The Impact of Leader Psychological Capital on Team Outcomes and Behaviors: A Multilevel Analysis

Melonie M. Boone

A Dissertation Submitted to The Faculty of

The Chicago School of Professional Psychology

In Partial Fulfillment of the Requirements

For the Degree of Doctor of Philosophy in Organizational Leadership

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July 3, 2020

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2020

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Acknowledgements

This dissertation was made possible through the help and encouragement of many people. I would like to thank the faculty of The Chicago School of Professional Psychology, my fellow doctoral students, family, and friends for the unwavering support and guidance during my doctoral studies. I owe a great debt of gratitude to my advisor and dissertation chair, Dr. Maria Malayter. Her guidance, support, and excitement for my research fueled my unwavering commitment to my doctoral journey. I am also thankful for Dr. Jennifer Thompson and Dr. Charmon Williams for their guidance, feedback, insights, and suggestions during my research study. The knowledge, experience, and expertise of my committee made it possible to complete this dissertation.

For my family, I would like to thank my husband Connie for sticking with me through my fourth and final degree. He has been my inspiration, my biggest fan, and most importantly the love of my life for over 20 years. I also thank my children Salvatore (18) and Ana Maria (12) for sharing me with my studies. They have been supportive and patient during the times that I was unable to be present. My mother Bessie has always inspired me to be great and this degree is for her. My sister Cynthia has been my academic inspiration. From the first time I visited her on the Loyola campus when I was 9 years old, I knew I wanted a lifelong relationship with higher educations. My sister December's strength has also inspired me to take on any obstacle in my path. Her fierce tenacity and grit gave me the fortitude to accomplish my dreams. Additionally, I would like to thank Erie Crawford who was not only a classmate but a true friend. Her encouragement and straight to the point, no-nonsense personality was just what I needed during times that I thought the completion of my studies was not going to be possible.

Dedication

This dissertation is dedicated to my Mother Bessie Martin-McCarty. She has always been a pillar of strength who showed us how to make something from nothing. She taught me to be humble and gracious yet strong. She has always been my inspiration and proof that a little southern girl from Louisiana could be a powerful force in the world. I will forever be grateful for her advice and wisdom. She has been my guiding light and will forever be my rock.

Love You

In Loving Memory

Bessie Martin-McCarty

September 19, 1949 – December 8, 2020

Abstract

Organizations face increasing pressure while operating in volatile and uncertain times. Leaders are required to perform under increasingly high demands. There is mounting evidence that there is value in having a positive mindset and the same has been found true for positive approaches in the workplace. Understanding the impact a leader has on their teams can have a profound effect on company success. This multilevel quantitative research study explored the overall research question: Does a leader's level of psychological capital influence team organizational citizenship behaviors and job performance? Previous research has found relationships at the individual level, or level 1. This study seeks to expand the body of knowledge by measuring the level 2, or team, relationship. Data were collected from 17 leaders follow groups comprised of 89 participants from various industries and company sizes. The Psychological Capital Questionnaire (PCQ) – 12 was used to evaluate Psychological Capital. The Organizational Citizenship Behavior Five-Dimension Scale was used to evaluate Organizational Citizenship Behavior. The Seven Items Technical and Social Performance Scale was used to evaluate performance. The findings did not support the research question; however, it does reveal implications for practice that organizations and individual leaders should consider.

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Chapter 1: Nature of the Study

Background

In today's business climate, organizations are operating in volatile and uncertain times concerning expectations and the workforce. Luthans wrote that the workplace is becoming a place where survival, let alone success necessitate a higher than average performance (Luthans & Youssef, 2003), which continues to be relevant in our current business landscape. Organizations have become more diverse and employ global workforces. Leaders are not only managing the demands of the job, but also leading teams with cultural differences. Studies have found that there is a difference in leadership styles based on cultural groups and suggests that perceptions of leadership are different depending on a person's cultural background (Jogulu, 2010).

Now, more than ever, organizations find themselves overtaxed with trying to meet varied demands and overcome many constraints to ensure a highly engaged workforce. Currently, organizations look to their leaders to cultivate environments that allow employees to flourish, thereby enhancing the employee experience. The environment that we work in today creates various stressors, including role ambiguity and role conflict, which were found to negatively impact job performance (Abramis & Beach, 2017). However, what we are finding is that many leaders are ill-equipped to meet the demands placed on them. Given the current dynamics of the internal and external factors affecting business, leaders can no longer operate as they have in the past. With the right set of competencies, a leader can have a significant impact on their teams.

Positive psychology has been shown to be positively related to desirable employee attitudes and behaviors (J. B. Avey et al., 2011). There is an increasing amount of evidence that there is value in having a positive mindset and the same has been found true for positive approaches in the workplace (J. B. Avey et al., 2011). Psychological capital or PsyCap is a state

of mind that guides behavior and has been identified as being comprised of four positive psychological resources: hope, efficacy, resilience, and optimism - it has been empirically determined to be a second-order core construct (J. B. Avey et al., 2011). Positive PsyCap was shown to have a positive relationship with employee empowerment and was a stronger predictor than transformational leadership (J. B. Avey et al., 2008). Through this study; the researcher sought to determine if a leader's level of psychological capital influences their teams psychological capital, thereby influencing the team's organizational citizenship behaviors and job performance. These findings could be significant since the researcher knows that PsyCap can be developed (Luthans, 2012). PsyCap interventions can be incorporated into companies' Human Resources Development Strategies, creating an opportunity for them to gain a competitive advantage.

Problem Statement

Being a leader is a complex task. Leaders who are ill-equipped to meet the demands of business find themselves in a no-win scenario, which makes it even more complicated when tasked with leading a diverse workforce. In addition to the demands a leader faces, they are also asked to deliver results in an unprecedented time of the multi-generational workforce. There are currently five generations making up global teams. According to the Center for Women and Business at Bentley University, the workforce is comprised of 2% Silent Generation (age 71-89), 29% Baby Boomers (age 53-70), 34% Generation X (age 37-52), 34% Millennials (age 19-36) and 1% Generation Z (age 0 – 18) (Various, 2017).

Millennials are moving into leadership roles but lack the skills to be successful. As the Silent Generation and Baby Boomers move out of the workforce, companies continually lose knowledge, and Generation X is moving into executive leadership, continuing to use leadership

styles that are becoming irrelevant. Traditional leadership competencies are not enough to give organizations a competitive edge. The researcher is seeking a more advanced leadership methodology to bridge the growing gap between organizations' needs and leadership capabilities. Research has found that positive human traits and behaviors may have a significant impact on desired outcomes (Luthans & Youssef, 2007). Organizations must be agile and cannot go on doing business as usual. This organizational paradigm requires an adaptation to the current way they lead their teams.

This problem impacts the various stakeholder, including customers, employees, and partners because failure to perform results in an organization's inability to achieve lasting success, which will eventually cause them to cease to exist. Many factors are contributing to this problem, among which include outdated human resources development strategies, organizations not requiring their leaders to develop and evolve their leadership skills, cultures that do not embrace or encourage change, and lack of knowledge around emerging leadership methodologies that can aid in navigating the new business landscape.

Purpose of the Study

This study will contribute to the body of knowledge and address this problem by showing that leader psychological capital influences team outcomes and desired organizational behaviors. Chen found that leaders who have higher levels of psychological capital can transfer those high levels to their direct reports (Chen, 2015). Later in the study, the researcher will give more detail on the Chen study. However, it is important to mention that Chen conducted one of the few multi-level studies investigating the relationship between leader PsyCap and follower outcomes. Chen’s study provided empirical evidence to the positive relationship leader PsyCap has with follower performance and engagement. This current study hopes to expand upon the current

body of knowledge by measuring the effects at the second level of group/team to determine if there is a relationship between leader psychological capital and the impact on their teams. The literature has called for more research on the role leadership plays in developing follower PsyCap (J. Avey, Avolio, & Luthans, 2011). While the study of PsyCap has grown, there continues to be a call to further the field of study with empirical research. The literature also calls for more quantitative research examining PsyCap's effects on the leader and follower relationship (J. B. Avey et al., 2011) which this study will contribute.

Studies have found that a follower who is hopeful, efficacious, resilient, and optimistic is more likely to be successful than followers with lower levels of PsyCap (Luthans, Avolio, Avey, & Norman, 2007). This study will help determine if the leader PsyCap influences followers, thereby resulting in high levels of PsyCap. This study will also show that an organization will benefit from developing a leaders' psychological capital to positively impact the team's job performance and organizational citizenship behaviors. Psychological capital has been demonstrated to show significant variance to desired attitudinal and behavioral outcomes (Luthans, 2012). The development of a leader's level of PsyCap can directly influence the behaviors and outcomes of their direct reports.

Research Questions/Research Questions and Hypotheses

The overall question guiding this research is: Does a leader's level of psychological capital influence team organizational citizenship behaviors and job performance?

Three hypotheses further ground this study:

H1: A leader's level of psychological capital has a positive relationship with their team's level of psychological capital.

H2: There will be a negative relationship between a leader with low psychological capital and team desirable organizational citizenship behaviors.

H3: A leader with high psychological capital will have a positive relationship with team job performance.

Theoretical/Conceptual Framework

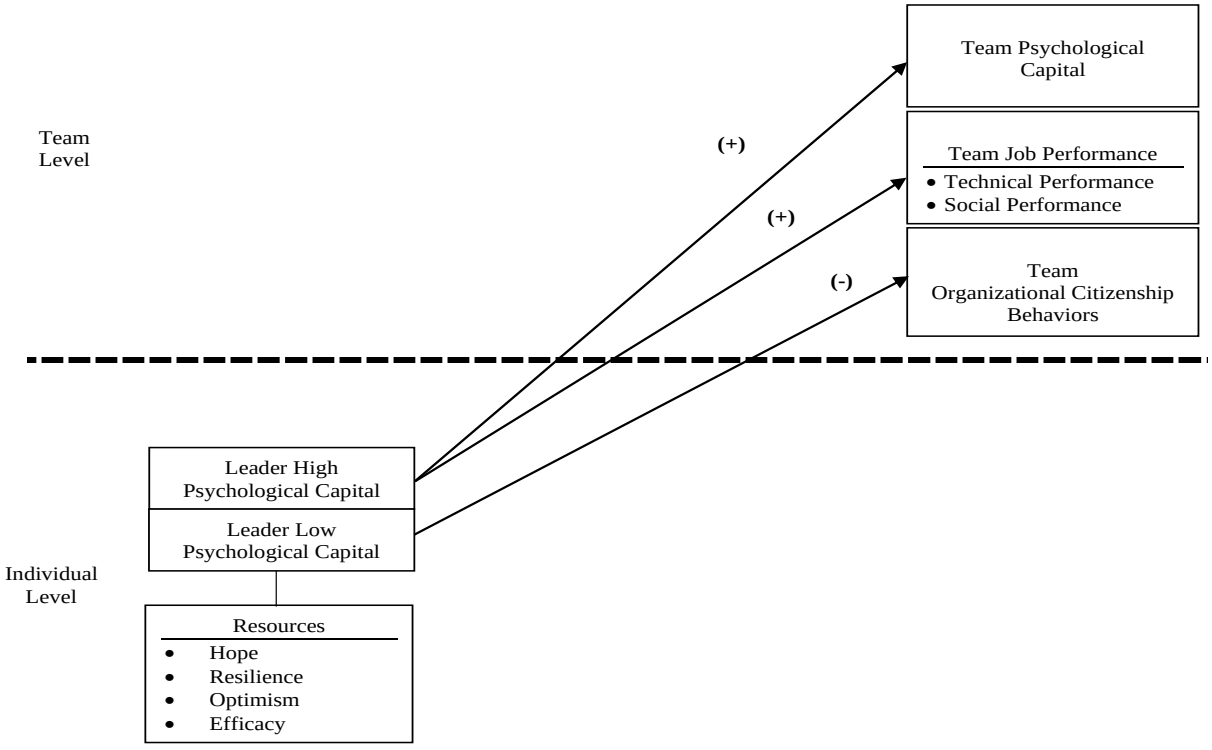
This multilevel quantitative study will examine if a relationship exists between a leader's level of PsyCap and their team's work outcomes in job performance. It will further explore if the leader's level of PsyCap influences the team's organizational citizenship behaviors. The study will collect data using a self-reporting survey method. Prior literature on leadership has identified the qualities of a leader, including trust, curiosity, guiding vision, passion, and integrity (Low, 2010).

This study will measure leader PsyCap and how it the workplace. Most literature on leadership in the past has focused on fixing what is wrong with leadership instead of focusing on looking at PsyCap's association with effective leaders (Luthans, Avolio, et al., 2007).

This study will further examine the latter to explore the impact a leader PsyCap has on their teams. As illustrated in figure one, the researcher believes that a leader with high psychological capital will have a positive relationship with their team/group psychological capital and job performance. Conversely, a leader with low psychological capital will have a negative relationship with team/group organizational citizenship behaviors. The group-level analysis is important in helping organizations gain a better understanding of how these relationships can affect team/group outcomes and behaviors.

Figure 1

Theoretical Framework



Prior studies have found a positive relationship between PsyCap and desired employee attitudes and behaviors (J. B. Avey et al., 2011). Furthermore, PsyCap has been found to have a negative relationship with cynicism and other negative employee attributes (J. B. Avey et al., 2008). Participants in Avey's study consisted of 341 working adults who averaged 38 years of age (sd 13.72) and 13 years of work experience (sd 12.35). Additionally, the participant pool was predominantly Caucasian, with 87% of participants identifying as white/Caucasian (J. B. Avey et al., 2008). The PsyCap Questionnaire 24 was used to collect data on Psychological Capital. The articles used in this research of Psychological capital or PsyCap all agree that this construct has applications across human resources systems and has positive effects on employee work outcomes. The study found that there is a positive impact when one has high PsyCap at the individual and leadership level. When leaders draw from a positive psychological state, it

promotes similar positive states in others (Rego, Filipa, Maques, & Cunah, 2012), specifically those who report to them. When the individual possesses a high level of PsyCap, they exhibit behaviors that include more organizational citizenship or desirable behaviors versus employees with low PsyCap who demonstrate behaviors that are mostly counterproductive or undesirable (Avey, Reichard, Luthans, & Mhatre, 2011).

Many studies have independently looked at the relationship between the variables that this study looks to explore on the individual level. The literature was also found to support psychological capitals significantly positive relationship to job performance (Luthans, Avolio, et al., 2007). Over time there has been a plethora of research on the relationship between employee behaviors and outcomes. Similarly, Jung and Yoon found that employees with positive psychological capital had a positive effect on their organizational citizenship behaviors (Sun Jung & Hyun Yoon, 2015). Jung and Yoon's study were administered to hotel employees and was self-administered. They took a two-step approach by first conducting a factor analysis to analyze the fit of their model, followed by structural equation modeling to analyze the hypotheses. They found that hope and resilience affected participant's organizational citizenship behaviors (Sun Jung & Hyun Yoon, 2015). PsyCap development has been shown to lead to performance improvements as well (Luthans, Avey, Avolio, & Peterson, 2010). The previous literature calls for expansion on analyzing the leader's impact on their teams.

Scope of the Study

Studies have found that psychological capital can produce a positive impact on work attitudes (Larson & Luthans, 2007). The researcher has also seen from various studies that relationships do exist between the variables that this study examines are defined in the forthcoming literature review. Due to the vast nature of the literature, the researcher felt that it

would be critical for this study to focus on the team level. While some research exists at the team level, it is sparse; the researcher knows that the literature calls for more research at the group and organizational level when looking at PsyCap. Most of these studies are preliminary, yet they have produced empirical results. The researcher hopes to expand on these findings by taking the research a step further and assess how the leader's psychological capital can influence these variables at the team level. There are also calls for more empirical analysis of PsyCap's relationship with outcomes like performance, satisfaction, organizational commitment, organizational citizenship behaviors, and retention (Luthans, 2012). The calls for more research guided the decision of the variables included in this study.

The researcher anticipates that participants will consist of a leader and their teams of three or more direct reports. The researcher will solicit participation by invite-only while maintaining an opt-in approach. The researcher believes that by not limiting industry or company size, the study will have a more well-rounded data set to analyze. Throughout the development of this study, the researcher has stuck closely to the calls for further research based on the literature reviewed to ensure that the study would add value to the body of knowledge and organizations looking for ways to enhance their team outcomes. The ultimate vision for this study is to further the body of knowledge by determining if high psychological capital in a leader can produce desired outcomes and behaviors from their teams.

Definitions of Key Terms

Table 1

Definition of Terms

Key Terms	Definition
Job Performance	"Behaviors functionally related to organizational goals."

	(Varela & Landis, 2010, p. 625)
Organizational Citizenship Behaviors	"Represents individual behaviors that are discretionary, not directly or explicitly recognized by the formal reward system and in the aggregate promotes the efficient and effective functioning of the organization. More recently the definition has been expanded to include not only the categories of altruism (helping behaviors aimed at a specific person) and generalized compliance (conscientious performance for the good of the organization) but also the categories of courtesy, sportsmanship, and civic virtue." (Foote, Li, & Tang, 2008, p. 934)
Positive Leadership	"…strength-based understanding of managing and inspiring others, comprised of four criteria – realistic optimism, intelligence, confidence, and hope.) (Mills, Fleck, & Kozikowski, 2013)
Positive Organizational Behaviors	"The study and application of positively oriented human resources strengths and psychological capacities that can be measured, developed, and effectively managed for performance improvements in today's workplace." (J. B. Avey et al., 2008)
Positive Psychology in the Workplace	Includes research "…regarding constructs such as resilience, appreciative inquiry, empowerment, gratitude, psychological capital, work engagement, supervisor and organizational support, positive teamwork, co-worker relations, and positive leadership." (Mills et al., 2013)
Psychological Capital	"…an individual's positive psychological state of development characterized by (1) Having confidence (efficacy) to take on and put in the necessary effort to succeed at challenging tasks; (2) making a positive attribution (optimism) about succeeding now and in the future; (3) persevering towards goals and, when necessary, redirecting paths to goals (hope) in order to succeed; and (4)

	when beset by problems and adversity, sustaining and bouncing back even beyond (resilience) to attain success." (Luthans F., Youssef, C.M., & Avolio, 2007, p. 3)
Hope	"…a bi-dimensional construct composed of both agency (a sense of willpower, or determination to begin and maintain the effort needed to achieve goals) and pathways (a sense of waypower or belief in one's ability to generate successful plans and alternatives when obstacles are met in order to meet desired goals). (Luthans & Jensen, 2002)
Efficacy	"…the belief or judgment made by an individual that they can succeed or accomplish an identified task." (Sable, Larrivee, & Gayer, 2008)
Resilience	"the developable capacity to rebound or bounce back from adversity, conflict, failure or even positive events, progress, and increased responsibility." (Luthans, 2002)
Optimism	"a positive explanatory style that attributes positive events to personal, permanent, and pervasive causes, and interprets negative events in terms of external, temporary, and situation-specific factors." (Luthans & Youssef-Morgan, 2017)

Significance of the Study

This study will expand the body of knowledge about how PsyCap can influence team outcomes and behaviors, which has important implications for an organizations' performance. While some research has suggested that leadership plays a role in developing followers' PsyCap at the individual level (Level 1) (J. Avey et al., 2011), more research is needed to analyze the impact at the group level (Level 2) specifically on team job performance, and organizational

citizenship behaviors. In one study which focused on the employee level, it found that an employee's positive psychological capital had a significant effect on organizational citizenship behaviors (Sun Jung & Hyun Yoon, 2015). Chen's 2015 study found that PsyCap can be a resource to have a positive impact on employee job performance and engagement but calls for more research (Chen, 2015). The literature suggests that a study like the proposed study is needed and will contribute to the PsyCap body of knowledge.

