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# The Effect of Dynamic Capabilities and Military Experience on the Performance of Veteran Women-Owned Businesses

Sequoiya Lawson

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The Effect of Dynamic Capabilities and Military Experience on the Performance of Veteran  
Women-Owned Businesses

BY

Sequoiya Latrice Lawson

A Dissertation Submitted in Partial Fulfillment of the Requirements for the Degree

Of

Executive Doctorate in Business

In the Robinson College of Business

Of

Georgia State University

GEORGIA STATE UNIVERSITY  
ROBINSON COLLEGE OF BUSINESS

2018

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## ACCEPTANCE

This dissertation was prepared under the direction of the *SEQUOIYA LATRICE LAWSON* Dissertation Committee. It has been approved and accepted by all members of that committee, and it has been accepted in partial fulfillment of the requirements for the degree of Doctor of Philosophy in Business Administration in the J. Mack Robinson College of Business of Georgia State University.

Richard Phillips, Dean

### DISSERTATION COMMITTEE

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*Dr. Lars Mathiassen*

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**ABBREVIATIONS**

EP – Entrepreneurial passion

ESE – Entrepreneurial self-efficacy

RBV – Resource-based view

SBA – Small business administration

SDVOSB – Service disabled veteran-owned small business

VA – Department of Veteran Affairs

VOSB – Veteran-owned small business

VWOB – Veteran woman-owned business

## ABSTRACT

The Effect of Dynamic Capabilities and Military Experience on the Performance of Veteran Women-Owned Businesses

By

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Women constitute one of the fastest rising segments of military veteran business owners. While the number of veteran women-owned businesses (VWOBs) continues to increase, however, the success of their businesses remains a concern, as only fragmented and extremely limited literature exists to provide insight into the factors that affect these businesses' performance.

Using Dynamic Capability Theory, this research examined the effect of dynamic capabilities and military experience on the performance of VWOBs and the role, if any, of military experience on the relationship between dynamic capabilities and business performance. This study provides actionable knowledge for veteran women business owners, as they now have further insight as to how their military experience and dynamic capabilities can ultimately influence the competitive advantage of their firms. Practical insights are offered to public and private entities interested in the sustainment and growth of VWOBs. This study also presents an empirical contribution to the growing body of knowledge on veteran entrepreneurship, filling in literature gaps. As a theoretical contribution, the study presents dynamic capabilities, an organizational theory, as a useful framework with which to link practical real-world issues facing veteran business owners.

**Index Words:** Veteran-owned small business; woman-owned business; dynamic capabilities; business performance; military experience; veteran entrepreneur

## **I CHAPTER I: INTRODUCTION**

### **I.1 Research Domain**

There are over two million women veterans in the United States (Department of Veteran Affairs, 2015) and about 1 in 5, or more than 380 thousand, are business owners (National Women's Business Council, 2015). Nearly all veteran women-owned businesses (VWOBs) are sole proprietorships as 96.7% have no employees other than the owner (U.S. Census Bureau, 2012). However, while the number of reported VWOBs increased by 286,188, or 294.7%, between 2007 and 2012, the total revenue from such businesses only increased by 26% during the same period (Weisul, 2015). These entrepreneurs thus face challenges to the survival of their businesses and need guidance on effective growth strategies (WVEC, 2013). Policymakers have addressed this issue recently by creating partnerships, programs, and initiatives designed specifically to address the needs of veteran women business owners (SBA, 2016).

### **I.2 Research Perspective**

Not much is known regarding the relationship between veteran women business owners' military experience and the capabilities and performance of their businesses. Thus, the analysis and discussion of this research is framed through dynamic capabilities and related constructs to gain a better understanding of this relationship. Researchers use the concept of dynamic capabilities in organizational theory, which has its roots in the resource-based view (RBV) of a firm, to describe how an organization adapts its resource base in response to changes in its environment (Teece et. al., 1997). Under this dynamic capabilities framework, business leaders should use their core competencies to adjust short-term competitive positions in order to build longer-term competitive advantages (Augier & Teece, 2009)

### **I.3 Research Approach**

An online survey of veteran women who own their own business examined the effects of their military experience and their firm's reported dynamic capabilities on business performance, as well as the effects of their military experience on the relationship between dynamic capabilities and the performance of VWOBs. The specific research questions are: *“What are the effects of the firm's dynamic capabilities, and the owner's military experience, on the performance of VWOBs?”* and *“Which of the firm's dynamic capabilities, if any, have a positive effect on the performance of VWOBs, and to what extent are these capabilities moderated by the owner's military experience?”* The unit of analysis is the Veteran Woman-Owned Business, or VWOB. Quantitative analysis of the survey data was adopted as the method of empirical inquiry, as laid out by Mathiassen (2017).

### **I.4 Research Definitions**

The target respondents in this study were women veterans who owned their own business. Researchers have defined a VWOB as a business owned at least 51% by a woman who has served in the active U.S. military and who has been discharged or released under conditions other than dishonorable (U.S. Census, 2011; Szymendera, 2016). Garcia-Morales, Bollvar-Ramos, and Martin-Rojas (2014) defined business performance as the quantifiable measures used to identify business processes to evaluate the strengths, weaknesses, and productivity in various aspects and areas of operation.

Teece, Pisano, and Shuen (1997) defined dynamic capabilities as “the firm's ability to integrate, build, and reconfigure internal and external competences to address rapidly changing environments”. Helfat et al. (2007) later refined this definition as “the capacity of an organization to purposefully create, extend, or modify its resource base.” In this study, military

experience is defined as the perceived knowledge, skills, and abilities that veteran women business owners believe they learned, enhanced, or otherwise adapted from their service in the military (WVEC, 2013).

## **I.5 Study Preview**

The problem setting, area of concern, research domain and approach have now been introduced.

The next section provides the background of women veterans and information related to their transition to business ownership after leaving military service. Existing literature is reviewed on veteran entrepreneurship to identify gaps in the current body of knowledge. Dynamic capabilities concepts are discussed to provide theoretical background. Then, the engaged scholarship method will be presented followed by data collection, data analyses and a discussion of the results.

Contributions and limitations of the study are offered, followed by implications for future research.



## **II CHAPTER II: LITERATURE REVIEW**

The current state of veteran women in terms of gender gaps in business ownership is examined, given the limited research on VWOBs. Existing research on veteran entrepreneurship is also closely related to the area of concern for this study. Knowledge gaps are addressed after examining factors that have received the most thorough analysis in previous research.

### **II.1 Women Veterans and the Gender Gap**

Given that many veteran women have chosen business ownership once they separate from service, researchers have been encouraged to examine the effect of military experience on veteran women's businesses in order to provide further insight for government, VWOB owners and other stakeholders (Boldon et.al. 2016).

The National Center for Veterans Analysis and Statistics (2017) found that a higher percentage of women veterans served in Gulf War 2 (Post-9/11) or during peacetime than men veterans. They also found that women veterans are younger and more racially and ethnically diverse than men veterans. A lower percent of women veterans are married, and women veterans have a lower median household income than men veterans. A higher percent of women veterans work for the government; in addition, women veterans have higher education attainment and enroll in higher education at higher rates than men veterans.

In the non-veteran population, women are more likely than men to be self-employed, according to the United States Department of Labor (2016). Similar trends within the women veteran population have been noted in prior studies, citing reasons such as work-life balance, the desire to be their own boss and the belief that they had a great business idea (WVEC, 2013). Researchers at the Veterans Administration (VA) have found that women veterans have different experiences post-service than men because women can sometimes be misidentified as the wife or

daughter of the “actual” veteran when taking advantage of various veteran services; thus, leaders at the Veterans Administration (VA) have undertaken campaigns to encourage women to embrace their veteran status and to provide outreach for women veteran business owners (Center for Women Veterans, 2018).

As a result of these gender differences, organizations have been established to address the specific needs of veteran women entrepreneurs. In addition, leaders of public and private organizations and lending institutions have partnered with each other to provide funding, training, and other resources to this unique group of business owners (Dilger & Lowry, 2014).

In order to further understand the veteran entrepreneur gender gap, general employment conditions of female veterans in the United States were examined. Kulshrestha (2015) conducted a review of the socioeconomic factors impacting the lives of women veterans in transition to civilian life. Through interviews with women veterans and individuals working in various veteran assistance organizations, Kulshrestha (2015) revealed that programs tend to be male-oriented because historically men have made up a larger percentage of the military. While more women are now serving in the military, the post-service support infrastructure is struggling to adapt. Aspiring women veteran business owners may face additional challenges due to this lack of critical aid.

Suter, Lamb, Meredith, and Tye-Williams (2006) conducted a study of the post-service experiences of women who served in the military between World War II and the Persian Gulf War, providing insight into the longstanding effects of military service for women. The majority of women who participated in the study reported that their service was the most important influential factor in their personal development (Suter et al., 2006). Many of the respondents found it extremely difficult to transition back into civilian life because they found the traditional

gender roles assigned to them by society to be incompatible with the training that they had received in the military. The women also found it difficult to conform to the social expectations of their peers, and many struggled to succeed in different social environments, including business management (Suter et al., 2006).

Through military experience, many people develop more independent and aggressive tendencies. For men, these traits are considered either desirable or normal (Haines, Deaux, & Lazaro, 2016). Women, on the other hand, often are not expected to be fully independent and aggressive (Haines et al., 2016); thus, these traits may be seen as inappropriate and offensive when exhibited by a woman. Importantly, both independence and aggressiveness are highly important traits when it comes to achieving success as an entrepreneur (DeCarlo & Lyons, 1979). Women veterans who possess these important traits may find themselves stifled in the social environment, and therefore they may also experience less success in the realm of business.

Although much of this research has focused on the challenges and barriers to successful entrepreneurship among women veterans, it is also important to analyze the factors that may lead to their success. Women veterans who do achieve success as entrepreneurs tend to apply their military training in the same capacity as male veterans (Osborn & Hicks, 2016). Benmelech and Frydman (2015) found that military service facilitates many of the traits most commonly associated with successful business leadership skills, including effective teamwork, personal ambition, and effective problem solving. Once individuals develop these skills in the military, they may later apply the same skills to the business world in order to develop effective strategies for overcoming the challenges faced in operating a business.

## II.2 Veteran Entrepreneurship Literature

Researchers have described veterans as “natural-born entrepreneurs” and have determined that veterans are 45% more likely than non-veterans to own their own businesses (US Small Business Association (SBA), 2018). Due to this phenomenon, researchers have investigated veteran entrepreneurship from a variety of angles and have discovered critical information relating to the behavior, success patterns and influences common among veteran entrepreneurs. Many researchers have focused on assessing government contracting programs; in addition, researchers have typically linked entrepreneurship education and problems to social and cognitive theories, such as entrepreneurial passion and self-efficacy, rather than to organizational theories like dynamic capabilities. Existing research has not focused on dynamic capabilities.

Several pieces of current legislation also relate to veteran entrepreneurship. In the Veterans Benefits Act of 2003, policymakers have outlined the education and employment provisions that veterans need to use their military education benefits for self-employment, on-the-job training, and other entrepreneurship courses from qualified providers, such as the National Veterans Business Development Corporation. Federal contracting officers have also been given the authority to award sole-source contracts to service-disabled veteran-owned small businesses (SDVOSBs) if the business owners meet specified criteria. In addition, policymakers designed the Veterans Entrepreneurship Act of 2015 to help veteran business owners with issues such as increased access to capital.

