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Developing Adaptive Performance: The Power of Experiences and a Strategic Network of Support

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Developing Adaptive Performance:

The Power of Experiences and a Strategic Network of Support

Joseph D. Landers Jr.

A dissertation proposal submitted in partial fulfillment

of the requirements for the degree of

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In

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Dedication

I dedicate this dissertation to anyone who feels they are entering uncertain territory - Speaking from experience, these are going to be the moments that are rich with opportunity to learn, grow, and take it all in. While it may seem scary or impossible now, this moment will prepare you for the future and you will come out better on the other side. Remember your experience and remember your people, and you'll be just fine.

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This dissertation and my completion of this doctoral program would not have been possible without the incredible network of support I have had the fortune to be surrounded by. I want to take a moment to acknowledge and thank you.

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Abstract

In today's dynamic work environment, the ability to adapt is becoming less of a luxury and more of a necessity. In order to contribute to the growing body of research surrounding adaptive performance, this study will seek to examine the power of a leader's breadth and depth of experience on his or her adaptive performance. It is predicted that the more breadth and depth of experience that a leader has, the higher the leader's adaptive performance will be. Additionally, in assessing the power of a leader's breadth and depth of experience on adaptive performance, it is also predicted that the larger breadth and depth of experience that a leader has, the more growth in adaptive performance that leader will show through a leadership development program. Furthermore, it is predicted that the strength of a leader's strategic network will moderate this relationship such that a leader who has a strong network of social support will be more adaptive compared to a leader with low social support, when combined with his or her breadth and depth of experiences and will strengthen the effect of a leader's growth through a development program. The data used was archival data collected from leaders who have participated in a whole leader development program. To analyze the data, a series of multiple regressions were run. Findings indicated that the breadth and depth of a leader's experiences does significantly predict his or her adaptive performance. Furthermore, a strong strategic network of support did not significantly moderate this relationship. Finally, significant evidence was not found indicating that past experiences were predictive of increased growth in his or her adaptive performance from time one to time two, regardless of the moderator of a strong strategic network of support.

CHAPTER I

Introduction and Literature Review

"Don't get set into one form, adapt it and build your own, and let it grow, be like water" -Bruce

Lee: A Warrior's Journey (2000)

Many people would agree that in today's world, things are changing and evolving at a head spinning pace. These changes are happening daily in so many aspects of each of a person's life, such as how they interact with their friends and families, the hobbies they choose, and even key decisions in their work (Moran & Brightman, 2000; Rafferty & Griffin, 2006). In a world where many would suggest that new technologies are emerging daily and globalization is the norm, what will be the most effective way to think about performance? And, what will be the fundamental building blocks of that new conceptualization? In that new world of performance, the capacity to adapt will be a key component, leaving us with a question regarding the experiential and social elements of building a leader with not only the capacity to perform, but to perform at the highest level of adaptive capacity. The purpose of this study will be to examine the impact of a leader's breadth and depth of experience on his or her ability to adapt. Additionally, the moderating relationship of a leader's strategic network of support will be examined (see Figure 1). Furthermore, this study will examine if a leader's breath and depth of experience are predictive of one's growth in adaptive performance when taking part in a leadership development program while still considering the moderating effect of a leader's strong network of social support (see Figure 2).

Figure 1

Proposed Model for Hypothesis 2
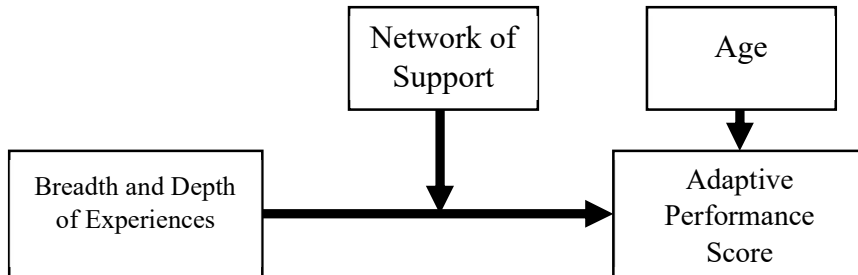
Figure 2

Proposed Model for Hypothesis 4.
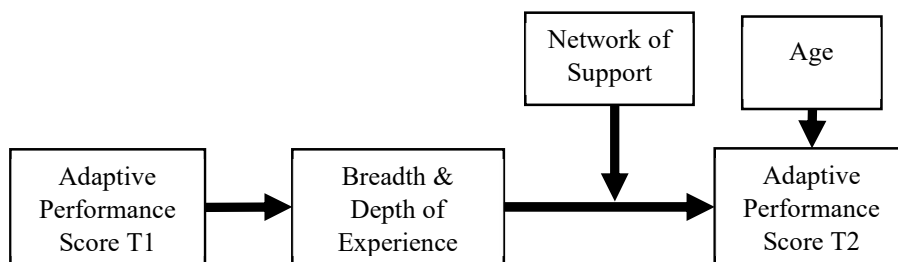
The ability to adapt is becoming more of a necessity and less of a luxury, especially with the world of work changing at a rapid pace (Koenigsbauer, 2018). Oftentimes referred to as adaptive performance, this way of viewing performance is more than simply an achievement of outcomes but includes things such as applying learning from one task to the next, maintaining composure when things get hard, and being able to move between contexts and cultures efficiently. This combination of factors is the capacity to adjust one's behaviors while evolving and changing to continue to perform at a high level (Allworth & Hesketh, 1999; Kozlowski et

al., 2001; Pulakos et al., 2000). While the value of such a skill is clear, the big question still remains; how can this form of performance be fostered?

The body of research on adaptive performance continues to grow, and as such there is an interest in how this capability can be developed. But, within the current body of research, there appears to be more of a focus on who has the right individual factors or things that an organization can do to help facilitate it. Where this study seeks to fill a gap is in understanding what individuals and leaders can do to increase their own capability to adapt. For example, there have been a number of studies surrounding adaptive performance that have focused on individual factors that serve as antecedents to a person's ability to adapt. These have included cognitive ability (e.g. Bell & Kozlowski, 2002; 2008) as well as personality traits (e.g. Bickle et al., 2011; Griffin & Hesketh, 2003; Shoss et al., 2012). Specifically, higher cognitive ability has been found as an antecedent of adaptive performance (Bell & Kozlowski, 2002; 2008). Additionally, conscientiousness was found to be an antecedent of adaptive performance (Shoss et al., 2012), as well as extraversion and emotional stability (Huang et al., 2014).

While this knowledge is valuable, it does not provide help to those who may not meet the criteria for optimal adaptive performance out of the gate. Additionally, much of the literature surrounding training for adaptive behaviors revolves around error management training and the development of adaptive transfer of training (e.g. Heimbeck et al., 2003; Ivancic & Hesketh, 2000). Again, this information can prove quite valuable when an organization has the resources available to give to training focused on building adaptive capacity. But, the question still remains; what can be done for those who do not meet these individual thresholds, or are a part of an organization that does not have the resources to allocate to this kind of training? The answer

to the challenge of how to keep up with an ever-changing work environment may lie in what each of us are gaining every day; experiences.

The impact of developmental experiences has been heavily studied in organizational research with an emphasis on preparing for the future. McCall et al. (1988) emphasize the importance of drawing on one's past experiences, in order to prepare an individual for future situations. But, not every person learns the lessons that experience can teach. Additionally, when people were required to reflect on their developmental experiences and on what elements of the experience that taught important lessons that could be applied in the future, there was a linkage between certain kinds of experiences and the lessons they teach (DeRue et al., 2012; McCall et al., 1988). Building on this idea, Pulakos et al. (2000), found that the past experiences that required adaptation predicted an individual's ability to adapt in future. Additionally, past experience requiring adaptation was more predictive of present adaptive performance beyond cognitive ability and personality (Pulakos et al., 2002). Going further, how would this relationship impact a leader's growth as they are investing in their own development as a leader? How would doing so impact an individual's ability to adapt moving forward? And, how would surrounding oneself with a network of support amplify this relationship?

Adaptive Performance

Adaptive performance refers to a performance dimension that does not quite fit into either of the typically considered task and contextual performance domains (Allworth & Hesketh, 1999). The task performance domain refers to the behaviors that are necessary to complete the tasks that are required of one's position and contribute to the success of the organization (Borman & Motowidlo, 1993; Motowidlo et al., 1997). In contrast, contextual performance refers to the behaviors that contribute to creating a successful work environment.

These behaviors are valuable to the organization in that they can promote a positive affect out of others, improve interpersonal communication, and promote cohesiveness and teamwork (Motowidlo & Kell, 2013). At its core, adaptive performance is the ability of people to manage and succeed in unfamiliar situations (London & Mone, 1999). Characteristics of this performance dimension have been cited as the ability to transfer past training and lessons from one task to another (Kozlowski et al., 2001), the ability to regulate one's emotions (Huang et al., 2014; Sonentag & Frese, 2003), as well as the ability to adjust to different cultures an individual encounters (Pulakos et al., 2000). These three elements of adaptive performance will be examined further. But first, while adaptive performance is emerging as a beneficial dimension of performance to consider, there are similar constructs that have been studied that should also be discussed.