Providing evidence-based information to organizations about the impact a leader PsyCap can have on team PsyCap and thereby influence job performance, and organizational citizenship behaviors are boundlessly significant to organizations. Chen also found that since the results of the study concluded that a leader's positive PsyCap could affect the employees' PsyCap, one can conclude that PsyCap should be a required capability of a leader (Chen, 2015). PsyCap was found to have a significant relationship with achieving desirable outcomes in employees, particularly with their job performance (J. B. Avey et al., 2011). The researcher also learned from the literature that PsyCap could be trained and developed over time through HR systems and practices (Newman, Ucbasaran, Zhu, & Hirst, 2014).

Summary

If this study finds that a leader's positive psychological capital has a significantly positive effect on team satisfaction, performance, and behavior; companies can develop a framework to use PsyCap to garner positive employee outcomes. Conversely, organizations will also be able to identify leaders with low PsyCap and use training interventions to increase their PsyCap levels. The application will be agnostic to industry and company size, having an impact on a board spectrum of organizations.

In the upcoming chapters of this study, the researcher has provided a detailed literature review covering the three variables of PsyCap, Job Performance, and Organizational Citizenship Behaviors. The literature review in Chapter 2 allowed the researcher to gain a thorough understanding of each concept to aid in the analysis and interpretation of the study findings. Chapter 2 will also describe the theory and practice gaps identified following the literature review. Finally, a review of the three hypotheses rounds out the chapter.

The research design and research methodology will be thoroughly detailed in Chapter 3. Chapter 3 will include participant selection criteria, recruitment process, sample size, and an overview of risks to human subjects and identify mitigations. Participant recruitment will be by invitation. This study will not cast a wide net to solicit participants openly. The study will carefully select participating organizations based on the criteria outlined later in the study. The overall approach to the measurements is to use tools for each variable that has been determined to be reliable and valid through previous studies. Three established instruments incorporated into a Likert-type survey will be administered electronically to the participant group. The data collected after the survey will be analyzed using SPSS statistical software. Steps will be taken to ensure the confidentiality of the data. The research collected will confirm or refute the hypothesis of the study, including detailed data and findings review.

Chapter 5 will outline the analysis by hypothesis and validate or invalidate them based on the interpretations of the statistical tests used for evaluation. Additionally, this chapter will include the interpretation of the tests as it applies to the group level relationships identified. Chapter 6 will conclude the study and detail a summary of the study findings. This final chapter will also review post-study limitations identified along with recommendations for future research.

Chapter 2: Literature Review

The objective of this research strategy is to examine various bodies of knowledge that demonstrated an interrelationship with the variables under study. The researcher also aimed to find previously established relationships between the constructs at the individual level to support the advancing of this study at the group level. What the researcher found was a need to further the body of knowledge by examining the Level 2 relationships between leader and team. As the reader will see established in the literature review below, a few studies looked at a multilevel relationship while many called for more multilevel research.

Research Strategy

The researcher reviewed an exhaustive amount of peer-reviewed journal articles, including those most relevant in the literature review. In addition to journals, *Psychological Capital: Developing the Human Competitive Edge*, a book by Fred Luthans, Carolyn M. Youssef, and Bruce Avolio contributed to the research phase of the study. The book pulled from positive psychology and positive organizational behavior (POB) to introduce the human resource capacity of psychological capital (Luthans, Youssef, & Avolio, 2007). Chapter 8 of the book also detailed the performance impact of PsyCap along with the Psychological Capital Questionnaire for measurement and the PsyCap Intervention for development (Luthans, Youssef, et al., 2007).

Before researching this study, the researcher first identified key search terms that aligned with analyzing the overall research question and hypotheses.

Table 2

Original List of Key Search Terms

Positive Leadership	Leader/Manager	Likert Scale

Psychological Capital	Follower/Report	Job Satisfaction Survey
Leadership	Psychological Capital Questionnaire	Employee Engagement
Organizational Citizenship Behaviors	Resilience	Transformational Change
Job Satisfaction	Leader-Member Exchange Questionnaire	Self-Efficacy
Job Performance	Optimism	Hope
Appreciative Inquiry	Emotional Intelligence	Employee Behaviors
Growth Mindset	Employee Attitudes	Positive Organizational Behavior
Employee Motivation	Employee Sabotage	Leader Effect on Employee Behavior

Upon preliminary review of an expansive collection of articles, the original list was refined to include those key search terms that produced more precise results and included literature that was most applicable to answering the research question.

Table 3

Refined List of Key Search Terms

Positive Leadership	Self-Efficacy	Leader/Manager

Psychological Capital	Job Performance	Follower/Report
Leadership	Resilience	Psychological Capital Questionnaire
Organizational Citizenship Behaviors	Positive Organizational Behavior	Organizational Citizenship Behavior Five-Dimension Scale
Leader-Member Exchange Questionnaire	Optimism	Technical Performance
Hope	Social Performance	Multi-level Analysis

The refined keywords list was searched using a database aggregator and produced results from over sixty literary journals including, but not limited to, the following:

Table 4

Journals Included in Research

Personnel Psychology	Academy of Management Executive	Academy of Management Journal
American Journal of Community Psychology	Educational and Psychological Measurement	Empowerment in Organizations
European Journal of Work and Organizational Psychology	Human Resource Development Quarterly	Human Resources Development Review Jensen

Industrial and Commercial Training	The Journal of Organizational Behavior	The International Journal of Human Resources Management
The Journal of Positive Psychology	The Journal of Psychology	The Leadership Quarterly
Personnel Psychology	Leadership & Organizational Development Journal	The Journal of Business Inquiry

Psychological Capital (PsyCap)

Historically a negative approach has been taken towards workplace-oriented constructs. The idea of fixing a problem was common in the literature around people and workplace development. Books like "Who Moved My Cheese by Spencer Johnson, "The One Minute Manager" by Kenneth Blanchard, and "Seven Habits of Highly Effective People by Steven Covey were on the leading edge of positive literature; however, they were not evidence-based (Luthans, Youssef, et al., 2007). These books, which included self-reporting questionnaires, may have provided some meaningful answers to their readers, but they did not have any empirically grounded studies to substantiate their predicted outcomes. The growth of the field of Positive Organizational Behaviors emerged and focused on positive state-like constructs. Positive Organizational Behavior or POB is "the study and application of positively oriented human resource strengths and psychological capacities that can be measured, developed and effectively managed for performance improvements in the workplace" (Luthans & Church, 2002 p. 59).

It is important to note that constructs must meet specific criteria to be inclusive as a positive organizational behavior. They must first be positive. Luthans argued that the early

negative approaches did more harm to performance, learning, and development than good (Luthans, Youssef, et al., 2007). Conversely, POBs looked to focus on the untapped power of positivity and how it may contribute to the workplace (Luthans, Youssef, et al., 2007). POBs must also be grounded in research that is empirically backed and have valid measurements. They must be state-like and amendable to development as well. Another criterion is that they must have a quantifiable impact on performance. POBs must ultimately show that they have a significant statistical impact on work outcomes (Luthans, Youssef, et al., 2007). Finally, POBs must have a psychological capacity. Several positive psychological capacities were considered and studied to determine their impact on the workplace. It determined that Hope, efficacy, resilience, and optimism best met the POB criteria (Jensen & Luthans, 2006; Luthans, 2002; Luthans, Vogelgesang, & Lester, 2006; Luthans & Youssef, 2004).

POB and its criteria served as the foundation resulting in what Luthans et al. termed Psychological Capital or PsyCap. Psychological capital, "is a higher-order core construct that integrates the various POB criteria-meeting capacities…synergistically" (Luthans, Youssef, et al., 2007 p. 19) PsyCap is a second-order factor that measures a person's motivational ability developed through psychological resources like hope, efficacy, resilience, and optimism (Luthans, Avolio, et al., 2007). The earliest mentions of psychological capital have been attributed most notably to researchers like Fred Luthans, Carolyn Yousef, Bruce Avolio, and James Avey in the early 2000s and is a young construct in comparison to other organizational and leadership theories. Psychological capital is state-like, meaning it is more open to development and change (Luthans, Avolio, et al., 2007). The literature has found that PsyCap interventions, which are meant to improve an individual level of PsyCap, results in improvement

of the individual's performance (Luthans et al., 2010). This study will be able to determine if this same relationship exists between a leader and their teams.

To fully understand the impact that Psychological Capital can have in the workplace, it is important to understand the four resources of Hope, Efficacy, Resilience, and Optimism, comprises PsyCap. PsyCap is not only a measurement of who one is but who they can become (Luthans et al., 2010). It was very important for these resources to be based on research and to have a measurable performance impact (Luthans et al., 2010). There is empirical evidence that these four resources are higher-order core construct with shared commonalities (Luthans & Youssef-Morgan, 2017). The later descriptive language around the four resources draws from Hobfoll's (2002) reference to "resource caravans," meaning that together they work in synergy overtime manifesting into differentiation across context and over time (J. B. Avey, Nimnicht, & Pigeon, 2010).

Hope is defined as "…a bi-dimensional construct composed of both agency (a sense of willpower, or determination to begin and maintain the effort needed to achieve goals) and pathways (a sense of waypower, or belief in one's ability to generate successful plans and alternatives when obstacles are met in order to meet desired goals)" (Luthans & Jensen, 2002). Like the other resources, Hope is state-like and therefore open to development. Hope is a positive state where an individual can set challenging goals and expectations that are realistic. These goals are achieved through self-directed initiative, energy, and determination (Luthans, Youssef, et al., 2007). Hope, Optimism, and Resilience share commonalities, including having positive capacities are self-motivated and can have an impact on attitudes at work and job performance (Youssef & Luthans, 2007).

The second resource of PsyCap is Self- Efficacy. Often referred to as confidence or self-esteem, the resources centers around a person's belief in their ability to complete a task or meet a goal. The most notable behavioral psychologist who helped define self-efficacy was A. Bandura (Sable et al., 2008). Bandura's work on self-efficacy began in 1977 and spanned over 20 years resulting in the concept involving specific situations that an individual must make their judgments of their ability to complete (Sable et al., 2008). As a resource to PsyCap, self-efficacy is looked at to be a measure of someone's ability to take on a task and their willingness to put in the necessary work to complete the task (Larson & Luthans, 2007). Hope, optimism, and self-efficacy have been empirically shown to be related, yet they are distinct constructs (Luthans & Jensen, 2002). Also, like the other resources, self-efficacy is a state-like construct meaning it is open to development (Luthans, Avolio, Avey, & Norman, 2007).

One's ability to "bounce back" is a measure of their resilience as the third resource for PsyCap resilience was originally thought to be hard to find personality traits (Luthans et al., 2006). A study on schizophrenic mothers and their children (Garmezy, 1971, 1974; Masten, Best, & Garmezy, 1990) found that unlike the previous conclusion, resilience was not a rare personality trait (Luthans et al., 2006). Like the other resources of PsyCap, it has been empirically proven to be state-like and can, therefore, be developed (Luthans et al., 2007). Resilience as a resource to PsyCap was drawn from Amy Masten (2001) a positive psychologist with a focus on the positive approach to assessing risks and assets that can affect an employee (Luthans et al., 2006). Resilience is not merely reactive; it can be proactive and can grow as an individual goes through various situations in life (Youssef & Luthans, 2007a). Hope, optimism, and resilience share characteristics as positive constructs included being self-directed

motivations that can have an impact on job performance and attitudes at work (Youssef & Luthans, 2007a).

Optimism, our final resource is a positive state-like construct that assigns positive evets to experiences and views negative events as temporary and situation-specific (Luthans & Youssef-Morgan, 2017). In short, optimistic individuals expect success (J. B. Avey et al., 2008). An optimistic person believes that there will be a positive outcome even in the most stressful of negative situations. A person takes personal responsibility for the positive outcomes in their lives (J. B. Avey et al., 2008). An individual with high levels of PsyCap will demonstrate a belief that they can create their success (J. B. Avey et al., 2011). An optimistic person expects to be successful. Hope, resilience, efficacy, and optimism are intentional positive appraisals of situations based on self-motivation (Luthans F., Youssef, C.M., & Avolio, 2007).

Today there are multiple PsyCap measurements. The Psychological Capital Questionnaire was the initial instrument and is a self-report measurement (Luthans, Youssef, et al., 2007). The researchers wanted to develop a measure that could be used to show the investment return on the PsyCap interventions. Other human resources development tools like return on investment measures often had their validity questioned, so it was important to have a valid measurement tool for Psychological Capital. The researchers of PsyCap wanted to ensure that this measure was validated specifically for the workplace with a theoretically sound way to assess the return on PsyCap intervention investments (Luthans F., Youssef, C.M., & Avolio, 2007). The PCQ-24, the original measurement was a 24 question self-reporting measure that includes six items to measure each of the four resources (Luthans & Youssef-Morgan, 2017). This study will utilize the abbreviated version called the PCQ-12. This version has three questions per resource and was also validated.

Research has demonstrated that one can measure implicit psychological constructs using PsyCap. This study was able to show the efficacy of implicit measures for organizational behavior constructs like PsyCap (Harms & Luthans, 2012). The study also found that implicit measures can help to understand implicit organizational constructs better. The study introduced the I-PCQ or Implicit Psychological Capital Questionnaire. The I-PCQ differs from the original PCQ because it is not solely a self-report instrument. It asks that other acquaintances of the participant rate the participant's PsyCap. I-PCQ however, does not fully eliminate common method variance, which was one of its intentions to improve upon challenges with the standard PCQ (Newman et al., 2014).

In earlier studies, relationships were found to exist between PsyCap and job performance. They found that leader PsyCap is associated with follower PsyCap and may enhance task and conceptual performance (Chen, 2015). This study will aim to expand on the earlier findings to look at the relationships and determine if these relationships can positively or negatively influence a leader's teams. Just as the research found a positive relationship between PsyCap and behavior, there is a similar correlation between an individual's level of PsyCap and the employee's performance. Individuals with higher PsyCap tend to perform better than those with low levels of PsyCap (Newman et al., 2014). The positive relationship between PsyCap and performance appeared in multiple articles included in this literature review.

High levels of PsyCap were also found to increase employee creativity (Rego, Filipa, Maques, & Cunah, 2012), boost employee morale, lower employee turnover intentions, and increase psychological well-being at work (Avey, Reichard, Luthans, & Mhatre, 2011). The researcher also knows based on previous studies that psychological capital is significantly correlated to organizational commitment (Larson & Luthans, 2007). Again, studies have been

able to demonstrate significance at the level 1 relationship, and this study hopes to expand and analyze the level 2 relationship.

The literature identifies that organizations who have leaders and contributors with high levels of PsyCap also experience a positive effect at the organizational level (Newman et al., 2014). A high level of organizational PsyCap can help organizations accomplish their goals and be competitive in the changing landscape we live in today. One of the studies found that PsyCap can be trained and developed over time through HR systems and practices (Newman et al., 2014). Organizations with effective HR functions can adopt a culture around creating a team made up of high PsyCap individuals and leaders by developing the necessary mindset through HR initiatives.

A meta-analysis of literature about PsyCap was published in 2011 to provide a summary of PsyCap's impact on workplace attitudes, behaviors, and outcomes. The Meta-Analysis was a quantitative review that found empirical evidence of a significant positive relationship between PsyCap and desirable employee attitudes, behaviors, and multiple measures of performance (Avey, Reichard, Luthans, & Mhatre, 2011). The meta-analysis included 51 samples that were all independent and represented N = 12,567 employees. The meta-analysis had five research questions it sought to answer:

HYPOTHESIS 1: PsyCap will be positively related to desirable employee attitudes.

HYPOTHESIS 2: PsyCap will be negatively related to undesirable employee attitudes.

HYPOTHESIS 3: PsyCap will be positively related to desirable employee behaviors.

HYPOTHESIS 4: PsyCap will be negatively related to undesirable employee behaviors.

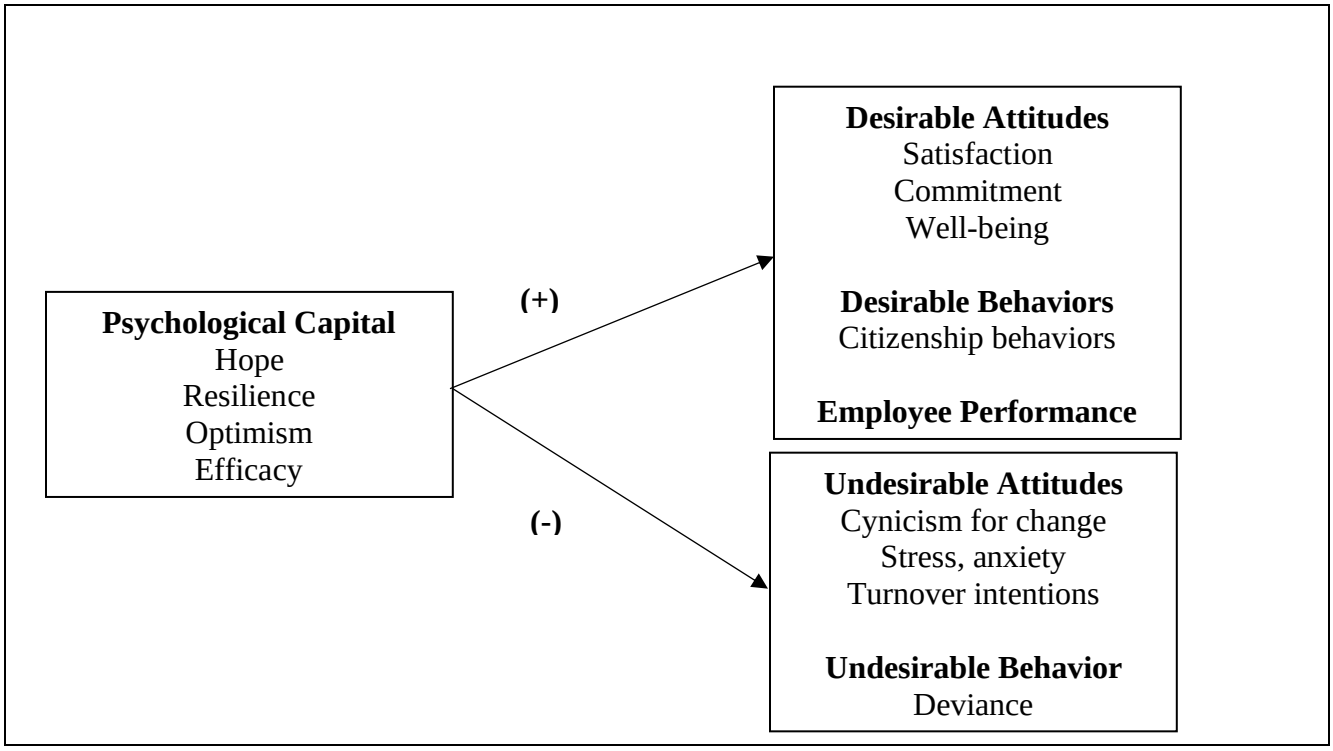
HYPOTHESIS 5: PsyCap will be positively related to employee performance.

Literature in the meta-analysis had to measure PsyCap quantitatively as a composite core construct and relate it to one or more of the outcome variables which included (1) job-specific task proficiency, (2) non-job-specific task proficiency, (3) written and oral communications, (4) demonstrating effort, (5) maintaining personal discipline, (6) facilitating peer and team performance, (7) supervision/leadership, and (8) management/administration (J. B. Avey et al., 2011). The study focused on the correlation of the literature. The researcher used the r statistic as the effect statistic. Using a 95% confidence interval to provide a range for effect sizes the researchers concluded with a 95% probability that the true effect sizes would fall within the range. Additionally, they concluded that the effect sizes would exclude zero and be significantly and statistically different from zero ($p < 0.05$).