Best (2012) and Fletcher (2015) explained the benefits and limitations of the Veterans First Contracting Program within the VA as it relates to service-disabled veteran business owners and government contract set-asides. They found that the program’s set-aside goals include the

intent to award 3% of federal procurement funds to SDVOSBs. However, legislation has not historically provided federal agencies with guidance on how to reach such goals.

Blass and Ketchen (2014) suggested that veteran business owners understand the clear distinction between hobbies, self-employment and the creation of a business. These researchers described successful ventures in general as those which “are based on a sustainable business model, leverage the entrepreneur’s unique experiences and attributes, and are built around a process or system that enables the venture to prosper even if the entrepreneur leaves the venture.”

In a study of the impact on small businesses when their employees who are military reservists are called to active duty, Bressler et al. (2013) found no significant effects on veteran-owned small businesses. However, these authors stated that their findings were contrary to other studies and that researchers need to explore these divergent results more closely. Closely related to military call-ups, Frochen (2015) examined the challenges faced by combat veterans when re-entering the civilian population, such as unemployment, and found that these have been addressed through programs designed for veterans and disabled veterans pursuing entrepreneurship (Frochen 2015).

However, unemployment rates indicate that re-entry programs are not performing well, despite many opportunities for veterans and disabled veterans from the post-9/11 and Vietnam eras (Frochen 2015). Veterans and disabled veterans have access to considerable financial assistance, which may keep them from pursuing employment or business ownership; in addition, civilian employers may have workforce performance concerns with hiring disabled veterans. Frochen (2015) suggested that policymakers should strive to ensure business ownership opportunities for disabled veterans, as these opportunities could relieve the sizable

unemployment benefit expenses stemming from the large population of unemployed disabled veterans and could increase tax revenues at the state and federal levels. Continuing the program evaluation conversation, Kerrick et. al. (2016) suggested that veteran entrepreneurs can benefit from community-based entrepreneurship training programs.

Using an exploratory, mixed-method study to measure Entrepreneurial Passion (EP) and networking frequency of military veterans in a community-based program, Kerrick, Cumberland, Church-Nally, and Kemelgor (2014) indicated that structured entrepreneurship training improved scores for both measurements. These authors also found that when civilians and veterans were combined in classes, veterans had better integration experiences, including larger networking opportunities and increased information about resources related to business ownership.

Kerrick et al. (2016) compared scores of veteran and civilian participants in entrepreneurship training and revealed similarities and differences in attitudes and behaviors between the two groups. Veterans and civilians both reported high Entrepreneurial Self-Efficacy (ESE) scores at the beginning and upon completion of the program. These authors also reported that veterans had a higher percentage of business launches and significantly higher EP scores than civilians in the same program, indicating a positive effect of training on veteran business owners.

### **II.3 Literature Gaps**

Women veterans are choosing entrepreneurship despite facing discriminatory practices such as difficulty securing capital and funding for their businesses (Boldon et. al., 2016), as well as challenges with time management and finding a mentor or support system (WVEC, 2013).

Factors that motivate women veterans to pursue entrepreneurship include work-life balance, the desire to be their own boss and the belief that they had a great business idea (WVEC, 2013).

However, few researchers have conducted studies on VWOBs. There would be value in linking these challenges and motivations to other populations such as women-owned businesses (WOBs), since non-veteran women in business also face comparable issues that prevent them from effectively being able to succeed in the business world (3BL Media, 2016). It is also important to have specific literature on VWOBs in order to explore whether the owners' perceived military experience creates a distinction for these businesses in comparison to other WOBs. Another way to bridge these identified literature gaps is to draw on what is not known in veteran entrepreneurship literature, since women veterans comprise one of several groups in this area of concern (3BL Media, 2016).

There is a demand for more veteran entrepreneurship studies in many government reports and academic journal articles (Baldon et. al., 2016). It would be valuable to compare the effects of their perceived military experience on the capabilities and performance of VOSBs. No studies have been found that examine the effect of military experience on the dynamic capabilities and performance of VWOBs or VOSBs in general, thus further research is needed.

### III CHAPTER III: THEORETICAL FRAMEWORK

#### III.1 Dynamic Capabilities: Origin, Definitions, and Key Concepts

The resource-based view (RBV) of the firm forms part of the foundation of dynamic capabilities.

Under this framework, researchers define resources as tangible and intangible assets that are organized to capture value, that are heterogeneous and immobile, that have attributes that are valuable, rare, and costly to imitate, and that provide competitive advantage (Wernerfelt, 1984).

Sustainable competitive advantage depends on how a firm's leaders apply their resources (Barney, 1991), and competitive advantage can be constant over longer time periods to the extent that the firms' leaders are able to protect against resource imitation, transfer, or substitution.

Researchers then developed dynamic capabilities from the RBV framework in order to capture sources of competitive advantage. Teece, Pisano, and Shuen (1997) defined dynamic capabilities as "the firm's ability to integrate, build, and reconfigure internal and external competences to address rapidly changing environments" and explained the theory as an approach rooted in the gathering of technological resources, flexible innovation, and managerial coordination.

Knowing ordinary capabilities can also enhance understanding dynamic capabilities. Teece (2014) defined ordinary capabilities as necessary functions for the continuation of business, such as administrative tasks, operational duties, and governance control. According to Katkalo, Pitelis, and Teece (2010), an individual who is competent at an ordinary capability performs one of the selected activities within these functions well or at least satisfactorily, regardless of whether or not the activity is the best match for the individual. In light of that definition, it is understandable how organizational leaders who once dominated their sector can face organizational renewal or expiration due to technological disruption in the external



environment (Teece, Peteraf, & Leih, 2016). Organizational leaders can learn ordinary capabilities from one another and modify those capabilities to fit their business's own needs. In contrast, a dynamic capability is unique to the history of a firm's own routines and signature processes that are difficult to imitate (Eisenhardt & Martin, 2000).

Leaders can make a capability dynamic through sensing, seizing, and transforming strategic management activities (Teece, 2007). This allows an organization to adapt its current capabilities and resources for the future. Through sensing, leaders explore internal and external opportunities and assess customer needs; through seizing, organizational leaders mobilize resources to gain value from identified opportunities. Finally, transformation in this context means that leaders will continuously renew their organizational processes in order help their firm endure change and ultimately sustain competitive advantage (Teece, 2007).

### **III.2 Dynamic Service Innovation Capabilities**

Organizational leaders often envision and apply dynamic capabilities in product-innovation environments, but dynamic capabilities can also be applied to service industries (Janssen, Castaldi, & Alexiev, 2016). Janssen, Castaldi, and Alexiev (2016) developed a measurement model for service industries that captures four key elements of dynamic service innovation capabilities (DSIC). These include a) sensing user needs, which involves a systemic evaluation of user needs, use, environment, etc.; b) conceptualizing, which includes the development of new services and the alignment of new services with current services; c) co-producing and orchestrating, which involves the creation and maintenance of strategic relationships; and d) scaling and stretching, which denotes the development and promotion of the brand and its new services. This framework addresses the threefold purpose of dynamic capabilities and has been used in this study as most VWOBs have reported being in the service industry.

### **III.3 Dynamic Capabilities and Business Performance**

Since business owners use dynamic capabilities to capture a sustainable competitive advantage, the dynamic capabilities framework can assist in improving overall business performance (Ktkalo, Pitelis, & Teece, 2010). Researchers have found firms with strong DSICs to be positively correlated with overall firm performance (Janssen, Castaldi, & Alexiev, 2016). In addition, a high innovative capacity and agility have been found to be essential to long-term financial performance (Teece, 2007; Teece, Peteraf, & Leih, 2016). By investing time and resources in developing dynamic capabilities, business owners can make a worthwhile learning investment for organizational training (Zollo & Winter, 2002). Business owners can use dynamic capabilities, especially those related to knowledge creation, product development, and strategic alliances, to drive superior performance in terms of their firm's general value offering across business units (Eisenhardt & Martin, 2000).

The ongoing relationship between a firm's level of dynamic capabilities and a firm's overall business performance can likely be attributed to the fact that enterprise performance itself depends on the strategic, organizational, and human resource decisions made by the firm's leaders (Augier & Teece, 2009), since dynamic capabilities affect each of these areas. Wiklund and Shepherd (2005) state that performance is multidimensional in nature, therefore empirical studies should integrate different dimensions to capture different aspects of business performance. In this study, the four business performance constructs used are market performance, financial performance, employee-related performance, and customer-related performance as specified by Wiklund and Shepherd (2005).

### **III.4 Role of the Manager**

In an organizational sense, the entrepreneurial manager plays a pivotal role in creating dynamic capabilities (Teece, 2007; Katkalo, Pitelis, & Teece, 2010; Augier & Teece, 2009; Teece, Peteraf, & Leih, 2016). While dynamic capabilities are not exclusive to management, the development of these capabilities constitutes a high-level strategy. Researchers have also associated dynamic capabilities with improved change rates in ordinary capabilities (Teece, 2007; Teece, 2014).

Dynamic capabilities are entrepreneurial in nature (Teece, 2014; Teece, 2007), meaning that people who develop these capabilities have the ability to sense, understand, and act on opportunities and build new things which are all useful traits for both start-ups and established businesses (Teece, 2007). To develop effective dynamic capabilities, people require routines; however, entrepreneurs often do not have a set routine. Thus, managers may face a certain paradox regarding the development of dynamic capabilities (Teece, 2014).

Management includes administrative, managerial, and entrepreneurial tasks, but one person typically does not carry out all of these types of managerial activities in a firm (Teece, 2007). Similarly, while the ideal entrepreneur would embody all three elements of dynamic capability (sensing, seizing, and transforming), organizations often operate sufficiently with three entrepreneurs who each singularly exemplify one of these elements (Teece, 2007).

### **III.5 Military Experience**

Veterans are more likely to be entrepreneurs than non-veterans (Hipple and Hammond 2016). This could be because many veterans have received training and experience that relates directly to managerial capabilities that could be interpreted as dynamic in the business world. Thus, a veteran may constitute an ideal candidate for entrepreneurial success after military service.

Experience that may make veterans ideal entrepreneurs includes leadership (Oxford, 2000); risk-taking propensity (Masters & Gibbs, 1989), the ability to adapt to changing environments (de Czege, 2009), and specific job skills (Hope, Oh, & Macklin, 2011; Kerrick et al., 2014).

Bass and Stogdill (1990) explain that there are as many definitions of leadership as those who try to define it. For this study, leadership is used as a term to describe the actions and styles of leadership in the military. The Oxford Companion to American Military History defines leadership in the military as “the process of influencing others to accomplish the mission by providing purpose, direction, and motivation.” There are eleven Armed Forces Leadership Principles that have been taught in some form across each branch of service as a part of training military leaders. These principles include being technically proficient, knowing and training staff, setting the example and seeking self-improvement (Logan, 2004). This differs from command, which is the lawful authority given to a service member as a condition of their rank and position (Oxford, 2000).

In addition to providing purpose, direction and motivation through leadership, risk-taking is also considered in this study as a characteristic of military experience which is also a characteristic of entrepreneurs (Hvide & Panos, 2014). Similar to entrepreneurs, U.S. military veterans have been considered risk takers in prior research. Military personnel take risks in their line of work when making decisions and choosing between alternatives, therefore this study views risk taking as a process of making the decision to take risks, and developing strategies to minimize risk (Masters & Gibbs, 1989).