Adaptive Performance, Learning Agility, and Role Flexibility

Adaptive performance is likely a construct that contains facets of many other things. Two examples that are similar to adaptive performance are leaning agility and role flexibility. Learning agility is defined as the willingness and ability of an individual to apply past lessons to new situations (Lombardo & Eichinger, 2000). People who are high in learning agility tend to glean the "right lessons" from an experience that can be applied to later situations (De Meuse et al., 2010). While adaptive performance and learning agility are certainly related, there are important distinctions. The emphasis around individual learning agility has been highly focused on individual leadership potential (Silzer & Church, 2009) rather than performance. Furthermore, learning agility has been found to have the tendency to be stable and present in those perceived to have high potential (Lombardo & Eichinger, 2002; Silzer & Church, 2009). Moreover, current measures and definitions of learning agility (i.e., Barnett, 2008; De Meuse et al., 2010; Spreitzer

et al.,1997) are limited in their attention to emotional regulation and cultural adjustment, two characteristics of adaptive performance. So, while on the surface these constructs can be viewed as similar, I would instead posit that is more an element of the transfer of training characteristic of adaptive performance as it has been defined.

Role flexibility also has some similarities to adaptive performance. Murphy and Jackson (1999) define role flexibility as the behaviors that allow an employee to maintain effectiveness when things are uncertain by being willing to step out of their previously defined role. Role flexibility is generally discussed in the context of situations where uncertainty in an organization and various roles emerge out of necessity (Katz & Kahn, 1978). While, according to Griffin et al., (2007) adaptivity is a necessary element of work role performance when roles are uncertain, there remains a distinction between role flexibility and adaptive performance, in that role flexibility is more specifically targeted toward work roles while adaptive performance is focused on how an individual reacts to changes and novel situations that he or she encounters (London & Mone, 1999). While there are and have been similar constructs in the context of organizational research, adaptive performance remains distinct and thus will be a construct of interest.

The Structure of Adaptive Performance

Through the research on adaptive performance, it has become clear that the construct is multifaceted. This has been found through studies on various elements that a variety of researchers have found to be indicative of adaptive behavior. There have been studies that have created various taxonomies of the facets of adaptive performance (e.g., Campbell, 1990; Pulakos et al., 2000), but some elements of these taxonomies do not apply to all jobs or positions. For the purposes of this study, adaptive performance will be defined as the ability of a person to adapt in real time to the changing workplace environment around them. Furthermore, for this study on

adaptive performance on those in leadership positions, three facets of adaptive performance will be considered: learning transfer (Kozlowski et al., 2001), emotional regulation (Allworth & Hesketh, 1999), and cultural/contextual adjustment (Pulakos et al., 2000).

Learning Transfer

In organizational research, transfer of training can be defined as the degree to which a person effectively applies the knowledge, skills, and abilities gained through training to the context of his or her job (Baldwin & Ford, 1988; Wexley & Latham, 1981). Within the context of adaptive performance, this is the ability to apply, and modify as necessary, previous training and learning to the current task at hand (Kozlowski et al., 2001). A person who is high in adaptive performance will take prior learning and make adjustments in order to perform in novel situations that may arise. One element of this is the ability to creatively solve problems (Hatano & Inagki, 1986). An adaptive person can step back from a complex problem and come up with new and creative solutions. Additionally, an adaptive person will be able to take past lessons and use them to learn new tasks and technologies that may arise (Pulakos et al., 2002; Noe & Ford, 1992; Thach & Woodman, 1994). As the workplace continues to advance and build on itself, an adaptive person will anticipate these changes and continue to use prior skills to successfully adjust to new situations to perform at a high level.

Emotional Regulation

Conceptualized through a social cognitive lens, Bandura (1991) conceptualized self-regulation as a means by which humans control their behavior through self-observation, judgement, and finally, a response. More specifically, emotional regulation is the process by which individuals experience and express emotions (Gross, 1998). As an element of adaptive performance, emotional regulation and stability have been shown to be an important predictor of

one's ability to react and adapt to new situations (Huang et al., 2014). This is also important

when dealing with stressful situations in the workplace (Lazarus, 1999; Lazarus & Folkman,

1984), or in dealing with uncertain situations that may arise (Dix & Savickas, 1995). Change and

ambiguity can be stressful, but the ability to regulate one's emotions can prove to be imperative

to continuing to perform at a high level.

Cultural Adjustment

Culture refers to how those in an organization interact with the workplace environment

around them through observation and experiences as well as how they make sense of this

environment (Schneider et al., 2011). Oftentimes, situations arise in which one needs to work in

an unfamiliar situation where the culture and those around them are vastly different from what he

or she is used to. Being put in these ambiguous and new situations can be a major source of work

and non-work-related stress (Black, 1990). It should be no surprise that this is an essential

dimension of adaptive performance. Within the context of adaptive performance, cultural

adaptability is the ability of an individual to perform at a high level in different cultures and

adjusting one's interpersonal style to continue to achieve goals when working with new teams

and groups of individuals (Pulakos et al., 2000; 2002).

Adaptive Performance and Leadership

Why focus specifically on the adaptive capabilities of leaders? One reason is because

while the organizational world continues to change and evolve, those in leadership positions will

be responsible for passing along these changes and helping those they lead adapt themselves.

Leaders today are not only responsible for themselves but are also responsible for the

development and consideration of those whom they lead (McKenna, 2008). For this reason, it is

important to consider how a leader's own ability to adapt plays a role on those they lead, as well as their own abilities to adapt.

A leader who is able to lead by example and translate a vision for those they lead has been shown to have largely positive effects for those that they serve and the organization overall (Judge & Piccolo, 2004). It stands to reason then, that these "transformational leaders" who are adaptive would be able to inspire those who they lead to be the same (Charbonnier-Voirin et al., 2010; Tucker et al., 2007). Transformational leadership is a leadership model in which, rather than focusing on an exchange of resources, a leader instead inspires his or her followers with a purpose or goal in order to facilitate higher performance (Judge & Piccolo, 2004). Research has shown that when a transformational leader facilitates a culture of adaptivity, his or her followers show an increase in their own adaptive performance (Charbonnier-Voirin et al., 2010). In a study examining the importance of adaptive performance for leaders in the army, Tucker et al. (2007) found that not only are leaders who exhibit adaptive performance more effective, but they actually develop more adaptive teams who report to them. With this in mind, this study seeks to advance the research on developing a leader's adaptive performance, as they will be the ones to inspire and develop the adaptive capabilities of those they lead. Next, a case will be considered for why a breadth and depth of experiences are important in developing a leader's capacity to adapt.

Developmental Experiences

In a review of the literature on experience, Hezlett (2016) outlined that learning from experiences has become a popular subject in the field of leadership development. However, experiences alone, without something more, may be more like random happenings than experiences that may increase our capacity to do better next time (McKenna, 2017).

Furthermore, while many people may experience the same thing, the lessons and abilities that

each person gleans from the experience can differ greatly (McCall, 2004). The focus of the

proposed study is to examine how the breadth and depth of experiences one has gained affects

his or her ability to adapt in uncertain or novel situations, and the potential enhancing effect a

strong network of support has on this interaction. Additionally, this study seeks to examine how

one's breadth and depth of experience will speak into a leader's adaptive development during the

course of a leadership development program. Thus, this section will focus on the value of

experiences, the connection between experiences and adaptation, the conceptualization of

breadth and depth experience as it will be used in this study, as well as the potential connection

between one's experiences and his or her network of support.

Value of Experience

The impact of experiences has long been studied in the context of organizational

research, especially with respect to leadership development (e.g., Avolio, 1999; McCall et al.,

1998; McCall, 2004; McKenna et al., 2007). McCall (2004) found that on-the-job experiences

were far more impactful for one's learning than training programs and formal lessons. In a study

by Schmidt et al. (1986), experience was highly predictive of an individual's performance as

well as more positive supervisory ratings. Additionally, it has been shown to be important that a

leader also takes the time to reflect on his or her experiences, in order to identify the key lessons

to take into the future (DeRue & Ashford, 2014). In a longitudinal study of managers, those who

had previously been assessed as low potential, performed much more successfully than expected

after being provided with developmental opportunities (Bray et al., 1974). Additionally, those

significant experiences that provide the most impactful lessons, are those where there is high

pressure or obstacles to overcome (McCauley et al., 1994; McKenna & Yost, 2004), such as uncertainty, completely new experiences, or ambiguity.

Furthermore, it is proposed that younger leaders may overestimate the depth of their experience when compared to more senior leaders who are likely to have a deeper intensity of experiences and breadth of experiences as a function of time (Menkhoff et al., 2010). Therefore, estimating the amount of experience that a leader has might be better understood by controlling for age.

Experience and Adaptation

Research suggests that past experiences predict future performance (McCall, 2004; McCall et al., 1988). Within organizational research, experience adapting has been studied as an antecedent to adaptive performance (Jundt et al., 2014). In a study by Allworth and Hesketh (1999), they found that one's adaptive performance rating was positively related to past experiences adapting. Additionally, Pulakos et al. (2002) found that specific past experiences adapting (namely problem solving, change, and learning) correlated more with adaptive performance. Overall, Pulakos et al. (2002) found that past experience adapting was a valid predictor of adaptive performance beyond cognitive ability and personality. While there is literature on past adaptive experiences on adaptive performance, there is limited research on the extent to which general developmental experiences increase one's ability to adapt. Additionally, this study seeks to consider the impact that one's strategic network of support has on this relationship.

Breadth and Depth of Experience

For this study, developmental experiences will be defined as events or lessons that have played a role in a person's development. McCauley et al. (1994) found that a variety of

experiences, in and out of the workplace, will have a substantial impact on one's development. Thus, the experiences being examined will represent various elements of an individual's life.

