sets a goal and utilizes agency and pathways to achieve the outcomes utilizing goal avoidance or approach methods. Once success of the outcome is reached, an individual reaps the positive outcomes associated with hope. Similarly, when goals are not achieved, levels of hope within the individual are diminished (Curry, Snyder, Cook, Ruby, & Rehm, 1997; Peterson & Luthans, 2003; Snyder, 1995b; Youssef & Luthans, 2007). Success leads to increased hope and belief applied toward the next attempted goal, while failure results in decreased hope and belief that they will achieve the next or similar task. Overall, this definition and model of hope is rather linear, clinical, and insular. This study will build on this theory by introducing external influences into this model.

Philosophical Underpinnings of Hope. It is difficult to examine hope, as well as consider what it means to have hope, using only the clinical, goal-directed theory cited above. While this approach is important to the application and understanding in how to increase levels of hope in a psychological sense, it is also necessary to consider the deep roots in mythological, religious, etiological, and historical accounts to understand its importance across cultures and in different contexts.

One of the most familiar mythological accounts of hope is in Hesiod's tale of Pandora's jar (most commonly known as a box, however the early writings describe a jar in the retelling of the myth). When the lid of the jar was lifted, all the evils of the world escaped to be realized and tormented by the entire population. However, the lid was closed in time to trap elpis (hope) within the jar (Sinclair, 1934). There are multiple interpretations of why hope remained locked within the vessel, but one of the more modern speculations to the myth implies that hope was kept from escaping so mankind would always possess the capability to hope despite the troubles and trials they would encounter in life (Geoghegan, 2008).

Similarly, many religious traditions are rooted in a person's ability to hope despite difficulty and based on a reality they will not receive in this lifetime (e.g., Christian, Hindu, Muslim texts). The Judeo-Christian teachings are built on the hope of a coming Messiah that will ensure a salvation following their earthly life (John 3:16, New International Version). Hindu teachings of Karma are centered on hope through which the actions and experience today will impact the later returns in this life or the next (O'Flaherty, 1980). Furthermore, the Quran detailing the eternal rewards through actions and faith in Allah is also centered on a basis of hope (Qur'an 32: 16-19). While the list of

religious doctrines and philosophical teachings is extensive compared to this representative list of major religions, the importance and need for hope is highlighted in its presence across religions and beliefs and is often in reference to a belief in an existence or future that will not be witnessed during the earthly life. Across religious traditions, spiritual leaders have urged followers to focus on the peace of the afterlife as a means to withstanding the current sufferings of their circumstances.

In addition to belief systems and stories, the historical accounts in which individuals and groups joined together to be hopeful in the bleakest of moments shows the shared human quotient of hope. Solnit (2010) describes many occurrences throughout human history (e.g., the 1940 London Blitz, 1906 San Francisco earthquake, and the more recent 2005 hurricane Katrina in New Orleans) where hope for a future, safety, life, was found and shared.

These examples indicate the ubiquitous existence of hope throughout history, mythology, and spiritual practices across cultures speak to the common anchor of what it means to be human. Combined with the understanding of hope as a psychological construct related to goal-setting and well-being, the complexity of hope can be appreciated. Furthermore, and for the purposes of this study, it is also important to tease apart the definitions of hope from other similar theoretical constructs.

Theoretical Perspectives of Hope. Understanding the differences between hope and other cognitive processes and theories is necessary in order to decipher the actual relationship between hope and other outcomes or impacts. While hope and comparable concepts have similarities, they oftentimes differ in both theory and measurement (Snyder, 2002). In addition, there is strong discriminant validity between hope and other

psychological constructs (Magaletta & Oliver, 1999). Specifically, the cognitive theories of optimism, self-efficacy, resilience, and goal-setting theory and how they compare to hope will be summarized. While there are additional cognitive and emotional constructs to compare, these four items are common in both colloquial speech and empirical literature in the way they are intertwined and occasionally interchanged.

Theory of Optimism. Hope, as described by Snyder (2000; 2002) is an internal process that both originates and is carried out by the individual. Optimism, however, is a cognitive process that is developed by external observations of a person(s) that is then internalized as a desire for oneself to have similar outcomes (Luthans, 2002). The similarity between hope and optimism lies in the aspiration for a positive outcome, typically improving on the current status of the individual (Bryant & Cvengros, 2004). Seligman (1998) adds that an optimistic individual externalizes the negative events viewing them as fleeting and only internalize the positive events. According to the theories of hope as previously studied and key to this research, experience with failure typically decreases levels of hope for an individual and thus is not externalized in the same way that optimism is experienced.

Theory of Self-Efficacy. Similar to optimism, self-efficacy is developed through observations of others and cognitions are learned through this internal processing of external behaviors (Bandura, 1982). However, while it is necessary to identify the divergences between self-efficacy and hope, the similarities are pertinent in linking theoretical support to relationships between hope and additional outcomes. For example, Stajkovic and Luthans (1998) found a strong relationship between self-efficacy and certain performance outcomes. In addition, the relationship between self-efficacy and

hope most closely models the pathway concept of hope theory with expectancy outcomes of self-efficacy (Luthans, 2002). To explain, the model of hope describes a process of building levels of hope through achievement of goals (Snyder, 2002). Similarly, self-efficacy is also increased through the achievement of outcomes (Bandura, 1982).

Though, it is important to note that hope theory also relies on the presence of agency to pursue and accomplish the goal, whereas self-efficacy focuses on the pathway process alone (Luthans, 2002). With the understanding of the relationship between hope and self-efficacy, linkages can be made to the outcomes while maintaining the importance of the separation between them.

Theory of Resilience. Resiliency is concerned with an individual's reaction to an event, typically a challenging or negative circumstance, and whether or not they are able to positively or negatively move forward by rebounding back from both positive and negative events (Luthans, 2002). Like the relationship of self-efficacy and hope, resiliency aligns more closely with the pathway section of the hope model and less with agency (Snyder, 2000), meaning that a person can be resilient but not hopeful if there is a lack of goal-directed energy. This is an important clarification as a person can be resilient through a difficult circumstance, but unless they have an outcome related to moving through the struggle, then this example refers to resilience alone and not the entire cognitive theory of hope.

Theory of Goal-setting. Goal-setting may seem exceptionally different from resiliency, optimism, and self-efficacy, however as goal achievement is a key component within the cognitive models of hope it is necessary to clarify the differences between the theory of goal-setting and the theory of hope. The cognitive model of hope achievement

as described by Snyder et al., (2002) is similar to the goal-setting model described by Locke and Latham (2002) in that through the achievement of goals there is an increase in positive outcomes. For example, if the goals of the assignment are attained, an increase in self-efficacy may occur which can spur an individual to set additional, higher-order goals (Locke & Latham, 2002; Bandura & Locke, 2003). Correspondingly, according to the models of hope, when goals are realized levels of hope also increase, which can increase the belief that one can achieve future goals of the same or more difficult levels (Snyder, 2002). While these theories of hope and goal-setting share similar outcomes through goal-attainment, the key difference between the models rests in the combinative components of agency and pathways that are present in the hope model, whereas goal-setting focuses solely on agency components (Peterson & Luthans, 2003). This distinction is important because hope increases as an individual accumulates learning of new paths of attaining goals, applying both experience and internal agency to future attempts.

Theoretical assumptions. Understanding hope as a construct that combines both personal agency with the identification of how an individual will achieve the outcome (pathways) is a key aspect to applying the concept. It is more than just the emotional feeling of optimism, the ability to recover utilizing resiliency, or the positive beliefs in one's abilities that is self-efficacy. Hope is complex in that it encompasses portions of each of the theories above and links them together to explain both the way and the how one looks at achieving an outcome. In addition, while goal-setting and achievement are necessary components to the process of increasing hope, they do not stand alone to describe hope and what it means to have hope.

The definition, philosophical underpinnings, and theoretical assumptions of hope are foundational to understanding the role and impact of hope. The research reviewed has highlighted how hope has been examined as an intrinsic and individualistic theory. The following sections will review the external influences on hope, its purpose, outcomes, and social aspects.

The Power of Failure: Purpose and Impact on Hope

The Purpose of Failure. While it may be a simple assumption that success leads to positive outcomes and increased well-being (Snyder 2000; 2002; Snyder, Rand, & Sigmon, 2002; Snyder, Shorey, Cheavens, Pulvers, Adams, & Wiklund, 2002), failure at tasks may also be critical to an individual's learning and development (Moxley, 1998). McCall (2010) also suggests that failure experiences are a critical component for emerging leaders to experience as part of their leadership journey. Furthermore, negative outcomes from stretch assignments can also have a positive effect on a developing leader and can even increase the amount of learning that occurs (McKenna, Boyd, & Yost, 2007). Experiencing these hardships can build resilience as well as an increased ability to problem solve and handle challenging situations (Day, 2001; Hernez-Broome & Hughes, 2004). However, many individuals may miss these opportunities to experience this type of failure because success and performance are valued over the risk associated with this type of learning (Hollenbeck & McCall, 1999). One may determine failure as either victory or defeat pending on their own individual identity and worldview (McKenna & Wenzel, 2016). For the purposes of this study, failure is defined in a more generalized definition of the construct— falling short of one's goal, a lack of success, or not being

able to perform. Examples of failure may include: ideas that didn't fly, conflicts that got out of hand, failures to make the most of opportunities, or failures to meet goals.

Impact of Success and Failure Outcomes on Hope. The literature on hope suggests that it is through successful attempts at reaching goals that build levels of hope. Small successes lead to smaller incremental increases in levels of hope, while achieving difficult tasks lead to larger increases in hope (Snyder 2000; 2002; 2004; Snyder, Rand, & Sigmon, 2002). However, if individuals only experienced success, would there be a need to have hope or understand its purpose? In contrast, the previous section on the importance of failure highlights some of the positive outcomes related to experiencing failure, creating a challenging paradox. If success is necessary to build hope (Snyder 2000; 2002; 2004; Snyder, Rand, & Sigmon, 2002), but failure and hardships are also key to development (Day, 2001; Hernez-Broome & Hughes, 2004; McCall, 2010; McKenna, Boyd, & Yost, 2007; Moxley, 1998), what capabilities of an individual or environmental circumstances are needed to be present in order to maintain hope despite failure? This juxtaposition of theories suggests that we consider success and failure together when thinking about positive outcomes and that increased levels of hope may be less directly related to success and failure alone, but rather the experience with other factors present while one is succeeding or failing.