Proposed Relationship Among Study Variables (J. B. Avey et al., 2011, Figure 1)

Figure 2

Meta-Analysis Proposed Relationship Among Study Variables



The results of the meta-analysis showed that for the first hypothesis the correlation coefficients between PsyCap and the desirable work attitudes were: satisfaction (k = 10, corrected r = 0.54, sd = 0.17), commitment (k = 9, corrected r = 0.48, sd = 0.07), and psychological well-being (k = 3, corrected r = 0.57, sd = 0.16) which were large and all significantly sufficient therefore the 1st hypothesis was supported. Hypothesis two had significant negative correlation showing that the hypothesis was correct, there is a negative relationship between PsyCap and undesirable attitudes cynicism (k = 4, corrected r = -0.49, sd = 0.07), turnover intentions (k = 5, corrected r = -0.32, sd = 0.11), and stress and anxiety (k = 4, corrected r = -0.29, sd = 0.20). The third and fourth hypotheses were supported by the results with a strong positive relationship between PsyCap and organizational citizenship behaviors (k = 8, corrected r = 0.45, sd = 0.15) as well as a negative relationship between PsyCap and deviance (k = 7, corrected r = -0.42, sd = 0.12) and both had significant effects. The fifth and final hypotheses were also supported and showed a significant relationship between PsyCap and performance. The study demonstrates that the empirical evidence presented by studies over the years supports PsyCap as a second-order core construct composed of the four resources and it has a statistically significant relationship with employee attitudes, behaviors, and outcomes (J. B. Avey et al., 2011).

Psychological capital is an emerging field, and researchers are encouraged throughout the literature review to continue to develop empirical studies on PsyCap's impact on work behaviors and outcomes. As the world and workplaces continue to evolve the needs of the employee, researchers must continue to find ways to use PsyCap to advance the employee experience and create thriving workforces. The researcher of this study believes that it will contribute to the body of knowledge, providing a multi-level analysis of the impact a leader's PsyCap has on their

team. The study is an important contribution because there are limited studies on the multi-level impact yet understanding these types of relationships is critical to understanding how a leader influences their teams' behaviors and work outcomes.

Job Performance

Before 1980, there was not much literature on performance (Campbell & Wiernik, 2015). Job performance is behaviors related to organizational goals functionally (Varela & Landis, 2010). Substantive models of performance were introduced in the 1990s by authors including Campbell, Broman, Motowidlo, and Murphy. From this literature a consolidated definition of performance was stated as "things that people do, actions they take, that contribute to the organization's goals" (Campbell & Wiernik, 2015, p. 48) Other definition focuses on the behaviors, not the outcomes (Varela & Landis, 2010). When looking at job performance, leaders focus on the job activities of a team member to measure their ability to meet expectations. Companies also use performance as a measurement of one's contribution to overall organizational success. Individual and organizational performance is influenced by many different factors, both internal and external (Bakotić, 2016). While many of the external factors are beyond an organization's control, there are ways to affect internal factors through Human Resources Development Strategies (HRD) which focus on the individual.

One of the earlier studies by Sackett et al. (1988) looked at performance being on a continuum from typical performance, "long-term, objective, on-the-job productivity measure" and maximum performance, an "objectively scorable work sample test" (Sackett, Zedeck, & Fogli, 1988 p. 483). Peak performance is an example of typical performance and is a measure of an individual's long term on the job performance expected of them (Sackett et al., 1988). Individual job performance is comprised of task performance and contextual performance.

(Luthans, Avolio, et al., 2007). Task performance is the mechanical process-driven part of the job, while contextual performance involves the social and psychological environment (Chen, 2015). The relationship the leader has with the follower is significant when one looks at how a leader's level of PsyCap influences the followers. PsyCap was found to have a significant positive relationship with job performance

For this study, we will look at technical performance and social performance. Technical performance measures an individual's ability to make decisions, perform tasks without mistakes and handle the demands of the job while social performance measures the individuals' ability to work with others avoid fighting and compromise (Abramis & Beach, 2017). The study's goal is to evaluate if the team job performance has a significant positive relationship with their leader's PsyCap. We know from previous literature that PsyCap is more of a contributor to job performance than individual elements (Luthans, Avolio, et al., 2007). Research also suggests that a leader's PsyCap can enhance job performance (Chen, 2015). The researcher can use this empirical study to expand upon the body of knowledge as the study attempts to understand the relationship between team performance and a leader's PsyCap.

Organizational Citizenship Behaviors (OCB)

Organizational citizenship behaviors (OCB) are a major construct in the fields of management and psychology (Foote, Li, & Tang, 2008). OCBs originally were defined as individual discretionary behaviors not recognized by a formal workplace reward system and promote organizational effectiveness (Organ, 1997). Author Organ, however, upon reconsideration of the construct redefined OCBs as employee contributions to the enhancement of psychological and social context supporting task performance (Organ, 1997). They are behaviors that leaders would like to see employees demonstrate but cannot commit to any reward

for the display of these desirable behaviors (Organ, 1997). There are over 30 different OCBs which represent individual behaviors that are discretionary, not directly or explicitly, recognized by formal reward systems. (Foote et al., 2008). There are five types of organizational citizenship behaviors consisting of altruism (helping), courtesy, civic virtue, conscientiousness, and sportsmanship (Srivastava & Saldanha, 2008). When an individual displays positive OCBs, they are selfless in their actions. Additionally, they try to prevent problems, stay current on events taking place, follow company policies, and are respectful of others while focusing on the positive side of things (Srivastava & Saldanha, 2008). These types of behaviors can create advantages for organizations because they promote an engaged workforce that will tend to be more productive.

Studies have found a relationship between levels of PsyCap and an individual exhibiting OCBs. When the individual possesses a high level of PsyCap, they exhibit behaviors that include more organizational citizenship or desirable behaviors versus employees with low PsyCap who demonstrate behaviors that are mostly counterproductive or undesirable (Avey, Reichard, Luthans, & Mhatre, 2011). An employee's desirable and undesirable behaviors link to employee performance. While the vast majority of studies focused on the individual level of OCB, new studies are beginning to emerge, examining the group level (Euwema, Wendt, & van Emmerik, 2007).

The concept of examining OCB's at the group level is referred to as group-level organizational citizenship behaviors or GOCB. GOCB can measure the relationship between a leader and his team or group OCBs. GOCBs examine the group level occurrence of the extent to which a group or a team engage in OCB within a team dynamic (Euwema et al., 2007). Studies have found that OCB has a strong relationship with leadership. A meta-analysis conducted by Podsakoff et al. (2000) concluded that authoritative leadership styles resulted in negative OCB

while supportive leadership resulted in positive OCBs (Podsakoff, Mackenzie, Paine, & Bachrach, 2000). As the researcher examines the influence a leader's level of psychological capital has on their group level OCBs, the researcher believes this study will find that positive levels of psychological capital will garner more desirable OCBs from the team.

Leadership

The relationship the leader has with the follower is significant when one looks at how a leader's level of PsyCap influences teams. Leaders PsyCap is associated with followers PsyCap and may enhance task and conceptual performance (Chen, 2015). Furthermore, PsyCap was found to have a significant positive relationship with job performance (Luthans, Avolio, et al., 2007). Past literature has examined various dimensions of the leader-follower relationship. Leader-Member Exchange looks at how a leader develops relationships with each of their subordinates (O 'Donnell, Yukl, & Taber, 2012).

There have also been findings for the relationship between leadership styles and employee behaviors. Directed leadership, which consist of a focus on micro-management and control of direct reports, has been found to hurt team outcomes and behaviors; while supportive leadership, which shows a leader demonstrating care for their team, tends to have a more positive affect (Euwema et al., 2007). Transformational leadership and PsyCap were both demonstrated to be significant indicators of empowerment, cynicism, and intentions to quit in employees (Avey, Hughes, Norman, & Luthans, 2008). Additionally, transformational leaders are said to transform their followers to high levels of performance and other positive work-related outcomes (Avey et al., 2008). Transformational leaders have also demonstrated the ability to influence employee outcomes and behaviors positively. Research establishes a link between Psychological capital and authentic leadership. Similar to PsyCap, authentic leadership is based on positive

leadership pedagogy and is considered another positive resource that can result in positive change across multiple levels (Luthans & Youssef, 2007).

Leaders can positively facilitate followers' abilities to perform in certain areas when their capabilities complement their followers (Wang, Sui, Luthans, Wang, & Wu, 2014). The current state of the workplace continues to require more demands on a leader to have highly functioning teams. When a leader's ability to influence team performance and behaviors, is examined, one finds that it is possible. However, there are multiple facets of the leadership paradigm that contribute to this influence on followers. Positive approaches and constructs have been demonstrated to be amenable to change and development (Youssef & Luthans, 2007a). The researcher hopes to demonstrate that this positive approach to leadership can aid in organizations achieving desired outcomes and behaviors from their teams.

Multi-Level Literature

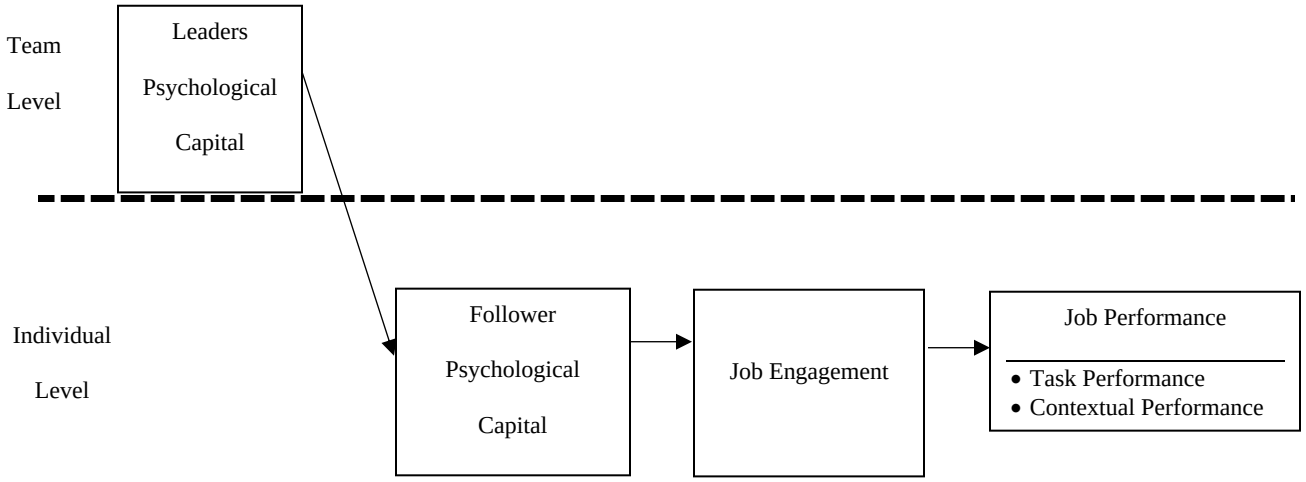
During the researcher's literature review, there were only a few studies about the relationship between PsyCap, performance, and organizational citizenship behaviors. A study conducted by Shu-Ling Chen's multi-level study was found to be the most relevant to this study. Chen's study looked at the relationship between leader PsyCap and follower PsyCap, engagement, and performance. In the study the collected data from a telecom company in Taiwan. In this multi-level study, a team had to consist of a minimum of three people reporting to a common leader. Information was collected multiple times to avoid common method variance problems. There were three-time intervals for data to be collected spread 12 to 15 weeks apart. Surveys were sent directly to participants. Leaders' average age was 48 years with approximately 22 years of experience and 70% of the leaders were male and 95% college graduates (N = 60 leaders). The followers averaged 40 years of age, 54% female, and 76% of college graduates (N

= 319 followers). A native language translation of the measure was self-administered. Findings included evidence that leaders can improve follower self-efficacy by sharing their personal experiences. Additionally, the data illustrated further evidence that PsyCap can be an important resource that positively impacts job performance (Chen, 2015).

Chen examined the relationship at the team/group level, which is the goal of this study. The conceptual framework can illustration:

Figure 3

Conceptual Framework of Multi-Level Study by Shu-Ling Chen



Under Chen's study, he examined the following research questions:

HYPOTHESIS 1: Follower PsyCap positively relates to their job engagement

HYPOTHESIS 2: Leader PsyCap positively affects follower job engagement at work through the medicating mechanism of follower PsyCap.

HYPOTHESIS 3a: Follower PsyCap positively affects follower task performance through the mediating mechanism of follower job engagement.

HYPOTHESIS 3b: Follower PsyCap positively affects follower contextual performance through the mediating mechanism of follower job engagement.

As a method of reducing concerns about sample bias, he used a one-sample *t*-test and a χ^2 test. These tests looked at the samples' average tenure, education, and age and compared the resulting statistics to the entire population resulting in ow significant difference ($p > 0.05$*)* allowing Chen to disregard sample bias for his study (Chen, 2015).

The results of the study found that Hypothesis one showed that leaders PsyCap is a significant predictor of follower PsyCap ($\hat{y} = 0.17$, $p < 0.05$; Model 1). The results of the second hypothesis found that leaders PsyCap is positively related to follower PsyCap ($\hat{y} = 0.17$, $p < 0.05$; Model 1) and job engagement and follower PsyCap have a positive relationship ($\hat{y} = 0.65$, $p < 0.001$; Model 2). Hypothesis 3a found that an individual's PsyCap is significantly related to their job engagement ($\hat{y} = 0.65$, $p < 0.001$; Model 2). With a 95 % bootstrapping confidence CI for engagement fell between 0.0.0379 and 0.1967. Excluding zero, the indirect effect is found to be significant. Additionally, job engagement showed a significant relationship with task performance ($\hat{y} = 0.29$, $p < 0.001$; Model 3). The same bootstrapping exercise was completed for hypothesis 3a, finding that with 95 % bootstrapping confidence CI for engagement fell between 0.1290 and 0.2585. Excluding zero again, the indirect effect is found to be significant. Similarly, Hypothesis 3b illustrated that individuals' PsyCap was significantly related to job engagement ($\hat{y} = 0.65$, $p < 0.001$; Model 2) and job engagement was significantly related to contextual performance ($\hat{y} = 0.32$, $p < 0.001$; Model 4). With 95 % bootstrapping confidence CI for engagement fell between 0.1445 and 0.2809. Excluding zero, the indirect effect is found to be significant.

As illustrated above, Chen did a more rigorous analysis to test the significance of any indirect effects using bootstrapping. To do this, he uses open-source R software to make sure he can accurately show the asymmetric sample distribution of the indirect effects. From this test, they determined that leaders PsyCap is related to job engagement by way of follower PsyCap with a 95% bootstrapped confidence Interval (Chen, 2015). Overall, Chen's study confirmed that leaders PsyCap is positively related to follower PsyCap. The findings furthered the understanding of how leader PsyCap can impact follower performance.

The researcher observed that the Chen study is a multi-level study that compared the leader to their followers and additionally to the collective team, which is like this current study. This study will examine the same leader/follower relationship; however, it will focus on the analysis of the followers as an aggregate or collective team to further explore the impact at the team or group level. Data in the Chen study analyzed the collective Team level however the findings focused on the leader's impact on the follower. This study seeks to expand upon Chen's finding and explore the leaders' impact on the collective team.

Another study that was found examined the relationship between Authentic leadership and positive organizational behaviors. While this current study does not directly pertain to authentic leadership, the researchers felt it was important to include its findings as it was one of the few multi-level studies found during the literature review. The researchers of the study on authentic leadership and POB make a note; prior studies only examined POB at the individual level which leaves the opportunity to contribute to the body of knowledge through multi-level analysis (Yammarino et al., 2008). The article began with a coded review of published articles about authentic leadership. The study notes that it could not analyze authentic leadership without including POB because it is a challenge to study authentic leadership without having an

understanding of positive organizational behaviors (Yammarino et al., 2008). This literature analysis examined 23 conceptual publications and five empirical publications about authentic leadership. The researchers found that the articles did not substantially address the levels of analysis issues.

The study found that 40% of the articles reviewed explicitly mentioned that it is important to develop future multi-level research from the conceptual publications and 53% from the empirical publications (Yammarino et al., 2008). The study found that the literature on POB may focus on the individual level, but it can be furthered and enhanced with more multi-level contributions. Yammarino et al. were able through their analysis to demonstrate the need and benefits of more multi-level research regarding authentic leadership and more importantly, for this study, positive organizational behaviors.

A dissertation by Jaymi Ratzlaff, a student at The Chicago School of Professional Psychology, titled Psychological Capital, and Employee Engagement as a Predictor of Patient-Care Outcomes did a multilevel analysis of PsyCap at the group level. The study looked at 109 employees across 13 locations. Twelve teams of employees with one leader who had at least five direct reports were participants in the study (Jaymi Ratzlaff, 2017). Participants included N=13 home managers, N=98 direct care employees. Participants completed the PSQ-24 and UWES-9 at the findings showed a significant relationship between PsyCap and employee engagement. Additionally, team leaders, PsyCap, was a predictor of patient satisfaction (Ratzlaff, 2017).

The Hypothesis and findings were as follows (Ratzlaff, 2017) :

Hypothesis 1: Individual PsyCap levels in employees will be positively related to employee work engagement levels, indicating that employees with high levels of PsyCap will have greater levels of work engagement. There was a significantly positive correlation between

employee PsyCap and employee engagement. (r = .59, p < .001) which illustrated that employees with high PsyCap tended to have high engagement scores, so hypothesis 1 was supported.

Hypothesis 2: Leaders' PsyCap levels will be positively related to their specific work teams' aggregate PsyCap levels, indicating that a leader with high levels of PsyCap will have work teams with higher PsyCap levels. Multilevel regression analysis was conducted and hypothesis 2 was not supported because the variance by location was not significant (Estimate = 0.04, Wald Z = 1.46, p = .15) and leader PsyCap was not significantly related to employee PsyCap (B = 0.07, p = .72).

Hypothesis 3: Team PsyCap levels will positively predict their patient care satisfaction, indicating that work teams with higher PsyCap levels will contribute to higher levels of satisfaction in the patients they serve. Patient PsyCap was not significantly related to employee PsyCap (B = -0.01, p = .99) so hypotheses 3 was not supported.

Hypothesis 4: Team PsyCap levels will be positively related to their work teams' aggregate engagement levels, indicating that work teams with high levels of PsyCap will have greater levels of engagement. Employee PsyCap scores were positively related to employee engagement (B = 1.03, p < .001); therefore, the findings support hypothesis four.

Hypothesis 5: Patient care satisfaction will mediate team PsyCap and employee engagement levels. The final multilevel analysis found that patient satisfaction was not significantly related to employee engagement scores (B = 0.01, p = .97). The findings were because the independent variable PsyCap remained significant after adding patient satisfaction as a mediator but was not significantly related to the independent variable. Based on these findings, hypotheses five was not supported.