Within the context of what develops adaptive performance, this study suggests that both the breadth and depth of a leader's experiences can be valuable when considering what will develop adaptive performance. Breadth of experience is defined as the exposure to a variety of experiences, whereas depth is defined as the amount of exposure one has to a specific experience (Coker et al., 2017). Research has shown that having a breadth of experiences is positively related to leadership emergence and development (Arvey et al., 2007; Avolio et al., 2009; DeRue & Wellman, 2009). Additionally, is has been suggested that experiences increasing in depth and are reinforced, are positively related to one's leadership development (DeRue & Workman, 2011). Furthermore, research has also outlined the importance of a depth of certain experiences based on leadership position (Mumford et al., 2007). When also considering the research regarding past experience adapting (Allworth & Hesketh, 1999; Pulakos et al., 2002), both breadth and depth would have their merits when informing adaptive performance. In theory, one who has a wider breadth of experiences will be slightly more adaptive across a wider variety of areas when compared to a person with a larger depth of experience across a few experiences; both of which would theoretically result in similar scores. For these reasons, the measure being used will report breadth and depth of experience.

Experiences and Support

Research suggests that having other people in an individual's corner who will provide guidance and support would prove to be pivotal to learning and developing from experiences (Bossen & Yost, 2014). These can be mentors, family, friends, or advocates. A mentoring relationship in which someone is heavily invested in another person has been found to be very

important for the mentee's development (Levinson, 1978). In a review of the literature

surrounding developmental networks Dobrow et al. (2012) discuss that an individual's network

as a key experience for those engaged in these relationships. Additionally, the people with whom

one surrounds his or herself (or lack thereof) has been cited as a powerful experience itself.

McCauley et al. (1994) cite a lack of personal support as a powerful negative experience that

may prove to be an obstacle. McKenna and Wenzel (2016) suggest having a strategic network of

support as a key component to the experience of developing as a more whole leader. If that is

true, what is the nature of support and what role does it play in an individual's adaptive capacity?

Support Network

No matter the context, social support is an overwhelming influence on an individual's

wellbeing and psychological health (Baumeister & Leary, 1995; Cohen & Wills, 1985;

Lowenthal & Haven, 1968). Defined as the extent to which those around us provide moral

support or encouragement during times of stress or difficulty (Cohen & Wills, 1985), social

support is one of the keys to the way that a person copes in difficult times. Research has shown

that having social support is much more important than some may realize (Baumeister & Leary,

1995). It has an impact on whether or not a person feels that her or she belongs (Baumeister &

Leary, 1995), how he or she handles personal tragedies (Lowenthal & Haven, 1968), and even

how a person handles stress (Cohen & Wills, 1985; Viswesvaran et al., 1999). From an

organizational perspective, social support has been found to be positively related to the ability

for one to feel in control in their work (van der Doef et al., 2000) as well as positively related to

a decrease in feelings of burnout. (Etzion, 1984). Therefore, this study seeks to consider the

possible impact of social support on an individual's capacity to adapt. Specifically, the

synergistic moderation interaction with a leader's breadth and depth of experiences when he or she has a weak or strong network of support.

Social Support and Adaptation

While there is little work directly linking adaptive performance to social support, there are some conceptual and practical linkages between those that one has around them, and how they maintain composure in the face of stress. Coyne and DeLongis (1986) suggest that a lack of social support is predictive of stress and maladaptive coping to challenging situations. In a study of young adults, Atac et al. (2018) found that those who perceived a high level of social support were more adaptable. With regard to this study, there appears to be a linkage between one's social support and his or her ability to adapt. But, what if someone were strategic about the support network they build?

Strategic Support Network

In a review of the literature, Provan et al. (2007) discuss that an individual's network includes those who, while the purpose of each person in the network may differ, provide some form of social interaction, relationships, and collaboration. And, while the importance of social support has been established, what if someone were to be intentional about those whom they rely on for this network of support? These people would consider the purpose of different relationships, what each person brings to the table, and would consider what kind of feedback or emotional support they need in each situation; ultimately, this intentionality would result in a strategic support network (McKenna & Wenzel, 2016; Olsen, Price, Sandhu, McKenna, & Kendall, 2017). A strategic support network is a group of people who will provide support, feedback, opportunities, and insight based on one's purpose (McKenna & Wenzel, 2016). For the purpose of this study, a strategic network is defined as a group of people who offer not just

career development opportunities, but also those who provide feedback, emotional support, and who are invested in the development of another person. The people in one's strategic support network are also those who help to figure out new challenges and support and individual during this time of development (Ibarra & Hunter, 2007). According to Ashford (1986), people who seek out this kind of person to have around (i.e., one who will provide real feedback) were found to be more adaptive in how they reached their performance goals. For this reason, I believe it will be important to look at how those who claim to have this kind of strategic support network compare to those who do not have it with respect to how their experiences affect their adaptive performance. Specifically, the synergistic moderation interaction will be examined. This means that the impact of one's breadth and depth of experiences will be strengthened when one has a strong strategic network of support.

Beyond Experiences to Intentional Development

In the realm of clinical psychology, just simply taking the steps to try and improve has been found to be a big part of overcoming one's issues (Asay & Lambert, 1999). Those that even just make an appointment show improvement in wellbeing while waiting to go for their first session (Snyder et al., 1999). And, there are linkages to the world of leadership and organizational development. As part of the process, those who are devoted to their own development, and taking those steps have an expectation of change (McKenna & Davis, 2009). It has been suggested that the decision to take part in a developmental program, as well as being ready to develop and learn, have a positive impact on the development that a participant experiences (Avolio, 2003; Avolio et al., 2010). Additionally, there is research suggesting that engaging in after-event-reviews, or taking time to capture the lessons from challenging experiences and reflect on them, is positively correlated with both performance (Ellis & Davidi,

2005) and leadership development (DeRue, et al., 2012). Furthermore, experience is shown to be a predictor of development. Research has shown that one's experiences have an impact on one's leadership development and should be considered at the center of this development (Collins, 2001; McCall, 2004, 2010). This would all suggest that experience is an important element of one's development, especially when one is participating in a process specifically designed to develop a person's leadership capabilities, including his or her ability to adapt. For this reason, this study will seek to examine not just the relationship between experiences and adaptive performance, but also the predictive power of one's breadth and depth of experience on his or her growth in adaptive performance as part of a leadership development process.

The Present Study: Developing Adaptive Performance

The Power of Past Experiences and a Strategic Network of Support

Purpose

The following study and design are structured to investigate the relationship between the breadth and depth of a leader's experiences and their adaptive performance, along with the effect that a strategic network of support has on this relationship. Additionally, this study is designed to investigate the extent to which past experiences are predictive of a leader's growth in adaptive performance when participating in a leadership development program, as well as the moderating effect his or her network of strategic support. Based on prior research, there is a strong indication one's past experiences will speak into how one grows through a leadership development process. But how does this relationship change when a person is surrounded by those who are invested in them? The proposed study is based in prior research on the importance of experiences and the necessity of adaptation, while exploring this relationship further.

The theoretical assumption as to why experiences may be predictive of one's growth in adaptive performance through a leadership development process is based in the research surrounding the importance of experience in leadership development (McCall, 2004, 2010) and in past experiences adapting predicting future situations. Pulakos et al. (2002) found that past experiences in which someone was adaptive was a predictor of one's adaptive performance. Furthermore, there is substantial evidence that even the act of taking part in a developmental process will have positive effects for the participant (Avolio, 2003; Avolio et al., 2010). This paper seeks to expand on these findings by considering a variety of developmental experiences one may encounter. Furthermore, the decision to consider the impact that the presence of a strong social support network has on this relationship is based in previous works examining strategic networks of social support (e.g., McKenna & Wenzel, 2016) as well as its effect on adaptation (e.g., Ashford, 1986).

Hypotheses

Given the literature and purpose discussed above, the hypotheses for the proposed study are as follows:

Hypothesis 1

A larger breadth and depth of developmental experiences will be positively related to adaptive performance, controlling for age.

Hypothesis 2

A strong network of social support moderates the relationship between an individual's breadth and depth of developmental experiences and adaptive performance such that this relationship is stronger when one has a strong network of social support, controlling for age.

Figure 3

Expected Moderating Effect of a Strong Network of Support
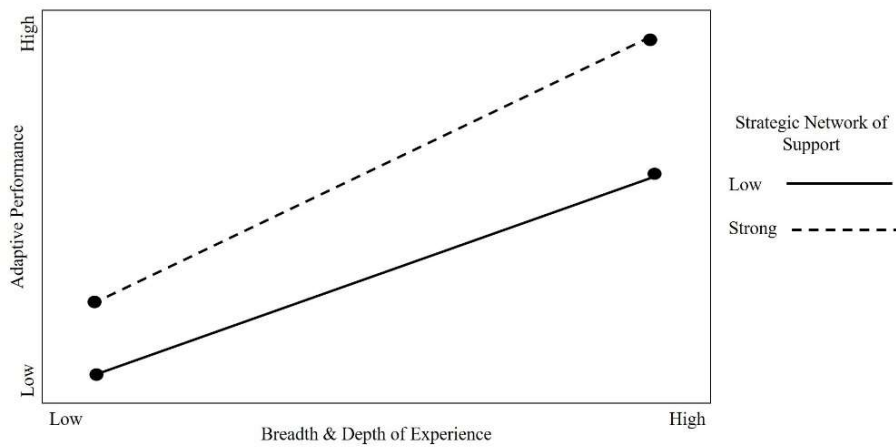
Hypothesis 3

A larger breadth and depth of experiences will be predictive of an increase in adaptive performance from Time 1 to Time 2 for those participating in a leadership development process, controlling for age.

Hypothesis 4

A larger breadth and depth of experiences will be predictive of an increase in adaptive performance from Time 1 to Time 2 for those participating in a leadership development process, as moderated by a strong network of social support, such that the increase is more dramatic when one perceives a strong network of social support, controlling for age.