Maintaining Hope Despite Failure: A Potential Relational Construct

The Importance of Social Support. Research shows that social support is a key component to positive well-being (Seligman, 2002; Thoits, 2011; Turner, 1981) as well as a fundamental aspect to an individual's need for interpersonal interactions (Baumeister & Leary, 1995). For example, social support has been found to have stress-buffering

effects related to health symptoms (Cohen & Wills, 1985; Turner, 1981), increase the ability to maintain control at work (van der Doef, Maes, & Diekstra, 2000), and reduce burnout (Etzion, 1984). Regarding this study, social support may also be a critical factor in an individual's ability to maintain hope despite a failure experience, as similar stress-buffering effects may be required. If the assumption is that experiencing failure may also be inherently stressful, these findings may be applicable to a larger examination of the impact of social support on the relationship between failure and hope. For example, some initial research has begun to explore the direct relationship between social support and hope in the field of medicine. These findings suggest that social support positively impacts levels of hope, and that with increased levels of hope a patient had an increased likelihood of recovery and longevity (e.g., Weis, Robert, Speridakos, & Elena, 2011).

In order to expand on these findings, specifically the impacts of social support on levels of hope, it is important to first understand how social support is defined and of what it is comprised. Further understanding of which types of social support impact the relationship between failure and hope may lead to more impactful implementation of support when a person is likely to experience failure.

Defining Social Support. Over the past few years, the research on social support has been described in multiple terms, but generally captures the same basic tenets of (1) recurrence, (2) structure, and (3) quality regarding the types of support. House, Umberson, and Landis (1988) first captured these three components of social support in their descriptions of social integration, social networks, and relational content. It is important to understand the complexity of social support and the types, quantity, and quality of relationships in order to discern how social support could impact the

connection between failure and hope. This section will use these components of social support to lay the groundwork for how this study will define and utilize social support.

Social Integration. This component has been studied as the type and frequency of interaction with sources of support (House et al., 1988). The type of interaction is key for the present study as support can come from differing sources (e.g., mentors, role models, feedback providers, etc.) and satisfaction with these sources may include the frequency of which an individual connects with these sources of support. Ng and Sorensen (2008) agree for defining the types or sources of social support as the antecedents and consequences of each situation can be quite different and need different sources of support. For example, peer support has been more linked to buffering burnout, while supervisor support at a work organization has been linked to satisfaction and productivity at work (Baruch-Feldman, Brondolo, Ben-Dayana, & Schwartz, 2002). In addition, organization support may more strongly related to outcomes of work attitudes than peer support (Ng & Sorensen, 2008). While the type of support is critical, these sources may not operate or influence alone. They can also be considered together as a type of network of support.

Social Networks. One purpose of networks is to seek out and develop numerous, diverse connections (Ibarra, 1993) with a focus on the constellation of connections and the extent to which those connections extend in society (Wolff & Moser, 2009). Smith and Christakis (2008) describe social networks as the structure and connections of the relationships - not the quantity or quality of the relationships. This is a key aspect of social networks as individuals beyond one's immediate network also have impact and influence on the individual, even if they never meet. The broader one's network the more

novel opportunities one has the chance to be exposed to and take advantage of, thus enhancing the person's developmental process and potential outcomes.

Relational Support. Once the types, frequency, and connections of someone's social support are considered, the quality of those relationships remains to be explored. When discussing social support, people are often referring to the relational content, or the quality of their relationships. Mainly, these relationships are viewed as either positive, fostering a type of support that buffers stress or as a more negative in nature, creating further demands or stressors. Individuals attempt to regulate interactions with those in their network and relationship type based on the positive or negative nature of the relationship- with the aim of increasing feelings of support (House et al., 1988).

Strategic Social Support. When thinking about social support in this way, considering the sources, quality, and purpose of support, one becomes intentional regarding the purpose of their relationships; creating a network of social support that is strategic. McKenna and Wenzel (2016) describe a strategic network of support as “a group of people who support you, provide you feedback, open up opportunities and insight, and know your purpose” (pp. 6).

Applying a strategic approach to social support during a difficult situation, potentially with a high risk of failure, a person may be able to plan for the right type of support needed to maximize levels of hope despite the circumstance and increase likelihood of success. This strategic approach may include understanding if certain types of social support will be more influential to the situation (Ng & Sorensen, 2008). Furthermore, insights into where additional development and expansion of your strategic social network, quality, or frequency is needed may increase hope before the next

difficult situation. Being intentional about who is providing support and in what capacity could mean the difference in hope for health, achievement, and perseverance despite failure experiences.

The Present Study: Building and Sustaining Hope in the Face of Failure Understanding the Role of Strategic Social Support

The objective of this study was to explore if hope, in the presence of failure, is impacted by strategic social support and if the more formal structural sources (i.e., mentors, role models, job contacts) and the more informal relational sources (i.e., emotional support, sources of feedback, advocates) also impact levels of hope when failure is present. The motivation behind this study was the recognition that much of the research on hope to date has focused within the vacuum of what is in an individual's control (i.e., success of goal achievement through pathways and internal agency). However, little has been examined related to the role and presence of others and their impact on levels of hope. This research study explores the impact of strategic social support relationships on levels of hope, including structural and relational sources of social support, leading the way for future research to expand on this concept and explore how and when these relationships are most critical to build or maintain hope in important moments. Additional research into the impact on gender, ethnicity, and race would prove helpful in determining how strategic social support is needed at certain critical points across differing demographics and is addressed in the discussion section of this paper. This study lays the groundwork for understanding how hope is maintained and built despite failure experience through the moderator of strategic social support.

Potential Implications. These findings, if supported by the results below, will aide in how individuals can be more intentional in the relationships they seek and how organizations can support structural and relational connections with the intention of building hope. From the perspective of an individual, knowing which relationships one should strategically develop to build hope could increase wellness, personal disposition, and health factors (Smith & Christakis, 2008; Snyder et al., 1991; Snyder, 2000; Snyder, 2002; Snyder et al., 2002) at greater speed or at key moments of difficulty. From an organizational perspective, employees with higher levels of hope have additional positive work outcomes (Peterson & Luthans, 2003) implying that the environment and programs linking the right relationships together at the right time could also increase the impact of these outcomes. Understanding which types of structural and relational support sources increase levels of hope despite failure situations and outcomes means individuals can seek out these key relationships and organizations can better invest in their employees to provide access to these sources.

Hypotheses. The hypotheses for this study are comprised of the following:

Hypothesis 1: People who have perceived more experience with failure will have lower levels of hope compared to those who have experienced less failure, who will have higher levels of hope.

Hypothesis 2: Strategic Social Support will moderate the relationship between perceived failure experience ratings and level of hope, while controlling for personality factors.

Hypothesis 3: Relational social support (advocates, sources of feedback, and emotional support) will have more of a moderating impact on the relationship between perceived failure experience and levels of hope compared to structural social support (role models, job contacts, and mentors), while controlling for personality factors.

Models.



Figure 1. Hypothesis 1 Model. This figure depicts the hypothesized links between key Perceived Failure Experience and Hope.

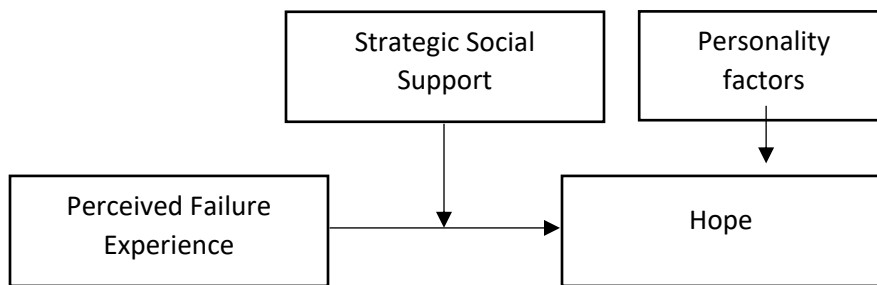


Figure 2. Hypothesis 2 Model. This figure depicts the hypothesized relationship between the moderator and the independent and dependent variables.

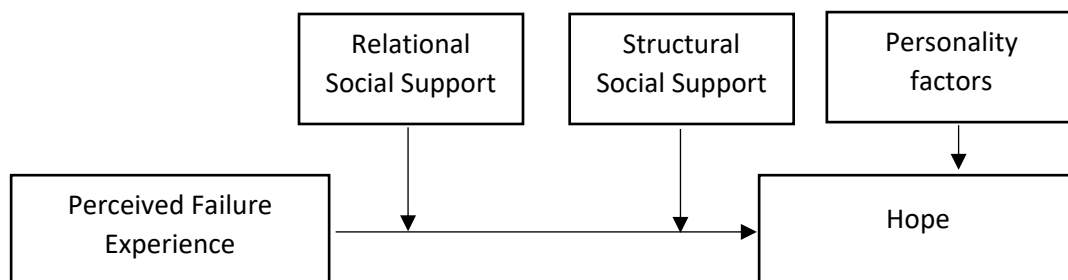


Figure 3. Hypothesis 3 Model. This figure depicts the hypothesized double moderation.

Statistical Analyses. A moderation analysis of strategic social support on the relationship between perceived experience with failure and levels of hope will be used to analyze interactions effects (Hayes, 2013). In addition, a double moderation using Hayes PROCESS macro (Hayes, 2013) will be utilized to examine the interaction effects of relational social support sources and structural social support sources on the relationship between perceived failure experience and levels of hope in order to test hypothesis 3.

