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The Relationship Between Cross-Cultural Psychological Capital and Organizational Commitment

Steven Andrew Snell
Walden University

Walden University

College of Social and Behavioral Sciences

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Steve Snell

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Review Committee
Dr. Derek Rohde, Committee Chairperson, Psychology Faculty
Dr. Brian Cesario, Committee Member, Psychology Faculty
Dr. Samuel Taylor, University Reviewer, Psychology Faculty

Chief Academic Officer and Provost
Sue Subocz, Ph.D.

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Abstract

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Dissertation Submitted in Partial Fulfillment

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Abstract

For many organizations, the cultural demographics of the workforce reflect the growing diversity of the global workforce. Effective intercultural interactions require individuals to have several personal psychological resources, including cross-cultural psychological capital (PsyCap). Without such resources, employees may not have the ability to effectively work with individuals from other cultures, making working in these environments stressful. These stressful situations may negatively impact employee commitment levels, potentially increasing turnover rates. The purpose of this study was to explore the influence that employees' cross-cultural PsyCap has on their organizational commitment (OC) as indicated by the three-component model of OC. To date, researchers have not explored the influential relationship between cross-cultural PsyCap and OC; this study aimed to fill that gap using health care employees. This quantitative study collected data from 382 participants through online surveys and used partial least squares, structured equation modeling (PLS-SEM) to analyze the cross-cultural PsyCap and OC relationships. After measurement and structural model evaluation, findings indicated statistically significant positive relationships between cross-cultural PsyCap and affective and normative commitment. Additionally, findings showed no significant difference in the relationship based on the employees' type of employment. The results of this study may provide positive social change through insights to organizations concerning the positive organizational outcomes (i.e., OC) that organizations can achieve through increasing cross-cultural PsyCap through training and development sessions.

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Dedication

This dissertation is dedicated first and foremost to my family, who have provided unwavering support throughout my education. To my wife Deanne, my son Colden, and my daughter Deklyn, your patience and support have given me the motivation to complete this dissertation. To each of you, thank you, I hope this dissertation shows that dreams can be pursued and achieved. I hope this dissertation provides an inspiration that instills a life-long love of learning in each of you. Finally, I hope that witnessing the challenges that have been overcome and the successes that have been achieved illustrate that perseverance in your endeavors will lead you to outstanding accomplishments.

Acknowledgments

This work has been guided by my committee members and inspired by my family. Dr. Derek Rohde guided and encouraged the development and execution of this study, and Dr. Brian Cesario provided the scholarly rigor to hold the study to the highest standards. My wife, Deanne, and children, Colden and Deklyn, inspired me first to pursue a master's degree and second, a Ph.D. This inspiration helped push me through the difficult times, through the times of uncertainty, and through the times where I lacked confidence. I will always be grateful to each of these individuals and for their contributions to this final product.

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Chapter 1: Introduction to the Study

Introduction

Advancements in communication and transportation technologies have contributed to increased globalization worldwide, resulting in many organizations becoming more culturally diverse than ever before (Christensen & Kowalczyk, 2017; Wood & Wilberger, 2015). The advantages of a diverse workforce, such as improved customer focus and satisfaction, a broader skills base (O'Neill, 2016), and higher motivation (Kotze & Massyn, 2019), are well-known. Employees' ability to interact within these multicultural environments can enhance or detract from the positive organizational outcomes their organizations are hoping to achieve (Adler & Aycan, 2018). Researchers have suggested that in multicultural organizations, employees may struggle with cultural competency. The adverse effects of these struggles impact not only the intercultural interactions between employees and positive organizational outcomes (Adler & Aycan, 2018) but also the psychological health and well-being of the employees within the organization (Blanchet-Garneau & Pepin, 2015; Kotze & Massyn, 2019).

In their annual review on psychological capital (PsyCap), Luthans and Youssef-Morgan (2017) suggested that while there is a modest body of research on PsyCap, further research is required to understand better how PsyCap functions under context-specific conditions. In making this suggestion, Luthans and Youssef-Morgan highlighted cross-cultural and culturally diverse contexts as a research area needing development. Consequently, Dollwet and Reichard (2014) conceptualized cross-cultural PsyCap as a distinct collection of personal psychological resources which allows individuals to

positively adjust to cross-cultural interactions in culturally diverse workplaces (Kotze & Massyn, 2019; Maslakci & Sesen, 2019; Yunlu & Clapp-Smith, 2014). Studies have shown that high cross-cultural PsyCap is associated with a higher likelihood of positive inter-cultural interactions (Dollwet & Reichard, 2014) and specific positive organizational outcomes such as employee engagement (Kotze & Massyn, 2019). However, there is limited knowledge of how positive interactions impact other positive organizational outcomes such as organizational commitment (OC).

Researchers have identified OC as a positive organizational outcome crucial to employees' performance and turnover intentions (Allen & Meyer, 1996; Meyer et al., 2002; Meyer et al., 2004). While the benefits of improved performance to both employees and the organization are apparent, the benefits of reduced turnover intentions may be just as significant. Researchers have been aware of numerous consequences of turnover for many years, including increased costs related to recruitment, training, and development, disruption in operations, and the demoralization of those who remain (Abbasi & Hollman, 2000; Staw, 1980). However, research conducted using nurses in health care organizations has identified that turnover increased costs related to recruitment and replacement (Halter et al., 2017) decreased productivity, increased the pressure on those that remained, and led to reduced patient outcomes (Dewanto & Wardhani, 2017; Hayes et al., 2006).