CHAPTER II

Method

Sampling Procedure

This study used archival data collected from an online leadership development platform. Participants were recruited from a variety of sectors (e.g., education, business, clergy, etc.), over the course of multiple years (2016 – 2020). Those who participated were not compensated financially, but participated in order to reflect and develop themselves as leaders. The development process includes a battery of assessments addressing multiple aspects of the participants' leadership development, as well as a profile that collected demographic and preliminary data.

Data have been collected through a battery of whole leader developmental assessments and measures (e.g., an experience-based audit, an assessment of one's strategic network, a skill-based audit, etc.). One assessment is an experience-based audit based in the research on experienced-based learning (McCall, 2004; McCall et al., 1998; McCauley et al. 1994; McKenna et al., 2007) that includes categories from both life and work experiences. Additionally, there are two audits meant to assess the whole experience of the leader before and after participating in the other audits. Within these are measures that encompass the three aspects of adaptive performance: transfer of training/learning, emotional regulation, and cultural adaptability. Within the first audit, there is also a demographic question regarding a participant's age, which will be used as a control. Finally, there is an assessment meant to take stock of and allow the leader to assess his or her strategic network.

This sampling procedure was chosen for the focus on the development of different aspects of a leader's life, as well as the comprehensive nature of the assessments and

questionnaires surrounding a person's experience. The data is self-report and focused on an individual's development, rather than an evaluation. The archival data being analyzed in this study received approval by the Institutional Review Board (IRB) and adheres to all procedures regarding human subjects and informed consent.

Participant Demographics and Sample Size

Participants were selected if they were over the age of 18 and had volunteered their data for research purposes and related studies. In order to be included, participants had completed the following scales that appear in the overall battery of assessments. The battery is based on 10 different developmental assessment moments, that include a baseline profile, an audit of their experience, and a final Plan.

- Baseline Profile (Profile): This includes demographic items such as age, the scales measuring characteristics of adaptive performance, taken as a precursor to the rest of the assessments.

- Transformational Experience Audit (TEA): This includes a battery of developmental experiences that allow a participant to rate the extent to which they have experienced them.

- Strategic Network Audit and Guide (SNAG): This includes opportunities for a participant to reflect on his or her strategic network in a variety of areas (e.g., personal, organizational, support, job contacts, etc.) as well as rate his or her satisfaction with each aspect of his or her network.

- Assessment Plan (Plan): This includes scales measuring the characteristics of adaptive performance. This is taken after finishing the other assessments.

A total of 238 participants met the criteria. Of the final sample size of 227 after data cleaning, the age range was 20 to 71 (M = 35.49, SD = 12.42) and 47.1% were women. Ethnicity of participants was 51.1% White/Caucasian, 21.3% African American/Black, 1.3% Native American, 6.7% Asian, 6.2% Native Hawaiian/Pacific Islander, 11.1% Hispanic/Latino, and .4% International/Other.

The suggested sample size by G*Power Version 3.1 (Cohen, 1992; Faul et al., 2009) when specifying a one-tailed, fixed effects linear model regression and effect size (f2) of .15, alpha = .05, 1- β = .95, with 3 predictors is 74 participants. The final sample size of 227 suggests the study is sufficiently powered.

Measures and Variables

The archival data used in this study was collected from the tools in an online leadership development program. The participants included in the data completed the surveys in the program within the course of 1 year. The online leadership development program is self-directed and meant to be taken at one's own pace. The average time a participant takes to complete the whole program is 8.45 weeks, with the longest time taken being 50 weeks, and the shortest being within one day. In order to be included in the study, participants must have completed the Profile, TEA, SNAG and Plan surveys, as they contain the scales of interest. It should also be noted that in order to participate in the Plan survey, all previous surveys in the program must be completed. The measures to be used in the proposed study will have undergone psychometric validation in order to be deemed appropriate, based upon the fit indices (Byrne, 2000) and alpha levels (Cortina, 1993). Details regarding the measures and their psychometric properties are included below.

Adaptive Performance

The measure of adaptive performance is made up of three items within a questionnaire assessing one's developmental readiness. These measures are housed within the Profile, the first assessment in the leadership development program, which is designed to help those going through it to establish a baseline for their development as well as collect demographic information. The measure for adaptive performance at Time 1 is housed in this Profile, which will be used as the outcome variable for hypotheses 1 and 2. This is intended to be one's measure of adaptive performance before participating in the leadership development program. Additionally, the Time 2 measure of adaptive performance is within the Plan, which is designed to assess changes and development in a leader's score on various items also included in the Profile after taking each of the other assessments, including the measure of adaptive performance. For hypotheses 3 and 4, adaptive performance Time 2 will be used as the outcome, while Time 1 will be used to assess the change after a leader has completed the leadership development program.

The three measures within the measure assess the three characteristics of adaptive performance: transfer of training and learning (Learning; Kozlowski et al., 2001), emotional regulation (Composure; Allworth & Hesketh, 2001), and cultural adaptability (Context; Pulakos et al., 2000). Learning reads as, "You are applying lessons from your past in current and future opportunities and challenges." Composure reads as, "You are composed under pressure." Context reads as, "You are able to walk into an unfamiliar environment and discern what people are thinking, what's happening, and what needs to happen next." Participants rate the extent to which they believe each statement is true of themselves using a Likert scale ranging from 1 (*Not at all)* to 10 (*To a great extent*). Total scores were calculated by taking a sum of a participant's

score on each question; thus, scores could vary from 3 to 30. For this study, alpha coefficients

were collected in order to assess reliability. An alpha coefficient of surpassed the minimum

threshold ($\alpha = .776$; Cortina, 1993).

Breadth & Depth of Experience

Breadth and depth of experience is measured using the questions housed in the

Transformational Experience Audit (TEA); an audit of a leader's past experiences, current

experiences, and future experiences a leader desires, and the lessons learned through these

experiences. The past experience scales from this measure were used to assess the breadth and

depth of experiences one has gathered.

This measure is based in three decades of experiences that develop and teach leaders

(McCall et al., 1988; McCauley et al., 1994; McKenna et al., 2007). The TEA and previous

versions of this assessment were developed using this research and cultivating a list of

developmental experiences that shape and teach valuable lessons to those who go through them.

The TEA includes 27 developmental experiences surrounding several areas of an individual's

life, and participants are asked to rate the extent to which they have experienced it, are currently

experiencing it, and desire to experience it in the future. For the purpose of the proposed study,

the extent to which one has experienced each item in the past was considered. Example items

include: "You have been able to observe great role models. These people are often described in

superlative terms and are examples of 'what to do or be'" and "You experienced having gained

increased responsibility that is both broader and different from previous work." Participants rate

the extent to which they have experienced each item using a Likert scale ranging from 1 (*no*

extent) to 10 (*great extent*). Total scores were calculated by taking a sum of a participant's score

on each question; thus, scores could vary from 27 to 270. For this study, alpha coefficients were

collected in order to assess reliability. An alpha coefficient of surpassed the minimum threshold (α = .935; Cortina, 1993).

Strategic Network of Support

In order to measure a participant's strategic network of support, the Strategic Network Audit and Guide, an audit of a leader's strategic network, was used. This assessment allows leaders to examine his or her network in 8 areas of his or her life (e.g., Role models, mentors, career networks, organizations, job contracts, advocates, feedback, and emotional support), as well as rate his or her satisfaction with each of these areas. The satisfaction scores will be used to assess the strength of each person's area of strategic support.

This assessment and measure are based in research on the subject of strategic networks (McKenna & Wenzel, 2016; Olsen et al., 2017; Provan et al., 2007). The SNAG includes eight important areas of a leader's strategic network in order to allow the leader to take stock of not only who is in his or her network, but to also allow that leader to reflect on the strength of that area and what can be done to improve the necessary areas. An example of a question includes, "On a scale from 1 to 10, how satisfied are you with your list of role models?" Each of these are answered after the leader lists his or her network in each area. Participants rate each of these items on a Likert scale ranging from 1 (*Very Dissatisfied*) to 10 (*Very Satisfied*). Total scores were calculated by taking a sum of a participant's score on each question; thus, scores could vary from 8 to 80. For this study, alpha coefficients were collected in order to assess reliability. An alpha coefficient of surpassed the minimum threshold (α = .941; Cortina, 1993).

Research Design & Procedure

This study is a non-experimental design using archival data of participants who have completed the necessary assessments and measures discussed above. The variables in this study were adaptive performance, breadth and depth of experience, and a strategic network of support. Participants were those who participated in an online leadership development process. Before starting the process, participants are presented with a consent form allowing their data to be used for research. Participants are able to complete the battery of leadership development assessments at their own pace within the course of a year. Each assessment is followed by a report out of results and insights from the participant's answers. Participants are able to take any of the assessments in any order, save for the Profile which must be taken first and the Plan which must be taken last. Participant answers are saved and can be downloaded as an archival dataset, which was used for the purpose of this study.

CHAPTER III

Results

Preliminary Analyses

In order to assess data characteristics that could impact the analyses, the data was cleaned, descriptive statistics were collected, and assumptions were tested. The following sections outline the methods used to assess missingness, outliers, normality, descriptive statistics, and assumptions.

Missing Data. In order to maintain the maximum number of cases, the data was reviewed for overall missingness. Data from the 238 participants was screened for the required inclusion criteria (Profile, TEA, SNAG, and Plan), 66 cases (29.07%) contained missing data and 169 values (1.86%) 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 238.

Outliers. Outliers were screened using Mahalanobis distance, Cook's D, and leverage tests (Leys et al., 2018; Cook & Wisberg, 1982; Field, 2013). Eleven cases did not pass the minimum threshold of passing two of the three test and were removed. After removing these cases, the final sample size was 227.