CHAPTER II

Method

Sampling Procedure

For the present study, archival data from an online leadership development tool was utilized to study the hypotheses. Participants engaged with the online tool for personal development purposes. All users received email notification to create an online profile before participating in the development tool; the profile consisted of demographic items and a 5-factor personality assessment. The option to provide data for research and related studies was given to each participant when they created their account and only those that selected this option were used in the present study. Methods for this study were approved by Institutional Review Board and are in compliance with the National Institute of Health.

Participant Characteristics

Participants were selected if they were over the age of 18 and had volunteered their data for research purposes and related studies. Of the final sample size of 573 participants, the age range was 21 to 97 ($M = 35.5$, $SD = 13.8$) and 56.2% were women. Ethnicity of participants was 77.1% Caucasian/White, 7.9% Asian Pacific Islander, 4.5% Hispanic/Latino, 4.0% African American/Black, 0.2% Other, and 6.3% did not identify. Participants were from a variety of organizations with 28.8% in Church Ministry, 20.8% For-Profit, 11.5% Educational, 10.8% Non-Profit, 4.2% Parachurch, 2.4% State/Federal Government, 13.1% not working for an organization, 7.0% Other, and 1.4% undisclosed.

Participants were selected if they answered the following three components of the development tool: (1) Assessment Profile – consisting of the personality assessment items and a single-item hope measure; (2) Leadership Experience and Learning Audit – specifically identifying their level of failure experience; and (3) the strategic network audit and guide –includes the strategic operative support scale, which measures 7 sources of social support. In addition, participants were chosen if they identified with having some level of experience with failure in order to map onto the hypotheses being studied. Participants were removed if they believed failure was not yet relevant to them or had no experience with failure.

Only participants who completed the various components of the development tool within 3 months' time were included in the study. This cutoff is to maintain reasonable temporal occurrence between measures (Shadish, Cook, & Campbell, 2002) and reduce common method variance (Podsakoff, MacKenzie, Lee, & Amp; Podsakoff, 2003).

Sample Size and Power

The present study utilized moderation analyses to assess the interaction effects of the total scale score of strategic operative support (all sources of social support together) with perceived failure experience on levels of hope. In addition, double-moderation using Hayes PROCESS (Hayes, 2013) was used to assess the impact of relational social support and structural social support on the relationship between perceived failure experience and levels of hope. This double moderation analysis assesses the B weights of each scale and the model neither requires nor assumes that structural and relational social support occur in a temporal sequence or be related.

This sample size of this study was 573 participants— above the minimum

threshold of $N > 392$ recommended by GPower for a medium effect size and power of .95 for the full model (See Appendix E).

Measures and Variables

Data was collected using an online personal and leadership development tool. Only participants who partook the following measures and items throughout the tool were selected for the present study.

Personality Measure. The studies on the relationship between personality and hope are mixed. Tierney (1995) noted a strong relationship between hope and personality. However, in another study, the authors found that hope predicts academic achievement while controlling for personality, intelligence, and historic achievements (Day, Hanson, Maltby, Proctor, & Wood, 2010). Given varying findings of the relationship between personality and hope, it was necessary for this study to control for personality in order to uniquely identify the impact of social support on the relationship between perceived failure and hope.

For the purposes of this study, the IPIP five factor model (Goldberg, 1999) was utilized to control for personality. Similar to other five factor models of personality, this model measures the following components of personality: neuroticism, openness to experience, agreeableness, extroversion, and conscientiousness (Barrick & Mount, 1991) and meets the optimal psychometric criteria (Goldberg, 1999). This measure uses a 5-point Likert scale and has participants “rate the extent to which they agree or disagree with the following items.”

In addition, the IPIP measure is public domain; making the access of this measure free to use across any body of research, therefore increasing its availability of usage and

the likelihood of reliability and validity of the measure overtime (Clark & Watson, 1995; Messick, 1995). Alpha coefficients for this personality measure surpassed the minimum threshold (Cortina, 1993) and were between .84 and .97 (Goldberg, 1992; 1999) Alpha coefficients will be assessed for this study to confirm the threshold is met.

Experience with Failure. As part of a larger development section focused on a participant's identification with different experiences, respondents identified their experience with failure using a categorical-type scale. For the purposes of this study, participants were sorted into four groups based on how they answered the following question regarding their personal experience with failure: "You experienced what you perceived as a failure or mistake on your part, even if you may now see it as positive. (e.g. ideas that didn't fly, conflicts that got out of hand, failures to make the most of opportunities, or failed goals)". The groups are (1) Little experience with this; (2) Moderate experience with this; (3) Significant experience with this; and (4) Definite experience with this. Those who selected that experience with failure was either *Not relevant to you yet* or had *no experience but desire it* were selected into a group as experience with failure is a necessary theoretical component to the independent variable in the present study.

Strategic Operative Support Scale. The Strategic Operative Support Scale assessed the total satisfaction with 7 sources of social support, comprising of: (1) Advocates; (2) Role Models; (3) Mentors; (4) Job Contacts; (5) Sources of Feedback; (6) Sources of Emotional Support; (7) Organization Support. Participants were asked to list the individuals who provided the associated type of support and then to select their level

of satisfaction with each of the 7 sources of support using a 10-point Likert-type scale ranging from 1 (not at all satisfied) to 10 (very satisfied). However, the organization support item was removed from the scale in order to align with the present studies hypotheses regarding social support from persons, not entities. Scale scores were averaged across 6 items.

Psychometric credibility. To test the reliability of the Strategic Operative Support Scale, Cronbach's alpha was assessed and found to be within the acceptable values of alpha of 0.70 and 0.95 ($\alpha = 0.82$) (Gliem & Gliem, 2003). See Table 1 for alpha results. A confirmatory factor analysis (CFA) was conducted in order to confirm the integrity of the Strategic Operative Support Scale (Clark & Watson, 1995). Additional fit testing compared the original 7 item scale to the proposed 6 item scale with *Organizational Support* item removed. The CFA was assessed, and the model fit was outside the acceptable ranges of a non-significant chi-square, root mean square error of approximation (RMSEA) and confidence interval $\leq .05$, and a comparative fit index (CFI) $\geq .95$ (Byrne, 2010). However, when the Organizational Support item was removed, the fit improved ($\chi^2 = 173.2$, $df = 9$, $p = .000$, CFI = .865, RMSEA = .178). Cronbach's alpha results and CFA model fit results and parameter estimates in Appendix F. Although the fit was still outside the ideal CFA ranges (Byrne, 2010), given the reliability test was strong, the strategic operative support scale was still utilized as the

measure for the satisfaction across all the support constructs. The limitations of fit are reviewed in the discussion section below.

Table 1
Strategic Social Support Scale Reliability and Item-Analysis

Statistics for Scale	<u>N</u>	<u>Mean</u>	<u>Variance</u>	<u>SD</u>		
	6	42.84	86.392	9.295		
	<u>Mean</u>	<u>Minimum</u>	<u>Maximum</u>	<u>Range</u>	<u>Max/Min</u>	<u>Variance</u>
Item Means	7.140	5.901	8.199	2.298	1.389	.734
Item Variances	4.527	3.227	6.355	3.129	1.970	1.358
Inter-Item Correlations	.448	.257	.696	.439	2.704	.01
	<u>Scale</u>					
Item Total Statistics	Scale Mean If Item Deleted	Variance If Item Deleted	Corrected Item Total Correlation	Squared Multiple Correlation	Alpha if Item Deleted	
Advocates	34.64	64.594	.643	.452	.787	
Feedback	36.11	58.060	.659	.454	.779	
Emo Support	34.92	65.607	.502	.316	.812	
Job Contacts	36.94	60.533	.497	.286	.820	
Role Models	35.47	64.044	.630	.516	.788	
Mentors	36.12	59.892	.657	.551	.780	
			<u>Alpha</u>	<u>Standardized Item Alpha</u>		
Reliability Coefficients			.823	.829		

Note. $N = 573$.

Hope. The dependent variable was assessed using the hope item within the profile portion of the online leadership development tool. Participants self-rated the item “I am able to stay focused on what could be, even in the worst of times” on a 5-point Likert-type scale ranging from 1 (Not at all like me) to 5 (Very much like me).

Scale Support. This study utilized a single-item measure to assess and individual’s level of hope. While there are strong psychometric measures for hope from the field of clinical psychology (Snyder et al. 2002), this single-item scale is believed by the author

to map onto the construct of hope in an accurate and practical way (Fisher, Matthews, & Gibbons, 2016) while providing a focused assessment of hope related to perceived failure experience as depicted in the item, “even in the worst of times”.

Research Design & Procedure

This study is a cross-sectional design in which participants completed all 3 components and required items within a 3-month time period using an online leadership development tool. All items were consistent across the 6-year time period in which the data for the present study was obtained. Given the design parameters and methods, this is a non-experiment study.

CHAPTER III

Results

Preliminary Analyses

In order to assess any probable data characteristics that could impact the analyses, the data was cleaned, descriptive statistics were reviewed, and assumptions were tested. The following sections review the methods used to assess missing data, outliers, normality, descriptive statistics, and assumptions.

Missing data. The data was reviewed for overall missingness to determine the appropriate method for maintaining maximum numbers of cases. After screening for the required inclusion criteria (single item measure of hope, experience with failure), 100 cases (17.3%) contained missing data and only 182 values (.54%) were missing across cases. Review of the missing values indicated random missingness. Multiple imputation was conducted to maintain the maximum number of cases for a total of 577 cases.

Outliers. Outliers were screened using Mahalanobis, Cook's D, and Leverage tests (Leys, Klein, Dominicy, & Ley, 2018; Jensen & Ramirez, 1998; Karadimitriou & Marshall, 2017). Four cases did not pass the minimum threshold of passing two of the three tests and were removed to increase the reliability of the results. These cases were removed in their entirety resulting in a final sample size of 573.

Normality. Histogram plots were reviewed to assess the normality of the data. Hope, the dependent variable, displayed a visually normal distribution. Of the moderating variables, Total Social Support and Structural Social Support had a visually normal distribution, while relational support was slightly negatively skewed. The Shapiro-Wilk test was utilized to further assess the distributions and found that all four variables were

significantly skewed. However, the analysis method utilized in this study, Hayes PROCESS, does not assume normal distribution and can assess data that is non-normally distributed (Hayes, 2018). The impact of non-normality is reviewed in the limitations section of the discussion.

