HOW DOES FAMILY FIRM STATUS MODERATE THE RELATIONSHIP BETWEEN ORGANIZATIONAL READINESS FOR CHANGE AND ORGANIZATIONAL RESILIENCE IN TIMES OF CRISIS?

by

Nubia A. Castillo de Valle

A dissertation submitted to the faculty of
The University of North Carolina at Charlotte
in partial fulfillment of the requirements
for the degree of
Doctor of Business Administration

Charlotte

2021

Approved by:

_____
Dr. Torsten M. Pieper

_____
Dr. Franz W. Kellermanns

_____
Dr. Laura J. Stanley

_____
Dr. Chandra Subramaniam

ABSTRACT

NUBIA A. CASTILLO DE VALLE. How does family firm status moderate the relationship between organizational readiness for change and organizational resilience in times of crisis? (Under the direction of DR.TORSTEN M. PIEPER)

The literature on organizational resilience shows that there has been little research about organizational resilience drivers. This study has two objectives. The first one aims to empirically explore if organizational readiness for change, precisely the three dimensions of organizational readiness for change: appropriateness, management support, and change efficacy (Holt, Armenakis, Feild, & Harris, 2007), as determinants of organizational resilience. The second objective investigates how firms' structure moderates that relationship in the context of change (adoption or usage of technology) in times of COVID-19. SMART-PLS, a statistical technique popular in business and social science, was used to perform the statistical analysis of this research. PLS-SEM measurement model was utilized, and the result suggests that psychometrics scales are reliable and evidence of rational validity. This study will influence organizational resilience research, and it will inform managers practitioners on how to prepare for a catastrophe and build resilient firms. The data was sourced via a survey by Qualtrics for a total sample of 160 companies divided into 80 family firms and 80 non-family firms. The target responders were leaders of those organizations. As this is an empirical cross-sectional study, causality is not inferred and cannot be generalized; furthermore, appropriateness and family firm status (moderation) were not significant. The findings suggest that the three dimensions of organizational readiness for change (appropriateness, management support, and change efficacy) could be critical antecedents of organizational resilience. Keywords: PLS-SEM, Organizational resilience, COVID-19, Firm Structure, Organizational readiness for change.

DEDICATION

This work is dedicated to God for his love and mercy to allow me to achieve this milestone; without him, I could not have done it. My parents: Porfirio Castillo, my fortress, Nubia Molina de Castillo, my mom, my cheerleader, my hero. My husband, Macario Valle, my rock, my love, and my children Perla Margine, Josue Isaac, David Valle Castillo, my sister Carmen Castillo Hinds, my brothers and sisters, nieces, nephews, friends, and cohort- two for sharing the journey. My family is my inspiration, grateful for their love, support, constant encouragement, and patience while I spent endless hours working toward achieving my dream.

ACKNOWLEDGEMENTS

Thank you to my chair, Dr. Torsten Pieper, for his patience, guidance, and willingness to share his knowledge. He kept my focus on the objective with his expertise and generosity in advising, revising, and editing this dissertation. Grateful for his commitment to guide me even when I was discouraged. Grateful to Dr. Kellermanns, who was instrumental in moving me forward when I was stuck. His encouragement was timely and kept me moving in the right direction. And to the following committee members for their generosity, feedback, and expertise. Dr. Laura Stanley, Dr. Chandra Subramaniam, Dr. Reginald Silver. Grateful to the UNC-Charlotte D.B.A. program directors, Dr. Franz Kellermanns and Dr. Reginald Silver created an academically challenging and prestigious program. The D.B.A. program at UNC-Charlotte is a kind for the quality of content, diverse professors, and students enrolled in the program. Special thanks to my classmates for sharing their academic, professional, and life experiences. Every one of you contributed to the learning experience—best of luck in your future endeavors.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