Normality. Histogram plots were used to assess the normality of the data. The Adaptive Performance measure at both time 1 and 2 appeared normally distributed. Additionally, the measure of breadth and depth of experience as well as the measure of strategic network of support appeared to be normally distributed. To further examine this, the Kolmogorov-Smirnov test as well as a Shapiro-Wilk test were used to test the normality of all variables and found that all four variables were within range to be normally distributed.

Assumptions. In addition to normality, the following test were conducted to evaluate the assumptions were met for the multiple regression methods.

Linearity. A linear relationship between the independent variables and the dependent variables suggests that a change in the response to the dependent variable due to a change in the independent variable is constant. Additionally, the effect of the independent variable on the dependent variable should be independent of other independent variables (Field, 2013). Linearity was assessed by collecting each independent variable's significant deviation from linearity. Each value was > .05, indicating the relationship between the independent variables are linearly dependent.

Multicollinearity. Multicollinearity is the phenomenon of the multiple independent variables in a study are found to be highly correlated with one another. This tends to increase the standard errors, leading to less precise estimates of the impact of independent variables on the dependent variable. To test for multicollinearity, the variance inflation factor (VIF) was assessed and the ranges were found to be below the threshold of 3 (VIF ranges = 1.008 to 1.019). These results indicate no multicollinearity in the data (Field, 2013).

Homoscedasticity. Homoscedasticity refers to the idea that the variance of the dependent variable should be stable at every level of the independent variable (Field, 2013). To examine homoscedasticity, residual scatterplots were examined (Appendix E). Upon examination, no patterns emerge within the scatterplots indicating the assumption of homoscedasticity of the data was met.

Descriptives and Correlations. Descriptive statistics and correlations were conducted for all predictor and criterion variables in the current study. Results are shown in Table 1. A few

relationships worth noting are the significant relationships between Adaptive Performance Time 1 and the predictor variables. For hypothesis 1 and 2, Adaptive performance Time 1 (before the leader has completed the leadership development program) is used as the outcome variable. Results of these correlations indicate the potential connection that these variables have with one's adaptive performance. Additionally, the lack of significance between Adaptive Performance Time 2 and the predictors is worth noting. This measure of adaptive performance is taken after a leader has completed the leadership development program and may indicate the necessity for further examination. These relationships will be further examined in the subsequent analyses and discussion.

Table 1

Means, Standard Deviations, Internal Consistencies, and Correlations

Measure	M	SD	1	2	3	4
1. Age	35.45	12.42	-			
2. Breadth & Depth of Experience	158.13	13.31	.487**	-		
3. Strategic Network	6.77	1.51	.119	.135**	-	
4. Adaptive Performance Time 1	22.76	3.61	.191**	.216**	.196**	-
5. Adaptive Performance Time 2	20.20	4.24	.125	.067	.030	.144*

*Note. N = 227. ** p < .01 level (2-tailed). * p < .05 level (2-tailed).*

Primary Analyses

Hypothesis 1. In order to test the first hypothesis that a larger breadth and depth of experiences is positively related to adaptive performance, controlling for age, a multiple regression was conducted. Results indicated that one's breadth and depth of experience explain a significant amount of the variance in one's adaptive performance, $F(2,224) = 6.70$, $p < .05$, $R^2 = .06$. Furthermore, the analysis showed that one's breadth and depth of experience significantly predicts one's adaptive performance (B $= .01$, $t(226) = 2.17$, $p < .05$; See Table 2). These results support the hypothesis that, while controlling for age, one's breadth and depth of experience significantly predict his or her adaptive performance.

Table 2

Predicting Adaptive Performance Time 1 with Breadth & Depth of Experience

Model and variable	*B*	*SE*	β	R^2	ΔR^2
Model 1				.04	.04*
Constant	20.79	.72	-		
Age (Control)	.06	.02	.19*		
Model 2				.06	.03*
Constant	19.46	.94	-		
Age (Control)	.03	.02	.11		
Breadth & Depth of Experience	.01	.01	.16*		

Note. $N = 227$. * $p < .05$.

Hypothesis 2. In order to test the hypothesis that the relationship between one's breadth and depth of experiences is moderated by one's perceived strength of his or her network of social support, such that the relationship between breadth and depth of experiences and adaptive performance will be strengthened for individuals with a strong network of social support, a multiple regression was conducted. While the overall model was found to be significant (F(4, 222) = 5.30, $p < .05$, R^2 = .09), a significant moderation was not found (B = -0.004, t(226) = -1.03, $p = .30$; See Table 3). Therefore, Hypothesis 2 was not supported. The non-significant interaction is depicted in Figure 4. Furthermore, although the interaction was not significant, a graphing of the relationship (see Figure 4) suggests that the relationship, if it had been significant, would not have been synergistic, as previously hypothesized, but a buffering relationship. This would suggest that one's network of social support does not multiply one's adaptive performance if they have a large breadth and depth of experience, but instead can compensate for a smaller breadth and depth of experience.

Table 3

Predicting Adaptive Performance Time 1 with Breadth & Depth of Experience, Moderated by Strategic Network of Support

Model and variable	*B*	*SE*	β	R^2	ΔR^2
Model 1				.04	.04*
Constant	20.79	.72	-		
Age (Control)	.06	.02	.19*		
Model 2				.08	.04*
Constant	17.14	1.30	-		
Age (Control)	.03	.02	.10		
Breadth & Depth of Experience	.01	.01	.15*		
Strategic Network of Support	.39	.16	.16*		
Model 3				.09	.00
Constant	17.00	1.31	-		
Age (Control)	.03	.02	.10		
Breadth & Depth of Experience	.01	.01	.14		
Strategic Network of Support	.43	.16	.18*		
Breadth & Depth of Experience x Strategic Network of Support	-.00	.00	-.07		

Note. $N = 227$. * $p < .05$.

Figure 4

Interaction of Breadth & Depth of Experience and Network of Support on Adaptive
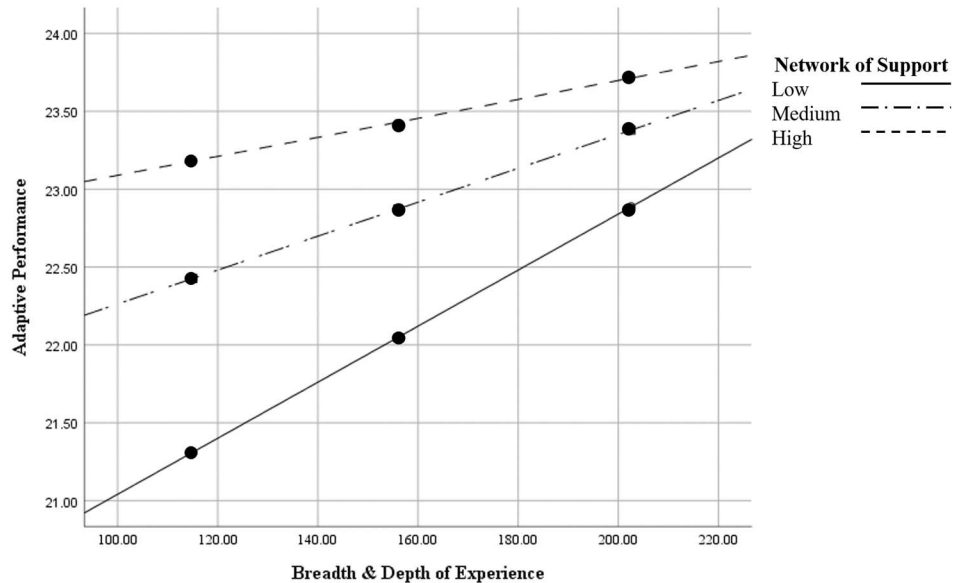
Performance

Hypothesis 3. In order to test the hypothesis that a larger breadth and depth of

experiences will be predictive of an increase in adaptive performance from Time 1 to Time 2 for

those participating in a leadership development process, a multiple regression was implemented.

The overall model was found to not be significant ($F(2, 224) = 2.37$, $p = .07$, $R^2 = .031$).

Furthermore, results indicate that a larger breadth and depth of experience is not predictive of a

change in adaptive performance from time 1 to time 2 when participating in a leadership

development program (B = -.00, $t(226) = -0.17$, $p > .05$; See Table 4). Therefore, Hypothesis 3

was not supported.

Table 4

Impact of Breadth and Depth of Experience on Adaptive Performance from Time 1 to Time 2 for Those Participating in Leadership Development

Model and variable	B	SE	β	R^2	ΔR^2
Model 1				.03	.03*
Constant	15.63	1.84	-		
Age (Control)	.04	.02	.10		
Adaptive Performance Time 1 (Control)	.15	.08	.13		
Model 2				.03	.00
Constant	15.72	1.91	-		
Age (Control)	.03	.02	.10		
Adaptive Performance Time 1 (Control)	.15	.08	.13		
Breadth & Depth of Experience	-.00	.01	-.01		

*Note. N = 227. * p < .05.*

Hypothesis 4. In order to test the hypothesis that a larger breadth and depth of experiences will be predictive of an increase in adaptive performance from Time 1 to Time 2 for those participating in a leadership development process, as moderated by a strong network of social support, such that the increase is more dramatic when one perceives a strong network of social support, a multiple regression was implemented. The overall model was found to not be significant ($F(5, 221) = 1.41$, $p = .22$, $R^2 = .03$). Furthermore, the interaction between one's breadth and depth of experience and having a strong network of support was not significant (B = .00, $t(226) = -0.11$, $p = .92$; See Table 5).