Previous research indicates that business leaders are also constantly forced to respond to change, which is the third capability in this study that can be related with military experience and is also considered dynamic (Teece, Peteraf, & Leih, 2016).

Military missions in the 21<sup>st</sup> century are becoming more complex, thus military members have been prepared to carry out their duties in any climate based on requirements at all levels (de Czege, 2009). This is considered a part of “operational art” and involves a delicate balance between design and planning missions as well as learning and adapting to changing environments (de Czege, 2009). This is not a necessarily a new concept. While qualities of the individual such as learning effectively, adapting rapidly and appropriately, and solving problems are valuable to commanders, results are ultimately determined by the collective quality of these abilities for the entire command (de Czege, 2009). The ability to quickly adapt to changes and formulate appropriate responses is also a major component of an entrepreneur’s or business leader’s responsibilities and is related to the concept of “doing the right things” in dynamic capability theory (Teece, Peteraf, & Leih, S., 2016). As such, adapting to changing environments is another area in which military experience prepares a veteran for entrepreneurship and business ownership.

Specific job skills are the final facets of military experience explored in this study, which may be considered more ordinary than other capabilities, or “doing things right (de Czege, 2009; Teece, Peteraf, & Leih, S., 2016).” However, these skills may also be considered dynamic under certain circumstances. Job skills learned through military service include those specific to gaining technical expertise in a particular area as well as training in broader reaching competencies such as discipline and time management (Hope et al., 2011). Specific Job skills may translate well from military service to the domain of entrepreneurship and business ownership (Kerrick, 2014), and can be considered dynamic when they become signature processes and difficult to imitate (Teece et al., 2016). It must be noted that effects credited to military service may actually be the result of an individual’s experience prior to entering the

military rather than that individual's veteran status (Profile of Women Veterans, 2016). For this reason, final respondents had to ascribe their skills to their military experience.

The next chapter introduces the conceptual models and hypotheses to explain how this knowledge is operationalized in the current study.

#### IV CHAPTER IV: CONCEPTUAL MODEL AND HYPOTHESES

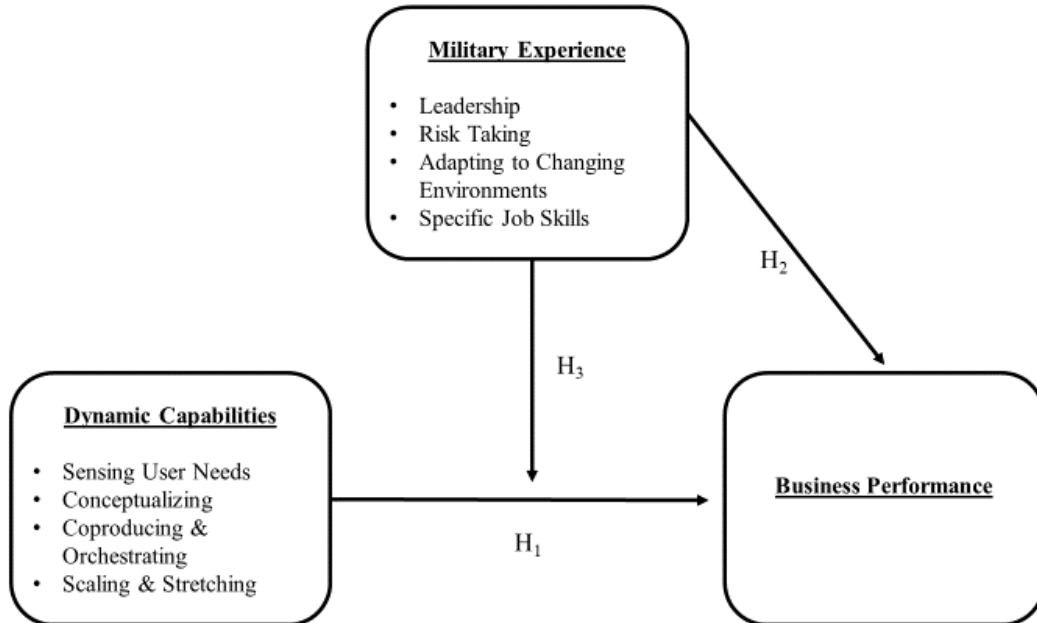
The conceptual model and hypotheses for this study were developed to measure the overall business performance of VWOBs, the owner's perceptions of their firm's dynamic capabilities, as well as abilities or skills provided by the owners' military experience.

The first research question asks, "*What are the effects of the firm's dynamic capabilities, and the owner's military experience, on the performance of VWOBs?*" This question is addressed with the hypotheses stated below:

H<sub>1</sub> Dynamic capabilities have a positive effect on business performance; and

H<sub>2</sub> Military experience has a positive effect on business performance.

The conceptual model in Figure 1 illustrates these overall constructs. Military experience, dynamic capabilities and business performance are calculated by combining responses to questions related to subconstructs in order to create an average for the overall measures. The subconstructs of dynamic capabilities and military experience are then explored individually as part of the second research question.



*Figure 1 Conceptual Model*

There are many capabilities that can be interpreted as dynamic which span across various industries. Most VWOBs provide some type of service (U.S. Census Bureau, 2012), therefore this study uses four dynamic capabilities that have been adjusted to fit the service industry. The four key elements of DSICs are sensing user needs; conceptualizing; coproducing and orchestrating; and scaling and stretching (Janssen, Castaldi & Alexiev, 2016). These elements are operationalized as the four subconstructs used to measure the dynamic capabilities of VWOBs. The conceptual model in Figure 1 illustrates these concepts and measurements for the second research question which has been separated into two main components.

Part I of the second research question isolates each subconstruct of dynamic capabilities and asks, “Which of the firm’s dynamic capabilities, if any, have a positive effect on the performance of VWOBs?” This question is associated with the hypotheses shown below:

H<sub>1a</sub> Sensing user needs has a positive effect on business performance;

H<sub>1b</sub> Conceptualizing has a positive effect on business performance;



H<sub>1c</sub> Coproducing and orchestrating have a positive effect on business performance; and  
H<sub>1d</sub> Scaling and stretching have a positive effect on business performance.

In addition to individual dynamic capabilities, this study suggests that distinct elements of an owner's military experience could have a positive effect on business performance, based on prior research. This study also measures any overall, or individual moderating effects of military experience on the relationship between dynamic capabilities and the performance of VWOBs, since this has not been addressed in previous research.

Part II of the second research question: "and to what extent are (the firm's dynamic capabilities) moderated by the *owner's military experience*?" examines the strength and direction of the relationship, or moderating effect (Hair, 2014), between the dynamic capabilities and performance of VWOBs. This portion of the second research question hypothesizes that:

H<sub>3</sub> Military experience moderates the direct relationship between dynamic capabilities and business performance; where high military experience increases business performance;

H<sub>3a</sub> Leadership skills moderate the relationship between dynamic capabilities and business performance, where high leadership skills increase business performance;

H<sub>3b</sub> Risk-taking experience moderates the relationship between dynamic capabilities and business performance, where high risk-taking experience increases business performance;

H<sub>3c</sub> Experience with adapting to changing environments moderates the relationship between dynamic capabilities and business performance, where high experience with adapting to changing environments increases business performance; and

H<sub>3d</sub> Specific job skills developed in the military moderate the relationship between dynamic capabilities and business performance, where high levels of specific job skills increase business performance.

The next chapter explains the research method used in the current study to test these models, followed by an analysis of the results.

## **V CHAPTER V: RESEARCH METHOD**

### **V.1 Study Design**

An online survey of veteran women business owners located throughout the United States was conducted. Potential respondents received an email or responded to a social media request to complete the survey. After consenting to participate, they completed the qualification questions. To be included, participants had to meet several criteria. They had to self-identify as a woman, veteran of the U.S. military, not currently serving on active duty, who owns at least 51% of a business. If the respondent had more than one business, they were asked to answer questions for the one with the highest percentage of personal ownership. The survey began by asking questions about the respondents' personal military background and how their businesses began, then continued with a more specific inquiry into the capabilities and performance of their businesses. The survey took about 15 minutes to complete. The complete survey can be found in Appendix A.

### **V.2 Measures**

This study used data pertaining to three measures, specifically dynamic capabilities, military experience, and business performance. Pre-existing scales were selected for the survey in this study to measure dynamic capabilities (Janssen, Castaldi et al. 2016) and business performance (Wiklund and Shepherd 2005). Military experience measures were developed by taking common themes from existing literature of capabilities learned through military service that could be interpreted as dynamic in business environments (Oxford, 2000; Masters & Gibbs, 1989; de Czege, 2009; Hope et al., 2011; Kerrick et al., 2014). Existing questions were adapted from the 2012 U.S. Census Survey of Business Owners and a questionnaire designed for the 2012 Women Veteran Entrepreneur Corps research study sponsored by Capital One to allow comparisons between known data on VWOBs and the current study. These questions include personal

demographic and business firmographic items as well as inquiries into military experience, and potential challenges being faced by VWOBs.

The dynamic capability measures used for this study are sensing, conceptualizing, co-producing and orchestrating and scaling and stretching. These four pre-existing elements were developed by Janssen, Castaldi, and Alexiev (2016) as a model to measure dynamic capabilities for the service industry.

The four measurements of capabilities that can be attributed to experience in the military are leadership experience (Oxford, 2000); risk-taking propensity (Masters & Gibbs, 1989), the ability to adapt to changing environments (de Czege, 2009), and specific job skills (Hope, Oh, & Macklin, 2011; Kerrick et al., 2014). These measures were developed for this study to explore the relationship between military experience and business performance, as well as how they affect the relationship between dynamic capabilities and business performance.

A subjective scale was used to evaluate business performance relative to main competitors, which is a common practice in literature (García-Morales, Bolívar-Ramos et al. 2014). The four subconstructs of business performance used in this study ask questions about marketing, finances, employee commitment and customer satisfaction. Scores for dynamic capabilities, military experience and business performance were created by calculating the mean of subconstructs to create single independent variables for each overall measure.

Demographic information included age, race, highest level of education and military status. Firmographic questions were related to the industry, years in operation, number of employees and other items that allowed for the exploration of descriptive statistics.

### **V.3 Sample**

Candidates were solicited by email through publicly-available contact information listed on websites from two main sources to reach the target audience for the sample in this study. Most respondents came from the Department of Veterans Affairs: Office of Small & Disadvantaged Business Utilization: Vets First Verification Program. The VA has currently certified more than 700 businesses as both a Veteran-Owned Small Business/Service Disabled Veteran-Owned Small Business (VOSB/SDVOSB) and a Woman-Owned Business (WOB). Data collected included business name, doing business as name, address, phone number, website, e-mail, city, and state. The VA is the only federal agency with this program.

Respondents were also recruited via a public Facebook page for Veteran Women Igniting the Spirit of Entrepreneurship (V-WiSE). The program is operated by the Institute of Veterans and Military Families at Syracuse University and is funded through a cooperative agreement with the SBA and other sponsors across the U.S.