Descriptive statistics and correlations. Table 2 presents the descriptive statistics for the dependent and moderator variables. Range restriction appears to be indicated for all moderating variables, particularly Total Social Support Scale and Relational Social Support. This range restriction is recognized and is reviewed as a limitation in the discussion. Frequencies and percentages for the independent variable, perceived experience with failure, are displayed in Table 3. There is a relatively even distribution of participants across these groups.

Pearson's correlation was reviewed between the relational and structural support scales and demonstrates moderate correlations between relational social support and structural social support ($r = .616$). This moderate correlation is not surprising given both subscales measure satisfaction with types of social support (Table 4). To assess the strength of the relationships between perceived experience with failure, the categorical independent variable, with the moderators and the dependent variable, eta and eta squared values were evaluated (Table 5). The relationship between perceived failure experience and hope does not appear to strong ($\eta = .09$; $\eta^2 = .0081$). This is relationship is further tested below in the analysis of the first hypothesis.

Table 2

Descriptive Statistics for Predictor and Criterion Variables

Variable	M	SD	Min.	Max.
Hope*	3.77	0.91	1.00	5.00
Strategic Social Support**	7.14	1.60	1.00	10.00
Relational**	7.62	0.85	1.00	10.00
Structural**	6.66	0.54	1.00	10.00

Note. N = 573. * indicates scale ranges from 1-5. ** indicates scale ranges from 1-10.

Table 3

Frequencies for independent variable experience with failure groups

Group	Frequency	Percent	Valid Percent	Cumulative Percent
Little Experience Group	111	19.4	19.4	19.4
Moderate Experience Group	193	33.7	33.7	53.1
Significant Experience Group	127	22.2	22.2	75.2
Definite Experience Group	142	24.8	24.8	100.0

Note. N = 573.

Table 4

Correlation table

Variable	1	2
1. Relational Social Support	--	.616**
2. Structural Social Support	.616**	--

Note. N = 573. * $p < .05$ (2-tailed). ** $p < .001$ (2-tailed).

Table 5
Perceived experience with failure

Variable	η	η^2
Hope	.090	.008
Total Social Support	.078	.006
Relational Social Support	.031	.001
Structural Social Support	.119	.014

Assumptions. In addition to normality, the following tests were conducted to evaluate the assumptions were met for the moderation methods.

Multicollinearity. To test for multicollinearity, the variance inflation factor (VIF) statistic was assessed and ranges were found to be below the threshold of 3 (VIF ranges = 1.0 - 1.6). These results indicate no multicollinearity in the data (Field, 2009).

Linearity. To assess linearity, standardized residuals were plotted on a P-P plot and were found to have a linear distribution indicating normally distributed errors (Appendix G).

Homoscedasticity and independence of errors. To examine for homogeneity of variance for a categorical independent variable, Levene's test was conducted and box plots reviewed. The results for Levene's test were on the edge of significant ($p = .056$). Given a larger sample size can often result in a false significance, the box plots were reviewed and the size, or variance, of each group was similar, indicating the assumption of homoscedasticity of the data was met (Appendix G). Finally, the Durbin-Watson statistic was 1.8, falling within the required boundaries of 1-3, suggesting the errors are independent.

Primary Analyses

Hypothesis 1. In order to test the first hypothesis (Figure 1) and confirm the eta results showing a low strength association between perceived failure groups and hope, a One-Way ANOVA was conducted. This test confirmed that there is not a significant relationship between the dependent and independent variables ($F = 1.54, p = 0.20$).

Neither the Welch or Brown-Forsythe tests increase the p-value. This suggests that there are no statistically significant differences between the means of hope based on perceived experience with failure and that hypothesis 1 was not supported by the data. See Table 6 for results.

Table 6
One-Way ANOVA

Predictor	Sum of Squares	<i>df</i>	Mean Square	<i>F</i>	<i>p</i>
Perceived Experience with Failure Group	3.78	3	1.26	1.54	.204

Note. $N = 573$.

Hypothesis 2. The second hypothesis examined the moderating effect of strategic social support on the relationship between perceived failure experience ratings and level of hope, while controlling for personality factors. Following Hayes procedure for moderation Model #1 (Hayes, 2018, p. 351), Hayes PROCESS macro in IBM SPSS Statistics v 26 was utilized to estimate the interaction and conditional effects (Figure 2). Table 7 shows the coding procedure for the categorical independent variable used in the analysis.

Table 7

Coding of categorical X for analysis

Perceived Failure Group	X ₁	X ₂	X ₃
Little Experience Group	.000	.000	.000
Moderate Experience Group	1.000	.000	.000
Significant Experience Group	.000	1.000	.000
Definite Experience Group	.000	.000	1.000

Note. g-1

Full model. The full model had a significant amount of variance over zero with about 17% of the dependent variable (levels of hope) attributed to the predictors $F(12, 560) = 9.37, p < .001, R^2 = .167$.

Main effects. Only one of the perceived failure groups, X₁, had a significant relationship with the dependent variable ($B = 1.039, p = .040$). The moderating variable, total social support, was significant ($B = 0.154, p = .007$) indicating a significant relationship between ratings of satisfaction with strategic social support and levels of hope. Four of the five covariates were significant, showing that extraversion was the only personality factor that did not have a significant relationship with hope in the model (Table 8).

Interaction effects. The perceived failure group x Strategic Social Support interactions were not statistically significant (Table 8). While the evidence does not support Hypothesis 2, the significant conditional effects show that as total social support increases, levels of hope increase, for all groups (Figure 4).

Table 8
Model Coefficients for the Model #1 Moderation

	Coeff.	SE	p	LLCI	ULCI
X ₁ (Perceived Failure)	1.039	0.503	.040*	.050	2.027
X ₂ (Perceived Failure)	0.939	0.522	.072	-0.086	1.965
X ₃ (Perceived Failure)	0.719	0.531	.176	-0.324	1.761
M (Total Social Support)	0.154	0.057	.007*	0.042	0.266
X ₁ *M	-0.124	0.070	.077	-0.261	0.013
X ₂ *M	-0.125	0.073	.084	-0.268	0.017
X ₃ *M	-0.083	0.073	.251	-0.226	0.059
CV ₁ (Intellect)	0.148	0.065	.023*	0.021	0.276
CV ₂ (Conscientious)	0.127	0.058	.028*	0.014	0.240
CV ₃ (Agreeable)	0.243	0.074	.002*	0.098	0.388
CV ₄ (Emo Support)	0.275	0.048	.000**	0.181	0.369
CV ₅ (Extraversion)	0.044	0.046	.332	-0.046	0.134
Constant	-0.563	0.558	.313	-1.658	0.532

$R^2 = 0.167$
F(12, 560) = 9.37, p < .001

Note. N = 573. *p < .05 (2-tailed). **p < .001 (2-tailed).

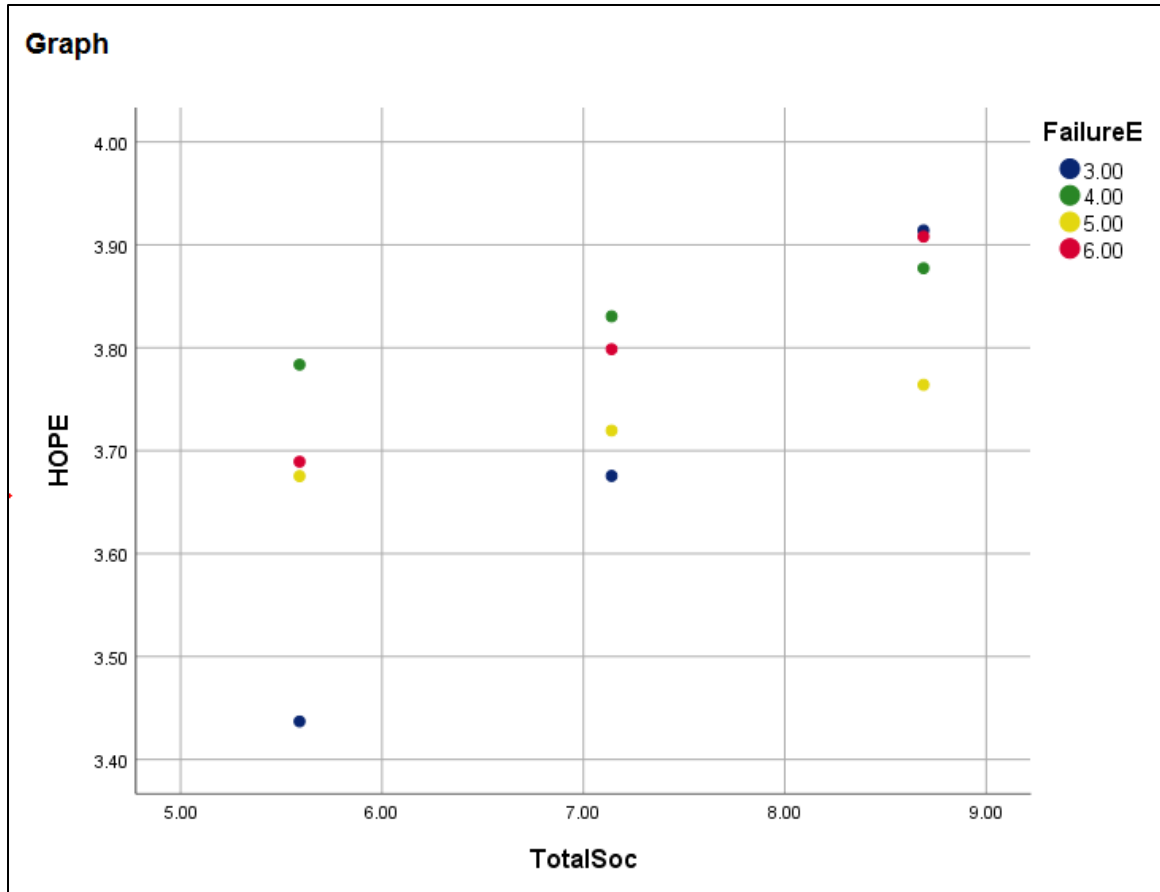


Figure 4. Conditional effect of the focal predictor.