Table 5

Impact of Breadth & Depth of Experience on Adaptive Performance from Time 1 to Time 2 for those Participating in Leadership Development and the Moderating Effect of a Strong Network of Social Support

Model and variable	B	SE	β	R^2	ΔR^2
Model 1				.03	.03*
Constant	15.63	1.84	-		
Age (Control)	.04	.02	.10		
Adaptive Performance Time 1 (Control)	.15	.08	.13		
Model 2				.03	.00
Constant	15.79	2.10	-		
Age (Control)	.04	.03	.11		
Adaptive Performance Time 1 (Control)	.15	.08	.13		
Breadth and Depth of Experience	-.00	.01	-.01		
Model 3				.03	.00
Constant	15.28	5.24	-		
Age (Control)	.04	.03	.11		
Adaptive Performance Time 1 (Control)	.15	.08	.13		
Breadth and Depth of Experience	.00	.03	.02		
Strategic Network of Support	.06	.76	.02		
Breadth & Depth of Experience x Strategic Network of Support	.00	.00	-.05		

Note. $N = 227$. * $p < .05$.

Post Hoc Analyses 1. In order to further examine the construct of adaptive performance, hypotheses 1 and 2 will be rerun, with the change in the dependent variable being that the adaptive performance scale will now be a multiplicative scale, rather than a summed scale of the three parts. This will be done to examine how the model would change if the combined effect of the three elements of adaptive performance is considered to be larger (or smaller) than the product of each individual element. For hypothesis 1, using this new calculation for the adaptive performance scores, the overall model was found to be significant ($F(1, 224) = 6.55$, $p < .05$, R^2 = .05). However, breadth and depth of experience was not found to significantly predict adaptive performance ($B = .06$, $t(1, 224) = 1.76$, $p = .08$; see Table 6). Although breadth and depth of experience were not found to be a statistically significant predictor in this model, the results do indicate that it is approaching the criterion for significance when conceptualizing adaptive performance in this manner. This will be discussed further in the following sections.

Table 6

Predicting Adaptive Performance Time 1 (Multiplicative Scale) with Breadth & Depth of Experience

Model and variable	B	SE	β	R^2	ΔR^2
Model 1				.04	.04*
Constant	33.11	4.08	-		
Age (Control)	.34	.11	.21*		
Model 2				.05	.01
Constant	26.93	5.37	-		
Age (Control)	.24	.12	.14		
Breadth & Depth of Experience	.06	.04	.13		

Note. $N = 227$. * $p < .05$.

Additionally, the multiplicative scale for adaptive performance was used to retest hypothesis 2 and the moderating effect of a network of support, such that a network of support is predicted to strengthen the relationship between adaptive performance and one's breadth and depth of experiences. Using multiple regression, results indicate that the model is significant ($F(4, 222) = 4.85$, $p < .05$, $R^2 = .08$). Additionally, results indicate that the interaction between one's strategic network and the breadth and depth of his or her experiences does not strengthen the relationship between those experiences and adaptive performance, similarly to the original test of hypothesis 2 ($B = -.22$, $t(2, 222) = -1.07$, $p = .28$; see Table 7).

Table 7

Predicting Adaptive Performance Time 1 (Multiplicative Scale) with Breadth & Depth of Experience, Moderated by Strategic Network of Support

Model and variable	B	SE	β	R^2	ΔR^2
Model 1				.04	.04*
Constant	33.11	4.08	-		
Age (Control)	.34	.11	.21*		
Model 2				.07	.03*
Constant	15.27	7.49	-		
Age (Control)	.22	.12	.13		
Breadth & Depth of Experience	.06	.04	.11		
Strategic Network of Support	1.97	.89	.14*		
Model 3				.08	.01
Constant	-9.57	24.29	-		
Age (Control)	.22	.12	.13		
Breadth & Depth of Experience	.20	.14	.43		
Strategic Network of Support	5.71	3.59	.42		
Breadth & Depth of Experience x Strategic Network of Support	-.02	.02	-.45		

Note. $N = 227$. * $p < .05$.

Post Hoc Analyses 2. In order to further explore the relationship between one's breadth and depth of experience and adaptive performance, each of the individual experiences used in the TEA will be tested for correlations with Adaptive Performance as well as change in Adaptive

Performance, controlling for age. The results can be seen in Table 8. These results suggest that certain experiences are more highly correlated with adaptive performance time 1.

Interestingly, some of the experiences were significantly correlated with change in adaptive performance (Time 2 – Time 1) but the relationships were negative, indicating that the experience led to decreasing rating of adaptive performance over time. This is possibly explained by a participant's schema surrounding his or her capability being broken or by heightened self-awareness. These ideas will be examined more in the discussion and future research sections to follow.

Table 8

Means, Standard Deviations, and Correlations Between Individual Experiences and Adaptive Performance Time 1 & Individual Experiences and Change in Adaptive Performance

Measure	M	SD	Corr$(X,Y)^a$	Corr$(X,Y)^b$
Non-Management Work Experience	7.43	2.61	-.15	.11
Religious Transformation	6.74	3.03	.07	.02
Calling	5.97	2.90	.08	-.00
Leading Alone	4.78	2.94	.13	-.14*
Breaking a Rut	6.10	2.76	.13*	-.08
Becoming a Manager	4.91	3.24	.17**	-.06
Exposure to a Larger Scope	5.70	2.65	.03	.11
Organizational Switch	5.66	3.06	.04	.02
Becoming a Manager of Managers	2.81	2.90	.23**	-.12*
Becoming a Senior Leader	2.68	2.76	.21**	-.10
Renewed Calling	4.50	3.00	.21**	-.08
Education/Training/Seminars	7.41	2.77	.24**	-.09
Personal Trauma	6.60	3.12	.07	-.13
Purely Personal Situation	7.23	2.69	.02	-.05
Being an Eyewitness	5.94	2.81	.13*	-.03
Family Experience	7.49	2.45	.12	.04
Good Role Model	7.28	2.36	.00	.07
Bad Role Model	6.67	2.63	.13*	-.01
Exposure to those in Need	6.88	2.70	.12	-.05
Leading Without Authority	5.94	2.76	.21**	-.0
Temporary Project/Task Force	5.93	3.05	.08	-.01
Starting from Scratch	5.76	3.33	.09	-.14*
Organizational Turnaround	4.11	3.02	.27**	-.13*
Subordinate Problems	4.62	3.19	.20**	-.09
Professional Setback	5.20	2.99	.11	-.07
Failure/Mistake	6.82	2.41	.00	-.05
Supporting Others through a Trauma	6.95	2.88	.14*	-.13

*Note. N = 227. ** p < .01 level (2-tailed). * p < .05 level (2-tailed).*

[a.] Correlation between Individual experiences and Adaptive Performance Time 1

[b.] Correlation between Individual experiences and change in Adaptive Performance

Chapter IV

Discussion

As the workplace continues to change and evolve, the demand for adaptable leaders is going to become more and more prevalent (Moran & Brightman, 2000; Rafferty & Griffin, 2006). The current study contributes to the existing literature by exploring what leaders can do to develop their adaptive capabilities on their own. This chapter begins with a summary of the findings as they relate to the primary hypotheses examined in the current research study. Next, the practical implications will be discussed. Finally, potential limitations along with recommendations for future research will be examined.

Summary of Findings

The purpose of this study was to expand on the growing body of research surrounding adaptive performance. More specifically, I sought to examine what a leader can do and what they can draw on to develop their adaptive performance.

Hypothesis 1 examined the relationship between one's breadth and depth of experience and adaptive performance; proposing the two constructs would be positively related. Initial correlation analysis (see Table 1) supported this idea, yielding a positive significant relationship between breadth and depth of experience and adaptive performance. This hypothesis was further examined using a multiple regression, controlling for age. This method yielded a significant relationship between the one's breadth and depth of experience and adaptive performance. This finding would suggest that those with a larger breadth and depth of experience are likely to be more adaptive when facing novel and challenging situations, regardless of age. As previously suggested, past experience does impact a leader's future performance, including situations in which adaptation is necessary (Jundt et al., 2014; McCall, 2004; McCall et al., 1988).

Hypothesis 2 tested the moderating effect of having a strong network of social support, such that the relationship between breadth and depth of experience and adaptive performance would be increased with the presence of a strong network of social support. Findings indicated that an interaction between one's breadth and depth of experiences and having a strong network of support was not significant. However, the direct effect of a strong network of social support on adaptive performance was found to be significant. This would indicate that having both a breadth and depth of experiences as well as a strong network of social support does not increase one's adaptive capabilities significantly than the person who has one or the other. This could also suggest that depending on the situation in which one needs to be adaptive, there may be different elements in a person's life that they draw on; be in those that surround and support them and/or their past experiences. A leader may be more likely to draw on certain things during these challenging and novel times. These ideas are expanded on in future research suggestions. And while there may not be evidence of a synergistic interaction between a leader's experience and his or her support network, there is evidence to suggest that in order to increase his or her adaptive capabilities, a leader should consider gaining experience and/or expanding his or her network of support.

Hypothesis 3 examined if a leader's breadth and depth of experience significantly predicts his or her growth in adaptive performance while taking part in a leadership development process. Hypothesis 4 also examined this while also testing the moderating relationship of a strong network of social support on the change in adaptive performance. Results for both hypotheses were found to be non-significant, indicating that one's breadth and depth of experience do not significantly impact a leader's growth in adaptive performance through a leadership development process, regardless of one's strategic network of support. This inability

to find a significant change in adaptive performance could be attributed to other factors; specifically, around awareness and self-schemas. The leadership development process implemented in this study is meant to be an iterative process; meaning it could be interesting to examine how the results would change through examination at further timepoints. This should be examined further in future research.