This sampling frame was selected in order to better reach the recommended sample size of 384 participants, based on the VWOB population size of 383,000 (U.S. Census Bureau, 2012). This is a generic calculation commonly used in statistical research (Noordzij, Dekker, Zoccali, & Jager, 2011) and should have produced a margin of error  $\alpha$  of .05 and confidence level of .95. The following sections explain the collection and analysis of data based on the described method.

## **VI CHAPTER VI: DATA COLLECTION AND ANALYSES**

Data collection was conducted from November 7 to December 21, 2017. A recruitment letter was sent through email to the veteran women business owners listed in the VA database, and Facebook posts were used for the V-WiSE group. About 700 names were downloaded from the VA database, and these participants proved to be the most responsive audience. The majority of responses were received within one day of sending initial and reminder e-mails.

The V-WiSE database could not be released for this study. However, the organization suggested posting an invitation on their public Facebook page, which included several thousand followers, to reach the V-WiSE VWOB audience. The program is open to all women veterans, women active duty service members, and female partners and spouses of active duty service members. Initial and reminder posts were submitted in the visitor's comments on the V-WiSE Homepage during the data collection timeframe.

Additional data collection methods were considered, including commercial panels and privately-owned databases. They were found to be unfeasible for this study due to legal restrictions and respondent suitability as this was a very specific audience. Once all feasible efforts to reach the target audience were exhausted, survey links were closed on December 21, 2017. As a result of these efforts, a total of 162 responses were obtained.

### **VI.1 Demographics Summary**

Prior to conducting the inferential analysis procedures to address the research questions, the demographic data collected was first processed to provide a description of the sample. Some of this information was then compared to data on the known population as reported by the Women Veterans Entrepreneurship Corporation. It was determined that respondents in this study were consistent in certain areas compared to previously known information about this population.

With regard to the branch of service (see Table 1), the distribution of the sample was roughly similar to the known population. For both the known population and the sample, the largest groups belonged to the Army and the Air Force. The difference was found in the Reserves. For the study sample, 10.6% belonged to the Reserves, while only 5.6% of the known population was reported to belong to the Reserves.

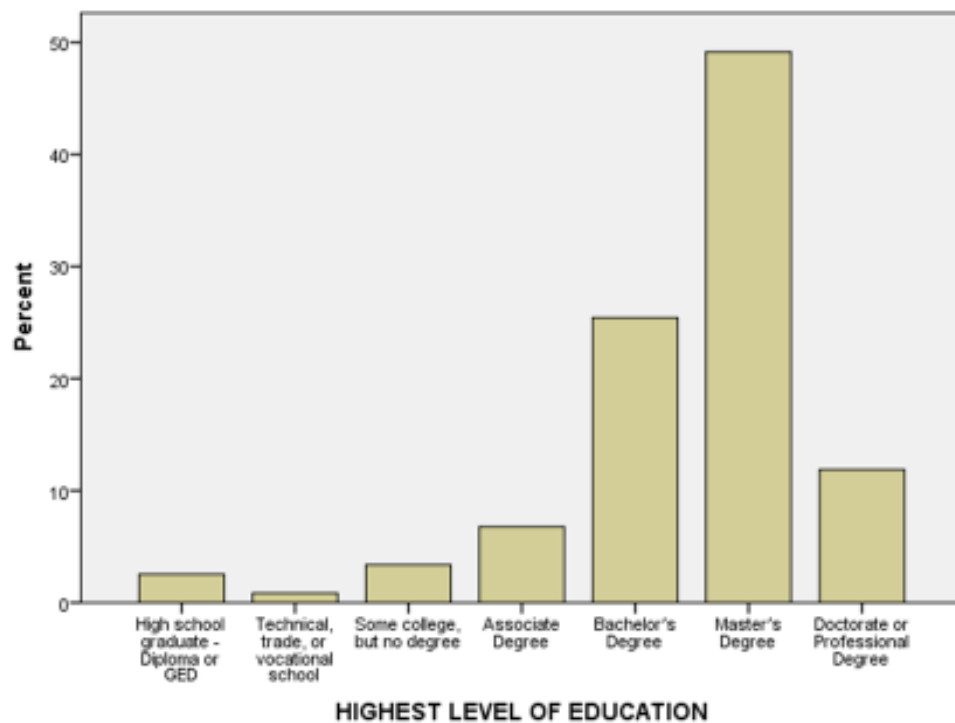
As for race, the largest group in the sample was reported to be white (40.8%) and the next largest group was reported to be Black or African-American (37.3%). In comparison, for the known population, 81.5% was reported to be White, while only 10.8% was reported to be Black or African-American. With regard to age, the distribution of the study sample was similar to the known population, with the largest percentage of participants reported to be between the ages of 55 and 64 (known population 24.4%, study sample 38.3%), closely followed by participants aged 45 to 54 (known population 17.1%, study sample 30%). These comparisons are summarized in Table 1, shown below.

**Table 1** Results of Demographic Survey Analysis

<b>Results of Demographic Survey Analysis</b>	<b>Study Sample (%)</b>	<b>Known Population (%)</b>
<b>Branch of Service</b>		
Army	41.5	37
Air Force	35.2	24.1
Navy	16.9	13
Marine Corp	5.6	11.1
Reserves	10.6	5.6
National Guard	10.6	unknown
Coast Guard	0.7	5.6
<b>Current Military Status</b>		
Veteran	95	91.1
Reservist	4.3	8.9
National Guard	0.7	unknown
<b>Race</b>		
White	40.8	81.5

Black or African-American	37.3	10.8
American Indian or Alaska Native	4.2	1.4
Asian	2.1	1.6
Native Hawaiian or Pacific Islander	1.4	unknown
Other	2.1	2.6
<b>Hispanic or Latino</b>		
Yes	5.0	8.1
No	92.4	91
Don't Know	2.5	0.9
<b>Age</b>		
18 – 24	0.8	1.4
25 – 34	2.5	8.6
35 – 44	22.5	12.1
45 – 54	30.0	17.1
55 – 64	38.3	24.4
65 – 74	5.8	36

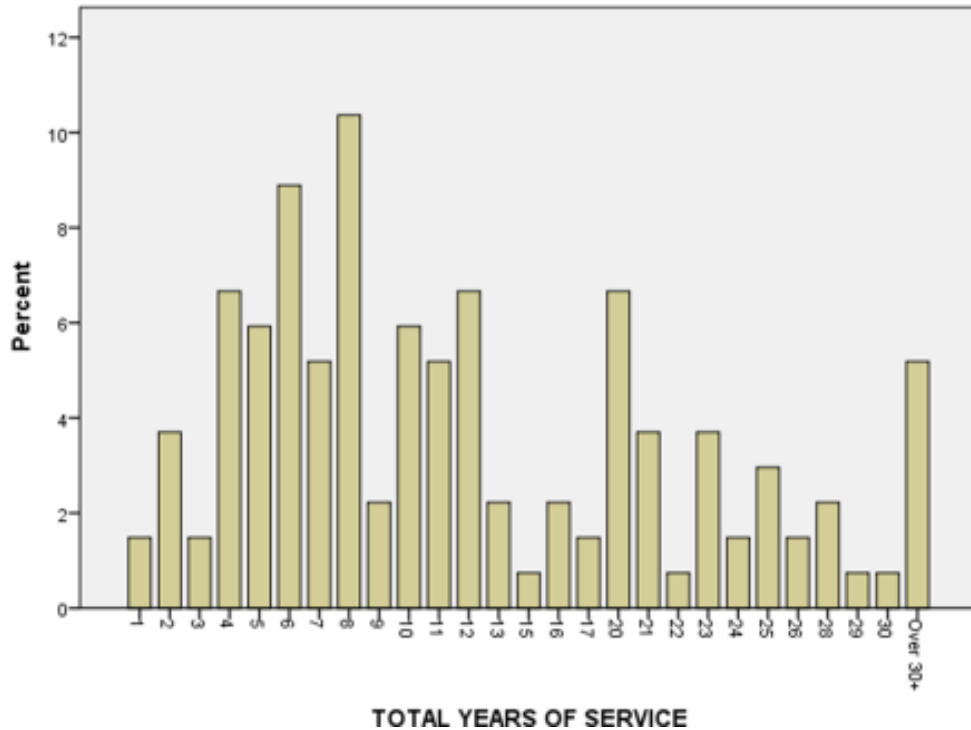
In this study, the majority of respondents had a master's degree (49%), followed by bachelor's (25.4%) and doctorate or professional degrees (11.9%) as illustrated in Figure 2 below.



*Figure 2 Owner's Highest Level of Education*



There was a wide range of total years of military service for respondents in this study, with the highest percentages being between six and eight years, as illustrated in Figure 3 below.



**Figure 3** Owner's Total Years of Military Service

More than 96% of respondents were the majority owners of their business. 86% of respondents started their business after leaving military service, 95.7% founded or started their businesses as compared to purchasing, inheriting, or transferring, and 36.7% participated in programs designed specifically for VWOBs. Respondents for this study were asked to report factors that inspired business ownership. The top responses included the desire to be their own boss and flexible hours to manage life commitments. The full summary of these factors is listed in Table 2 below.

**Table 2** *Factors That Inspired Business Ownership*

<b>Factors That Inspired Business Ownership</b>	<b>Percent</b>
Desire to be my own boss	59.2
Flexible hours to manage other life commitments	40.1
I had a great business idea	35.2
Other	18.3
Could not find a job	13.4
Take over family business or bought franchise	2.1
<b>Other factors included:</b> disability and other workplace discrimination, and the desire to make a change by hiring more veterans	

## VI.2 Firmographics Summary

At the firm-level, the most frequent industry represented by VWOBs was professional consulting, followed by technology. Other services included construction, forest management, medical, security, intelligence analysis, social services, and homecare. Years in operation varied, where 29.5% of respondents reported being in business from three to five years, and only 0.7% have been in business more than 30 years. Most business owners employed just one or two workers; only 14.7% had 30 or more employees. Businesses in this study were most frequently registered in Georgia, Texas, Maryland, Florida, and Virginia, which is similar to known population data from the National Women’s Business Council. The summary of these results is displayed in Table 3.

**Table 3** *Results of Firmographic Survey Analysis*

<b>Results of Firmographic Survey Analysis</b>	<b>Study Sample (%)</b>
<b>Primary Industry</b>	
Other (Please describe)	35.8
Professional consulting services (marketing, research)	23.3
Technology	10
Other services (child care, janitorial, cosmetology)	8.3
Professional practices (law, medical, veterinary)	7.5

Consumer products, retail or wholesale	5		
Financial services or business	3.3		
Manufacturing (production of goods)	3.3		
Transportation	1.7		
Tourism/hospitality	1.7		
<b>Other services and industries reported include:</b> construction, forest management, security, intelligence analysis, social services, homecare			
<b>Years in Operation</b>			
3 - 5	29.5		
11 - 30	25.9		
1 - 2	21.6		
6 - 10	20.1		
0	2.2		
More than 30	0.7		
<b>Number of Employees (Top 5)</b>			
1	27.9		
2	17.6		
Over 30	14.7		
3	7.4		
4	7.4		
5	3.7		
<b>States of VWOB Registration (Top 5)</b>			
<b>Study Sample</b>	<b>Study Sample (%)</b>	<b>Known Population</b>	<b>Known Population (%)</b>
Georgia	15.5	California	12
Texas	12	Texas	9.9
Maryland	11.3	Florida	9.1
Florida	10.6	New York	6.4
Virginia	10.6	Georgia	5.4

Only 13.7% of participants received loans, grants, or other financial assistance based on their VWOB status. Revenue varied widely, with 25.9% of the studied businesses earning \$1 million or more and 21.6% earning less than \$25,000 in the past year. The biggest challenge faced by veteran women when trying to build their business appeared to be gaining access to financial capital. Other major challenges included time management and human resource functions, and participants reported feeling concerned about securing new customers and contracts, making the right business connections, and developing a clear strategy for growth.