LIST OF ABBREVIATIONS

AVE	Average variance extracted
BRT-53	The Benchmark Resilience Tool
CB-SEM	Covariance based Structural Equation Modeling
CCA	Confirmatory composite analysis
CFA	Confirmatory factor analysis
CR	Composite reliability
COVID-19	Coronavirus Disease 2019
F-PEC	Family Influence through Power, Experience, and Culture
GDP	Gross Domestic Product
HOC	Higher-order components
HTMT	Heterotrait-Monotrait ratio of correlations
IFERA	International Family Enterprise Research Academy
IROC	Individual Readiness for Organizational Change
KMO	Kaiser-Meyer-Olkin
ORIC	Organizational Readiness for Implementing Change
PLS-SEM	Partial Least Squares Structural Equation Modeling
R.B.V.	Resource-Based View
SMART-PLS	Software with Structural Graphical Interface for variance-based structural equation modeling using partial least square (PLS) path model method
SPSS	Statistical Package for Social Sciences
L.O.C.	Lower order components
T.A.M.	Technology Adoption Model
TCU-ORC	Texas Christian University-Organizational

	Readiness for Change
V.I.F.	Variance Inflation Factor
U.S.	United States

CHAPTER 1: INTRODUCTION

1.1 Introduction of Theory and Context.

The year 2020 took the world hostage by a global health crisis.COVID-19 has distressed societies and economies at a level that has not been seen since the last century (World Bank, 2020). The number of small business owners fell from 15 million in February 2020 to 11.7 million in April 2020 (Fairlie, 2020) due to the pandemic. As of April 19, 2020, Yelp, the online reviewer, recorded that more than 175,000 U.S businesses have closed since the beginning of the pandemic (March 1, 2020) (Yelpeconomicaverage, 2020). Smaller, typically family firms and businesses, have been particularly negatively affected, with as many as 83.5% of businesses in the hospitality and foodservice industries reporting negative impacts due to COVID-19 (Buffington, Dennis, Dinlersoz, Foster, & Klimek, 2020). In May 2020, approximately 75% of family firms surveyed showed a decline in operating revenues, equally distributed across industries except for utilities (the difference between the lowest and highest is 20%) (Buffington et al., 2020). The National Academy of Sciences published that the median business in their sample had less than one month of currency reserve, and 75% had funds available for only two months (Bartik et al., 2020).

Family firms are at the forefront of this abrupt economic disruption, one of the worst crises ever experienced in the U.S since the Great Depression (Arthi & Parman, 2020). Astrachan and Shanker (2003) defined a family business as an organizational entity where one family (or several) has effective control over its strategic direction by its ownership and management involvement. The authors found that in the year 2000, according to data from the U.S. Internal Revenue Service, family firms generated up to 89% of business tax returns,

accounted for 62% of the workforce (corresponding to 82 million people), and contributed $5.9 trillion to the G.D.P. of the U.S. economy. The coronavirus pandemic has put family firms at risk of suffering significant losses; some firms have closed permanently, hurting the livelihood of millions of families in America and around the world. In the U.S. alone, 26.5 million jobs were lost (Lambert, 2020) by April 23, 2020, due to the pandemic. Despite the $2 trillion financial stimulus, family 'firms' economic threat continues to be imminent (Emma & Scholtes, 2020). Family firms' survival is critical for the economy; as mentioned before, they generated 89% of business taxes.

Therefore, family firms' resilience is critical in dealing with severe disruptions, such as a pandemic. While no agreed-upon definition of resilience across disciplines (Cahyanto & Pennington-Gray, 2017), Luthar et al. (2002) defined resilience as an iterative process of positive change within the context of a significant catastrophe. However, in the literature, there are three different conceptualizations of resilience: (1) a characteristic of an organization, (2) an outcome of a firm, and (3) a measure of the changes that a firm can experience. All focus on organizational survival in the face of drastic and unplanned change (Ruiz-Martin, López-Paredes, & Wainer, 2018). As informed by the literature, resilience can adjust to abrupt events, remain focused on the objective, allocated, deployed resources, and a rapid change of strategy to meet or exceed demands. The formal definition that for this dissertation is a firm's ability to effectively absorb, develop situation-specific responses to, and ultimately engage in transformative activities to capitalize on disruptive surprises that potentially threaten organization survival" (Lengnick-Hall et al., 2011, p. 244). Organizational resilience creates the environment to generate innovative solutions for the organization to adjust, survive, and grow

during abrupt internal and external changes (Lengnick-Hall & Beck, 2005). Indeed, resilience has been identified as a crucial capability for organizations to deal with disruptions and uncertain events inherent to pandemics (Maunder et al., 2008; Rodríguez-Sánchez et al., 2019).