The researcher of the current study ran an analysis using the same data Ratzlaff data in an Advanced Statistics capstone project during their Ph.D. studies at The Chicago School of Professional Psychology. This independent study was conducted using multilevel regression analysis to examine the level two relationship between leader and aggregate team scores. The analysis found the following:

Hypothesis 1: Individual PsyCap is positively related to Leaders' PsyCap. In this initial evaluation, the researcher looked at the relationship between Individual PsyCap and Leaders' PsyCap using a simple regression equation model at Level 1. Individual PsyCap was the dependent variable and Leaders' PsyCap as the independent variable. The researcher looked at Individual PsyCap of direct reports as a function of the Leaders' PsyCap. In this simple regression model, we had 101 participants. The predictor was Leaders' PsyCap (M = 5.99, SD = .44) and the criterion was Individual PsyCap (M = 5.01, SD = .50). The overall model was not significant by a small amount, R2 = .19, F (1, 99) = 3.61, p.06. This model can predict 19% of the variance for overall Individual PsyCap.

Hypothesis 2: Individual PsyCap will be positively related to their Leaders' PsyCap when treated as a fixed intercept. The first mixed model was done to expand on the null hypothesis. The dependent (outcome) variable was Individual PsyCap score, and the Independent (predictor) variable was Leaders' PsyCap. The fixed intercept was significant (Estimate = 5.02, Wald Z 6.67, *p* .00). The findings mean that there is a difference in individual PsyCap based on leader PsyCap. While there was a very slight positive relationship, the researcher went on to test our 3rd hypothesis to determine if there is a significant variance based on location.

Hypothesis 3: Individual PsyCap will be positively related to their work location. The purpose of this was to determine if there was any variance based on location. The dependent

(outcome) variable was Individual PsyCap score, and the Independent (predictor) variable was Leaders' PsyCap. Employees are nested by a leader within locations adding location as the random intercept. The random intercept for a location means the model allowed for results to vary by location, was not significant (Estimate = .027, Wald Z = 1.25, p = .21). The researcher, however, retained the random intercept to account for the nonindependence of employees within locations. The interclass correlation (calculated as the random intercept variance divided by the random intercept plus residual covariance) was .125. The findings mean the proportion of variation in Individual PsyCap that lied between locations is approximately 12.5%. There was no significance demonstrated between individual PsyCap and location (*p = .07).* Therefore, Hypothesis 3 was not supported.

Hypothesis 4: Team Engagement Scores will positively predict Individual PsyCap, indicating that work teams with higher engagement scores will have higher PsyCap. To further the analysis, the researcher wanted to test if instead of looking at location and leader PsyCap effects on Individual PsyCap, they look at the Team effect. For this, the researcher looked at the impact of team engagement (predictor) of Individual PsyCap (outcome) keeping the location as the random intercept. They conducted another multilevel regression analysis to test our fourth and final hypothesis. In this analysis, the dependent variable was Individual PsyCap, and the independent variable was Team Engagement. The random intercept for the location was not significant just missing the threshold for acceptable significance (Estimate = .00, Wald Z = .18, p = .05) indicating that modeling location as random did not account for a significant amount of variance in the model. However, the random intercept was retained to account for the nonindependence of employees within locations. The interclass correlation (calculated as the random intercept variance divided by the random intercept plus residual covariance) was .009.

The findings show the proportion of variation in Individual PsyCap that lies between locations is less than 1%. While location was not significant to Individual PsyCap (p = .86), the researcher did find significance between Team Engagement and Individual PsyCap (p = .01). Therefore, the research found that Team Engagement was significantly related to Individual PsyCap supporting hypothesis 4.

This additional data analysis demonstrates the need for more multilevel analysis aiding in a better understanding of the relationship at the team level. Further analysis should be conducted among a larger group before any final assumptions made on the influence leader PsyCap has on team PsyCap. This current study is intended to help bridge the gap that exists between leader PsyCap and aggregate team behaviors and outcomes. The researcher used the capstone assignment to gain more insight into the multilevel analysis and the impact that leader PsyCap can have at the team level.

Summary

The significance of adding to the PsyCap body of knowledge is tremendous. If Psychological capital developed it has the potential to enhance a leader's self-development, resulting in leaders with higher PsyCap, and one can expect to see the same in their followers (Luthans, Youssef, et al., 2007). Developing a better understanding of the impact at the group level provides for greater insights into the impact that PsyCap can have on organizational success. Each of the variables analyzed in this study has been found to have relationships, both negative and positive.

Studies have found a relationship between PsyCap and employee behaviors, employee performance, and attitudes (J. B. Avey et al., 2011). Furthermore, the literature has found relationships between psychological capital, organizational citizenship behaviors (Sun Jung &

Hyun Yoon, 2015). Pulling from positive psychology, Youssef and Luthans found a significant positive correlation between performance, hope, optimism, and resilience, demonstrating the positive effects that the core tenants of PsyCap have on individuals' behaviors and outcomes. (Youssef & Luthans, 2007). Most of the studies performed have been at the individual level. The researcher believes that these studies have created the basis for the current study to proceed to examine these relationships at the group level.

Chapter 3: Research Design and Method

The purpose of this study is to further the body of knowledge as it pertains to a leader's ability to influence team outcomes. In this chapter, the researcher will review the research methodology of the study. Also, the researcher will outline the process by which they will conduct this research, along with the measurements used to gather and analyze the data. The researcher will use this chapter to provide more information about the research questions and our rationale for taking the prescribed course of action in this study. The researcher will use this as an opportunity to define participant qualifications, data collection methods, procedures followed, and instrumentation used.

Research Questions, Hypotheses and their Rationales

The study of leadership's impact on teams and organizations has an extraordinarily rich history. As individuals and organizations continue to evolve and thrive in the changing business landscape, practitioners have found it more and more challenging to be successful. This study seeks to test the relationship between leader psychological capital and the team or group outcomes. The researcher will look at how a leader's level of psychological capital may impact group job performance and organizational citizenship behaviors.

For the first hypothesis, *A leader's high level of psychological capital has a positive relationship with their team's level of psychological capital,* the researcher hopes to establish a baseline for analysis. The study will hold the leader's psychological capital as a constant throughout the study. By this, the researcher means, the leader's level of psychological capital will be the variable that the researcher uses to test the group relationships. Several studies from Luthans, Avery, Youssef, Avolio, and others who have studied the construct have found a relationship exists. Not only has it been determined that the relationship exists but empirical

evidence shows that there can be organizational advantages to developing psychological capital in leaders using human resources development interventions (Luthans et al., 2010).

The second hypothesis; *There will be a negative relationship between a leader with low psychological capital and team desirable organizational citizenship behaviors* - looks to establish that leaders with lower levels of psychological capital have a negative relationship with group organizational citizenship behaviors. Leaders and team members have been found to define organizational citizenship behaviors differently in some cases (Lam, Hui, & Law, 1999). Since a leader's level of psychological capital can affect the individual's level of psychological capital, the researcher believes that there will be a group effect as well. Since the researcher knows that leaders and team members may look at OCBs differently, the researcher believes that their level of PsyCap may further alter how OCBs are defined by the teams. OCBs have been shown to contribute to team effectiveness (Podsakoff & Mackenzie, 1983). Our goal with this hypothesis is to demonstrate that a leader's low level of psychological capital will hurt group OCBs making teams less effective.

The final hypothesis states that *A leader with high psychological capital will have a positive relationship with team job performance.* It has is empirically determined that a follower's identification with their leader influences job performance and further states that there are benefits to training employees to develop their PsyCap which in turn can promote improved job performance (Tüzün, Çetin, & Basim, 2018). Throughout the review of the literature, the researcher has found empirical relationships between organizational performance and organizational citizenship behaviors (Podsakoff & Mackenzie, 1983). The researcher has also seen more evidence that PsyCap can influence job performance at the individual level (Luthans

et al., 2010). With this study, the researcher hopes to demonstrate similar findings at the group level.

Research Design

The researcher has elected to conduct a quantitative research study in line with needs from previous research to establish more empirical evidence of the relationship between PsyCap and other constructs (J. B. Avey et al., 2011). Furthermore, the researcher will explore these relationships at multiple levels. The multi-level analysis looks at three dimensions within the workplace. Level 1 represents the individual employee or leader level, and level 2 is the group or team level, and level three is at the organizational level. From a POB perspective, level 1 is the leader/follower, level 2 is the shared level, and level three is the cultural level (Yammarino et al., 2008). The goal of this study is to examine the relationships at the team or shared level.

Multi-Level Analysis of PsyCap is not as abundant as research at the individual level. Researching organizational levels consist of the individual, department, workgroup, and organization (Rousseau, 1985). While this study will focus on the group level, the researcher believes it will create opportunities for future research to expand to the organizational level. Procedurally, it is important to identify the focal unit that is analyzed, which means what level is analyzed (Rousseau, 1985). While challenging, the development of multi-level studies using the development of both theory and multi-level research together can allow for more accurate and realistic models of organizational phenomenon (Bliese, Chan, & Ployhart, 2007).

While there has been some opposition to the use of multi-level analysis in the past due to the complexity of the analysis, it has begun to gain more esteem recently as organizations grow more dynamic, requiring advanced research methodologies. To achieve the workgroup level analysis, the researcher will take an aggregate of the individual-level data collected. The

aggregate allows the researcher to examine the relationships between the leader and the group. The researcher also needs to be mindful of the various biases and misrepresentations that may result from the aggradation of individual data into workgroup data. One of the key biases to be concerned about is aggregation bias, which occurs when the relationship exists because of the data combination method (Rousseau, 1985). The researcher can overcome this by using the proper statistical, regression, which is our chosen method for analysis.

The thoroughly vetted research design took into consideration the advantages and challenges to use multi-level analysis, and the benefits of the added contribution to the body of knowledge are more beneficial than the challenges the researcher may face in conducting the study. The researcher believes that determining the relationship between the leader's psychological capital and the workgroup's job performance, and organizational citizenship behaviors can have a significant impact on organizational development.

Population and Sample

One of the biggest challenges facing this study is the need to collect data from a large enough participant pool. The ideal sample size was between 15 – 30 groups of three or more team members. The study was conducted with 17 groups of three or more team members. The ideal population will represent multiple industries and have varying types of experiences to create a diverse representation of today's workforce. Participants in this study were from industries that include non-profit, post-secondary education, professional services, and technology. Ideal participant levels were between 80 – 100 total participants. The study was conducted with 89 total participants. There is a great deal of debate for the number of participants to have a reliable study. Hox found through simulation that level two analysis is acceptable between 10 and 30 groups (Hox, 2010). The researcher hopes that the study will have

a proper level of participants to minimize the margin of error and have a large enough sample to produce valid data to analyze the research question. The researcher would also like the sample size to be representative of at least three different industries, preferably technology, higher education, professional services, and financial services.

The diversity of participants in the study is pivotal to achieving substantive data for analysis. The population of this study will consist of leaders and their direct reports. This study will take from a diverse group of business industries and leaders from Senior to entry-level team members. The leaders should have a minimum of five direct reports which will also participate in the study. The criteria for direct reports are that their direct manager must also participate in the study. It is also a goal of the study to include global participants as well. The researcher recognizes there could be language barriers, so the researcher will ask participants to self-identify their level of fluency using the Interagency Language Roundtable scale.

Participants must be fluent in reading, writing, and comprehending the English language. They must also use English as the primary language in the day-to-day commission of their professions. Global representation in the study is acceptable for participants who meet the requirements. The participants will be asked to identify their level of fluency using the Interagency Language Roundtable scale, which is the official language skill level descriptions of the United States Government (Gasparyan, 2007). A participant must identify at a level three or higher to meet the criteria for participation.

The researcher also implements a selection process; where the researcher will consider who will be the best fit based on a participant profile. The researcher will also ensure that the participants can productively participate in the data gathering and make sure individual participants have the necessary resources to participate. The researcher will purposefully select

the participants that will best help understand the problem and research question (Creswell 2014). To ensure that participants meet the criteria to participate in the study, the researcher will include the following demographic questions in the survey:

Table 5

Assessment of Demographic Information

Age ● Open Response	Gender • Male • Female • Other: Please Specify Race • American Indian or Alaska Native • Asian/Pacific Islander • Black or African American • Hispanic • White/Caucasian • Multiple Ethnicity/Other	Role: a. Individual Contributor (I am a member of a team or an independent employee) b. Supervisor or team leaders (I oversee a group or a team, but not a department) c. Manager (I oversee a department within a functional area) d. Director (I oversee an entire functional area) e. Vice President (I oversee one or more functional areas) f. Executive (I oversee one or more business units)
Company Name • Open Response	Years of Experience ● Open Response	Current Language Skills ● ILR Level 0 – No proficiency ● ILR Level 1 – Elementary proficiency ● ILR Level 2 – Limited working proficiency ● ILR Level 3 – Professional working proficiency ● ILR Level 4 – Full professional proficiency ● ILR Level 5 – Native or bilingual proficiency

Industry • Accounting, Tax, Bookkeeping, Payroll Services • Consumer Products and Services • Construction • Education • Financial Services • Government • Healthcare • Legal Services • Logistics and Transportation • Manufacturing • Oil & Gas • Professional Services • Real Estate • Retail • Security • Technology • Other	Department • Accounting/Finance • Administration • Customer Service • Engineering (Software) • Engineering (Other) • Human Resources • Information Technology • Legal • Logistics • Marketing & Advertising • Operations • Purchasing • Product Development • Quality Assurance • Research & Development • Sales • Other	Supervise Others • Yes or No

Procedures

The researcher has planned a two-pronged approach to recruiting for participants. First, the researcher plan to use professional connections both online and offline, to solicit participants in the study. There is currently a pool of over 1000 individual leaders whom the researcher has direct access to from various social outlets and connections, from networking, public speaking, and working relationships. Secondly, the researcher will request permission to recruit participant groups internally from the researcher's current organization's International Expansion Business Unit. This unit has around 900 employees and over 100 leaders who may meet the selection criteria. Prior permission will be requested from the department of human resources before any recruitment would begin.

The researcher will use email addresses as the primary form of contact for each participant. Once email addresses are confirmed, a coded ID number will be assigned. Participant confidentiality is extremely important for the study, so all steps possible will be taken to ensure the highest level of confidence. The researcher will add participants into the online survey representing three categories: 1) Leader/Manager, 2) Follower/Report, 3) Team/Work Group. The following instruments for the survey are as follows.

Table 6

Leader and Group Self-Reporter Questionnaires

	# of Qs	Leader	Group
Psychological Capital Questionnaire (PCQ) – 12	12	Self	Self
Organizational Citizenship Behavior Five-Dimension Scale	20	Self	Self
Technical and Social Performance Scale	7	Self	Self

The surveys will be emailed to participants and collected in an online survey data tool. The survey will have a defined timeframe to be completed to give participants ample time to complete. The researcher will include reminders to increase the participation rate.

Collected data will be kept in a password protected survey tool. The researcher will save the data to a secure password-protected folder stored in the researcher's password-protected Google Drive. The researcher plan to use SPSS statistical analysis software to analyze the data. SPSS is the tool in which the researcher has the most familiarity and is commonly used for such

studies. Once recruitments are completed, the researcher will arrange the data will by workgroup, manager, company, and industry. The individual responses will be aggregated into groups to create the level 2 data needed for analysis. The data will be analyzed to determine if there are findings for our hypothesis.

Validity

There are several threats to validity that the researcher must consider during this study. One threat to the validity is that the pre-existing scales that the researcher use may have to be modified to fit the scope of this study. The researcher will attempt to ensure that the pre-existing scales are not modified so that they no longer fall into the predetermined objectives of the questionnaires. Another possible threat to validity is the potential bias that the researcher will bring to the study. To help mitigate this threat, the researcher will reflect on the data and include commentary about how the researcher interprets the findings and potential influences created by our specific background and experiences.

As mentioned above, there are also some challenges in using multi-level regression analysis. The researcher must be cognizant of Aggregation bias as a potential threat to the findings of the study. Misspecification is another concern when doing multi-level analysis. Misspecification occurs when the researcher believes the relationship assessed from the data is associated with the group when it is associated with a different level or behavior (Rousseau, 1985). To assist in overcoming this potential risk, the researcher will run additional analysis like the analysis conducted by Chen to account for indirect effects so that the researcher can minimize the chance of invalid data.

The researcher must account for selection bias may also be present. The researcher wants to make sure that the participant pool is diverse. For this, the researcher will recruit from various

industries to help mitigate this risk. Finally, the researcher has considered participant reactions to being studied, also known as the Hawthorne Effect. Since the researcher is assessing at the group level, participants may be reluctant to be forthcoming due to fear that their managers will see their responses. The researcher will be deliberate in our expression of the confidential nature of the survey to mitigate the Hawthorne Effect. The researcher will also assert that the researcher will take every step possible to ensure the confidence of the information.

Instrumentation

The overall approach to the measurements for each variable is to use a tool that has been determined reliable and valid through previous studies. It is important to the body of knowledge that the researcher conduct a qualitative study to demonstrate the positive effects of PsyCap in the workplace further.

Measures

Psychological Capital

(Luthans et al., 2007)**.** The selected Instrument to measure PsyCap is the Psychological Capital Questionnaire (PCQ) – 12. This is 12 item questionnaires using a 6-point Likert Type Scale (1 = strongly disagree, 2 = disagree. 3 = somewhat disagree, 4 = somewhat agree, 5 = agree, 6 = strongly agree). Three questions per resource for hope, efficacy, resilience, and optimism. Questions ask participants how they think about themselves in the present regarding their work. Sample questions include, “I feel confident representing my work ~~are~~ in meetings with management.” | “Right now, I see myself as being pretty successful at work.” | “When I have a setback at work, I have trouble recovering from it, moving on.” | “I always look on the bright side of things regarding my job.” The findings from the PCQ – 12 will be used to measure the participant’s level of psychological capital. The researcher will be able to use these measures

to conclude the implications of the individual's level of psychological capital on other variables, helping to resolve the hypothesized questions. The higher the PCQ score, the higher the level of psychological capital. PCQ was found to have a Cronbach's alpha of .87.

Job Performance

(Abramis & Beach, 2017). The Seven items Technical and Social Performance Scale is based on Quinn (1977) and will be used to measure team member performance in this study. Technical performance items will examine the ability to complete tasks. The Social Performance items will examine the ability to work well with others. The questions based on rating activities of the last (seven days/week you worked) and how well for example they handled "the responsibilities and daily demands of your work, and made the right decisions" for technical performance and "got along with others at work; avoided arguing with others at work" for social performance The scale ranges from 1 'very poorly' to 5 'exceptionally well.' The findings from the two measurements will determine how the direct report performs on the job. The higher the score, the better the performance. The researcher will be able to use these measures to conclude the relationship between the leader's level of psychological capital and team performance. The average of the individual scores will be compiled to run the level 2 analysis — Cronbach's alpha of .83 for technical performance and .76 for social performance.

Organizational Citizenship Behaviors

The instrument used for measuring OCBs is the Organizational Citizenship Behavior Five-Dimension Scale. Podsakoff & McKenzie (1989) developed the scale. It is a 20 item, 5-factor scale, measuring altruism, courtesy, sportsmanship, conscientiousness, and civic virtue. It includes items describing specific behaviors, and managers indicate their agreement on each item for each employee. The OCB rating form uses a 7-point format. Measuring OCB for participants

will allow us to determine if there is a relationship between a leader's level of PsyCap and if their team member's demonstration of desirable or undesirable organizational citizenship behavior. The average of the individual scores will be compiled to run the level 2 analysis. Cronbach's alpha was over .70 for each dimension.

Data Processing

A multilevel regression analysis will be conducted to analyze the participant data using SPSS statistical software. Organizational dynamics have contributed to a changing emphasis on levels within an organization. The use of multilevel research will allow us to integrate multiple levels of activity relevant to the study (Rousseau, 1985). In addition to multilevel regression analysis, the researcher will also run parallel linear regression models to aid in a better interpretation of the data at the individual level and the group/leader level. The researcher will begin by testing to eliminate the possibility of a null hypothesis before the researcher moves forward. The researcher wants to be sure that our data is statistically significant at the individual level before the researcher moves on to test at the group level.