Securing new customers and contracts was the highest reported current area of concern, followed by making the right connections and again, access to capital. These challenges and concerns are summarized in Table 4, shown below.

**Table 4** Challenges and Current Areas of Concern for VWOBs

<b>Challenges Faced in Building Business</b>	<b>Study Sample (%)</b>
Getting access to financial capital	43.7
Time management	33.8
Finding a mentor or support system	28.9
Hiring employees/HR functions	28.2
Other	17.6
Writing a business plan	15.5
Legal issues	14.8
Setting up a website	14.1
Locating office/retail space	7.0
<b>Other factors included:</b>	
<ul style="list-style-type: none"> <li>• Perceived discrimination based on veteran or woman status in certain fields</li> <li>• Inconsistent government agency responsiveness to requests for certain support</li> <li>• Business financial management and planning</li> </ul>	
<b>Current Areas of Concern</b>	
	<b>Study Sample (%)</b>
Securing new customers/contracts	40.8
Making the right business connections	37.3
Access to capital	31.7
Developing a clear strategy for growth	28.9
Time management	18.3
Managing finances and cash flow	16.9
Creating a marketing plan	16.2
Navigating social media	13.4
Other	11.3
<b>Other factors included:</b>	
<ul style="list-style-type: none"> <li>• Professional writing</li> <li>• Corporate mentorship</li> <li>• Competing against bigger firms once the business grows and is no longer considered a small business, but not yet large enough to successfully compete against large corporations</li> </ul>	

The adequacy of data will now be discussed, followed by an explanation of the inferential analysis procedures.

### **VI.3 Adequacy of Data**

Dynamic capabilities subconstructs were used as the independent variables, subconstructs of perceived military experience were the moderator variables and business performance, calculated by taking the average of subconstructs, was used as the dependent variable.

Additional analyses were conducted to test the statistical power of the regression models. The number of tested dynamic capabilities overall predictors was five and number of capabilities influenced by military experience predictors was five. A post-hoc power analysis using G\*Power, as recommended by Faul, Erdfelder, Lang, & Buchner (2007), found that the 142 valid responses was adequate and should produce a  $\alpha$  of .05 and .95 for the regression model, which is the same as the desired result to reach the population based on the original generic sample size calculations.

### **VI.4 Inferential Analysis Procedures**

To test the direct and the moderated effects, it was first necessary to establish that dynamic capabilities have a positive effect on business performance. Then, military experience was examined to determine whether a moderating effect exists on the direct relationship between dynamic capabilities and business performance. Additionally, the correlations detailed in Appendix B can also be used as an indication of the appropriateness of using military experience as a moderator variable, particularly between the subconstructs of dynamic capabilities and military experience. The results of the analysis procedures described are discussed in the succeeding sections, followed by a summary of findings.

## VII CHAPTER VII: RESULTS

### VII.1 Hypotheses Tests

Two research questions were examined in order to test the hypotheses for this study. First, it had to be determined whether dynamic capabilities and military experience affected the performance of VWOBs. The second question asks whether military experience has an effect on the relationship between dynamic capabilities and business performance. These questions and related hypotheses were tested using several regression models.

The first regression used the average score across all of the dynamic capabilities subconstructs as the predictor variable. As shown in Table 5, it was determined to be a statistically significant predictor of business performance. The B-value indicates that for every unit of increase in the dynamic capabilities score, there will be a corresponding .289 increase in the business performance scores. It was also determined that this positive predictive relationship accounts for 16.8% of the variance in the business performance, thus validating H<sub>1</sub>. The second regression used the total score of military experience as the predictor variable. As shown in Table 3, it was also determined to be a statistically significant predictor of business performance. The B-value indicates that for every unit of increase in the military experience score, there will be a .085 increase in the business performance scores. The positive predictive relationship between military experience and business performance accounts for 19.2% of the variance, thus validating H<sub>2</sub>.

*Table 5 Results of Regression Analysis - RQ I*

<i>“What are the effects of dynamic capabilities and military experience on the performance of VWOBs?”</i>	<b>Results of Regression Analysis – RQ I</b>				
	<b>B</b>	<b>t</b>	<b>F-Value (Sig.)</b>	<b>Adj. R<sup>2</sup></b>	<b>Significance</b>
<b>Dynamic Capabilities</b>	.289	5.107	26.087 (.000)	.168	Yes < .05
<b>Military Experience</b>	.085	2.152	4.629 (.033)	.192	Yes < .05

The next tests were conducted to determine if the four subconstructs of dynamic capabilities, as calculated by the averages of individual questions, revealed a statistically significant effect on business performance of VWOBs when taken separately. As shown in Table 6, as individual predictors, all four subconstructs of Dynamic Capabilities significantly predicted business performance.

*Table 6 Results of Regression Analysis - RQ II Part I*

<i>“Which dynamic capabilities, if any, have a positive effect on the performance of veteran women-owned businesses,”</i>	<b>Results of Regression Analysis – RQ II Part I</b>				
	<b>B</b>	<b>t</b>	<b>F-Value (Sig.)</b>	<b>Adj. R<sup>2</sup></b>	<b>Significance</b>
<b>Sensing User Needs</b>	.293	4.965	24.650 (.000)	.160	Yes < .05
<b>Conceptualizing</b>	.161	3.686	13.585 (.000)	.093	Yes < .05

<b>Coproducing &amp; Orchestrating</b>	.091	2.306	5.317 (.023)	.034	Yes < .05
<b>Scaling &amp; Stretching</b>	.191	4.538	20.596 (.000)	.137	Yes < .05

The Beta-values indicate a positive effect between the variables, measuring that an increase in the scores for the four subconstructs would translate to an increase in business performance. These results support H<sub>1a</sub>, H<sub>1b</sub>, H<sub>1c</sub>, and H<sub>1d</sub>. Based on the adjusted R<sup>2</sup> values, the sensing user needs subconstruct was associated with the largest effect on business performance. with every unit of increase in the score for sensing user needs, the score for business performance will increase by .293. The sensing user needs subconstruct, taken as an individual predictor variable, accounts for 16% of the variance in business performance.

After establishing the relationships between individual dynamic capabilities and business performance, the next task was to determine how the relationship between these variables are moderated by the veteran woman business owners' perceived military experience. Military experience was tested as a moderating effect (Hair, 2014) to examine how it affects the strength and direction of the relationship between dynamic capabilities and business performance. Therefore, a series of moderated multiple regression analysis tests were conducted.

The first test calculated the overall interaction effect between the total measures of dynamic capabilities and military experience using business performance as the dependent variable. The interaction between the two variables was not statistically significant, suggesting that military experience does not moderate the relationship between dynamic capabilities and business performance.



The subsequent regressions were conducted to determine whether military experience overall, as well as individual subconstructs, were significant moderators of the relationship between dynamic capabilities and business performance. Overall, military experience was not found to be a significant moderator. Among the four subconstructs of military experience, only leadership skills and risk-taking were identified to be significant moderators of the relationship between overall dynamic capabilities and business performance. The significant moderators had diminishing rather than enhancing effects. These two variables resulted in a statistically significant change in  $R^2$  from 19.2% and 19.8%, respectively as indicated in Table 5. The moderating effects shown in Table 5 are illustrated as simple slope plots in Appendix C.

**Table 7 Results of Regression Analysis - RQ II Part II**

<i>“...and to what extent are (dynamic capabilities) moderated by the owner’s perceived military experience?”</i>	<b>Results of Regression Analysis – RQ II Part II</b>						
	<b>B</b>	<b>t</b>	<b>Sig.</b>	<b>F change</b>	<b>F change Sig</b>	<b>Adj. R<sup>2</sup></b>	<b>Sig.</b>
<b>Military Experience</b>							
Dynamic Capabilities	.038	.100	.921	.352	.554	.188	No
Military Experience	-.125	-.350	.727				
Moderator	.038	.594	.554				
<b>Leadership Skills</b>				<b>4.686</b>	<b>.032</b>	<b>.192</b>	Yes < .05
Dynamic Capabilities	.208	3.100	.002				
Leadership (Mod)	.011	2.165	.032				
<b>Risk Taking</b>				<b>5.545</b>	<b>.020</b>	<b>.198</b>	Yes < .05
Dynamic Capabilities	.187	2.648	.009				
Risk Taking (Mod)	.014	2.355	.020				
<b>Adapting to Changing Environments</b>				.734	.393	.166	No
Dynamic Capabilities	.241	2.994	.003				

Adapting (Mod)	.006	.857	.393				
<b>Specific Job Skills</b>				3.256	.074	.183	No
Dynamic Capabilities	.200	2.672	.009				
Specific Skills (Mod)	.012	1.804	.074				

These results offer insight as to how dynamic capabilities and military experience, using both independent and combined factors, predict business performance as all hypotheses were confirmed. Unexpectedly, there was no support for the hypothesis that overall military experience moderates the relationship between dynamic capabilities and business performance. Despite this result, two out of four subconstructs of military experience have a moderating effect on business performance. These findings only partially support previous research suggesting that various components of military experience translate to success in business (Ozlen, 2014; Lucke, & Furtner, 2015; Heinz, Freeman, Harpaz-Rotem, & Pietrzak, 2017). The next section discusses these findings in further detail.

## VIII CHAPTER VIII: DISCUSSION

In this chapter, the findings of this study are discussed in two parts: first, in terms of the direct regression models and second, in terms of the moderated models. This is followed by the contributions of this study to practice and theory.

### VIII.1 Research Question I

*“What are the effects of the firm’s dynamic capabilities and the owner’s military experience on the performance of VWOBs?”*

Overall, dynamic capabilities had a significant positive effect on business performance. This supports findings from existing literature, which indicate that firms with strong dynamic capabilities have overall strong firm performance (Janssen et al., 2016; Ktkalo et al., 2010). Likewise, overall military experience was determined to have a statistically significant direct effect on the performance of VWOBs. As with dynamic capabilities, the literature indicates that military experience (Oxford, 2000; Masters & Gibbs, 1989; de Czege, 2009; Hope et al., 2011; Kerrick et al., 2014) facilitates many of the traits commonly associated with successful business performance. The second research question further explores dynamic capabilities at the individual level and their effect on overall business performance.

### VIII.2 Research Question II: Part I

*“Which dynamic capabilities, if any, have a positive effect on the performance of veteran women-owned businesses...?”*

Individually, the four subconstructs of dynamic capabilities used for this study each had a significant direct positive effect on the performance of VWOBs. The subconstructs were defined as sensing user needs; conceptualizing; coproducing and orchestrating; and scaling and stretching. Each capability, as indicated by prior research, should have had a positive effect on firm performance (Janssen et al., 2016).