Despite decades of research on resilience in various fields, such as psychology (Craciun, 2013; Garmezy, 1993; Luthans et al., 2006; Masten, 2001), ecology (Holling, 1973; Jacob, Manson, Barfknecht, & Fredricks, 2014; Sarker, Wu, Shouse, & Ma, 2019), safety engineering (Hollnagel, Woods, & Leveson, 2006; Sun, Liu, Wang, & He, 2020), organizational studies (Ortiz-de-Mandojana & Bansal, 2016; Poole, 2014; Sutcliffe & Vogus, 2003), and management (Chadwick & Raver, 2020; Stoverink, Kirkman, Mistry, & Rosen, 2020; B. Walker et al., 2002), the COVID-19 pandemic has revealed stark differences among organizations and their respective levels of resilience. According to Luthar et al. (2000), resilience is an iterative series of changes over time and relies on individuals' interactions with their environment. In general, resilience is seen as a desirable attribute at the individual and organizational levels to conquer adversity. However, we often fall into a retrospective bias; that is, the outcome has already occurred. For example, U.S. commercial flights resumed after 9/11 with new methods to mitigate another terrorist attack.

The focus of most current organizational resilience literature has been theoretical (Lengnick-Hall, Beck & Lengnick-Hall, 2011) with relatively few empirical studies (Chowdhury & Quaddus, 2016; McManus, Seville, Vargo, & Brunsdon, 2008). A few case studies (Majchrzak et al., 2007; Perrow, 2011; Stevenson, 2014; Vaughn, 1986) have examined adaptation to catastrophic external events. One school of thought to study organizational resilience is by exploring organizational characteristics conducive to resilience, such as leadership or the ability to make quick decisions (Coutu, 2002; Hafeez, Zhang, & Malak, 2002;

Home III & Orr, 1997). Therefore, resilience scholars and practitioners have a common objective: to understand the challenges of responding to catastrophic, unexpected, disruptive events while keeping an organization competitive and functional to recognize that returning to old standards may no longer be an alternative (Grandori, 2020; Välikangas & Lewin, 2020). The antecedents to resilience, however, remain to be understood (Ruiz-Martin et al., 2018). In the present study, a proposed critical antecedent of organizational resilience to be readiness for change because it indicates an organization's capability and willingness to engage in a future objective.

Indeed, while the pandemic has had severely impacted virtually all businesses across industries and sectors, it seems that some family businesses have weathered the crisis better than other firms (Astrachan et al., 2020). As the present study argues, this discrepancy is impressive due to differences in readiness for change across firms. Weiner et al. (2008, 2009) define organizational readiness for change that organizational members' attitudes and how they are emotionally and cognitively ready to implement change. Readiness for change is proposed as a vital determinant to the successful implementation of change (Shea, Jacobs, Esserman, Bruce, & Weiner, 2014). Today, organizations face more changes than ever before (Wanberg, Hough, & Song, 2002). Firm readiness for change could develop resilience because it enhances firm members' commitment to a common strategy and increases their belief in their collective capabilities (Holt et al., 2007a). Furthermore, readiness for change reduces decisional uncertainty. Quicker response time to a crisis will lead to fewer errors, better damage containment, better resource allocation, and enhanced predictability and influence (Mitroff et al., 1987; Natarajarathinam et al., 2009).

This study focuses on firm status (family or non-family) as a moderator. The literature suggests that family firms, by nature, lack professionalization since they employ family members in leadership positions. Nepotism is the norm, not the exception. Some professionals find it unappealing to work in family firms because the family hierarchy is embedded in the business culture. Decisions are made based on relationships and family objectives, and, usually, there is no formal business process to implement critical decisions. Family firms usually lag in technology because of their risk-averse nature and limited access to capital. However, in times of crisis, the literature suggests that family businesses could respond faster than non-family firms (de Vries, 1993). Nevertheless, how firm status (family or non-family) affects the link between organizational readiness for change during the COVID-19 pandemic and organizational resilience remains unexplored.