The first set of post hoc analyses were run in order to examine how the results of hypotheses 1 and 2 would change when the scale for adaptive performance was examined as multiplicative, rather than a sum of three different parts. Examining the results of these analyses it is interesting to note that the model remains significant, but breadth and depth of experiences are no longer significantly predictive of adaptive performance, when controlling for age. Additionally, the interaction between one's network of social support and his or her experiences are still shown to be non-significant. This could potentially indicate that experience may speak more into one of the three tenants of adaptive performance (i.e., learning transfer, emotional regulation, and cultural adjustment), rather than all three of them combined. These analyses shed light on the importance of how constructs are both measured and defined. In the case of this study, there appears to be a difference depending on if adaptive performance is a construct of three additive parts, in which lower scores on one part can be supplemented by higher scores on others, or if it is conceptualized as multiplicative in which the combined effect of the three elements has a large impact than the sum of each of its individual parts. In this study, adaptive performance was viewed in an additive manner, due to the assumption that not every novel or challenging situation will require every element of adaptive performance. Results indicate that relationships were stronger assuming this additive relationship and disappeared when multiplicative adaptive performance was used. As research continues in this emerging construct,

the importance of understanding how the construct should be looked at and measured should emerge.

For the second set of post hoc analyses, correlations were run to examine the relationships between adaptive performance, as well as a change in adaptive performance, and each of the experiences individually. Upon inspecting the correlations, a trend seemed to emerge. Many of the experiences that seemed to correlate highly with a leader's adaptive performance were those in which they were being put into a leadership position (i.e., becoming a manager, becoming a senior leader, leading without authority, etc.). This could indicate that experiences most related to dealing with novel situations would be those in which a leader is put in a new situation. Additionally, several experiences surrounding overcoming challenges (i.e., organizational turnaround and subordinate problems) were also found to be highly correlated with adaptive performance. Going further, each of the experiences were also run individually to examine if they were correlated with a change in adaptive performance. The results of these analyses seem to indicate that, while several experiences were correlated with one's adaptive performance, there are less experiences that are correlated with the change in adaptive performance a leader shows between the beginning and end of the implemented leadership development process. Furthermore, the correlations that were found to be significant were negatively correlated, indicating that certain experiences may decrease one's adaptive performance over time. Implications regarding both of these sets of correlations, as well as how the process by which data was collected may affect these results will be discussed in the future research sections.

Practical Implications

One of the main purposes of this study was to provide leaders with something that they can do for themselves to positively impact their adaptive performance capabilities as the workplace continues to change at a rapid pace. What this study suggests is that there is value in experience as the world continues to change. While there was not significant evidence to show that having a larger breadth and depth of experience is predictive of a change in adaptive performance through a leadership development process, there is evidence that there is value to gaining experiences. For instance, when a leader is stepping into a new position, it is likely that the challenges and experiences of his or her previous positions will likely speak into solving his or her new challenges that are likely to arise. Leaders can take this information forward, knowing that gaining a breadth and depth of experiences and making a point to try new things may play a role in preparing them for new and unknown challenges that may arise in their lives at work.

Additionally, while the purpose of this study was focused on providing leaders with tools to increase his or her adaptive capabilities, the results of this study indicate that there would be value in organizations also investing in the adaptive performance of their leaders. For instance, there may be value in organizations investing in those who have risen through their ranks and encountered challenges, or if looking externally, looking for leaders who have encountered them. While further examination is likely needed, there is evidence that these experiences will compound and be valuable in the adaptive performance development of these leaders. As new technology and globalization continue to arise, the results of this study may suggest that organizations might want to begin investing in experiences, such as addressing issues and participating in training, for those in leadership positions. If these organizations make the effort to invest in their leaders and the experiences that the leaders are gaining, there is evidence that

this will prepare leaders to adapt and successfully face potential challenges and issues the organization may face in the future.

Furthermore, while it was not the focal point of this study, there is evidence to suggest that having a strong network of support may be important to a leader's adaptive capacity. This information could prove powerful to a new leader who has not yet had the breadth or depth of experience of those around them. For instance, if a new challenges arises for a leader who is new to his or her position, the people that leader has chosen to surround his or herself with could be instrumental. These are the people that could provide emotional support, making sure this leader does not become overwhelmed or stressed, which can cloud potential solutions. These can also be people to provide feedback and advice that could be helpful in finding the solution. It could prove powerful to develop a strong support network who will provide emotional support as well as constructive feedback. While it is not a synergistic relationship between one's network and the breadth and depth or his or her experiences, that network of support and his or her experiences that they have gained may work together additively to increase that leader's adaptive capacity during challenging situations that arise.

Finally, from a practice point of view, when facing new or challenging situations in which the need for adaptive performance arises, it can be difficult to remember the essential elements one may need to build his or her adaptive performance. For this reason, a quick guide to building one's adaptive performance based in the research presented in this study has been developed (see Appendix G). This quick guide was developed with the intention of giving suggestions to leaders for taking active steps to become more adaptive. Additionally, this guide can be used in coaching or feedback situations for those actively trying to become more adaptive with the help of a coach or advisor.

Limitations

In this study, there are a number of threats to validity that may affect the strength of the findings. These threats are grouped into four categories of validity (Shadishet al., 2002): Internal validity, external validity, construct validity, and statistical conclusion validity. Internal validity addresses whether there is a causal relationship between the independent variable and the dependent variable. External validity addresses if the causal relationship found in this study will hold with variations in population or settings. Construct validity addresses if the variables of interest in a study are truly being tested. Finally, statistical conclusion validity addresses if the statistics in a study adequately test the hypothesis of interest (Shadish et al., 2002). Below, a threat to each form of validity will be addressed as a limitation to the current study.

Mono-method bias. A threat to construct validity, mono-method bias is when one method is used to collect all measurements for the variables of interest (Shadish et al., 2002). In the case of the present study, all measures are collected via self-report measures. Using only one method to collect all of the variables can under-represent the constructs being examined, and may impact correlations, making results less reliable. Future research could examine alternative measures of each of these constructs. For example, supervisory ratings could be used to examine adaptive performance.

Maturation/Testing. Maturation and testing are threats to internal validity. According to Shadish et al. (2002) testing is the tendency for exposure to a test or measure to affect scores on subsequent tests or measures. In the case of this study, participants are those who have completed ten assessments as part of the leadership development program. When assessing adaptive performance at time one and time two, participants will have gone through a battery of other measures and tests that may affect the manner in which he or she answers the time two

measure of adaptive performance. Along similar lines, maturation is the potential for purported treatment effects to be due to changes that occur between time 1 and 2. In this case, those seeking to participate in a leadership development program are naturally taking the steps to develop as leaders, and that they could naturally change due to elements of the process. In the future research, the items of interest can be used independent of a leadership development program, while also implementing a variety of tests to avoid testing and maturation effects.

Sample. The sample examined in this study may impact the external validity of these findings. While the sample used in this study was fairly diverse in terms of gender and age, participants were fairly homogeneous in terms of race. Of the participants included, 51.1% identified as Caucasian, which may influence the participants' reports of experience and what experiences they have had or had the opportunity for. This can make it difficult to generalize results on a broader scale.

Additionally, generalizability of the current study may be limited due to participant response rates. Within the database of 1,194 leaders, only 227 met the criteria to be included in this study. One of the criteria was to have finished the required assessments, one of which requires all other assessments to be completed. And while this was necessary for the study at hand, there could be individual factors of those who finish the entire development program, and therefore the results of the study could vary when replicating the study using a different sample of leaders. Further research could explore a more diverse sample of leaders and attempt a greater consistent response rate.

Unreliability of treatment implementation. As a threat to statistical conclusion validity, when treatments and testing are not administered in a standard fashion, an increase in error variance is likely to occur, making it more difficult to observe true differences (Shadish et al.,

2002). In this study, those who participate in the leadership development process, by which the data is collected, are free to do so wherever and whenever they choose. For this reason, there are other potential variables in each participants life that may speak into the data. In future research, it would be beneficial to administer the variable scales in a more controlled environment.

Future Research

Looking beyond the current study, there are ways for future researchers to expand upon these results. This can include expanding the analyses beyond just time one and time two, expanding on the results of the post hoc correlations, as well as examining what resources leaders draw on when challenges arise. These ideas will be expanded upon and discussed as means of further exploring the concept of adaptive performance.

As previously stated, the measures utilized in this study were collected from a developmental battery of assessments. One theory for why significant changes for hypothesis 3 and 4 were not found could be due to a gained self-awareness surrounding the different elements of a leader's development. This process is designed to be taken each year to assess the development of the leader. During a process like this, preexisting schemas and assumptions are bound to be challenged which has been found to be necessary for learning and knowledge acquisition (Lacerenza et al., 2017; Mezirow & Taylor, 2009) but this break in schema could also lead a person to self-appraise at a lower level (Baumeister et al., 1996). This is just one potential for why adaptive performance scores did not see a significant change and why some even seemed to decrease. For example, people may have increased in their adaptive performance but recognized a new higher requirement and therefore actually scored themselves equal to or lower with that new knowledge. For this reason, it would be interesting to continue to observe changes in a leader's adaptive performance score as they continue through the process into the future.

One could hypothesize that as leaders continue to engage in the process, there could be a shift in those who have gone through the process multiple times from a state of a negative evaluation from gained self-awareness to a sense of development and learning. A longitudinal analysis of a leader's adaptive performance score as they continue to go through the process yearly could prove valuable. Additionally, narrowing down the individual experiences that impact one's capacity to adapt would be of value.

Another potential future research direction could surround individual experiences. The post hoc correlational analyses showed that there is evidence that some developmental experiences are more highly correlated to adaptive performance. By expanding on this information, future researchers could potentially provide leaders with a list of valuable experiences that may be more impactful to the leaders' adaptive performance development. While the current study outlines the importance of experience, there would be value in a more specific list of experiences leaders would be encouraged to seek out.