### VIII.3 Research Question II: Part II

*“...and to what extent are (dynamic capabilities) moderated by the owner’s perceived military experience?”*

Military experience was tested as moderator to determine the strength and direction of the relationship (Hair, 2014) between overall dynamic capabilities and the performance of VWOBs. These capabilities in particular are leadership experience (Oxford, 2000); risk-taking propensity (Masters & Gibbs, 1989), the ability to adapt to changing environments (de Czege, 2009), and specific job skills (Hope et al., 2011; Kerrick et al., 2014). In the moderated regression models, the main interests were the power and the change in significance of overall dynamic capabilities when different subconstructs of military experience were added to the models as moderators. The significance threshold was set at .05. The change in the variance, as quantified by the change in the adjusted  $R^2$  values, were also taken into consideration.

It was found that leadership and risk-taking as subconstructs were significant at ( $p < .05$ ) being pure moderators of the relationship between overall dynamic capabilities and business performance. In each of these cases, the moderators had a weakening rather than an amplifying effect on the relationship between overall dynamic capabilities and business performance; in other words, the power of dynamic capability declined as a predictor of business performance when leadership and risk-taking experience were added as moderators.

Based on the finding that when used as a moderator, military experience weakened rather than amplified the relationship between dynamic capability and business performance, it is posited that military experience may provide the same kind of performance-boosting effects as dynamic capabilities themselves. If military experience merely formed a channel through which dynamic capabilities became more effective, the inclusion of the moderators of military experience should have amplified rather than weakened the power of dynamic capabilities as a

predictor of business performance. The presence of a weakening rather than amplifying effect, suggested that aspects of military experience, in this case leadership skills and risk-taking, conceptually overlap dynamic capabilities. Previous researchers have supported this finding, suggesting that the training and experience obtained by veterans through years of military service are similar or related to managerial capabilities that could be interpreted as dynamic in the business world and to which the entrepreneurial success of veterans can be attributed. Future researchers might be interested in identifying skills developed in the military that do not overlap with existing dynamic capabilities to determine whether these skills moderate the relationship between dynamic capabilities and business performance.

#### **VIII.4 Contributions to Practice**

According to data from the National Center for Veterans Analysis and Statistics (2011), women represented about 8 percent of the total veteran population in 2009. However, they are projected to make up 15 percent of all living veterans by 2035. The number of VWOBs is likely to increase with this projection, since 1 in 5 veteran women are currently business owners (National Women's Business Council, 2015). The relevance of the findings of this study for specific stakeholders is discussed in further detail in the succeeding subsections.

##### **Veteran Women Business Owners**

The majority of respondents revealed the need for access to capital, time management, and finding a mentor or support system as the biggest challenges faced in building their VWOB. The most critical business development needs were reported to be again, access to capital, as well as securing new customers and contracts, making the right business connections and developing a clear strategy for growth. Some veteran women business owners may have already known about these factors and issues, others may not. The findings from this study serves as a tool to bridge

that gap to increase the number of veteran women who understand how their perceived military experience affects their businesses.

Actionable knowledge, as described by Mathiassen (2017), has been provided for veteran women business owners to use as a guide to better understand the effects of dynamic capabilities on the performance of VWOBs. Also, there is some indication of factors that provide a moderating effect on that relationship, specifically leadership skills (Oxford, 2000) and the propensity for risk taking (Masters & Gibbs, 1989). Veteran women business owners should seek opportunities to explore the concepts of dynamic capability theory. Because of the overlapping role that dynamic capabilities play in both the military and entrepreneurial settings, military experience is particularly useful for veteran women business owners in the latter field. This will provide women veterans with more information about how their capabilities can help them with starting and managing their own business.

There are some resources available to promote networking, such as through the Women Veteran-Owned Business Directory. This directory serves to assist with locating VWOBs to increase business opportunities and provide a platform for like-minded individuals to share necessary information. Additionally, these platforms can also be used as a means to connect female veterans who are interested in starting their own business with the capital and resources they might need to succeed.

### **Government Agencies**

Previous researchers have found that current governmental policies with regard to post-service aid provided for veterans could pose a limitation to the entrepreneurial potential of women veterans (Baechtold & Danielle, 2011; Suter et al., 2006). Government agencies can use the results of this study to better meet the needs of this unique group of business owners. For

example, The National Women's Business Council (NWBC) is "a politically neutral organization comprised of women business owners and representatives of women's business organizations who serve as an advisory council to members of the U.S. government, including the President." The council is an independent voice that can use its platform to communicate the issues in this study that affect VWOBs. Also, Women Business Centers (WBCs) "are an initiative provided by the U.S. Small Business Administration (SBA) to enable women with an interest in entrepreneurship assistance in developing and locating the necessary resources to pursue their own businesses." The list of VWOB business needs is a useful planning aid for these organizations. Also, through their educational network, WBCs can modify their training programs to focus on developing the dynamic capabilities and military experience factors that were identified to positively affect business performance for VWOBs.

### **Professional Organizations**

Veterans assistance programs have historically been male-oriented (Kulshrestha, 2015), but the increase in veteran women business owners has necessitated the adaptation of programs to better address this change in demographics. These programs include Veteran Women Igniting the Spirit of Entrepreneurship (V-WiSE), and the Women Veterans Entrepreneurship Corp. V-WiSE is a training program offered in three phases, designed for women veterans to hone business skills that are useful in entrepreneurship and small business management. The phases include online courses, mentorship, and ultimately providing support upon launching the business. WVEC is a program that facilitates a mentorship and training program for women veteran business owners. It was developed in partnership with Capital One in response to the need to help women veterans efficiently acclimate into civilian life by providing the tools to grow and successfully run their businesses.

Organizations such as V-WiSE and WVEC should develop, and revise education and training programs based on the results of this study. Specifically, veteran women business owners seek additional support with how to gain access to capital, secure new customers and make the right business connections. Also, these business owners should be educated on dynamic capability theory, as this study contributes to changing the perception of dynamic capabilities for VWOBs.

Leaders can make a capability dynamic through certain strategic management activities (Teece, 2007), which allows an organization to adapt its current capabilities and resources for the future. This study used dynamic capabilities for service innovation (Janssen, Castaldi & Alexiev, 2016), as most VWOBs have reported being in the service industry. Overall and individually, the dynamic capabilities measured in this study were found to have a direct positive effect on the performance of VWOBs. Sensing user needs had the highest level of significance of the dynamic capabilities subconstructs, followed by scaling and stretching; conceptualizing; and co-producing and orchestrating. Since certain military experience is duplicative of dynamic capabilities, these organizations can interpret that leadership and risk-taking propensity subconstructs already have significant positive effects on the overall capabilities and performance of VWOBs.

By using the information provided in this study, these professional organizations can make an impact on the performance of these firms, potentially helping them develop the specified skills faster and help understand how to maximize their sustained competitive advantage. The next section of this study will contain a discussion of how the findings from this study contribute to existing knowledge.



### **VIII.5 Contributions to Theory**

Few researchers have examined veteran entrepreneurship, despite the distinctive characteristics of the owners as a result of their experiences in the military and veteran status as a whole. This study contributes to filling gaps in knowledge, since there are not many studies in this area of concern. More specifically, there were none found that examined the effect of the owners' perceived military experience on the dynamic capabilities and performance of VWOBs.

This study also presents dynamic capabilities, an organizational theory, as a useful framework with which to link practical real-world issues facing veteran women business owners. Most researchers who have examined veteran entrepreneurship literature have drawn on personality-based theories such as self-efficacy, entrepreneurial cognition, and planned behavior (Kerrick, et al., 2016), all of which involve personality-based research. The results of this research provide a possible challenge to dynamic capability theory for VWOBs by de-emphasizing co-producing and orchestrating, conceptualizing and scaling, and stretching. In addition, it is suggested that military experience conceptually overlaps with the effect of dynamic capabilities. Future researchers should also conduct more quantitative studies such as this, regarding dynamic capabilities as most of the existing literature centers on qualitative or conceptual studies (Kump, Engelmann, Kessler, & Schweiger, 2016).

## **IX CHAPTER IX: CONCLUSION**

Military experience compensates for certain dynamic capabilities for VWOBs. Researchers should further explore the capabilities that have a positive effect on business performance for VWOBs in order to better understand how this unique set of business owners can thrive and compete in today's ever-growing and rapidly changing business environments. Many veteran women business owners have expressed the desire to continue to serve their country by providing resources and jobs to fellow veterans. A better understanding of the effect of military experience on the skills that these veterans possess can be invaluable to the success of veteran women business owners and their employees. Based on the results of this study, future researchers should further examine the growth of VWOBs, to provide key stakeholders more insight on how to best assist this distinct group of business owners.

## APPENDICES

### Appendix A: Survey Instrument

#### INTRODUCTION

In this study, we would like to understand how your business is performing and whether your military experience influences its capabilities. The goal is to offer valuable insight that can be used in practice by business owners like you, as well as lending institutions, policy makers and various organizations that support veteran businesses.

#### ABOUT YOUR MILITARY BACKGROUND

1. In which branch or branches, if any, of the U.S. military have you served? [Select All That Apply]
  - 1) I have not served in the U.S. military
  - 2) Army
  - 3) Air Force
  - 4) Marines
  - 5) Navy
  - 6) Coast Guard
  - 7) Reserves
  - 8) National Guard
  
2. Which of the following best describes your current military status? [Select One]
  - 1) Currently serving as a Reservist
  - 2) Still on active duty in the U.S. Military
  - 3) Currently a veteran of the U.S. Military
  - 4) Currently in the National Guard
  
3. How many years in total did you serve in the military? For example, if you were on active duty in the Army for 6 years, then served 5 years in the Army Reserves we would consider that 11 years of total service.

(Drop down menu item: 1-30 years and a 30+ option, numbers listed individually)

**ABOUT YOUR BUSINESS:** We would like to know about your business. If you own several businesses, please choose the one with highest personal ownership, and think about that one **only** as you answer the questions.

4. Did you start your business before, during, or after your military service?
  - 1) Before
  - 2) During
  - 3) After
  
5. Which of these factors drove you to start your own business? [Select All That Apply]

- 1) I had a great business idea
  - 2) Flexible hours to manage other life commitments
  - 3) Desire to be my own boss
  - 4) Take over family business or bought franchise
  - 5) Could not find a job
  - 6) Other (Please describe \_\_\_\_\_)
6. How did you initially acquire ownership of your business?
- 1) Founded or started
  - 2) Purchased
  - 3) Leased
  - 4) Inherited
  - 5) Received transfer of ownership/or gift
  - 6) Other (Please describe \_\_\_\_\_)
7. What percentage of your business do you personally own? [Select One]
- 1) Less than 25%
  - 2) 25-50%
  - 3) 51-75%
  - 4) 76-100%
8. Thinking about your current business, how many years has your business been in operation?
- 1) 0
  - 2) 1 to 2
  - 3) 3 to 5
  - 4) 6 to 10
  - 5) 11 to 30
  - 6) More than 30
9. How many employees does your business have? For example, this can include employees that are full-time, part-time or independent contractors etc. [Select One]
- (Drop down menu item: 1-30, more than 30)

**ABOUT RUNNING YOUR BUSINESS:** We would like to know about how you run your business, the services it provides and its organization. Indicate your level of agreement or disagreement with each statement.