Organizational readiness for change helps researchers understand a key potential antecedent of resilience, as readying the organization for change will likely increase resilience. In the present study, change refers to organizational adaptation in the context of the COVID-19. Specifically, I examine how organizations accelerate the adoption and use of digital technology, such as working from home applications (e.g., via Zoom, Google Meet, Microsoft Teams, telemedicine) and changing their business model (e.g., moving to online services, serving customers contact-free, or other new measures) to mitigate transmission of the virus.

The study of organizational responses to COVID-19 is an opportunity to explore how an organization's status (specifically, family or non-family) may affect the link between firm readiness for change and firm resilience. A firm's structure impacts firm behavior, mainly how businesses translate change readiness into resilience (Pal, Torstensson, & Mattila, 2014). Although there is no consistent evidence that family firms are better at coping with crises (Conz

& Magnani, 2020; Revilla, Perez-Luno, & Nieto, 2016; Sullivan-Taylor & Branicki, 2011), some evidence suggests that some family firms survive and become successful during unforeseen events (Miller et al., 2003). Scholars have been calling for more studies and contextualization views of resilience to advance organizational phenomena (Massis et al., 2018). The present study heeds the call for research by investigating how a firm's ownership status may affect the link between an organization's readiness for change and resilience (Kraus et al., 2020).

Prior literature has examined how family and non-family businesses diverge in management strategies (Le Breton-Miller, 2006), financial and legacy objectives (Naldi, Cennamo, Corbetta, & Gomez-Mejia, 2013), strategic programs (Kellermanns & Eddleston, 2006), risk appetite (Zahara, 2005), oversight and accountability (Chrisman, Sharma, Steir, & Chua, 2013), resource distribution (Carnes & Ireland, 2013), and strategic point of view (Marchisio, Mazzola, Sciascia, Miles & Astrachan, 2010). Moreover, scholars have proposed that family firms usually are different from non-family firms in future objectives because of the family firm nature. A critical objective of the family firm's founder is to pass the firm on to their descendants. More than a financial legacy, the firm is the product of the founder's imagination, hard work, dedication, and life achievement (Lumpkin & Brigham 2011; Lumpkin et al. 2010). Chrisman and Patel (2012) proposed that family firm objectives can influence executive risk appetite. For instance, when attention is focused on future objectives, family firm leaders will be willing to invest in research and development. Family ownership and management control could create conservative governance, limited access to resources, and unrestricted ability to make swift decisions (Carney, 2005) and change's strategic direction (Chrisman & Patel, 2012; Patel & Chrisman, 2013). Hence, the literature is replete with research that differentiates between family and non-family firms and how their characteristics may affect organizational behaviors and

outcomes differently.

This dissertation will explore how differences across family and non-family firms may increase resilience levels and better prepare firms to deal with future crises and disruptions. Specifically, a firm's readiness for change is a crucial predictor of its resilience amid the COVID-19 crisis; this relationship is moderated by its ownership structure (family or non-family). A survey-based quantitative method was employed by SMART-PLS modeling techniques to test hypotheses related to three predictors of organizational resilience: appropriateness, change efficacy, and management support. This study's target population is top managers of family and non-family business; the unit of analysis is at the organizational level.

Despite their destructive nature, from a research standpoint, the disruptive events caused by the pandemic have created ideal conditions under which to investigate organizational adaptations and how firm status (family or non-family) may affect the link between organizational readiness for change and resilience (Bhamra, 2016; Doern, 2016; Fowler et al., 2007; Parnell, 2015).

1.2 Contributions.

The first contribution identifies, theoretically and empirically, a vital antecedent to organizational resilience, namely, readiness for change. The second contribution is studying how firm ownership structure could moderate readiness for change and organizational resilience. The third contribution is validating the theory of organizational readiness for change (Weiner, 2020), adding management support as an essential variable. The fourth contribution is creating a better understanding of how businesses have been adjusting their technologies and business models reaction to COVID-19; for example, working from home using Zoom, Google Meet, and other means; shifting to online shopping; or modifying existing services with contactless technology.

These insights may help explain why and how technology adoption can help firms become resilient in times of crisis.

This study will help understand the drivers of resilience and how family firms may differ from non-family firms and contribute to organizational theory (Dyer Jr, 2003). It will help practitioners design and implement specific strategies to help organizations become more resilient and provide helpful knowledge on remaining competitive even during times of disruption (Chrisman et al., 2005; Tagiuri & Davis, 1992). These insights will help practitioners devise ways to prepare for future pandemics and crisis events, which are bound to become more regular and better understand resilience's antecedents amid chaos. Decision-makers will grow their firms' capabilities, promote change efficacy, and understand how to adjust strategy under adverse conditions, thereby creating more resilient organizations.