Hypothesis 3. The double moderation of hypothesis 3 (Figure 3) was examined using Hayes procedure for moderation Model #2 (Hayes, 2018, p. 322). The coding procedure for the categorical independent variable was the same as Hypothesis 2 (Table 6).

Full model. The full model had a significant amount of variance over zero with about 17% of the dependent variable (levels of hope) attributed to the predictors $F(16, 556) = 7.08, p < .001, R^2 = .169$.

Main effects. Two of the perceived failure groups had a significant relationship with the dependent variable, X1 ($B = 1.253, p = .023$) and X2 ($B = 1.119, p = .049$). Relational social support was significant ($B = 0.141, p = .05$) while the structural social support

subscale did not have a significant p-value ($B = .033, p = .550$) indicating the relational sources of support subscale has a significant relationship with hope and the structural sources of support do not. Similar to model #1, extraversion was the only personality factor that did not have a significant relationship (Table 9).

Interaction effects. The interactions were not statistically significant for relational support sources nor structural support sources x Failure groups (Table 9). Hypothesis 3 is not supported by these results; however, Figure 5 shows that as satisfaction with relational support sources increases, levels of hope also increase for all groups.

Table 9
Model Coefficients for the Model #2 Moderation

	Coeff.	SE	p	LLCI	ULCI
X ₁ (Perceived Failure)	1.253	0.550	.023*	.172	2.334
X ₂ (Perceived Failure)	1.119	0.567	.049*	.005	2.232
X ₃ (Perceived Failure)	0.913	0.574	.113	-.215	2.041
M (Relational Support)	0.141	0.073	.054*	-.003	.285
X ₁ *M	-0.134	0.086	.121	-.303	.036
X ₂ *M	-0.099	0.088	.263	-.272	.074
X ₃ *M	-0.091	0.092	.325	-.272	.090
W (Structural Support)	0.033	0.055	.550	-.075	.140
X ₁ *W	-0.010	0.071	.888	-.149	.129
X ₂ *W	-.0048	0.075	.524	-.194	.099
X ₃ *W	-0.013	0.078	.871	-.167	.141
CV ₁ (Intellect)	0.159	0.066	.016*	.029	.288
CV ₂ (Conscientious)	0.129	0.058	.026*	.016	.243
CV ₃ (Agreeable)	0.236	0.075	.002*	.090	.383
CV ₄ (Emo Support)	0.278	0.048	.000**	.183	.373
CV ₅ (Extraversion)	0.041	0.046	.373	-.050	.132
Constant	-0.790	0.599	.188	-1.966	.387
			R ² = 0.169		
			F(16, 556) = 7.08, p < .001		

Note. N = 573. * $p < .05$ (2-tailed). ** $p < .001$ (2-tailed).

Graph

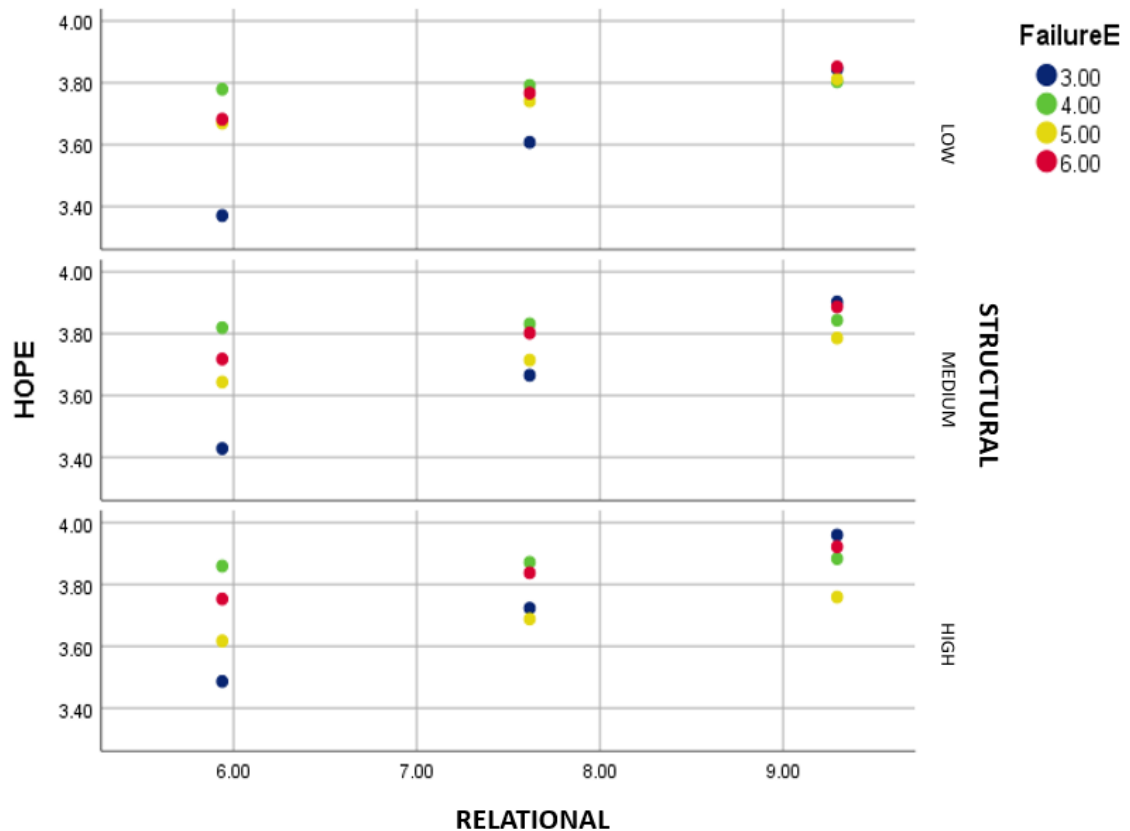


Figure 5. Conditional effect of the relational and structural predictors.

Exploratory Analyses

Based on the findings of the hypothesis, further analysis of the moderation effects of the relational support items was conducted to explore their individual relationship on levels of hope. Hayes Model #1 was used to individually test each of the relational support sources (sources of feedback, advocates, and sources of emotional support) as moderators. Results showed that emotional support was not significant, but both advocate support ($B = 0.121, p = .0184$) and sources of feedback ($B = 0.141, p = .000$) had significant main effects on the model while controlling for personality factors. None of

the individual relational factors had significant interactions. Table 10 displays the model coefficients for the separate analyses for sources of relational support.

Table 10
Model coefficients for exploratory analyses of moderators

	Coeff.	SE	p	LLCI	ULCI
Advocates	0.121	0.051	.018*	0.020	0.221
Sources of Feedback	0.141	0.039	.000**	0.065	0.218
Emotional Support	0.006	0.045	.896	-0.083	0.095

Note. * $p < .05$ (2-tailed). ** $p < .001$ (2-tailed).

CHAPTER IV

Discussion

Intent of the research

The intent of this study was to understand how strategic social support plays a unique role when building and sustaining hope in individuals, despite their experience with failure. This research further examined how relational sources of support may impact levels of hope different from structural sources of support. With the real potential for failure and difficulty, knowing how to increase levels of hope despite those experiences could increase the likelihood of success and resiliency. Based on previous research of social support and hope (Avolio et al., 2004), it was hypothesized that strategic social support, specifically relational support related to emotional support, sources of feedback, and advocates would positively impact levels of hope and who will support an individual and increase levels of hope.

Summary of Results

Connection of Failure and Hope. The results of this study did not support hypothesis 1, which expected that as perceived experience with failure increased, levels of hope would decrease. One potential reason for not finding similar results to previous research is that individuals were asked rate their perceived experience with failure over time rather than identifying one, recent incident. However, with previous research already showing strong linkages between experience with failure and hope (Snyder 2000; 2002; 2004; Snyder, Rand, & Sigmon, 2002), this relationship is still believed to exist although it was not seen in this study. One possibility is that this study asked participants to rate their experience with failure over time. It could be that although an individual has

experienced many failures, they also may have experienced many successes, which would increase levels of hope, and align to what has been shown in the previous research on hope. Another possibility is that failure is not related to hope in the way research has previously addressed. Further exploring some of the theories that discuss the necessity of failure as part of development and how this relates to increasing or decreasing levels of hope would be beneficial to our understanding of how hope is built and maintained.

The Role of Strategic Social Support. Results found a significant relationship between strategic social support and levels of hope, supporting hypothesis 2, while controlling for personality factors. Although the interaction between failure and strategic social support was not significant, the significant main effect relationship between strategic social support and hope suggest that if an individual wants to increase levels of hope, being satisfied with sources of social support is a key factor. These main effect results support previous research showing the linkages between social support and hope (Avolio et al., 2004 & Weis et al., 2011).

The Role of Relational and Structural Sources. Similar to strategic social support and perceived failure groups, the interactions between perceived failure groups and both the relational social support scale and structural social support scale were non-significant. However, there was a significant main effect of relational sources with levels of hope. This suggests that levels of hope increase when individuals are more satisfied with their sources of relational support (emotional support, advocates, and sources of feedback). Although structural sources were not found to have a significant relationship with levels of hope, previous literature outlines the importance of mentors, role models,

and job contacts on organizational outcomes (Earley & Kanfer, 1985; Hetty van Emmerik, 2004; Huffman & Torres, 2002; Wright & Wright 1987).

To further explore the resulting impact of relational sources on levels of hope, individual moderations were analyzed for each of the three variables. All moderations were run while controlling for personality factors. Sources of feedback and advocates were both found to have significant main effects on levels of hope, while sources of emotional support were not found to be significant. None of the variables had significant interactions across the failure groups. These outcomes suggest that having advocates and individuals who provide feedback are likely to increase levels of hope. Inversely, lower satisfaction with these particular sources of support may decrease levels of hope. This indicates that individuals and organizations should strive for increasing satisfaction with advocates and sources of feedback in order to increase levels of hope along with the positive outcomes related to high levels of hope.