Our first hypothesis, *A leader's level of psychological capital has a positive relationship with a follower's level of psychological capital* will be examined at the individual level to establish PsyCap as our constant construct. The researcher will use basic regression analysis to test for the strength of the association between two continuous variables. The variables will be Leader PsyCap and Follower PsyCap. The researcher expects to see a positive relationship between a leader's level of PsyCap and their direct reports PsyCap. The higher the level of the leader's PsyCap, the higher the direct reports PsyCap.

Our second hypothesis, *Leaders with low levels of psychological capital will have teams who demonstrate undesirable organizational citizenship behaviors* will be analyzed using multi-

level regression. This test will look at the association between two variables Leader/Manager PsyCap, Group organizational citizenship behaviors. The researcher expects there to be a positive relationship between a leader's level of PsyCap and the group's demonstration of desirable organizational citizenship behaviors. The level of leader psychological capital is related to the demonstration of organizational citizenship behaviors demonstrated by the group.

Finally, our last hypothesis, *A leader with high psychological capital will have teams with better job performance* will also be multi-level regression to test the strength of the association between the leader's PsyCap and group Job Performance. The researcher expects a leader with a high level of PsyCap will have groups with job performance that meets expectations while a leader with a low level of PsyCap will have followers with poor job performance.

Assumptions

The first assumption is that participants will answer the questionnaire honestly and candidly. The researcher will apply a code to each participant to maintain confidentiality and help ensure the integrity of the responses. The study will also be explicit about confidentiality in the authorization and instructions. Another assumption is with the inclusion criteria for participation in the study are well defined and thereby ensure that all participants have similar relationships and experiences that will help to determine the validity of the study's hypothesis. Our final assumption is that participating organizations will have a sincere interest in participating in the survey and will not have any other motives steering their interest. The study will provide insights into the organization's leader and group relationships helping them to improve the employee experience.

Limitations

One limitation of the study is the fact that all data collection comes from self-report methods. Self- report is a common limitation in the literature (Howard, 2017). The researcher has specifically decided to use self-reported data in this study as part of our research methodology. There is also a lack of literature discussing PsyCap and the leader-follower relationship. The research has been conducted to cover a wide cross-section of discussions on PsyCap, Job Performance, and organizational citizenship behaviors to overcome this limitation. While there has been some mention, the hope is that this study will aid in filling in the void in this area.

Having a large enough participant pool to gain significant results is another potential limitation. This limitation is noteworthy because of the need to have participants with a leader-follower relationship. A large percentage of the literature reviewed calls for more contribution to the body of knowledge around the evaluation of leaders and followers (Sun Jung & Hyun Yoon, 2015). However, it is often a challenge to gather enough groups when doing a multilevel analysis. The researcher will call on a vast network of organizations that are familiar to solicit participation instead of a blanket solicitation to decrease the chances of this limitation being problematic for the study. With this method arises a latent limitation which can involve personality traits that are similar across participants and provide for a connection to the researcher.

Common Method Variance is another potential limitation. As with the study conducted by Chen, to avoid this limitation, leaders will be asked to rate followers' tasks and conceptual performance (Chen, 2015). The researcher will still have to consider that a leader's ratings may be affected by bias. The study will try to combat this limitation by providing specific guidance specifying how to complete the survey in the survey instructions.

Ethical Assurances

The researcher plan to do everything within our power to preserve the integrity of the data collected in this study and limit the risk of a negative impact on participants. The researcher will take steps to ensure the ethical protection of our participants using several measures, including but not limited to, allowing for an opt-in participant strategy. Participants will not be required to participate in the study, nor will there be any adverse actions or retaliation taken against those who chose not to participate. A comprehensive consent form will be provided to all participants and include background and purpose of the research study, possible demands on the participants, benefits, and risks of participating, as well as outlining the confidential nature of the responses. The researcher will also outline the process for collecting data and how they use the information. Participants must opt-in and consent to participate in this study.

The researcher has identified several risks to human subjects along with several ways to mitigate such risks to protect program participants from harm. Loss of time may be of concern to participants. The time needed to complete the survey for participants will take them away from other responsibilities they have. These risks may cause some anxiety to complete the survey quickly, so it does not impede on their other commitments. The survey design is going to be critical. The researcher needs to make sure to have created a concise survey that does not require much time but also allows us to capture enough information to conduct a thorough study.

The researcher has also identified the delicate relationship between members of a low-power group, which may conclude that participation in the survey could have an adverse impact on them. The researcher plans to offer the leader participants' feedback from the survey to allow them to utilize it to improve. If the direct report gives negative feedback, they may fear reprisal from their leaders. The researcher will be mindful of the self-identifiers the researcher collects

and provide data in a confidential format to protect direct-report identities to help mitigate any risk. Participants will be randomly assigned a numerical code to help maintain confidentiality.

The researcher also has chosen not to get so granular that identifiers spell out specifics about the participants, such as a female, 25 years old from the Chicago office in the position of the project lead. This level of detail could be an identifier of who the participant is. The researcher will carefully craft the self-identifiers to get enough information for the survey while preserving participant confidentiality. While it would be ideal to have the survey completely confidential, the researcher recognizes that there are advantages to having some self-identifiers to help aggregate the data.

Privacy concerns may also alter a person's response to the information for fear that information shared would adversely impact their job. Ultimately, participants in this research are not being incentivized to participate, but rather the researcher wants to provide the participating company with a report on the findings providing areas for improvement. Consequently, the researcher must be mindful that the participants' manager or company leadership may see the report, and there could be adverse action against the participant at the leader level. If a leader participant receives negative responses from their direct report, it can reflect on their performance and could have consequences.

To mitigate this risk, the researcher wants to present the feedback in an executive summary format versus providing participating organizations with the raw data. The researcher is then able to add context to the information and give a summary of action items to address concerns. While the researcher cannot fully negate any risks, the researcher hopes that our efforts to safeguard participant identity will protect them from reprisal.

Summary

The study seeks to determine the relationships between the leader and group behaviors and outcomes. The researcher has selected four research questions to assess these relationships using multi-level regression analysis. Our participant recruitment aims to secure 100 – 200 participants. While the number of participants is an ongoing topic in the research community, the researcher chose to use Hox's methodology based on simulations that were run to determine enough participant sizes. Our recruitment process will not be random nor open to anyone. The researcher has selected specific guidelines included. The researcher will solicit participation from business leaders who have five or more direct reports. The researcher also wishes to have a diverse participant pool so plan to seek participants from multiple industries and backgrounds.

The researcher has selected three measurement tools for this process. The Psychological Capital Questionnaire (PCQ) – 12, Organizational Citizenship Behavior Five-Dimension Scale, Technical and Social Performance Scale, will be used to collect data totaling 39 questions. These tools have been empirically shown to be valid and reliable. To minimize the potential risk to validity, the researcher will give full assessments versus making any alterations to the questionnaire. The researcher will also need to be aware of additional threats to validity, which include common issues that arise when using multi-level regression analysis. Misspecification and aggregation bias are two phenomena that the researcher must be aware of when the researcher conduct our analysis of the data and take steps to minimize the risk. The researcher also acknowledges some potential limitations to our study. The greatest inhibitor would be the participation level. The researcher hopes to have 20 groups total but no less than 10.

The data will be analyzed using SPSS software. SPSS is most familiar to the researchers and is a common analytics tool for research studies such as this. In addition to the multi-level

analysis, the researcher will also run parallel regression analysis to aid in minimizing some of the threats to data integrity. Using PsyCap as our constant construct, the researcher believes that the study will concur with our hypothesis. The researcher has taken a multitude of factors into account to ensure a substantive report that contributes to the body of knowledge.

Chapter 4: Findings

A quantitative design was used to investigate a leader's ability to influence team outcomes. Specifically, a multi-level analysis was evaluated at three dimensions within the workplace. Level 1 represents the individual employee or leader level, and level 2 is the group or team level, and level three is at the organizational level. From a POB perspective, level 1 is the leader/follower, level 2 is the shared level, and level three is the cultural level (Yammarino et al., 2008). The goal of this study was to examine the relationships at the team or shared level. The dependent variables of the study were Psychological Capital, Organizational Citizenship Behaviors, and Job Performance. The independent variable of the study was Leaders (High versus Low) Psychological Capital. The data were collected to test the following research question and hypotheses:

RQ1: Does a leader's level of psychological capital influence team organizational citizenship behaviors and job performance?

H1: A leader's level of psychological capital has a positive relationship with their team's level of psychological capital.

H2: There will be a negative relationship between a leader with low psychological capital and team desirable organizational citizenship behaviors.

H3: A leader with high psychological capital will have a positive relationship with team job performance.

To answer this research question, a multilevel regression analysis was utilized to test whether the independent variables were related to the dependent variables.

This chapter presents the descriptive statistics of the variables of interest along with an examination of the data. Next, the results from the multilevel regression analysis are presented. A summary of the results concludes this chapter.

Demographics

Participants were 89 business industries and leaders from Senior to entry-level members. Participants represented various industries including non-profit, post-secondary educations, professional services, and technology. While each participant was in the United States three organizations were international companies. Of this sample, 17 individuals were identified as Leaders with 100% of the leaders supervising others and 72 were identified as Followers. Most of the participants were female (64.0%), Caucasian (64.0%) individual contributors who did not supervise others (52.8%). Also, 39% of participants reported holding a bachelor's degree, 40.4% hold a master's degree, 12.4% hold a Terminal degree (Ph. D., Ed. D., J.D., M.D.), and 3.4% hold an Associate's degree or reported some college. The average years of experience reported was 18.09 (*SD* = 11.01). Table 6 presents the characteristics of the sample

Table 7

Characteristics for the sample (n = 89)

Variable	Category	*n*	*%*
Gender	Female	57	64.0%
	Male	32	36.0%
Ethnicity or Racial Identity	White/Caucasian	57	64.0%
	Hispanic	10	11.2%
	Black/African American	9	10.1%
	Asian/Pacific Islander	8	9.0%

	Multiple/Other	4	4.5%
	Prefer not to say	1	1.1%
Level of education	Terminal Degree (Ph. D., Ed. D., J.D., M.D.)	11	12.4%
	Master's Degree	36	40.4%
	Bachelor's Degree	49	43.8%
	Associate degree or Some College	3	3.4%
Group	Leader	17	19.1%
	Follower	72	80.9%
Supervise Others	Yes	42	47.2%
	No	47	52.8%

Descriptive Statistics

Data were collected from 89 business industry professionals. Investigation of descriptive statistics revealed 3 missing cases across the three outcome variables. Maximum likelihood methods were used to address the 3 missing cases since, without the actual score, an accurate assessment of the explained changes to Psychological Capital, Organizational Citizenship Behaviors, and Job Performance was not possible.

The main variables of interest were the Leader's Psychological Capital, Follower Psychological Capital, Organizational Citizenship Behaviors, and Job Performance. As can be seen from Table 7, the overall averages for Psychological Capital were 4.20 (*SD* = 0.48), Organizational Citizenship Behaviors was 2.96 (*SD* = 0.58), and Job Performance was 4.04 (*SD* = 0.44). Leaders had an average of 4.36 *(SD* = 0.33) Psychological Capital, whereas Followers

had an average of 4.16 (*SD* = 0.50) Psychological Capital. To determine the high versus low psychological capital for group-level analysis, a bimodal median split was conducted to divide the Leader's Psychological Capital into two groups. The median was 4.33, leaving 9 leaders in the High Psychological Capital Group and 8 Leaders in the Low Psychological Capital Group.

Table 8

Summary of Descriptive Statistics

Variables	**N**	**M (SD)**	**Min.**	**Max.**
Psychological Capital	88	4.20 (0.48)	2.83	5.00
Leaders	17	4.36 (0.33)	3.83	4.92
Followers	71	4.16 (0.50)	2.83	5.00
Organizational Citizenship Behaviors	87	2.96 (0.58)	1.45	4.85
Job Performance	89	4.04 (0.44)	3.00	5.00

Tests of Assumptions

The analyses used to address the research hypotheses in the present study were linear regression and multilevel regression. There are five assumptions of regression: normality of the residuals, no multicollinearity, homoscedasticity, independence of the residuals, and linearity (Cohen, Cohen, West, & Aiken, 2003). Since there is only one predictor variable in the linear regression model, the assumptions of multicollinearity and independence have been met.

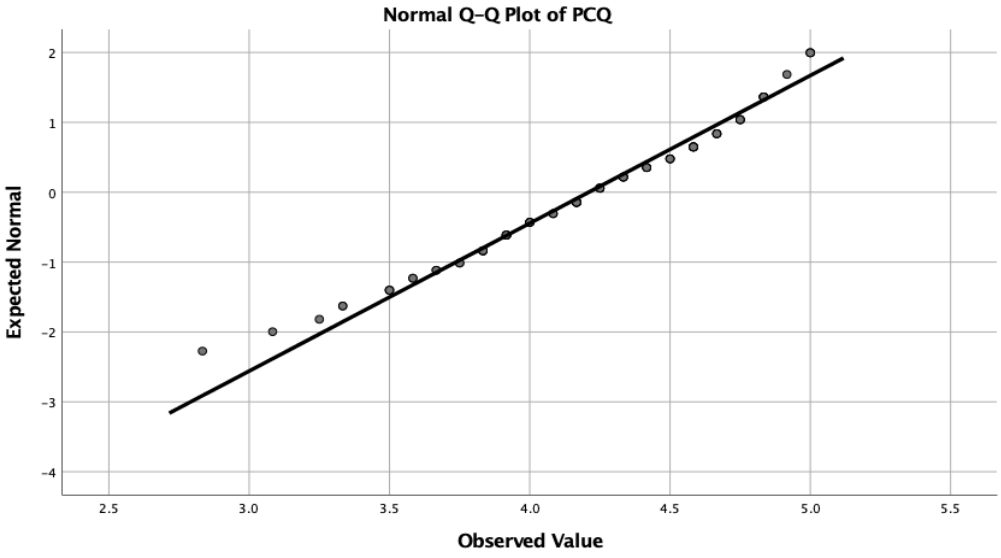
Normality

To determine the normality of the dependent variables, examinations of histograms and P-P plots for Psychological Capital, Organizational Citizenship Behaviors, and Job Performance were conducted (Cohen et al., 2003). The histograms and P-P plots follow a normal distribution for all dependent variables (see Figure 4 for P-P plots). Therefore, the assumption of normality has been met.

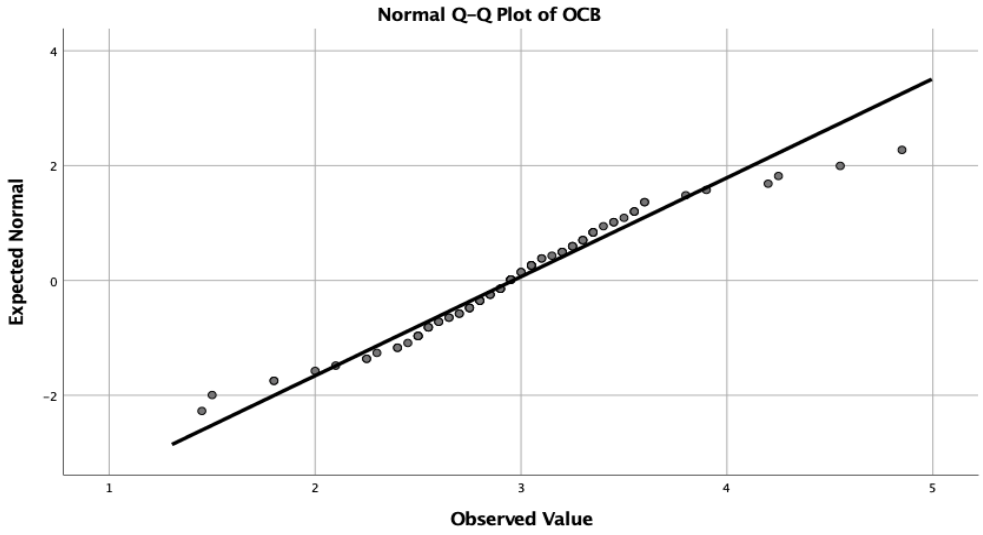
Figure 4

P-P Plots for (a) Psychological Capital, (b) Organizational Citizenship Behaviors, (c) Job Performance.