7-point Likert scale 1-Strongly Disagree, 2-Disagree, 3-Somewhat Disagree, 4-Neither Agree or Disagree, 5-Somewhat Agree, 6-Agree, 7-Strongly Agree – N/A

- |     |  |
|-----|--|
| 10. | We systematically observe and evaluate the needs of our customers.             |
| 11. | We analyze the actual use of our services.                                     |
| 12. | Our organization is strong in distinguishing different groups of customers and |

	market segments.
13.	Staying up-to-date with promising new services and technologies is important for our organization.
14.	We follow which technologies our competitors use.
15.	In order to identify possibilities for new services, we use different information sources.
16.	We are innovative in coming up with ideas for new service concepts.
17.	Our organization experiments with new service concepts.
18.	We align new service offerings with our current business and processes.
19.	Collaboration with other organizations helps us in improving or introducing new services.
20.	Our organization is strong in coordinating service innovation activities involving several parties.
21.	In the development of new services, we take into account our branding strategy.
22.	Our organization is actively engaged in promoting its new services.
23.	We introduce new services by following our marketing plan.

**ABOUT YOUR MILITARY EXPERIENCE:** We are interested in whether your experiences in the military may or may not have influenced you as a business owner. Indicate your level of agreement or disagreement with each statement.

7-point Likert scale 1-Strongly Disagree, 2-Disagree, 3-Somewhat Disagree, 4-Neither Agree or Disagree, 5-Somewhat Agree, 6-Agree, 7-Strongly Agree – N/A

24.	My leadership experience in the military inspired me to become a business owner.
25.	My experience in the military made me more comfortable taking calculated risks in my business.
26.	My experience in the military increased my ability to adapt quickly to changing environments in my business.
27.	Specific job skills that I received in my military experience bring advantages to my business.

**ABOUT THE PERFORMANCE OF YOUR BUSINESS:** We are interested in how you perceive the performance of your business in relation to your competitors.

Please think about your key competitors. How would you rate your business in comparison?

5-point scale ranging from 1-Much worse than most, 2-Somewhat worse than most, 3-The same as most, 4-Somewhat better than most, 5-Much better than most, N/A

<b>28.</b>	Our ability to attract new customers is...
<b>29.</b>	Our ability to open new markets is...
<b>30.</b>	Our development of market shares is...
<b>31.</b>	Our growth in sales is...
<b>32.</b>	Our growth in profits is...
<b>33.</b>	The overall profitability of our business is...
<b>34.</b>	Our employee satisfaction rate is...
<b>35.</b>	The level of employee commitment in our business is...
<b>36.</b>	Our ability to keep staff long-term staff and reduce employee fluctuation is...
<b>37.</b>	Our customers view our business image as...
<b>38.</b>	Customer satisfaction in our business is...
<b>39.</b>	Customer loyalty to our business is...

Again, thinking about your current business with the most personal ownership, please answer the questions below.

**40.** What challenges have you faced in building your small business? [Select All That Apply]

- 1) Writing a business plan
- 2) Legal issues
- 3) Time management
- 4) Locating office/retail space
- 5) Hiring employees/HR functions
- 6) Getting access to financial capital
- 7) Setting up a website
- 8) Finding a mentor or support system
- 9) Other (Please describe \_\_\_\_\_)

**41.** What areas, if any, do you need the most help with now that you are a small business owner? [Select All That Apply]

- 1) Developing a clear strategy for growth
- 2) Securing new customers/contracts
- 3) Access to capital
- 4) Managing finances and cash flow
- 5) Time management
- 6) Making the right business connections
- 7) Creating a marketing plan
- 8) Navigating social media
- 9) Other (Please describe \_\_\_\_\_)

- 42.** Have you ever participated in a government, private or non-profit program designed specifically for veteran women business owners?
- 1) Yes
  - 2) No

As you may know, the Department of Veteran Affairs has a Vets First Verification Program that certifies the nature of veteran-owned businesses.

- 43.** Which of the following best describes your knowledge of the Vets First Verification Program?
- 1) I was not aware of the program
  - 2) I am aware of the program but have not applied
  - 3) I have an application in process
  - 4) I have a Vets First Verification for my business
- 44.** If you currently have a Vets First Verification for your business, please select which Vets First Verification your business has, otherwise you may skip this question. [Select All That Apply]
- 1) 8a Certification
  - 2) HubZone
  - 3) Veteran-Owned Small Business
  - 4) Service Disabled Veteran-Owned Small Business
  - 5) Woman-Owned Small Business
  - 6) Minority-Owned Small Business
- 45.** Have you ever received loans, grants or other financial contributions from government, private or non-profit organizations specifically because of your status as a veteran woman business owner?
- 1) Yes
  - 2) No
- 46.** What category best describes the primary industry for your business? [Select One]
- 1) Professional consulting services (i.e., marketing firm, research firm)
  - 2) Creative services (i.e., theater company, graphic design firm, music production)
  - 3) Financial services or business
  - 4) Other Services (i.e., child care, janitorial, cosmetology)
  - 5) Consumer products, retail or wholesale
  - 6) Tourism/hospitality
  - 7) Manufacturing (i.e., production of goods)
  - 8) Accounting
  - 9) Professional practices (i.e., law, medical, veterinary, etc.)
  - 10) Technology
  - 11) Transportation
  - 12) Other (Please describe \_\_\_\_\_)

47. For the past **year**, which of the following best describes your total revenue? [Select One]

- 1) \$0 -- I made no money
- 2) Less than \$25,000
- 3) \$25,000 to \$30,000
- 4) \$30,000 to \$40,000
- 5) \$40,000 to \$50,000
- 6) \$50,000 to \$60,000
- 7) \$60,000 to \$70,000
- 8) \$70,000 to \$80,000
- 9) \$80,000 to \$90,000
- 10) \$90,000 to \$100,000
- 11) \$100,000 to \$150,000
- 12) \$150,000 to \$200,000
- 13) \$200,000 to \$250,000
- 14) \$250,000 to \$500,000
- 15) \$500,000 to \$1 million
- 16) \$1 million or more
- 17) Not applicable

48. Think about your business **three years ago**. Which of the following best describes your total revenue back then? [Select One]

- 1) I didn't have this business 3 years ago
- 2) \$0 -- I made no money
- 3) Less than \$25,000
- 4) \$25,000 to \$30,000
- 5) \$30,000 to \$40,000
- 6) \$40,000 to \$50,000
- 7) \$50,000 to \$60,000
- 8) \$60,000 to \$70,000
- 9) \$70,000 to \$80,000
- 10) \$80,000 to \$90,000
- 11) \$90,000 to \$100,000
- 12) \$100,000 to \$150,000
- 13) \$150,000 to \$200,000
- 14) \$200,000 to \$250,000
- 15) \$250,000 to \$500,000
- 16) \$500,000 to \$1 million
- 17) \$1 million or more
- 18) Not applicable



- 49.** Which state(s) is your business registered in? [Select All That Apply]  
(Drop down menu item, 50 U.S. states listed individually with ‘Other’ fill in the blank option)

**ABOUT YOU:** The following are for classification purposes only.

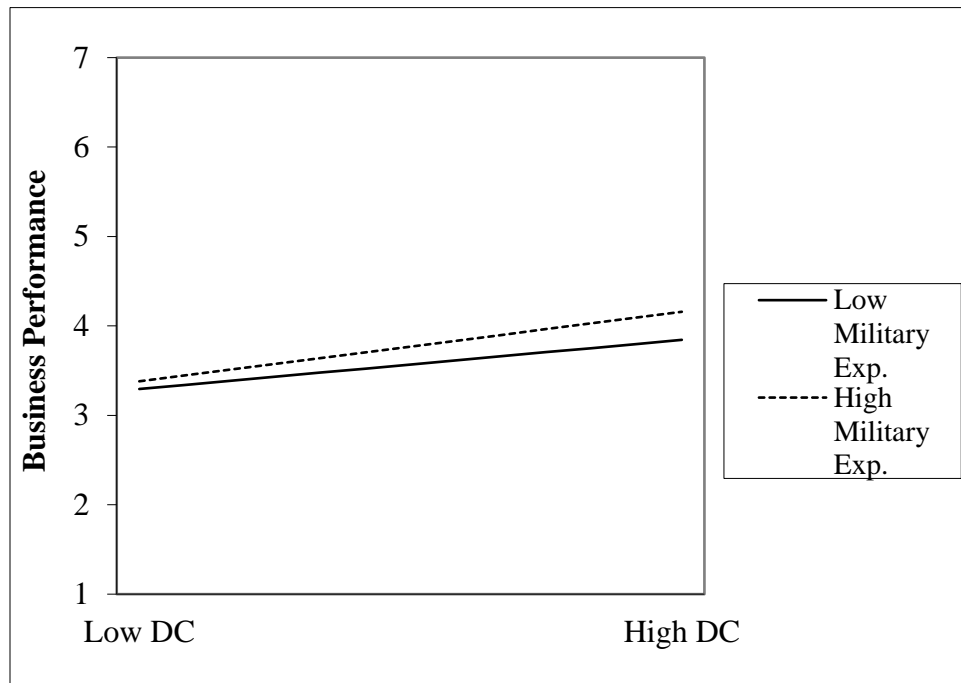
- 50.** Are you...
- 1) Male
  - 2) Female
- 51.** Which of the following best describes your age? Are you...
- 1) 18-24
  - 2) 25-34
  - 3) 35-44
  - 4) 45-54
  - 5) 55-64
  - 6) 65 or older
- 52.** Do you describe yourself as Hispanic or Latino?
- 1) Yes
  - 2) No
  - 3) Don't know
- 53.** With which race do you identify? Are you... [Select All That Apply]
- 1) White or Caucasian
  - 2) Black or African-American
  - 3) Asian or Asian American
  - 4) American Indian/Native American
  - 5) Native Hawaiian/Other Pacific Islander
  - 6) Other (Please describe \_\_\_\_\_)
- 54. Before you started your business, what was your highest level of education? [Select One]**
- 1) Less than high school graduate
  - 2) High school graduate - Diploma or GED
  - 3) Technical, trade, or vocational school
  - 4) Some college, but no degree
  - 5) Associate Degree
  - 6) Bachelor's Degree
  - 7) Master's Degree
  - 8) Doctorate or Professional Degree

Again, we appreciate you taking the time to complete this survey. Thank you.