It is also important to note that the sources of support, explored in this study as structural and relational support, are complex relationships that should be carefully considered. For the purposes of this paper, these sources of support were organized into groupings of more formal relationships (structural) and sources of support that could come from informal relationships (relational). However, these sources of support may also work together or overlap (e.g., emotional support can also come from a mentor as well as be a separate source of support). There may also be certain sources that require more effort versus those that are more passive in nature. Further understanding aspects of these sources of social support will benefit individuals and organizations in how they think about what types of social support are needed to increase levels of hope.

Practical Implications

Although the link between failure experiences and levels of hope was not observed in this study, we know that everyone is going to fail, in big and small ways, and that through these moments it is critical for individuals to have hope for a successful outcome or just to try again. While there is more to be seen about the relationships and their role in this connection between failure and hope, this study would suggest that surrounding individuals with the right sources of support could prove helpful in the moments or aftermath of failure experiences. Furthermore, this study suggests that support doesn't only look like a shoulder to cry on or a sympathetic friend, but some of the most influential sources are those that tell the truth with feedback and are actively advocating on the behalf of the individual.

These findings suggest that individuals and organizations can be more intentional in how they approach building and maintaining sources of support with the objective of building hope. Individuals can seek out key relationships that they are missing and/or those that provide feedback and advocacy, while organizations can better invest in their employees, managers, and leaders to provide access to these sources through programs, initiatives, and incentives.

Employees with higher levels of hope have additional positive work outcomes (Peterson & Luthans, 2003). Based on the present study, an organization could invest in programs and cultures that support the creation of social support connections. One opportunity for organizations would be to intentionally incorporate sources of social support into development programs. Emerging leader, high potential, and manager development programs could all benefit from pairing key sources of support with

participants with the goal of building hope to reach positive organizational outcomes. Mentorship programs could focus on the pairing of individuals with specific sources of support based on gaps or key sources of support related to increasing levels of hope. By connecting individuals with the sources of support they need up front, they can build higher levels of hope for when the risks and challenges are higher.

Individuals could apply the results from this study by identifying the sources of support that fill the gaps in their strategic network. These relationships have the potential to build hope resulting in increased wellness, personal disposition, and health factors (Smith & Christakis, 2008; Snyder et al., 1991; Snyder, 2000; Snyder, 2002; Snyder et al., 2002). Based on the exploratory analyses, to further increase the impacts of these positive outcomes, individuals could intentionally seek out sources of feedback and advocates or request current sources of support provide these types support.

Limitations & Future Research

The following section outlines the primary identified limitations of the study and is intended to inform how the results are considered and applied. These limitations also serve as a means to direct future research to expand and improve upon this study.

Sample. One limitation of this study was the fairly homogeneous reporting of the sample. A majority of the participants identified their ethnicity as Caucasian/White (77.1%). However, the other aspects of the sample demographics were more diverse (e.g., age and gender). It is possible that the ethnic homogeneity within the sample may have impacted the range restriction and skewness observed across the variables. Future research may look to expand the sample with a more ethnically diverse group or add ethnicity as a control factor as well as increase the response rate.

It is also noteworthy that 33% of the sample identified as working for church ministry or para-church organizations. These individuals, given their work in faith-based organizations, may be more hopeful or focused on positive outcomes to come in the future, which also may have impacted the range restriction and skewness. Additional research could explore ministry workers and how their levels of hope are impacted by sources of social support and if this looks different from other organizational employees.

A second concern related to the sample is the overall low response rate potentially affecting the ability to generalize the findings and replicate the study. Due to the strict inclusion criteria, only 573 of 1,940 (29.5% response rate) participants who agreed to have their data used for research purposes met these qualifications. While this rate falls near the average for online instruments of 33.3% (Nulty, 2008), conclusions made may be biased based on potential missing representation of the sample.

Measurement. While the Strategic Operative Support Scale was examined psychometrically, the fit indices did not meet all cut-off criteria. Due to the intent of this scale measuring total satisfaction across all sources of support and not a specific construct of social support, for the purposes of this study the scale met the theoretical criteria to continue. However, it is worth noting that this creates possible measurement error and the potential for Type 1 error.

Previous research has measured how levels of hope were impacted by success or failure related to a specific goal (e.g., Snyder, 2002). This study had the participants rate their experience with failure over time. It could be that while an individual has experienced a lot of failure, they have also experienced many, if not more successes, which would relate to levels of hope. It is also important to refer to some of the

development research that suggests that individuals grow through failure experiences and that they are necessary to leadership development (McCall, 2010; McKenna, Boyd, & Yost, 2007). Further research could further look at the long-term impacts of experiences with failure and levels of hope over time and how this connects with personal and leadership development.

Skewness and Range Restriction. Normality tests showed that all variables had a negative skew to the data. One explanation could be due to the sample limitations of homogeneity and response rates. The presence of skewness across the variables could result in an overestimation of the overall observed effects and increased potential for Type II error. It should also be noted that there was a fair amount of range restriction for strategic social support as well as the relational and structural support sources. This restriction in range, even if only a small restriction, could diminish the power to detect moderating effects and reduce the observed effect size (Aguinis, Edwards, & Bradley, 2017).

Causality. In order to maintain reasonable temporal precedence, the data collected was required to meet a 3 month cut-off for all scales to be completed. However, the data was cross-sectional in design, deterring the ability to determine causal direction and reducing internal validity (Shadish et al., 2002). Previous research on hope suggests that while levels of hope are an outcome of a successful or failed attempt, levels of hope are also an antecedent in the model, influencing the next attempt (Snyder, 2002). Therefore, while causality of predictors cannot be fully determined, the intent of this study was to explore the presence of a relationship between strategic social support and

hope as a first step. Future research should expound on the presence of this relationship to understand the causal nature.

Additional research could look to expand the understanding of how these relationships impact specific desired work outcomes at the employee, team, and organization level. Knowing who, how, and when to insert key sources of support, could increase the positive business outcomes associated with higher levels of hope (Peterson & Luthans, 2003). For example, an intervention that intentionally places different strategic sources of support with individuals attempting a difficult or high-risk task could be observed and measured to better understand a causal relationship between perceived failure, the presence of strategic social support, and levels of hope. An intervention of this design would allow for observation of success or failure in a specific situation, rather than ratings of perception. Levels of hope could be measured before, during, and after the attempt to understand how support sources impacted the levels of hope.

Helland & Winston (2005) discuss hope in the context of a positive motivation state where leaders and members of the organization have the energy to achieve goals. Future research could further explore the impact of levels of hope on team directed goals and outcomes. Like the suggestion above regarding individuals, teams that have the right sources of support may increase levels of hope and therefore their likelihood to achieve positive organizational outcomes. Studies may look to understand which sources of support are more beneficial to team levels of hope and if these are the same as those for individuals.

Lastly, future research could examine the impacts of diversity regarding how sources of support influence levels of hope in failure situations differently depending on

race, ethnicity, gender, age, etc. For example, research on mentorship has shown that for women and people of color, finding mentors and sponsors to guide and advocate on their behalf is more difficult compared to male and white counterparts (Huffman & Torres, 2002). This may impact what sources of support are more needed by certain groups and which may be harder to attain through informal connections. Understanding how aspects of an individual's identity may impact whom, how, and when sources of social support may engage, organizations can be more intentional with how these connections are made to increase levels of hope.

Conclusion

In a reality where the likelihood of failure is high and hope is needed to meet the challenges, this study shows the importance of having strategic sources of social support to assist an individual along their way. The findings of this study demonstrated that specifically investing in relational related support sources of advocates as well as sources of feedback are especially critical for increasing levels of hope. Individuals seeking support may want to consider someone who will give clear feedback or could be a strong advocate. For those who serve in this capacity for someone else, they could consider how to increase the feedback and/or advocacy they provide, which may increase levels of hope for that individual. As future research continues to explore how to support individuals to increase their likelihood of hoping and believing in the potential, it is important to remember that humans are inherently relational and that exploring hope without considering the sources of support around that person potentially leaves out a central piece of the puzzle.

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Appendix A: Perceived Failure Experience Scale

Perceived Failure Experience Scale

This item is within the Leader Experience and Learning Audit Inventory.

Inventory Tool Introduction:

Below are descriptions of different experiences you may or may not have been through at this point in your career. Read the description of each experience on the left and indicate the extent to which you have had the experience (relevance), and its importance to your career and life.

Experience with Failure:

You experienced what you perceived as a failure or mistake on your part, even if you may now see it as positive (e.g. ideas that didn't fly, conflicts that got out of hand, failures to make the most of opportunities, or failed goals).

1. Not relevant to you yet
2. No experience but desire it
3. Little experience with this
4. Moderate experience with this
5. Significant experience with this
6. Definite experience with this

Appendix B: Hope Scale

Hope Scale

This scale is on page 1 of the Profile.

Profile Instructions:

Please indicate the extent to which each of the following statements describe you.

Hope Scale:

I am able to stay focused on what could be, even in the worst of times.

(1) Not at all like me

(3) Like me

(5) Very much like me

Appendix C: Strategic Operative Support Scale

Strategic Operative Support Scale

This scale is within the Strategic Network Audit and Guide.

Strategic Operative Support Scale:

(1) Role Models:

- a. List: Who do you consider important role models in your life and career?

While they may not be a role model for every aspect of your life, in some way they represent something you would like to be or do. List up to 9 names.

- b. Satisfaction: On a scale from 1 to 10, how satisfied are you with your list of role models?**

(2) Mentors:

- a. List: Who do you consider to be important mentors in your life and/or

career? Even if he or she may not claim to be your mentor, you would consider them to have a mentoring voice in your life. List up to 9 names.

- b. Satisfaction: On a scale from 1 to 10, how satisfied are you with your list of mentors?**

(3) Job Contacts:

- a. List: Who would you would call tomorrow if you were looking for a job?