The last contribution is to help policymakers prepare for future catastrophic events with low probability and high risk that may cause harm at all levels of society (e.g., earthquakes, hurricanes, tornadoes, terrorist attacks, global health crises) ('t Hart, Rosenthal, & Kouzmin, 1993). Theories of risk reduction through redundancy (Simon, 1969, 1981; Landau, 1991) are generally not popular because they are too costly for low probability events. The concept of resilience has been popular in crisis management literature. This study hopes to contribute to the interdisciplinary literature on resilience.

CHAPTER 2: LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

2.1 Literature Review.

This chapter reviews the literature on organizational resilience, organizational readiness for change, family and non-family firm status. Emerging literature recognizes the importance of investigating organizational resilience drivers, suggesting that organizational resilience is among the most critical factors for organizational success. Although there has been renewed interest in organizational resilience, considerable research has been descriptive and not generalizable. There was no detailed investigation of the drivers of organizational resilience.

After defining resilience, similar constructs are discussed, such as grit, perseverance, and antifragility, and differentiate them from organizational resilience. I then address the study's independent variable, organizational readiness for change, and differentiate it from neighboring concepts, such as openness to change. The firm status (family and non-family), examine how different businesses may translate organizational readiness into resilience, and conclude by describing the proposed model and hypotheses development.

A wide variety of literature addressing resilience, organizational resilience, organizational readiness for change, family firms, firm governance structure, strategy, organizational change, and COVID-19 crisis was scanned via the U.N.C. Charlotte library's Google Scholar search engine. The search focused on keywords or phrases such as organizational resilience, resilience, organizational readiness for change, family firm structure, non-family firm structure, and COVID-19. The review consisted of searchers by journal type and relevance to the topic to identify the most relevant literature. Of the 571 articles deemed

relevant for this study, a total of 121 articles were selected as the most representative from a variety of journals: *Academy of Management, Journal of Change Management*, *Journal of Family Business Strategy*, *Entrepreneurship Theory, and Practice*, *Journal of Organizational Behavior*, *Family Business Review, Organizational Research Methods*, *Journal of Business Research*, *Journal of Applied Psychology*, *The Journal of Applied Behavioral Science*, *Sloan Management Review,* and *Implementation Science*. Please see below the crosstabs from SPSS.

Table 1: Articles Reviewed

	Number of Articles Reviewed					
	Valid		Cases Missing			Total
	N	Percent	N	Percent	N	Percent
Journal * YEAR	571	93.3%	41	6.70%	612	100%

Although resilience has been studied in management, ecology, psychology, disaster management, sociology, and engineering, scholars have not agreed upon the definition. Table 1, Appendix 1 summarizes the definitions of resilience from top journals and includes a wide variety of definitions from different fields.

Definition of Resilience.

In 1973, Holling published "Resilience and Stability of Ecological Systems," which considered the foundation for ecological resilience. Holling defined resilience as an estimate of systems persistence and absorbing disturbances and stability as the ability to resume an equilibrium state after a disturbance. The concept of resilience is not only multi-disciplinary but also multi-dimensional, including traits such as temperament and personality and skills such as problem-solving, that allow people to manage traumatic life events (Campbell-Sills, Cohan, & Stein, 2006; Connor & Davidson, 2003; Garmezy, 1985; Garmezy & Rutter, 1985; Seligman &

Csikszentmihalyi, 2000; Werner & Smith, 1992). In the beginning, resilience research focused on individuals' traits; the second phase of research focused on understanding the process through which individuals can 'bounce back; from trauma (Bonanno, 2004). Scholars have explained the construct of resilience according to trait types: resilient, over-controlled, and under-controlled (Asendorpf & van Aken, 1999; Hart, Hofmann, Edelstein, & Keller, 1997; Robins, John, Caspi, Moffitt, & Stouthamer-Loeber, 1996).