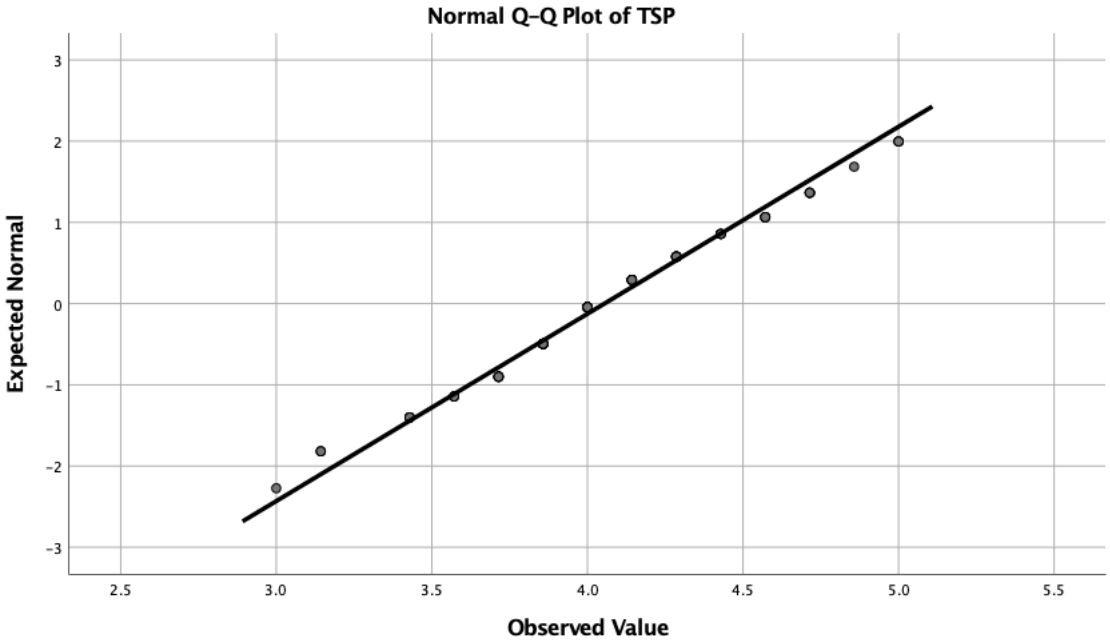
a. Psychological Capital



b. Organizational Citizenship Behaviors



c. Job Performance



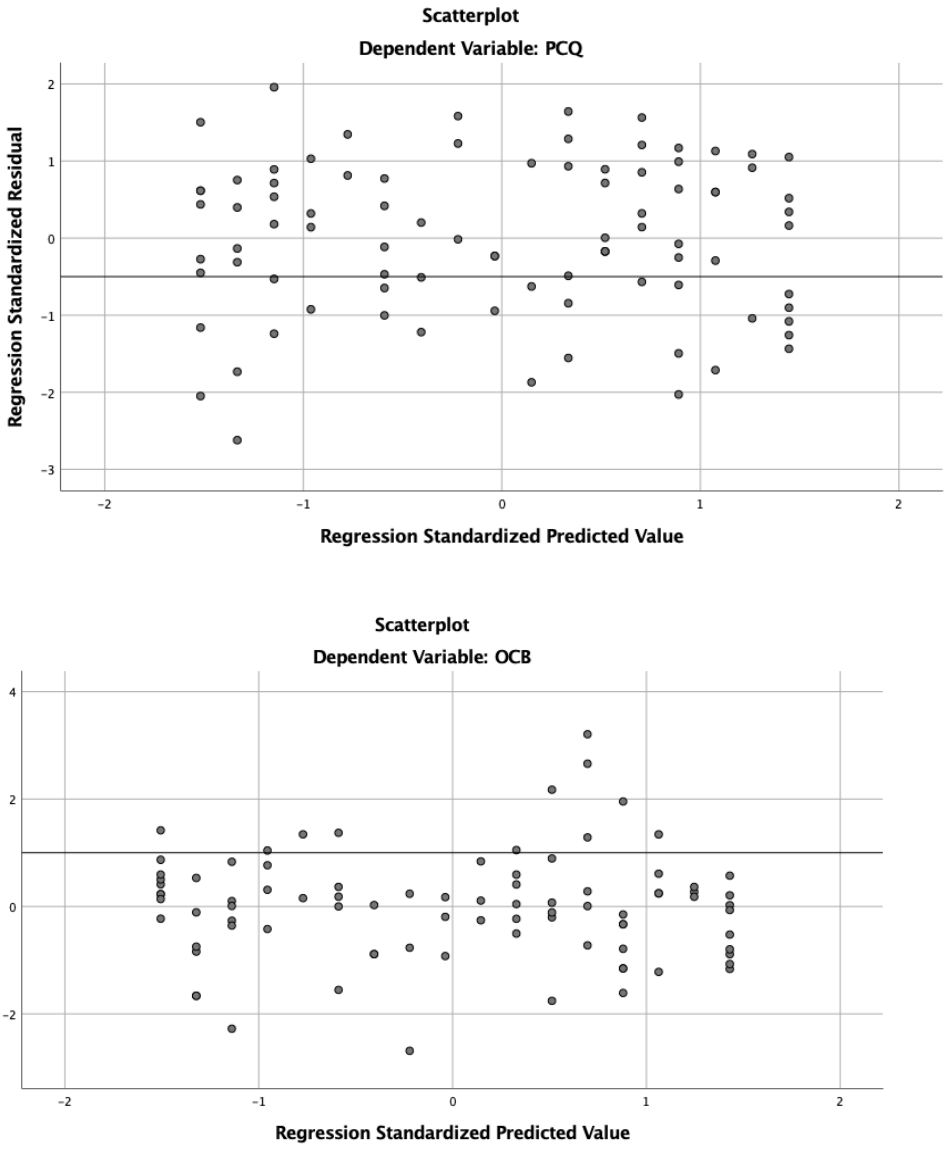
Homoscedasticity

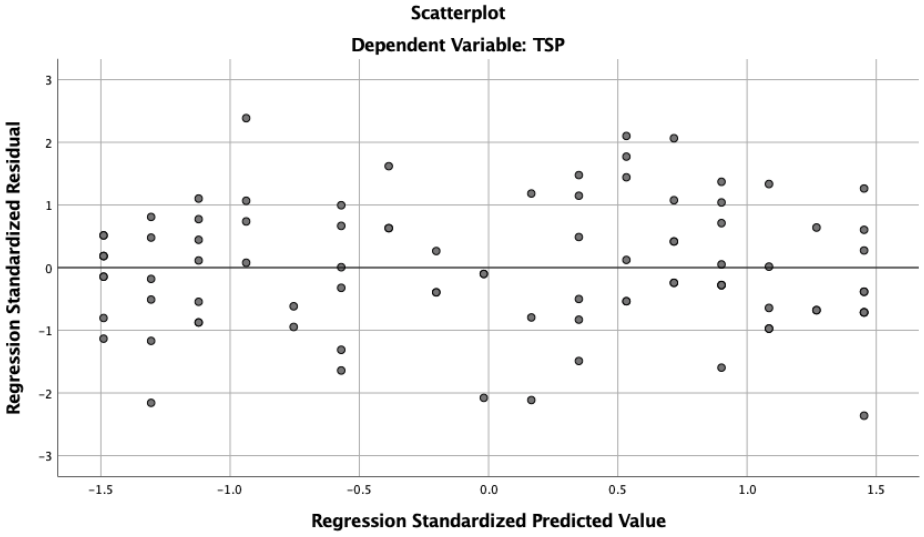
Scatterplots were used to evaluated homoscedasticity. Specifically, the residuals and predicted values should follow a stable distribution around the regression line (Cohen et al.,

2003). The residuals are relatively stable. This means that the assumption of homoscedasticity has been met (see Figure 5).

Figure 5

Predictors and DVs



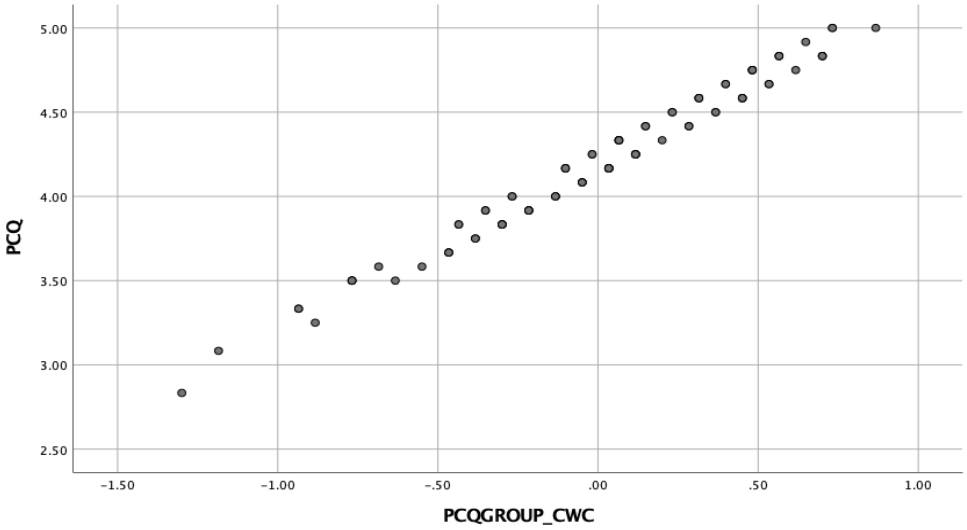


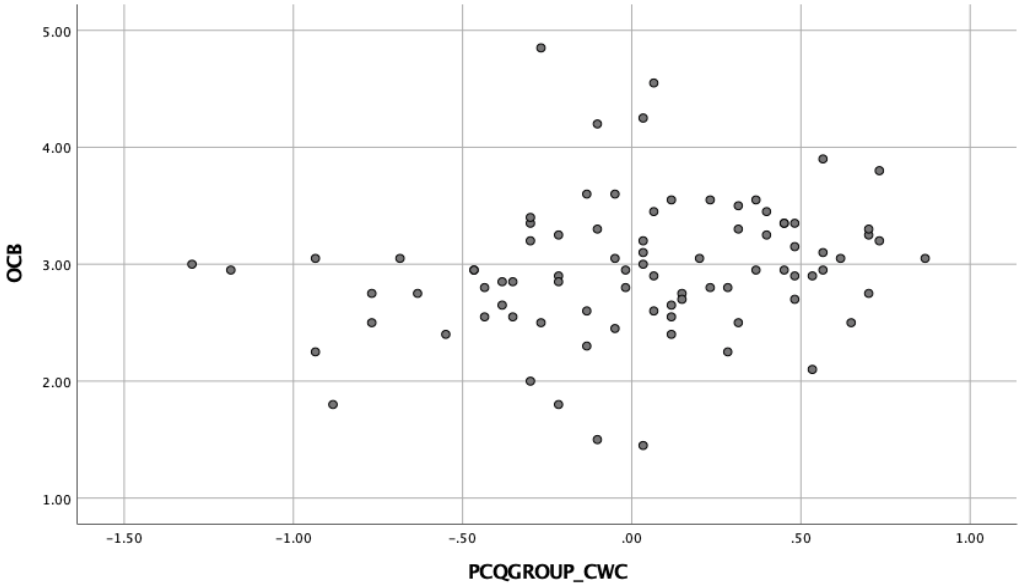
Linearity

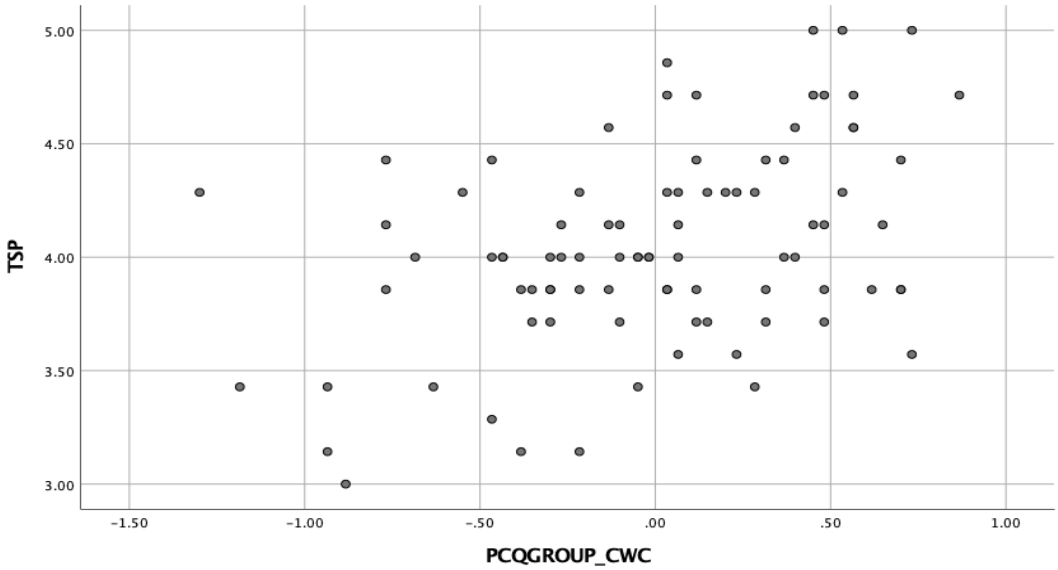
To test the assumption of linearity, a series of scatterplots were produced to evaluate the independent variable against the dependent variables. As can be seen from figure 6, the scatterplot for the PCQ outcome variable follows a linear pattern for the PCQ group analysis. However, OCB and Job Performance are less linear in relation to the PCQ Group variable.

Figure 6

Scatterplot of PCQ Group Variable


PCQ
5.00
4.50
4.00
3.50
3.00
2.50
-1.50
-1.00
-.50
.00
.50
1.00
PCQGROUP_CWC


OCB
5.00
4.00
3.00
2.00
1.00
-1.50
-1.00
-.50
.00
.50
1.00
PCQGROUP_CWC



Results

***H1*: A leader's level of psychological capital has a positive relationship with their team's level of psychological capital.**

To investigate whether Leader's Psychological Capital predicted Follower Psychological Capital, a simple linear regression was conducted with Leader Group as the independent variable and Psychological Capital as the dependent variable. The results of the regression indicated that the model explained 2.8% of the variance and that the model was not a significant predictor of Psychological Capital, F (1, 86) = 2.466, p = .120. Table 8 presents the linear regression analysis. There was not enough data to support Hypothesis 1.

Table 9.

Linear regression analyses for variables predicting psychological capital

Predictor	*B*	*SE*	*p*
Leader	-.201	.128	.120
Constant	4.558	.236	.000

R^2	.028
F	2.466

Note. $*p < .05$. $**p < .01$. $***p < .001$

***H2*: There will be a negative relationship between a leader with low psychological capital and team desirable organizational citizenship behaviors.**

To investigate whether the Leader's Level of Psychological Capital (High versus Low) predicted Team Organizational Citizenship Behaviors, a multilevel regression analysis was conducted. The results of the multilevel regression indicated that, at level 1, Psychological Capital was not a significant predictor of Team Organizational Citizenship Behaviors (B = -.211, p =.742). At level 2, Leader's Group Psychological Capital was not a significant predictor of Organizational Citizenship Behaviors (B = -.303, p =.537). That is, the proportion of individuals with low psychological capital leaders was unrelated to organizational citizenship behavior. The participant's group did not explain additional variance in the overall model (Wald Z = 1.454, p = .146). There was not enough data to support Hypothesis 2. Table 9 presents the multilevel regression analysis.

Table 10

Multilevel regression analyses for variables predicting organizational citizenship behavior

Parameter	**Estimate**	**Std. Error**	**df**	**t**	**Sig.**	**95% Confidence Interval**	
						Lower Bound	Upper Bound

Intercept	2.953683	0.084214	14.548	35.074	0	2.773697	3.133668
PCQ_CWC	-0.210754	0.637586	81.975	-0.331	0.742	-1.479121	1.057613
PCQGROUP_CWC	-0.393706	0.635681	82.604	0.619	0.537	-0.870728	1.65814

***H3*: A leader with high psychological capital will have a positive relationship with team job performance.**

To investigate whether the Leader's Level of Psychological Capital (High versus Low) predicted Team Job Performance, a multilevel regression analysis was conducted. The results of the multilevel regression indicated that, at level 1, Psychological Capital was not a significant predictor of Job Performance (B = .595, p =.172). At level 2, Leader's Group Psychological Capital was not a significant predictor of Team Job Performance (B = -.189, p =.661). That is, the proportion of individuals with high psychological capital leaders was unrelated to job performance. The participants group did not explain additional variance in the overall model (Wald Z = .373, p = .709). There was not enough data to support Hypothesis 3. Table 10 presents the multilevel regression analysis.

Table 11

Multilevel Regression Analyses for Variables Predicting Job Performance

Parameter	Estimate	Std. Error	df	t	Sig.	95% Confidence Interval

						Lower Bound	Upper Bound
Intercept	4.049108	0.045796	8.215	88.417	0	3.943984	4.154233
PCQ_CWC	0.595318	0.429285	47.334	1.387	0.172	-0.268131	1.458766
PCQGROUP_CWC	-0.188887	0.427445	48.139	-0.442	0.661	-1.048258	0.670484

Post Hoc Testing

Post Hoc testing was conducted to analyze the data at the individual level. While the multi-level analysis was conducted, a post hoc correlation was completed to help indicate any additional statistical tests that may need to be conducted. The researcher also conducted a linear regression analysis and a multivariate analysis to further analyze statistical power.

A Pearson correlation analysis was conducted to see if there were any significant relationships between Psychological Capital, Organizational Citizenship Behavior (OCB) and performance., Psychological Capital and OCB was positively correlated $r(87) = .28$, $p = .01$. This was a small effect. Psychological Capital and Job Performance were also positively correlated $r(87) = .41$, $p < .001$. This was a medium effect.

Table 12

Correlation of Descriptive and Study Variables

	M	SD	PsyCap	OCB	JP
1. PsyCapMean12	4.20	.475		.284	.413
2. OCB_SUM	58.58	.439	.284		.159

3. TPSPmean7	4.04	12.27	.413	.159

**$p < .01$

The PsyCap mean was consistent with previous research. As Psychological Capital increases, OCB slightly increases, and Job Performance increases. This too is in line with previous research at level 1.

The post hoc testing also conducted a simple regression analysis on the 17 leaders who participated in the study to examine the descriptive statistics. The predictor was Psychological Capital scores (M = 4.36, SD = .33) and the criterion was overall job performance (M = 3.94, SD = .41) and OCB (M = 61.94, SD = 8.61). Psychological Capital has a higher mean for leaders (M = 4.36 versus M = 4.20 from the total group, and a smaller standard deviation which is more consistent with previous research.

A simple regression analysis was also conducted on the 87 total participants. A simple regression analysis was conducted to see if Psychological Capital predicted Job Performance and OCB. The predictor was Psychological Capital scores (M = 4.20, SD = .48) and the criterion was overall job performance (M = 4.04, SD = .44) and OCB (M = 58.58, SD = 12.27).

The regression model for Psychological Capital and Job Performance at level 1, R2 = .17, F (1, 87) = 17.90, p<.001. 17% of the variance of performance is accounted for by PsyCap. PsyCap predicts job performance, B = .41, t(87) = 4.23, p<.001 variance of performance is accounted for by PsyCap. PsyCap and OCB at level 1 R2 = .08, F(1, 87) = 7.66, p<.01. PsyCap predicts OCB, B = .28, t(87) = 2.77, p<.01. These findings also align with previous research at the individual or level 1 analysis.

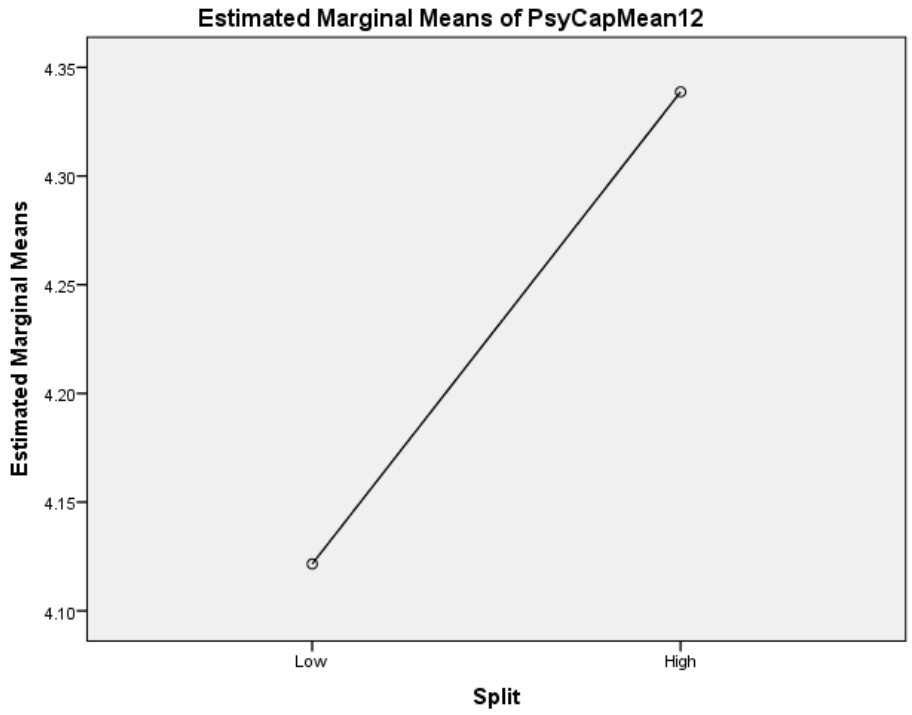
Additionally, a general linear model was conducted. The researcher found Multivariate normality because the box test is not significant. There was a multivariate finding, Wilks

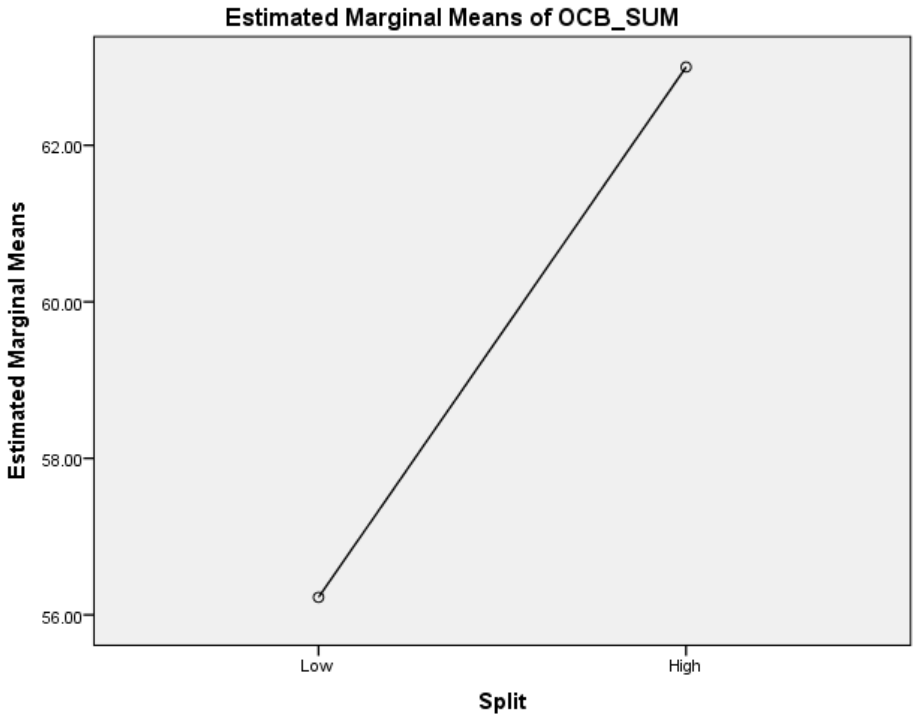
Lambda = .90, F(2, 86) = 3.00, p=.05, pN2 = .10, which was a small effect. The test for normality of variances for both dependent variables is not significant so there were no violated assumptions.