List up to 9 names.

- b. Satisfaction: On a scale from 1 to 10, how satisfied are you with your list of job contacts?**

(4) Advocates:

- a. List: Who has your back? These are people who would defend your competence and character if questioned, and/or people who believe in you and encourage you to push forward. List up to 9 names.
- b. Satisfaction: On a scale from 1 to 10, how satisfied are you with the list of people who have your back?**

(5) Feedback:

- a. List: Who are the people who give you honest, open, and challenging feedback about your development, strengths, and weaknesses? List up to 9 names.
- b. Satisfaction: On a scale from 1 to 10, how satisfied are you with the list of people who give you honest feedback?**

(6) Emotional Support:

- a. List: If your life or career were falling apart, whose shoulder would you lean on? List up to 9 names.
- b. Satisfaction: On a scale from 1 to 10, how satisfied are you with the list of people who offer you emotional support?**

(7) Organization Support:

- a. List: List 3 organizations where you would enjoy working. After each organization, fill in the name of one person who would be willing to help you get your foot in the door. If you are currently working, list your organization to the right.
- b. Satisfaction: On a scale from 1 to 10, how satisfied are you with the list above?**

Appendix D: IPIP Five Factor Personality Measure

IPIP Five Factor Personality Measure (Goldberg, 1992; 1999)

Instructions: Describe yourself as you generally are now, not as you wish to be in the future. Describe yourself as you honestly see yourself, in relation to other people you know of the same sex as you are, and roughly your same age. So that you can describe yourself in an honest manner, your responses will be kept in absolute confidence.

Indicate for each statement whether it is (1) Very Inaccurate, (2) Moderately Inaccurate, (3) Neither Accurate Nor Inaccurate, (4) Moderately Accurate, or (5) Very Accurate as a description of you.

1. Am the life of the party.
2. Feel little concern for others.
3. Am always prepared.
4. Get stressed out easily.
5. Have a rich vocabulary.
6. Don't talk a lot.
7. Am interested in people.
8. Leave my belongings around.
9. Am relaxed most of the time.
10. Have difficulty understanding abstract ideas.
11. Feel comfortable around people.
12. Insult people.
13. Pay attention to details.

14. Worry about things.

15. Have a vivid imagination.

LEADER SELF REGULATION 64

16. Keep in the background.

17. Sympathize with others' feelings.

18. Make a mess of things.

19. Seldom feel blue.

20. Am not interested in abstract ideas.

21. Start conversations.

22. Am not interested in other people's problems.

23. Get chores done right away.

24. Am easily disturbed.

25. Have excellent ideas.

26. Have little to say.

27. Have a soft heart.

28. Often forget to put things back in their proper place.

29. Get upset easily.

30. Do not have a good imagination.

31. Talk to a lot of different people at parties.

32. Am not really interested in others.

- 33. Like order.
- 34. Change my mood a lot.
- 35. Am quick to understand things.
- 36. Don't like to draw attention to myself.
- 37. Take time out for others.
- 38. Shirk my duties.

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- 39. Have frequent mood swings.
- 40. Use difficult words.
- 41. Don't mind being the center of attention.
- 42. Feel others' emotions.
- 43. Follow a schedule.
- 44. Get irritated easily.
- 45. Spend time reflecting on things.
- 46. Am quiet around strangers.
- 47. Make people feel at ease.
- 48. Am exacting in my work.
- 49. Often feel blue.
- 50. Am full of ideas.

Appendix E: Demographic Items

Demographic Items

This scale is within the Profile section of the online development tool.

What is your sex?

Male

Female

Which of these best describes your ethnic background?

Caucasian/White

African American/Black

Hispanic/Latino

Asian/Pacific Islander

Native American

Other

What year were you born?

(Open item)

Which of these best describes the type of organization in which you work?