However, resilience as a rigid trait does not consider the interaction between individuals and their social networks, such as family, community, and society. Robert and Masten (2004) claim that interaction with the environment plays a vital role in building individual resilience. Luthar et al. (2000) propose resilience as a development process that changes over time and relies on how they interact with their environment. Implied in the construct of resilience are two components: a) awareness of significant risk or severe hardship and b) the attainment of positive adjustment despite major assaults on the systematic process (Luthar, Cicchetti, & Becker, 2000; Luthar & Zigler, 1991; Masten, Best, & Garmezy, 1990; Rutter, 1990; Wermer & Smith, 1982; Werner & Smith, 1992).

There are several definitions of resilience, each modified according to context. Researchers have defined resilience as a personal trait and ability that allows an individual to function successfully amid a catastrophic event or personal tragedy (Connor & Davidson, 2003; Luthar et al., 2000; Masten & Obradović, 2006). Here, the definition of resilience refers to Lengnick Hall et al.'s (2011) as a capacity "derived from a set of specific organizational capabilities, methodologies, and processes by which a firm conceptually orients itself acts to move forward and creates a set of diversity and adjustable integration" (p. 245). Please see Appendix 1, Table 2: Definition of Resilience.

Constructs similar to resilience.

Grit.

It is vital to recognize concepts similar to resilience, such as grit, adaptive capacity, and antifragility. Since only a few scholars have addressed grit, there is a relatively small body of literature on the topic. *Grit* is defined as perseverance toward future objectives and endured commitment toward completing a specific enterprise undeterred by failure, setback, and adversity (Duckworth et al., 2007). Research at the organizational level is still in the early stages (Mallak, 1998; Pal et al., 2014), lacking construct, predictive validity, and methodology. Grit as a construct is similar to resilience; grit is a combination of perseverance and passion that grit adds to the understanding of success (Robertson-Kraft & Duckworth, 2014). Resilience, in general terms, is the capacity to bounce back from adversity, cognitive or otherwise; that is, a positive response to adversity. Grit indicates resilience in the face of failure, adversity, or catastrophe; Grit is an indomitable commitment and determination over time despite setbacks. Grit represents one's passion and determination toward a future objective despite not seeing immediate rewards. It consists of two components: consistency of interests and best effort (Duckworth, Peterson, Matthews, & Kelly, 2007).

The construct of grit is an association of passion and perseverance. Although this definition intuitively makes sense, Duckworth et al.(2007) lack theoretical support because it allows different conceptualizations of how to structure the construct. Scholars propose grit as a more advanced construct formed of two first-order facets: perseverance and passion. What is the logic of combining two distinct constructs into one? It is possible that perseverance and passion are correlated and that other latent variables contribute to that relationship.

Currently, Grit lacks construct validity, discriminant validity, and predictive validity.

There is no empirical support in the literature for grit's concept as the sum of perseverance and passion, nor is there evidence for the assertion that grit contributes to understanding success and performance. Future research should focus on analyzing passion and perseverance individually to create a reliable psychometric of these traits. Future researchers should develop valid measurements, then create a longitudinal study to explore the relationships of previously valid psychological factors and other known psychological factors that directly affect positive performance outcomes. Not until we have better measurements of the individual constructs grit be considered a valid construct to predict positive outcomes (Crede, 2018).

Only a handful of authors have examined grit. Crede et al.'s (2017) meta-analysis focused on grit structure and the link between grit and performance, retention, conscientiousness, cognitive ability, and demographic variables. Scholars suggest that grit is a complex-order construct composed of diligence and constancy. The authors claim that grit scores could be better indicators than cognitive ability to forecast outcomes (Credé, Tynan, & Harms, 2017).

Moreover, grit scores provide information about different individuals striving for excellence in everything they do. Crede et al. (2017) suggest that revising the methodology of studying grit is vital to identifying performance determinants. Their meta-analysis indicates that there is insufficient evidence to assert that grit is a complex construct. They found that combined perseverance and consistency scores into an overall grit score appeared to be a poor predictor of performance. Because perseverance qualifies as a more reliable predictor of performance than consistency or grit, it should be examined separately to determine its value to the literature. Crede et al. (2017) also found that grit's incremental value for predicting performance is limited. Grit scores show strong correlations with conscientiousness and with self-control (ρ=.84), suggesting that grit may be redundant with conscientiousness. The