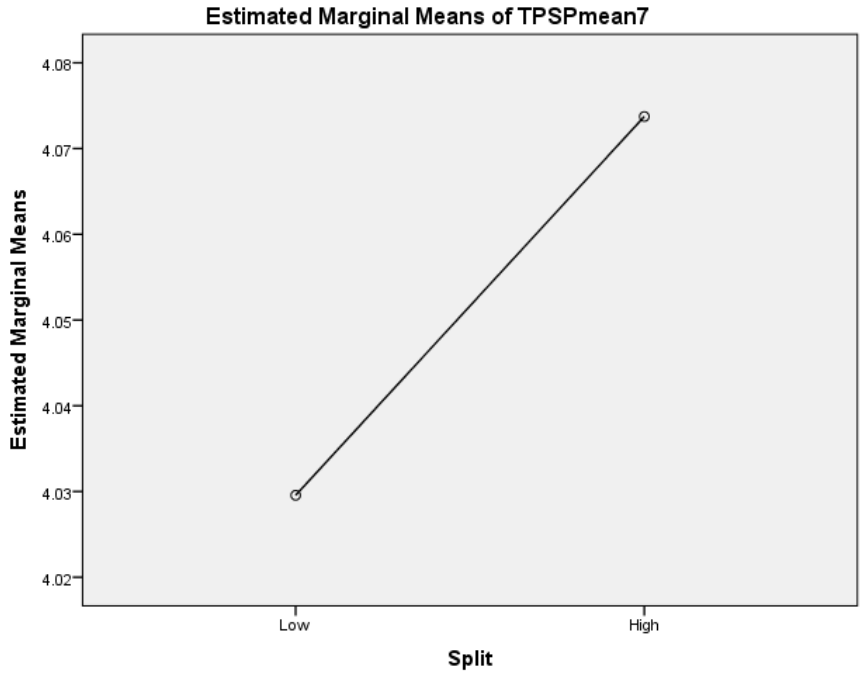
When the researcher examined the estimated marginal means there was a significant univariate effect for OCB, but not for performance, F(1, 87) = 6.55, p<.05, pN2 = .07. Participants with a leader with high PC (including the leaders themselves) had higher OCB scores PsyCap F(1, 87) = 4.40, p<.05, pN2 = .05.

Figure 7

Estimated Marginal Means Plots for (a) Psychological Capital, (b) Organizational Citizenship Behaviors, (c) Job Performance.




Estimated Marginal Means of OCB_SUM
Estimated Marginal Means
62.00
60.00
58.00
56.00
Low
High
Split


Estimated Marginal Means of TPSPmean7
Estimated Marginal Means
4.08
4.07
4.06
4.05
4.04
4.03
4.02
Low
High
Split

Summary

In this chapter, the researcher explored three research hypotheses designed to address three central hypotheses of this study, which was to evaluate a leader's ability to influence team outcomes. Specifically, a multi-level analysis was evaluated at three dimensions within the workplace. Results revealed leader's psychological capital did not predict team psychological capital. Further, leader's psychological capital (high versus low) did not predict team organizational citizenship behaviors or job performance.

The researcher conducted Post Hoc testing to explore the level 1 relationship between Psychological Capital, Organizational Citizenship Behaviors, and Job Performance. The simple regression found that the relationship at level 1 was consistent with previous research. The multivariate analysis found normality and the box test was not significant, therefore there was a small effect. Finally, the estimated marginal means showed a significant univariate effect for OCB, but not for performance. The researcher believes that additional quantitative research should be conducted at the 2nd level to determine if there is a relationship between the leader and the aggregate team, or if the relationships found at level 1 become diluted as you move from level 1 to level 2 and ultimately level 3, the organizational level.

Chapter 5 will discuss a detailed summary of the findings, contributions of this study, theoretical and practical implications, limitations, and future directions.

Chapter 5: Summary, Conclusions, and Recommendations

As individuals' psychological capital is associated with their job performance (Luthans, Avolio, et al., 2007), researchers have looked to increasing employee's psychological capital by increasing leadership's psychological capital (Rego et al., 2012). Thus far, the literature has shown that positive leadership and psychological capital are associated with employee's positive organizational behavior and job performance (Chen, 2015). However, the literature has called for more research on the role leadership plays in developing follower psychological capital (J. Avey et al, 2011) and the impact of leader's psychological capital on employee positive behaviors (Larson & Luthans, 2007) and job performance (Luthans, 2012). Additionally, researchers have called for more quantitative research examining psychological capital and its effects on the leader and follower relationship (J. B. Avey et al., 2011). Therefore, building upon the work of Chen (2015), this study sought to address this gap in the literature by examining if leader psychological capital influences team outcomes and desired organizational behaviors using multi-level statistical methods.

The current study addressed two gaps in the current literature. First, the current study adds to the small body of literature that explores how leader's psychological capital is associated with team outcomes (Chen, 2015). The literature shows that an individuals' psychological capital is associated with more organizational citizenship (Larson & Luthans, 2007) and better job performance (Luthans et al., 2010; Tüzün et al., 2018). Additionally, the literature shows a positive association between positive leadership and better team outcomes (Avey et al., 2008; Euwema et al., 2007; Luthans & Youssef, 2007; Wang et al., 2014). As these positive leadership techniques are based on similar positive psychological pedagogy as psychological capital (Luthans & Youssef, 2007), it was believed that leader psychological capital would improve

employee outcomes. This theoretical argument was supported by the work of Chen (2015). However, as Chen's (2015) study is the only study to date to examine this association, additional research was needed to both better understand the associations between leader psychological capital and employee outcomes. The current study adds to this small body of literature to provide more information on the association between leader psychological capital and employee work-related outcomes.

Second, there have been calls in the current literature for more studies to examine the association between leader positive behaviors and team outcomes using multilevel methods (Yammarino et al., 2008). Yammarino et al. (2008) noted that most of the studies they reviewed called for multilevel methods, particularly empirical studies. Multi-level research is important as it allows for more accurate and realistic models of organizational phenomena (Bliese et al., 2007). Organizations exist within different levels (e.g., individual, team, department; Rousseau, 1985) and these levels should be considered when attempting to understand these organizations. The current study addresses this methodological gap in the current literature by utilizing a multi-level methodology.

In the current chapter, the findings of the current study will be discussed within the context of previous literature. Recommendations for future research and implications for organizations will also be discussed.

Interpretation of Findings

Contrary to the hypotheses, the current study did not find that leader psychological capital was associated with follower psychological capital, organizational citizenship behaviors, or job performance. These results are contrary to previous literature using multilevel models to examine the association between leader psychological capital and employee outcomes (Chen,

2015) as well as other studies examining the association between individual psychological capital and organizational citizenship (Larson & Luthans, 2007) or job performance (Luthans et al., 2010; Tüzün et al., 2018). Though these results were unexpected, there are several methodological differences between the current study and previous literature (e.g., Chen, 2015) that may explain the differences in these findings. These methodological differences range from the population examined to the specific statistical methods used. These methodological differences may explain why the results of the current study differ from previous research. Methodological differences will be explored within each hypothesis.

RQ1: Does a leader's level of psychological capital influence team organizational citizenship behaviors and job performance?

H1: A leader's level of psychological capital has a positive relationship with their team's level of psychological capital. Contrary to Chen (2015), the current study did not find that leader's level of psychological capital was associated with follower psychological capital. There are several methodological differences between the current study and Chen's (2015) study that may explain these differing findings. The first difference is the population studied. Chen (2015) examined the association between leader psychological capital and follower psychological capital within a single organization in Taiwan. The current study utilized a sample of Americans who work across a variety of organizations. Some of the differences in findings between these study studies may be due to the different populations explored. Positive psychology does not give a specific theoretical explanation as to why these differences would exist between these two populations. There may be a specific organizational culture that exists in

the single organization examined by Chen (2015) that facilitated the association between leader psychological capital and follower psychological capital that is unique.

To further analyze the potentials cultural effects on the findings of this study the researcher explored Hofstede's Cultural Dimensions. These work-related cultural dimensions have been used in research over three decades to understand cross-cultural psychology and intercultural communication (Wu, 2006). In Hofstede's Cultural Dimensions 30 Years Later: A Study of Taiwan and the United States, author Ming-Yi Wu used Hofstede's five work-related cultural values to compare workplace culture in Taiwan and the United States. Wu's study showed that there have been significant changes when you look at work-related cultural values compared to Hofstede's studies in 1988 and 1981 (Wu, 2006).

Wu also found that when examining Power Distance, Uncertainty Avoidance, Masculinity, and Confucian Work Dynamics the US scored higher than the Taiwanese participants. Based on these findings Wu's research showed that when the political, societal, and economic environments change, people's cultural values also change (Wu, 2006. p. 41). Furthermore, Jogulu found that leadership styles differ based on cultural groups and suggest that perceptions of leadership are different depending on a person's cultural background (Jogulu, 2010). The current study outcome could therefore differ from Chen's findings because of the same cultural, political, societal, and economic environment differences among the participants.

Second, Chen (2015) utilized multiple time points in their study while the current study did not. Participant responses to the current study may have been impacted by response bias. For example, responses to the questions in the current study may have been impacted by the participant's mood or current day at work. As such, participants in a better mood may have responded more positively across the questionnaire, and participants in a worse mood may have

responded more negatively across the questionnaire. Utilizing multiple time points in data collection may have lessened any impact of response bias in Chen's (2015) study and resulting in a significant association.

The final methodological difference between the current study and Chen's (2015) that may, at least in part, explain the differing findings is the sample size. Though the current study included a sample size consistent with recommendations (Hox, 2010), it was still a relatively small sample size for multi-level research (McNeish & Stapleton, 2016). In comparison, Chen (2015) included a sample of 379 participants. Using a smaller sample size in multilevel statistical methods makes it more likely that a Type II error will occur (McNeish & Stapleton, 2016). It may be that with a larger sample, the current study may not have accepted the null hypothesis.

Though this finding differed from Chen (2015), these results are consistent with those of Ratzlaff (2017). Consistent with the current study (Ratzlaff, 2017) did not find that leader's psychological capital was associated with team aggregate psychological capital. The current study and Ratzlaff (2017) differ methodologically from Chen (2015) in the ways previously discussed. Both the current study and Ratzlaff (2017) utilized an American sample that worked at more than one organization. Both the current study and Ratzlaff (2017) included a smaller sample size compared to Chen (2015). The current study and Ratzlaff (2017) may have the same methodological issues that would hinder the ability to find the association between leader psychological capital and employee psychological capital (e.g., small sample size).

Interestingly, however, Ratzlaff (2017) did find that individual psychological capital was associated with individual work engagement levels. Such that an individual who reported higher levels of psychological capital reported more work engagement. Therefore, it may be that it is not methodological differences that underlie these differing findings, but that a leader's

psychological capital is only associated with employee psychological capital under certain conditions. These conditions may range from organizational culture or leadership to the broader culture one lives in. Chen (2015) did not report on the association between individual psychological capital and work engagement or job performance. Additional research is needed to (a) continue to explore the possible associations between leader's psychological capital and employee psychological capital and (b) understand the contexts under which leader psychological capital is associated with employee psychological capital.

H2: There will be a negative relationship between a leader with low psychological capital and team desirable organizational citizenship behaviors. The current study did not find that an individual's psychological capital was significantly associated with team organizational citizenship behavior. This finding is contrary to the current literature that examines psychological capital and organizational citizenship (J.B. Avey et al., 2011). In fact, in the meta-analysis conducted by J.B. Avey et al. (2011), there was a strong significant relationship between psychological capital and organizational citizenship, such that an individual with higher psychological capital reported more positive organizational behavior. Meta-analyses aggregate across multiple studies that utilize a variety of samples and methodologies to conduct statistical tests to discover the strength of the association between two variables (J.B. Avey et al., 2011). Thus, not finding this association in the current study is unexpected.

It is possible that the small sample size of the current study negatively affected the ability of the statistical methods used in the current study to identify relationships among the variables (McNeish & Stapleton, 2016). As stated previously, though the current study followed previous recommendations (Hox, 2010), it is a smaller sample size for multi-level methods and the use of small sample size in multi-level methods can increase the likelihood of a Type II error (McNeish

& Stapleton, 2016). As J.B. Avey et al. (2011) findings were a part of a meta-analysis, it is unlikely that sample characteristics in the current study influenced these differing findings as meta-analyses analyze findings across a variety of samples. The measure utilized in the current study is a validated measure that is used within the literature (Niehoff & Moorman, 1993). It also shows good reliability within the current study ($\alpha = .70$). Results also show that the data were distributed normally, and the assumption of homoscedasticity had been met. Therefore, it is unlikely that the lack of association was due to the measure utilized.

Additionally, leader group psychological capital was not significantly associated with organizational citizenship behavior. Previous literature has not specifically examined leader psychological capital and its association with organizational citizenship behavior. This hypothesis was built upon previous research showing that positive leadership styles were associated with better employee outcomes (Avey et al., 2008; Euwema et al., 2007; Wang et al., 2014; Youssef & Luthans, 2007). Expanding this theoretical perspective, therefore, it would be theoretically consistent to explore the association between leader psychological capital and employee organizational citizenship. However, based on the findings of the current study, positive leadership and leader psychological capital do not appear to be interchangeable.

One possible explanation for this lack of association is that psychological capital may not directly relate to actual leadership skills or behavior. Though psychological capital is associated with positive leadership techniques (Avey et al., 2008; Luthans & Youssef, 2007), the characteristics of psychological capital may not always transfer directly to relational behaviors. Leadership behaviors are skills that are learned through training or observing others. Regardless of psychological capital, if a leader is trained within an organization to use a more authoritative leadership style or if the organizational culture systematically encourages an authoritarian style,

the leader's psychological capital is less likely to have a positive influence on their employee's outcomes. Further research is needed to examine the correlation between leadership skills and PsyCap.

However, that does not mean that leader's psychological capital cannot influence their leadership and, in turn, influence their employee's outcomes. Psychological capital, transformational leadership, and authentic leadership are similar constructs (Avey et al., 2008; Luthans & Youssef, 2007). Research has also shown that higher psychological capital is associated with more authentic leadership (Luthans & Youssef, 2007). Therefore, it might be that specific leadership behaviors or styles mediate the association between leader psychological capital and employee outcomes. Therefore, this should be explored within future research.

H3: A leader with high psychological capital will have a positive relationship with team job performance. Contrary to previous literature (J. B. Avey et al., 2011; Luthans et al., 2007; Ratzlaff, 2017; Tüzün et al., 2018), an individual's psychological capital was not significantly associated with their job performance. The measurement of job performance may assist in explaining why the current study did not find this association when previous research had. Job performance can be measured in a wide variety of ways (Campbell & Wiernik, 2015; Sackett et al., 1988; Varela & Landis, 2010). And within the current literature examining the association between psychological capital and job performance, job performance has been measured in a variety of ways (J. B. Avey et al., 2011; Luthans, Avolio, et al., 2007; Ratzlaff, 2017; Tüzün et al., 2018). Take, for example, Ratzlaff's (2017) study. Though Ratzlaff's (2017) study was similar in terms of sample and statistical method, Ratzlaff (2017) examined employee engagement and patient satisfaction as job performance outcomes. These job performance outcomes are considerably different from those examined in the current study.

It may also be possible that aggregate measures of job performance do not reflect the process through which psychological capital impacts job performance. Researchers believe that psychological capital influences contextual job performance as this construct is related to the social aspects of one's job (Abramis & Beach, 2017; Luthans et al., 2007). Technical performance, on the other hand, may only be indirectly related to psychological capital through contextual performance. Therefore, combining these two dimensions of job performance hinders the ability to understand how psychological capital may affect each type. Though Chen (2015) similarly measured job performance, the author did not report the results of the association between individual psychological capital and job performance. Therefore, it is not known if the researcher found similar results or not.

Additionally, leader psychological capital was not significantly associated with team job performance, which is contrary to the findings of Chen (2015). As stated previously, there are several methodological differences between the current study and Chen (2015) that may, at least in part, contribute to the differing findings. These methodological differences (i.e., population studied, use of multiple time points, and sample size) may continue to be part of the explanation for the differing findings in the third hypothesis as well as the first. In the context of the current hypothesis, there are other methodological differences to consider as well.

In Chen's (2015) study, participants did not rate their job performance. The team leader reported on the employee's job performance 12 to 15 weeks after the employee rated their psychological capital and job engagement; both of which were collected at a different data collection wave than the leader's psychological capital. The current study used a self-report measure of job performance which may be more easily biased due to mood, how well the participant's day at work went the day they answered the survey or poor self-evaluation skills.

Second, the association between leader psychological capital and employee job performance was mediated through two other variables, follower psychological capital and job engagement. The current study did not find that leader psychological capital was associated with follower psychological capital and did not measure job engagement. It is possible that, consistent with Chen's (2015) findings, the association between leader psychological capital and job performance is not a direct association. As research shows that an individual's psychological capital is associated with their job performance (J. B. Avey et al., 2011; Luthans, Avolio, et al., 2007; Ratzlaff, 2017; Tüzün et al., 2018), it may be that a leader's psychological capital influences employee job performance through influencing employee psychological capital. That is, if a leader with high psychological capital is unable to improve their employee's psychological capital, they will not improve the employee's job performance. It should also be noted that job engagement is also associated with one's psychological capital (Ratzlaff, 2017), therefore, it may also be an important component of this pathway to consider.

Finally, the statistical methods used in Chen's (2015) study differed from the current study. As Chen (2015) had a larger sample size, the researcher was able to utilize more rigorous statistical methods, including bootstrapping and examining indirect effects. These methods were not used in the current study and may contribute, at least in part, to the differing findings in the current study.

Though these methodological differences may play an important role in understanding why the current study did not find the same results as Chen (2015), other factors may contribute as well. Overall, the reports of psychological capital and job performance were high. On both scales, the minimum was above the mid-point of the scale. Though the results show that these two variables were normally distributed and that the assumption of homoscedasticity had been

met, both variables were tightly distributed. For both variables, the standard deviation was less than ½ of a point on the individual scale. Leaders rated their psychological capital as quite high and had little variability in the responses.

These results raise some concerns regarding response bias. Individuals who had higher psychological capital or felt they had better job performance may have been more likely to respond to the survey. It is also possible that individuals responded to the survey when they were in a more positive mood or had a better day at work and were, therefore, more likely to respond favorably to the measures. Though Chen (2015) used remarkably similar measures to the current study, the author collected data at three different time points that were spaced 12 to 15 weeks apart and use multiple reporters to gather data.