Business/For-profit org

State/Fed/Gov Agency

Educational Institution

Church/Ministry Setting

Para-Church Organization

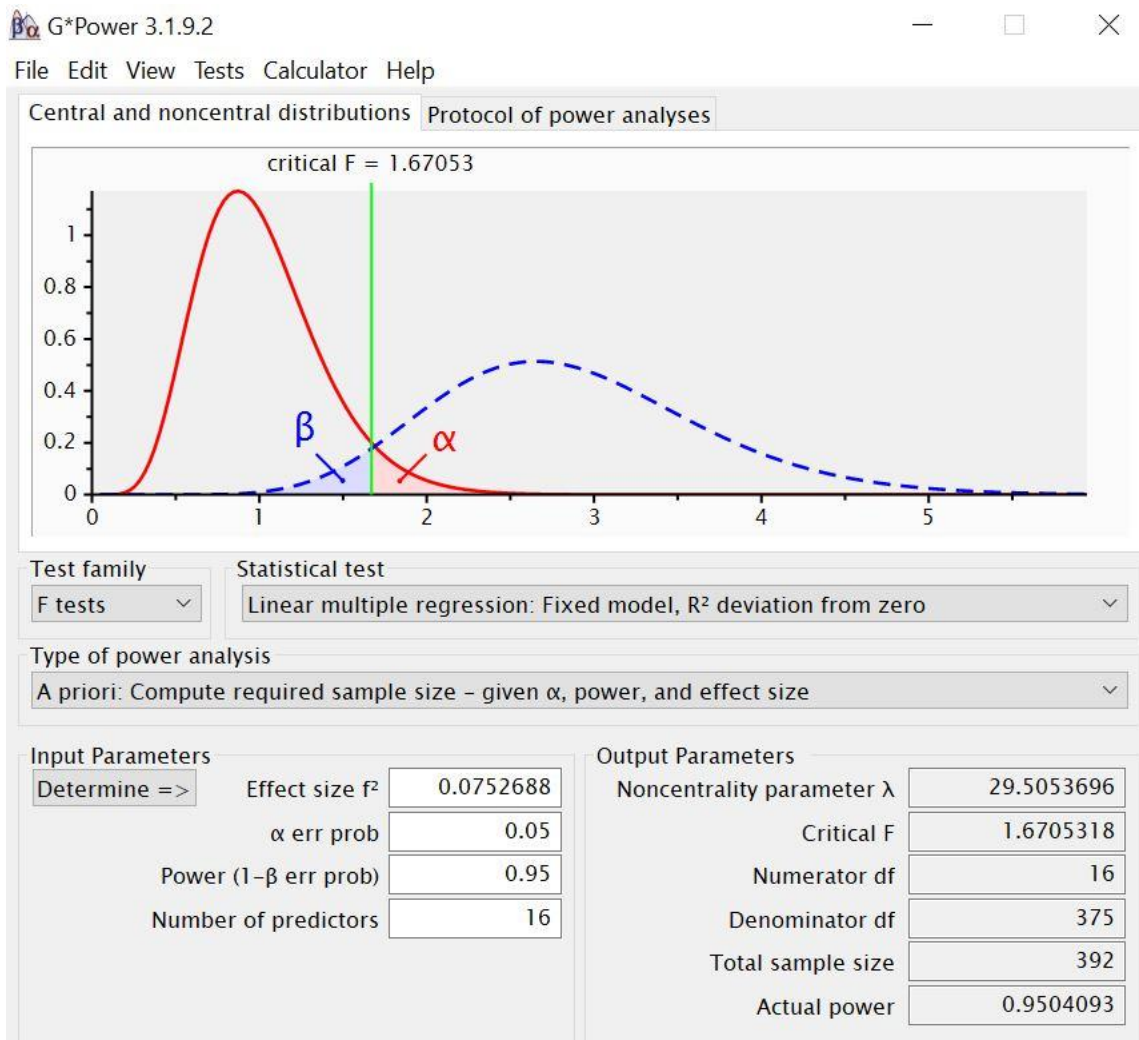
Not-for-Profit Organization

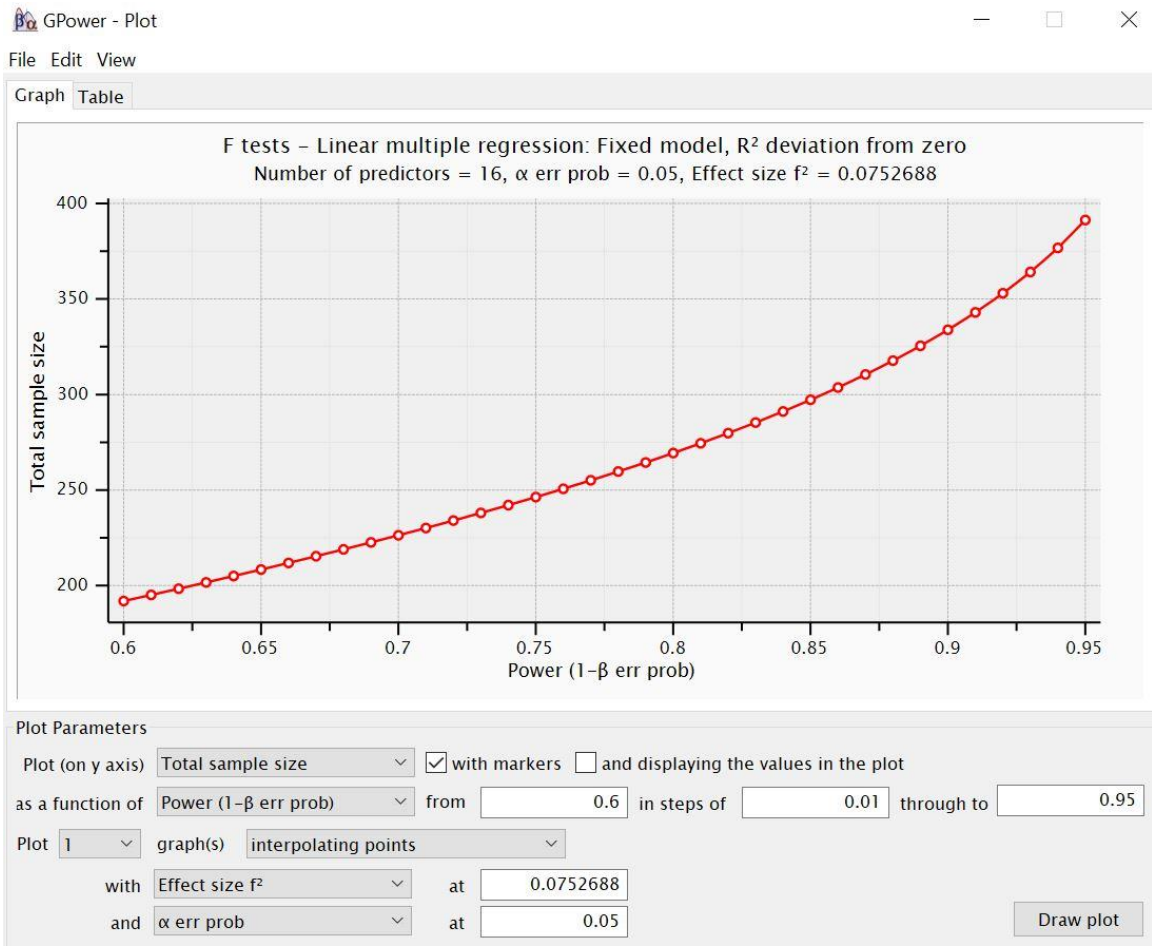
Not working right now

Other

Appendix F: Power Analysis

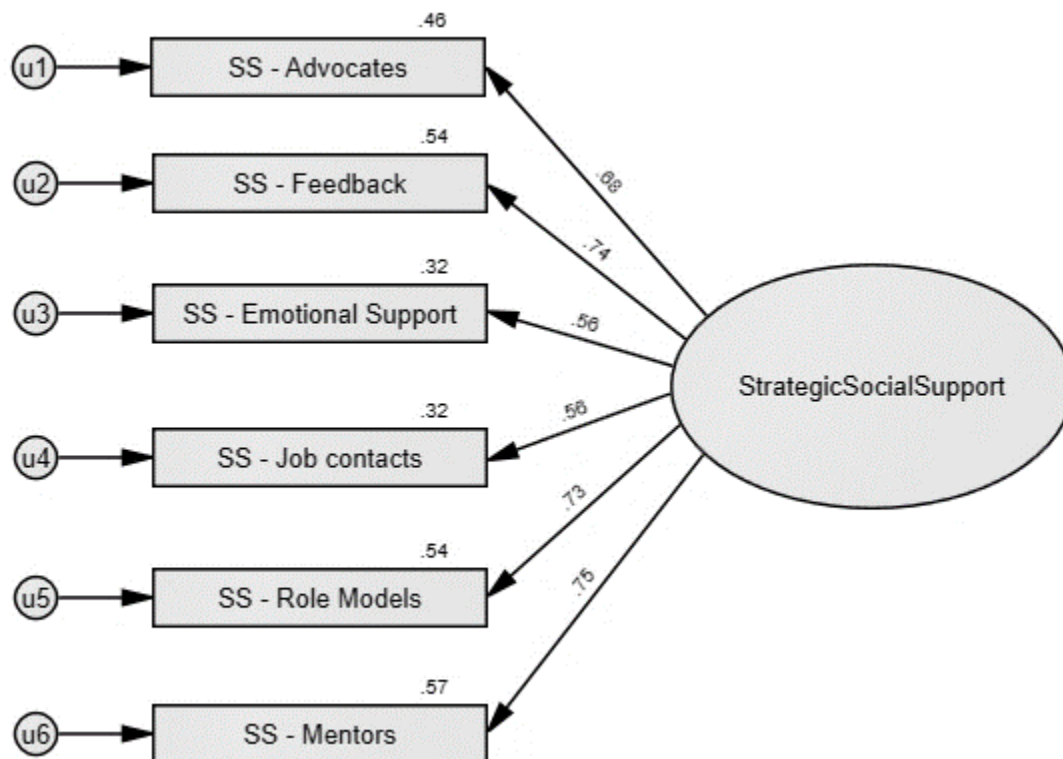
Power Analysis





Appendix G: CFA Results

CFA Results on Strategic Operative Scale – Model 1

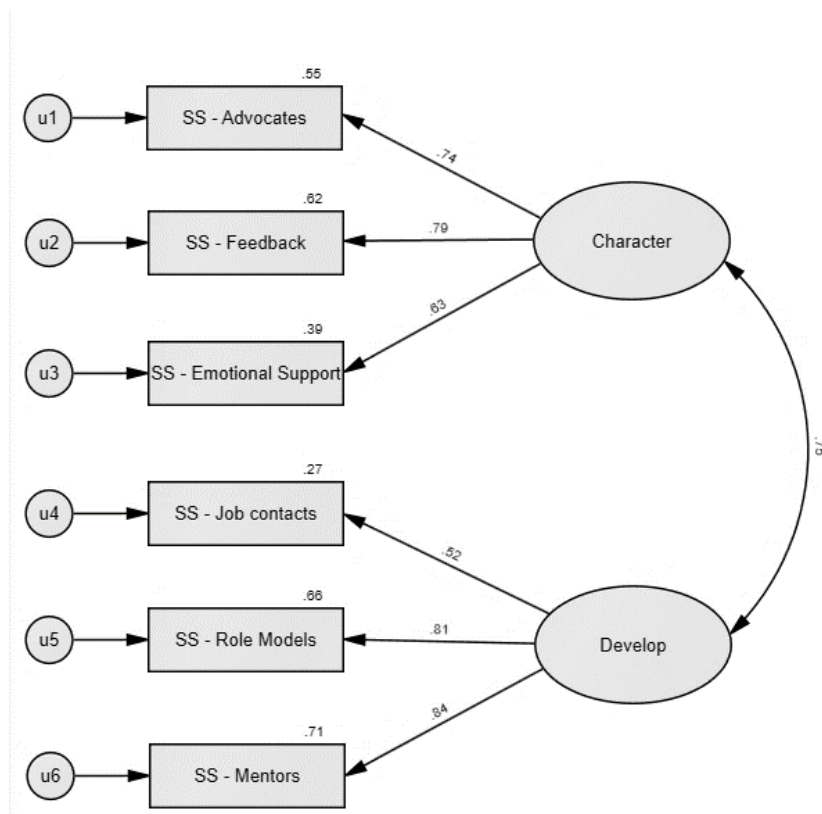


*Summary Parameter Estimates for Strategic Social Support Scale
(Organizational Support item removed)*

Path	Estimate	S.E	p
<i>First-order</i>			
SSEmotionalSupport ← StrategicSocialSupport	0.94 (.56)	.08	***
SSJobContacts ← StrategicSocialSupport	1.15 (.56)	.10	***
SSFeedback ← StrategicSocialSupport	1.38 (.73)	.09	***
SSRoleModels ← StrategicSocialSupport	1.12 (.73)	.08	***
SSMentors ← StrategicSocialSupport	1.31 (.75)	.09	***
SSAdvocates ← StrategicSocialSupport	1.00 (.68)	--	--

Note. Standardized values are in parentheses. ** indicates $p < .05$. *** indicates $p < .001$.

CFA Results on Strategic Operative Scale – Model 2



Summary Parameter Estimates for Strategic Social Support Scale
(Organizational Support item removed)

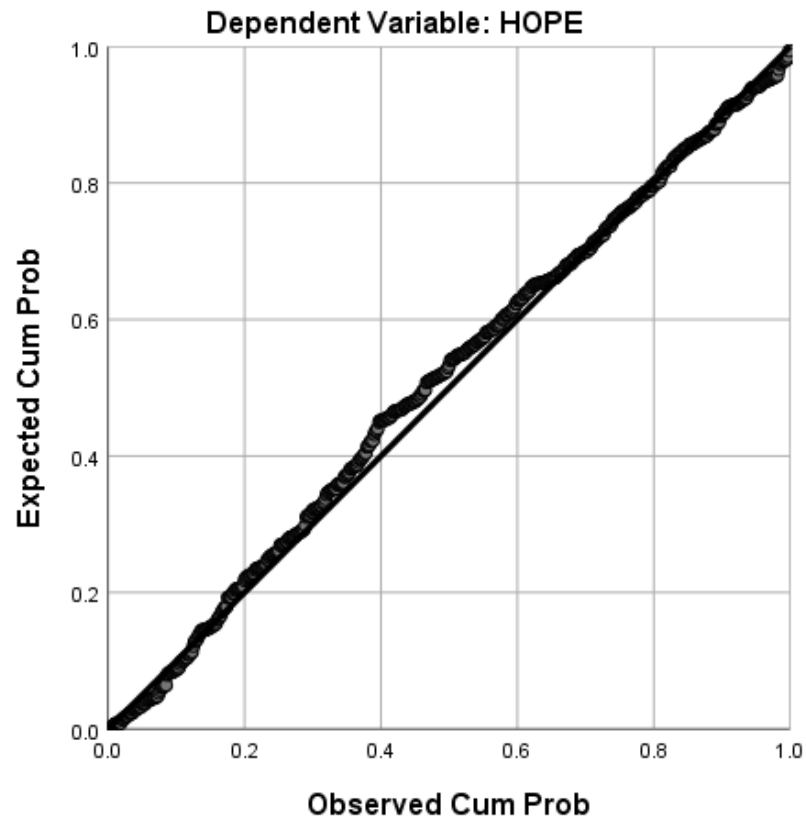
Path	Estimate	S.E	p
<i>First-order</i>			
SSEmotionalSupport ← Relational	0.96 (.63)	.07	***
SSFeedback ← Relational	1.36 (.79)	.09	***
SSAdvocates ← Relational	1.00 (.74)	--	--
SSJobContacts ← Structural	1.34 (.52)	.16	***
SSRoleModels ← Structural	1.56 (.82)	.15	***
SSMentors ← Structural	1.85 (.84)	.17	***

Note. Standardized values are in parentheses. ** indicates $p < .05$. *** indicates $p < .001$.

Appendix H: Assumption Tests

Assumption Tests

P-P Plot of Regression Standardized Residuals



Box Plots for Homoscedasticity of Variables