Finally, future research could examine what strategies and tools leaders draw upon during times where it is necessary to adapt. The results of this study showed that, while there is not a synergistic interaction between one's strategic network and the breadth and depth of his or her experiences, both of these elements significantly predict adaptive performance. It would be valuable to explore if there are novel situations in which a leader is more likely to draw on his or her experience, his or her network, or a different important element. Are there situations in which one is more powerful? Are there individual characteristics that make a certain element more valuable during situations in which a leader needs to adapt? By addressing these questions, as well as the previous future research ideas, researchers can contribute to the growing body of

adaptive performance research as well as provide leaders with useful tools as the world of work continues to change and evolve.

Conclusion

As the workplace continues to change and evolve, there will be a growing interest in how leaders can be adaptive and continue to perform at a high level. Moreover, it is going to become more and more important that leaders are adaptive and encourage those they lead to strive to be the same (Charbonnier-Voirin et al. 2010; Tucker et al., 2007). With the pace that the world is moving and changing, the organizations that refuse to adapt and change are likely to be those left behind. The current study sought to examine what a leader can do to develop his or her adaptive capabilities; specifically drawing on the experiences he or she is gaining daily. While not every model was significant, this study does expand the current research surrounding adaptive performance by identifying the importance and predictive power that experiences have on one's ability to adapt.

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Appendix A: Demographic Items

Demographic Items

What is your Sex?	Male	Female							
What is your ethnicity? Please check all that apply.	Caucasian/White	African American/ Black	Native American/ Alaska Native	Asian	Native Hawaiian/ Pacific Islander	Hispanic/Latino	Middle Eastern	International/Other	
What year were you born?									
Are you currently in a formal leadership role (e.g., do you have people you are responsible for leading)?	Yes	No							
What is your religious affiliation?	Catholic	Protestant	Jewish	Muslim	Buddhist	Hindu	Atheist/Agnostic	Other	N/A

Appendix B: Assumption Testing

Appendix E: Assumption Testing
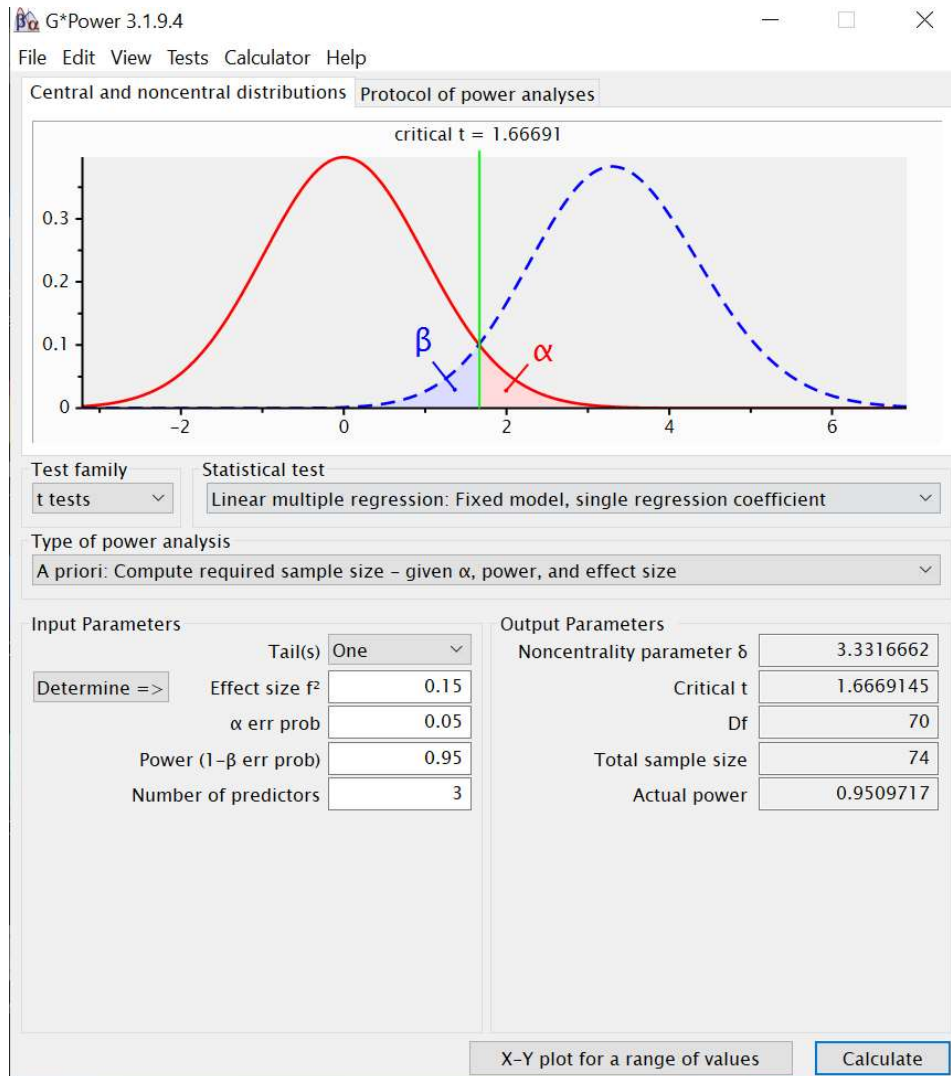
Test of homoscedasticity

Homoscedasticity Scatterplot
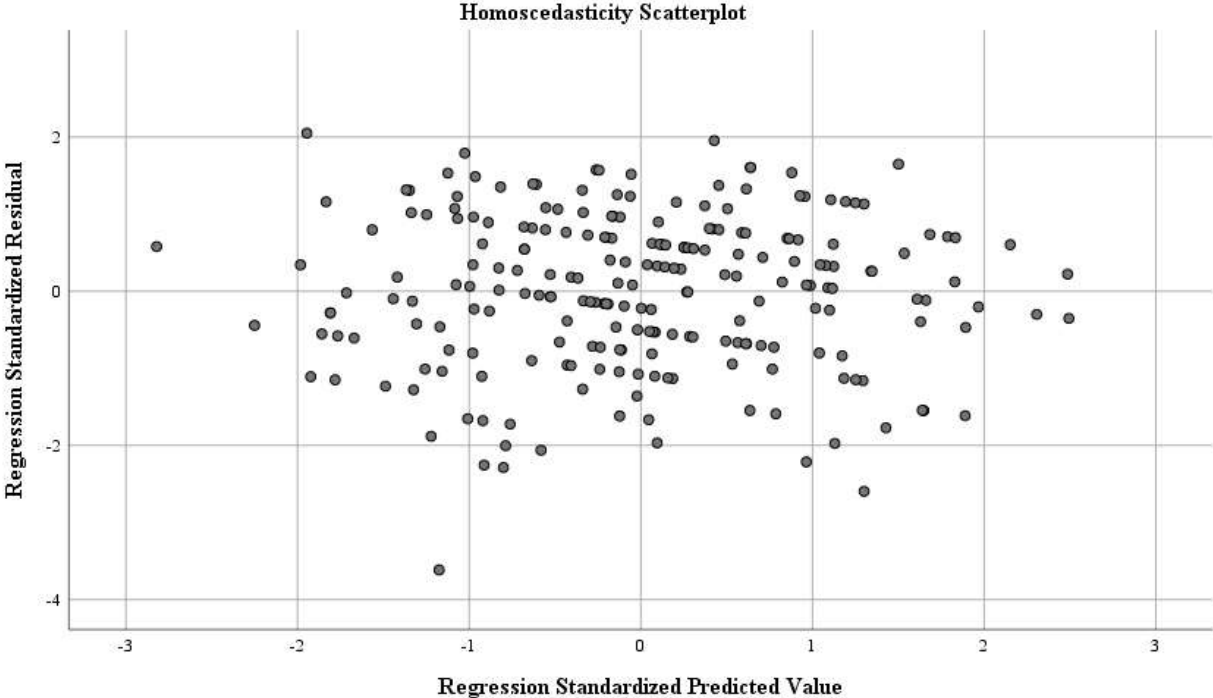
Appendix C: Power Analysis

Power Analysis

Linear Model Regression

Appendix D: Building Adaptive Performance

<u>Building Adaptive Performance</u>

This is a brief guide to building a leader's adaptive performance and things to consider when building the adaptive performance of those around them. Consider going over this guide with a coach or trusted colleague when facing new or challenging situations, in order to help develop your adaptive performance in real time.

1. **High Impact Experiences:** These are the experiences that have shown to be impactful to one's adaptive capabilities. While it may be difficult, it is essential to reflect on these experiences and sit with the lessons that come from them.
   a. Put yourself in the position to lead, both formally and informally. When given these kinds of opportunities, actively consider what elements of past leadership experiences can be applied successfully.
   b. Don't shy away from what is difficult. Dealing with difficult problems and taking the steps to fixing them will be instrumental to tackling future challenges that arise.
2. **The People Around You:** Take stock of those you have surrounded yourself with. This not only includes professional contacts, but also those that you go to for feedback and support. As you encounter new challenges, these will be the people that you approach, not only for help, but also to keep you on track and get through times of stress. The people you surround yourself with will be instrumental in meeting new challenges.
3. **Remember the Three Pieces:** A leader's adaptive performance is made up of three parts. It is important to consider how you show up in each of these parts. Taking time to reflect on each during new and challenging situations will help you to continue to perform at a high level.
   a. <u>Learning Transfer:</u> Are you applying your knowledge, skills, lessons and abilities from your past to your current situation to overcome challenges?
   b. <u>Emotional Regulation:</u> Are you maintaining your composure when things become hard or when dealing with stressors?
   c. <u>Cultural/Contextual Adjustment:</u> How are you showing up when entering new workplace cultures or working with new teams?