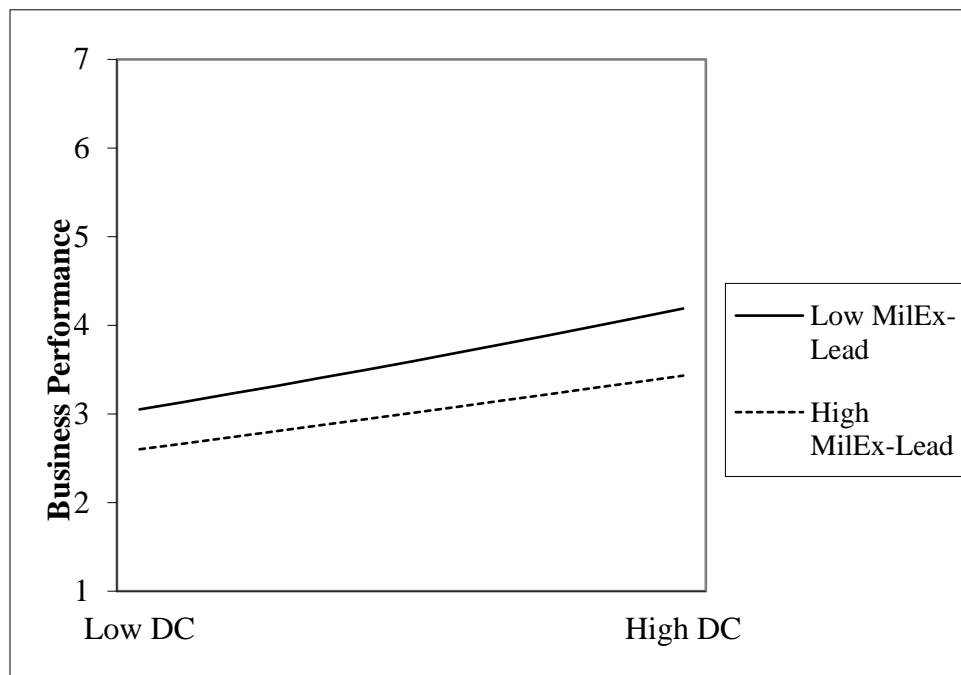
## Appendix B: Correlations

		DC	DC - Sensing	DC - Concept	DC - CorpOrch	DC - ScaleStretch	Military Experience	ME - Leadership	ME - Risk Taking	ME - Adapting	ME - Specific Skills
<b>Military Experience</b>	r	.196*	.208*	0.054	.191*	.200*					
	p	0.025	0.018	0.540	0.031	0.023					
<b>ME - Leadership</b>	r	.226**	.244**	0.085	.198*	.204*	.806**				
	p	0.010	0.005	0.339	0.025	0.020	0.000				
<b>ME - Risk taking</b>	r	0.148	0.157	0.004	0.163	.180*	.919**	.664**			
	p	0.094	0.075	0.966	0.066	0.041	0.000	0.000			
<b>ME - Adapting</b>	r	0.135	0.126	0.035	0.166	0.152	.852**	.498**	.755**		
	p	0.125	0.152	0.690	0.060	0.085	0.000	0.000	0.000		
<b>ME - Specific Skills</b>	r	0.141	0.159	0.052	0.115	0.133	.849**	.485**	.741**	.750**	
	p	0.110	0.070	0.557	0.194	0.132	0.000	0.000	0.000	0.000	
<b>Business Performance</b>	r	.418**	.409**	.317**	.205*	.380**	.256**	.246**	.255**	0.129	.207*
	p	0.000	0.000	0.000	0.023	0.000	0.004	0.006	0.004	0.151	0.020
<b>BP - Market</b>	r	.467**	.398**	.378**	.212*	.488**	.249**	.248**	.297**	0.081	.179*
	p	0.000	0.000	0.000	0.019	0.000	0.005	0.005	0.001	0.370	0.045
<b>BP - Financial</b>	r	.269**	.292**	0.156	0.173	.216*	.213*	.210*	.229*	0.113	0.142
	p	0.003	0.001	0.083	0.056	0.016	0.017	0.019	0.010	0.212	0.116
<b>BP - Employee</b>	r	.259**	.253**	.269**	0.060	.217*	0.175	0.153	0.126	0.118	.186*
	p	0.004	0.005	0.003	0.510	0.016	0.052	0.090	0.163	0.190	0.039
<b>BP - Customer</b>	r	.273**	.297**	0.158	.181*	.236**	0.134	0.130	0.120	0.075	0.116
	p	0.002	0.001	0.080	0.045	0.008	0.136	0.147	0.183	0.408	0.199

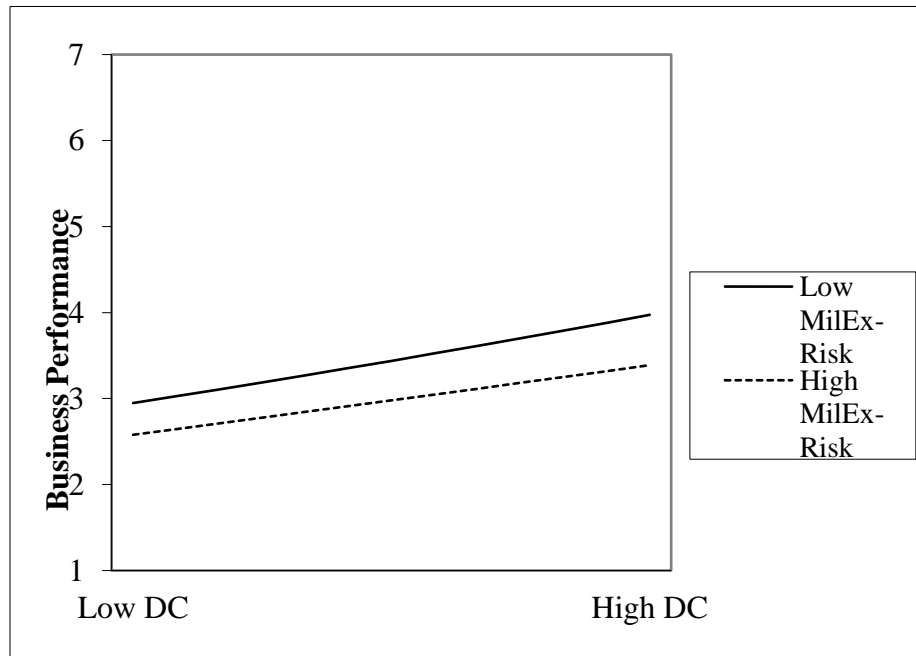
### Appendix C: Moderator Simple Slope Plots



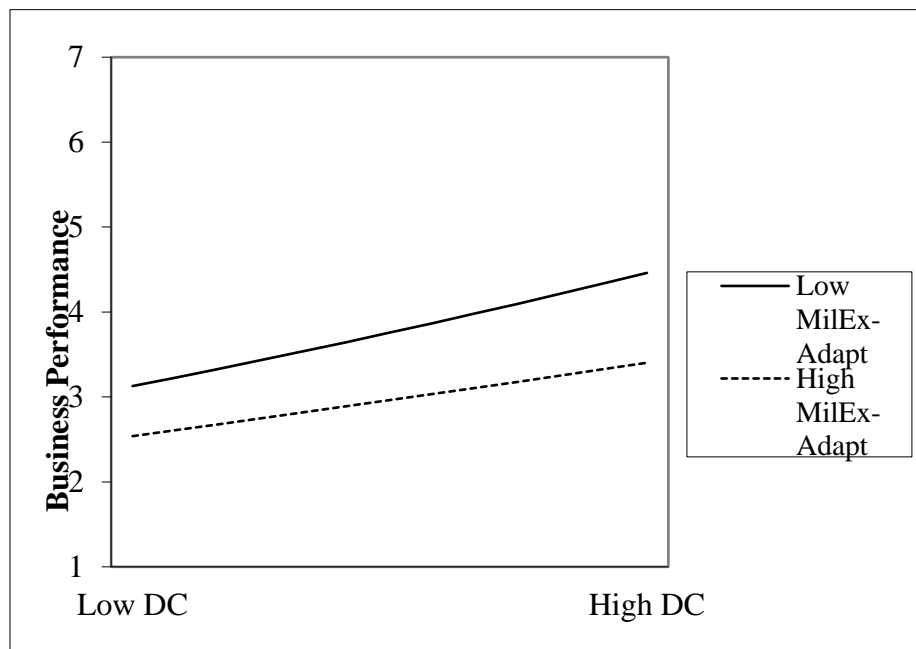
*Figure 4 Moderator: Dynamic Capabilities x Military Experience*



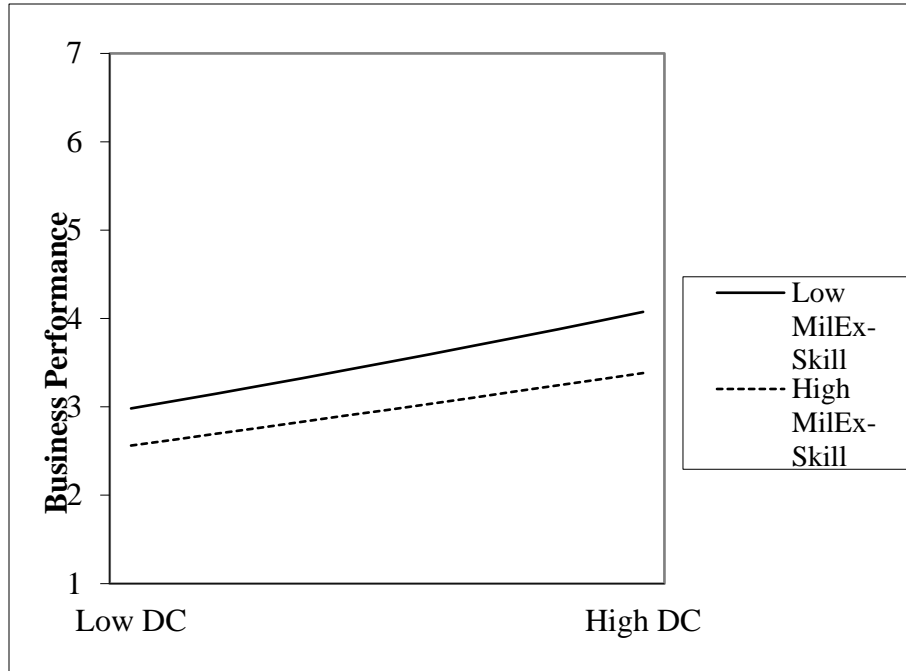
**Figure 5** Moderator: *Dynamic Capabilities x Military Experience – Leadership*



**Figure 6** Moderator: *Dynamic Capabilities x Military Experience – Risk Taking*



**Figure 7** Moderator: *Dynamic Capabilities x Military Experience – Adaptation*



**Figure 8** *Dynamic Capabilities x Military Experience – Skill*

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## X VITA

Sequoiya Latrice Lawson is a business professional with over 15 years of experience in program management and public affairs within the U.S. Department of Defense.

Ms. Lawson is currently the Drug Demand Reduction Program Manager at Dobbins Air Reserve Base, Georgia. Her program management responsibilities include detecting and deterring illicit drug use through drug testing and marketing activities for military and civilian personnel on the installation. She is a certified substance abuse prevention specialist and was previously employed at Yokota Air Base in Tokyo, Japan managing the same program. She was awarded civilian of the year for the 374<sup>th</sup> Medical Group for her efforts in Japan.

After serving 11 years, on active duty and as a reservist, Ms. Lawson was honorably discharged from the U.S. Air Force with the rank of captain. As a public affairs officer, she served in many locations stateside and overseas. Her last assignment was at Headquarters, United States Forces Korea, U.S. Army Garrison Yongsan in Seoul, South Korea. Her public affairs experience includes strategic communication planning, media relations, community relations and internal information management. Ms. Lawson was awarded communications company grade officer of the year for Air Force Materiel Command, as well as numerous service medals.

In addition to her Executive Doctorate in Business from the Robinson College of Business at Georgia State University, Ms. Lawson earned a Bachelor of Science degree in Mass Communication from Tennessee State University, a Master of Public Administration (MPA) from Georgia College and State University and a Master of Business Administration (MBA) from the Keller Graduate School of Management at DeVry University.