Limitations

The findings of the current study should be considered within the context of several limitations. First, there may have been some response bias despite efforts to recruit participants using neutral language and assurances that their information would be unidentifiable. Overall, reports of psychological capital and job performance were high. It may be that participants who are happier at their job, enjoy their leader or team more, or feel more confident about their job performance were more likely to respond to the survey. Alternatively, it may be that participants felt some internal pressure to report socially desirable answers, particularly leaders who are reporting on their employee's performance, a common problem among momentary self-report methods (Stone & Shiffman, 2002). Future research should consider alternative methods to self-report data to avoid issues with response bias.

The second limitation to be considered is that the sample size included in the current study was small for multi-level methodology. Though the current study had a sample size

consistent with recommendations (Hox, 2010) and researchers have varying opinions about appropriate sample sizes (Maas & Hox, 2005), the overall sample was still smaller than usual for multi-level studies. The average number of groups included in prior multi-level models is about 50 (Maas & Hox, 2005) as this number of groups avoids statistical issues that can arise when using small sample sizes (McNeish & Stapleton, 2016). Therefore, it is possible that the smaller sample size in the current study made it difficult to find significant associations among the variables.

The final limitation to be considered regarding the current study is that the pool of leaders may not have been large enough for multilevel modeling. Though the sample size of the current study was consistent with recommendations (Hox, 2010) and a large pool of potential participants were used for recruitment, the ratio of leaders to followers was still relatively small (19.1% leaders). Once broken down into leaders with a high level of psychological capital (n = 9) and low levels of psychological capital (n = 8), the groups became smaller. While the current study is one of the few studies that addressed calls for more research that includes both leaders and followers in multilevel modeling (Sun Jung & Hyun Yoon, 2015), additional research is needed that utilizes both populations and this statistical method but with a larger sample of leaders.

Recommendations

There are several areas for additional research to address considering the limitations noted. The first direction that future research may consider is the use of methods other than self-report measures; specifically, the inclusion of experimental or observational methods. Self-report measures are common in the field (Howard, 2017) as well as previous studies that examine psychological capital, organizational citizenship, and job performance (J. B. Avey et al., 2011).

Researchers (Newman et al., 2014) have been specifically critical of using only self-report measures of psychological capital. However, these methods may result in increased response bias due to participants feeling internal social desirability pressure and/or are generally poor at reporting on their social capital, organizational citizenship, or job performance. The use of experimental or observational research would avoid these response biases, allowing the researcher to make more reliable measurements of psychological capital, organizational citizenship, and job performance.

In addition to the use of methods other than self-report, to further understand the associations between these three constructs, researchers may also consider the use of multiple measures of the same construct. Much of the current literature (J. B. Avey et al., 2011), including the current study, utilize one measure of each construct included in the study. Psychological capital, organizational citizenship, and job performance are all complex constructs consisting of different categories of behavior (Foote et al., 2008; Sackett et al., 1988). Just psychological capital alone consists of hope, efficacy, resilience, and optimism (Luthans et al., 2010). The measurement used in research should reflect the complexity of the constructs measured. Additionally, using more involved measures may yield findings that assist in our understanding of why these three constructs are or are not related to each other. And in turn, businesses and leaders can better understand the importance of improving psychological capital to increase organizational citizenship and job performance.

The final recommendation for future research is to examine the association between psychological capital, organizational citizenship, and job performance over time. Much of the current literature (J. B. Avey et al., 2011), including the current study, have only examined these constructs at a single time point. Though Chen (2015) used multiple time points, each construct

was only measured at one time point. Researchers have assumed that it is psychological capital that drives other behavior, but it is also possible that changes in one of the outcomes examined here (i.e., organizational behavior and job performance) influence psychological capital. That is a person who continues to get positive feedback on their job performance feels improvements in their psychological capital. Additionally, it is possible that an individual's responses to these questionnaires can be influenced by their overall mood. A person in a better mood may report more positively on their psychological capital and job performance and a person in a bad mood may report more negatively. Utilizing multiple time points can assist in removing this kind of response bias and begin to examine the direction of these associations.

Implications

Despite the limitations and questions for future research, the current study does reveal implications for practice that organizations and individual leaders should consider. The first of which is to focus on increasing individual psychological capital. The current study did not find that leader psychological capital was associated with follower's psychological capital, organizational citizenship, or job performance, but there is still a substantial literature showing that individual psychological capital is associated with job performance (Luthans, Avolio, et al., 2007). It might have been more cost-effective and faster to train leaders to increase their psychological capital, which in turn will improve follower's psychological capital, organizational citizenship, and job performance, but improving all employee's psychological capital still has several benefits for employees (e.g., wellbeing; Avey et al., 2011; employee creativity; Rego et al., 2012) and the organization (e.g., organizational commitment; Larson & Luthan, 2007). Therefore, organizations should continue to implement training and an organizational culture that improves psychological capital.

Second, as stated previously, it might be that leader's psychological capital does not influence follower's psychological capital or behavior as psychological capital may not directly translate to positive leadership skills. Therefore, organizations may consider training leaders on positive leadership behaviors. Transformational leadership or more supportive, caring leadership behaviors are associated with better team outcomes (Avey et al., 2008; Euwema et al., 2007; Wang et al., 2014). As such, organizations may consider training for leaders that focus on these leadership skills in addition to training all employees to improve their psychological capital. Improving both leadership skills and psychological capital can have a greater effect than training one of these areas alone (Youssef & Luthans, 2007a).

Businesses should continue to incorporate positive psychology into their organizational culture and leadership techniques. Though the current study did not find that leader's psychological capital was associated with follower's outcomes, several methodological considerations should be addressed by future research before determining that these constructs do or do not have worth for an organization. Moreover, this study is a single study within the growing literature on positive psychology in the workplace, with much of that literature showing that positive psychology has benefits for the organization and its employees (J. B. Avey et al., 2011). Organizations should consider the findings on the benefits of positive psychology in the workplace as a whole and should not make decisions on training or organizational culture based on a single study. As demonstrated by the post hoc analysis at level 1, the relationships did exist like previous literature. The literature shows the benefits of positive psychology, as well as improving psychological capital in a workforce (J.B Avey et al., 2011). Additional research with a larger number of participants is needed to further the body of knowledge on the effects of leader Psychological Capital on team outcomes and behaviors.

An additional implication of the research is the potential effect that culture may have on a leader's ability to display positive leadership traits such as PsyCap. A leader with high PsyCap may be limited in their ability to transfer PsyCap at the team or individual level if they are in a toxic or otherwise negative work culture that doesn't allow them to have a positive impact on their team. In organizations such as this, a fundamental culture change may be necessary for leaders to be able to be their true selves and thereby have a positive impact on teams. For this culture change to occur, organizations must allow leaders the autonomy to be authentic and the leaders must have the confidence to challenge the organizational status quote. If companies want to see positive organizational change, they may have to shake up every part of the organization and shake out the people who do not align with the emerging culture.

When leaders can shape company culture one with high PsyCap and a positive leadership style will have an impact and be able to influence across multiple levels of the organization. These leaders will have to have the confidence to challenge the company norms. Absent of the chance to do this at the organizational level, leaders must know that they can start incrementally at the individual report and aggregate team levels. As the literature has shown, leaders can have an impact on direct reports. They can affect their outcomes and behaviors as demonstrated in the findings of researchers such as Luthans, Avey, Chen, Avolio, Norman, and others. Leaders can make an impact in any cultural setting at the individual and team level but it depends on how they choose to show up every day and engage their team.

Finally, Psychological Capital and other positive leadership methodologies should be further researched using mixed methods research methodology to analyze the relationship between company culture and positive organizational behaviors. Further research is needed because organizations will benefit from a better understanding of how the leaders' ability to be

authentic at work impacts teams. Cultural diversity extends not only to diverse individuals but creating a conduit for them to share their diverse ideas and experiences to facilitate more effective decision-making. As organizations continue to face changes to the workplace, they must gain a better understanding of the benefits of positive organizational behaviors like PsyCap utilizing additional research to support organizational interventions

Conclusion

By examining the association between leader psychological capital and follower's psychological capital, organizational citizenship, and job performance using a multilevel statistical method, the current study addressed two gaps in the current literature. First, few studies (i.e., Chen, 2015; Ratzlaff, 2017) have examined how leaders' psychological capital is associated with their team's psychological capital, organizational behavior, and job performance. Second, there have been several calls in the current literature for additional quantitative studies on psychological capital (J. B. Avey et al., 2011) and studies that utilize multilevel methods (Yammarino et al., 2008).

Though the current study did not find that leader's psychological capital was associated with follower's psychological capital, organizational leadership, and job performance, the current study did showcase several methodological considerations for future research. Future research should consider examining the associations between psychological capital, organizational citizenship, and job performance over time, using non-self-report methodologies, and use multiple measures of each construct. In doing so, future research can begin to untangle these complex and interesting associations. Though the hypotheses in the current study were not supported, psychological capital still has important implications for organizations. Organizations

should still consider improving the psychological capital of its workforce to both improve organizational outcomes as well as the overall well-being of their employees.

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Appendix A: Recruitment Email Script

Participating Organizations

Hello XXXXXXX,
I hope you are doing well. I am currently working on my dissertation for the Ph.D. at The Chicago School of Professional Psychology. My purpose for reaching out to you is because I am connecting with my contacts to share details about the study and how they can participate or share with someone who they think might be interested in participating.

To help better explain the study to participants I have included a link to a brief video. The video takes around 5 minutes. I invite you to view the video link below and if interested in your organization or team participating, we can schedule some time to chat.

Finding Your Leadership H.E.R.Os: The Impact of leader psychological capital on team outcome and behaviors.
a dissertation study by Melonie Boone
https://youtu.be/hiyU2yDpQGE

Thank you in advance for your consideration. I look forward to hearing from you soon.
Melonie Boone
Doctoral Student, Organizational Leadership
The Chicago School of Professional Psychology
Business Psychology Department
mboone@ego.thechicagoschool.ed
Mobile: (312) 315-1522

Participant Email (sent by internal company representative)

Hello XXXXXXX,

[Company Name} is working with an independent researcher Melonie Boone who is currently working on her dissertation for the Ph.D. at The Chicago School of Professional Psychology. The purpose of this email is to reach out to employees who meet the criteria to participate in the study. Participation is completely voluntary, and you may opt out at any time.

To help better explain the study to participants I have included the attached brochure that will provide you with an overview of the study and what would be required to participate. Those who participate in the study will complete a survey that takes about 15 minutes. You will receive an email with the survey link from QuestionPro a data collection software. The survey will begin with an informed consent page detailing the study and any risks or benefits from participation.

Again, participation is completely voluntary, and you can opt out at any time. Information provide in the study will be confidential.

If you have any questions you may contact myself or the Independent Researcher:
Melonie Boone
Doctoral Student, Organizational Leadership
The Chicago School of Professional Psychology
Business Psychology Department
mboone@ego.thechicagoschool.ed
Mobile: (312) 315-1522

Thank you,
[Company Representative]

Appendix B: Consent Form

Informed Consent

Investigator: Melonie Boone

Study Title: The Impact of Leader Psychological Capital on Team Performance and Behaviors: A Multilevel Analysis | Finding Your Leadership H.E.R.Os

I am a student at The Chicago School of Professional Psychology. This study is part of my dissertation requirement for a Ph.D. in Organizational Leadership from the Business Psychology Program.

I am asking you to participate in a research study looking at the relationship between a leader's psychological capital and how it influences team outcomes and desired organizational behaviors. The study's findings will demonstrate how organizations and teams can benefit from developing leaders' psychological capital to positively impact the team's job performance and organizational citizenship behaviors. You will be asked to complete an online survey. The survey may take up to 20 minutes to complete. You will only need to take the survey once. Participation may cause you to feel uncomfortable as you reflect on your work behaviors and desired outcomes. Although you may not directly benefit, it will help to understand how leaders impact behaviors.

Please take your time to read the entire document and feel free to ask any questions before signing this document.

Purpose: The purpose of this study is to show that a leader's psychological capital influences team outcomes and desired organizational behaviors. The study's findings will demonstrate how organizations and teams can benefit from developing leaders' psychological capital to positively impact the team's job performance and organizational citizenship behaviors.

Procedures: You will be contacted by an internal company representative with information regarding this study. You will be assigned a random alpha numeric ID number as a measure to retain confidentiality. You are also required to acknowledge the informed consent page prior to completing the questionnaire.

Demographic information will be collected including age, race and ethnicity, gender identity, role, company name, years of experience current language skills, industry, department, supervisor (yes or no). Once completed, you will move on to the survey questionnaire comprised of the Psychological Capital Questionnaire (PCQ) - 12 (12 questions), Organizational Citizenship Behavior Five-Dimension Scale (20 questions) and Technical and Social

Performance Scale (7 questions). The survey questionnaire will be followed by a thank you message to participants.

Once completed all email addresses will be removed for the data file before analysis takes place. The completion of this questionnaire generally takes approximately 20 minutes or less to complete. You may choose to leave the study at any time and may also request that any data collected from you not be used in the study.

Risks to Participants: You may experience some discomfort as they reflect on your personal work experiences, behaviors, and performance outcomes. I will do my best to minimize this discomfort by ensuring that confidentiality is maintained by not citing your actual name within the real study. To further minimize discomfort, I used a concise survey that does not require a lot of time and only captures the information necessary to conduct a thorough study.

Every attempt will be made to maintain the strictest level of confidence however loss of confidentiality is a risk. You will be assigned a participant ID to limit the risk of a loss. To mitigate this risk of privacy concerns, I will present the results in an executive summary format using aggregated data versus providing your organizations with the raw data.

If you have questions about participating, please contact me at mboone@ego.thechicagoschool.edu

Benefits to Participants: You will not directly benefit from this study. However, I hope the information learned from this study may help the workplace by broadening our understanding of how leaders influence an employee.

Alternatives to Participation: Participation in this study is voluntary. You may withdraw from study participation at any time without any penalty.

Confidentiality: During this study, the information collected about you for this research includes age, gender, position, department, years of service, and English language fluency. You will be assigned a random ID number to guard the confidentiality of your responses and personal information. Access to information will be limited to myself and the dissertation committee only if needed. Research materials will be kept in a secure password-protected file for a minimum of five years after publication per the American Psychological Association guidelines.

Your data may be used for future research or distributed to another researcher without your consent. However, information that could identify you will be removed.

Your research records may be reviewed by federal agencies whose responsibility is to protect human subjects participating in research, including the Office of Human Research Protections (OHRP) and by representatives from The Chicago School of Professional Psychology Institutional Review Board, a committee that oversees research.

Questions/Concerns: If you have questions related to the procedures described in this document, please contact myself, Melonie Boone, Doctoral Student – The Chicago School of

Professional Psychology mboone@ego.thechicagoschool.edu – (312) 315-1522 or Dr. Maria Malayter, Department Faculty & Dissertation Chair - The Chicago School of Professional Psychology mmalayter@thechicagoschool.edu – (312) 329-6663

If you have questions concerning your rights in this research study, you may contact the Institutional Review Board (IRB), which is concerned with the protection of subjects in the research project. You may reach the IRB office Monday-Friday by calling 312.467.2343 or writing: Institutional Review Board, The Chicago School of Professional Psychology, 325 N. Wells, Chicago, Illinois, 60654.

Consent to Participate in Research

Participant:

> I have read the above information and have received satisfactory answers to my questions. I understand the research project and the procedures involved have been explained to me. I agree to participate in this study. My participation is voluntary. I can opt-out at any time, and I do not have to sign this form if I do not want to be part of this research project. I will receive a copy of this consent form for my records.

By selecting "I Consent" from the drop-down menu on this survey, you are consenting to participate in this research study.

Appendix C: Instruments

Psychological Capital Questionnaire (PCQ) – 12

Melonie Boone

Psychological Capital Questionnaire (PCQ-12)
Self-Rater Short Form

Name: _____ Date: _____

Instructions: Below are statements that describe how you may think about yourself **right now**. Use the following scale to indicate your level of agreement or disagreement with each statement.

Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
1	2	3	4	5	6

1.	I feel confident in representing my work area in meetings with management.	1 2 3 4 5 6
2.	I feel confident contributing to discussions about the organization's strategy.	1 2 3 4 5 6
3.	I feel confident presenting information to a group of colleagues.	1 2 3 4 5 6
4.	If I should find myself in a jam at work, I could think of many ways to get out of it.	1 2 3 4 5 6
5.	Right now I see myself as being pretty successful at work.	1 2 3 4 5 6
6.	I can think of many ways to reach my current work goals.	1 2 3 4 5 6
7.	At this time, I am meeting the work goals that I have set for myself.	1 2 3 4 5 6
8.	I can be "on my own," so to speak, at work if I have to.	1 2 3 4 5 6
9.	I usually take stressful things at work in stride.	1 2 3 4 5 6
10.	I can get through difficult times at work because I've experienced difficulty before.	1 2 3 4 5 6
11.	I always look on the bright side of things regarding my job.	1 2 3 4 5 6
12.	I'm optimistic about what will happen to me in the future as it pertains to work.	1 2 3 4 5 6

Organizational Citizenship Behavior Five-Dimension Scale

Organizational Citizenship Behavior Checklist (OCB-C) 20 Item

How often have you done each of the following things on your present job?	Never	Once or twice	Once or twice per month	...
1. Picked up a meal for others at work	1	2	3	4 5
2. Took time to advise, coach, or mentor a co-worker.	1	2	3	4 5
3. Helped co-worker learn new skills or shared job knowledge.	1	2	3	4 5
4. Helped new employees get oriented to the job.	1	2	3	4 5
5. Lent a compassionate ear when someone had a work problem.	1	2	3	4 5
6. Lent a compassionate ear when someone had a personal problem.	1	2	3	4 5
7. Changed vacation schedule, workdays, or shifts to accommodate co-worker's needs.	1	2	3	4 5
8. Offered suggestions to improve how work is done.	1	2	3	4 5
9. Offered suggestions for improving the work environment.	1	2	3	4 5
10. Finished something for a co-worker who had to leave early.	1	2	3	4 5
11. Helped a less capable co-worker lift a heavy box or another object.	1	2	3	4 5
12. Helped a co-worker who had too much to do.	1	2	3	4 5
13. Volunteered for extra work assignments.	1	2	3	4 5
14. Took phone messages for an absent or busy co-worker.	1	2	3	4 5
15. Said good things about your employer in front of others.	1	2	3	4 5
16. Gave up a meal and other breaks to complete work.	1	2	3	4 5
17. Volunteered to help a co-worker deal with a difficult customer, vendor, or co-worker.	1	2	3	4 5

18. Went out of the way to give co-worker encouragement or express appreciation.	1 2 3 4 5
19. Decorated, straightened up, or otherwise beautified common workspace.	1 2 3 4 5
20. Defended a co-worker who was being "put-down" or spoken ill of by other co-workers or supervisor.	1 2 3 4 5

Technical and Social Performance Scale

In the last (seven days/week you worked), how well were you	Very Poorly Not Very Well Alright
Technical Performance	
1. Handling the responsibilities and daily demands of your work?	1 2 3 4 5
2. Making the right decision?	1 2 3 4 5
3. Performing without mistakes?	1 2 3 4 5
4. Getting things done one time?	1 2 3 4 5
Social Performance	1 2 3 4 5
5. Getting along with others at work?	1 2 3 4 5
6. Avoiding arguing with others?	1 2 3 4 5
7. Handling disagreements by compromising and meeting other people half-way?	1 2 3 4 5