This study examines the important relationship between cross-cultural PsyCap and OC for employees in a multicultural workplace such as a health care organization. The study will add to the body of knowledge highlighting the relationship between cross-

cultural PsyCap and positive organizational outcomes, further contributing to the development of the construct while also providing support for achieving social change through improving cultural competence within multicultural workplaces.

Background

Globalization has changed organizations and the cultural demographics represented in workforces worldwide (Wood & Wilberger, 2015). More than ever before, changes in the cultural demographics of organizations' workforces have created scenarios where employees must develop and leverage new skills to successfully work with co-workers from different cultures who may speak other languages and have different beliefs (Dollwet & Reichard, 2014). While research has shown numerous advantages to culturally diverse workforces, including increased employee motivation (Kotze & Massyn, 2019) and increased job satisfaction (Bergheim et al., 2015), the psychological resources used to function effectively across different cultures to achieve those results are of vital importance. This study will address a gap in the literature about cross-cultural PsyCap and the predictive relationship between cross-cultural PsyCap and OC in multicultural organizations.

Psychological Capital

PsyCap is a psychological state of development based on the personal psychological resources of hope, efficacy, resilience, and optimism (Luthans & Youssef-Morgan, 2017), commonly referred to by the acronym HERO. PsyCap, as a construct, was developed under the broader movements of positive organizational behavior (POB), positive organizational scholarship (POS), and most broadly, positive psychology (PP).

These areas of psychology, along with PsyCap as a construct, focus primarily on individuals' positive experiences and traits rather than the maladaptive behaviors individuals engage in (Seligman, 2019). However, to be included within these domains of psychology, PsyCap must also display several other characteristics, including being state-like and context-specific (Luthans & Youssef-Morgan, 2017). State-like, in this context, means that PsyCap is somewhat flexible, and employees can develop their PsyCap through external interventions such as training and development sessions (Dollwet & Reichard, 2014; Luthans & Youssef-Morgan, 2017). Context or domain-specificity implies that PsyCap can change in different contexts, such as a workplace or educational setting, whereas a person may have high levels of HERO in one, and they may have much lower levels in the other (Dollwet & Reichard, 2014; Luthans & Youssef-Morgan, 2017). PsyCap is also a higher-order construct as it is a latent variable that is observable through the combination of the HERO psychological resources. As such, researchers often measure PsyCap through questionnaires that have individual scales reflecting each of the individual HERO components. PsyCap studies have found positive relationships between PsyCap and job satisfaction (Badran & Youssef-Morgan, 2015; Bergheim et al., 2015) while also identifying correlations between positive safety perceptions and high levels of PsyCap (Bergheim et al., 2015). Other research has suggested that employees who experienced positive PsyCap were more likely to engage in organizational citizenship behaviors, and team leaders' learning values and optimism strengthened the relationship (Bogler and Somech, 2019).

Additionally, Firestone and Anngela-Cole (2016) found evidence suggesting a relationship between certain quality of life factors external to an organization and PsyCap. The researchers found that the psychological resources that combine to form PsyCap (i.e., HERO) could be measured reliably in non-profit organizations. Results were consistent with previous data specific to for-profit organizations. However, not all studies on PsyCap have achieved positive results; Idris and Manganaro (2017) could not find any significant relationships between PsyCap, job satisfaction, and OC for a specific population of Saudi Arabian petrochemical workers. These results aside, the preponderance of studies have shown that higher levels of PsyCap are generally associated with high levels of positive outcomes for employees and organizations.

Cross-Cultural Psychological Capital

Whereas PsyCap is a psychological state of development based on HERO (Luthans & Youssef-Morgan, 2017), cross-cultural PsyCap extends the construct into the domain of intercultural interactions within a multicultural workplace (Dollwet & Reichard, 2014). Recalling the domain-specificity of the PsyCap construct, cross-cultural PsyCap focuses on the HERO psychological resources in terms of interactions that occur between individuals from different cultures within the workplace (Dollwet & Reichard, 2014). It is less concerned with how individuals feel about their ability to complete their work successfully and more concerned with their perceptions and feelings towards their ability to successfully navigate and interact among diverse groups of individuals within a work environment. Similar to PsyCap, cross-cultural PsyCap is a latent variable observable through the cross-cultural HERO components. However, the differentiation

between the HERO and the cross-cultural HERO scales is essential as the scales measure different resources and may provide profoundly different results. While the workplace hope scale intends to measure an employee's ability to set and achieve goals related to their work, the *cross-cultural hope* scale changes the focus to the measure from work activities to intercultural interactions (Dollwet & Reichard, 2014). While the psychological resource is similar, the target of the resource is vastly different. To this end, Dollwet and Reichard (2014) adapted Luthans et al.'s (2007a) PsyCap questionnaire to measure cross-cultural PsyCap related to intercultural interactions in organizations comprised of a culturally diverse group of employees. The researchers analyzed the tools for psychometric properties, and the result indicated that the tools measuring cross-cultural PsyCap were measuring a distinct construct. Other cross-cultural PsyCap studies have found cross-cultural PsyCap to be an indicator of cultural competence and suggested increased PsyCap/cultural competence resulted in higher levels of employee well-being in a group of South African employees (Kotze & Massyn, 2019). A study using a sample of hospitality employees in Northern Cyprus further identified that cross-cultural PsyCap assisted with intercultural competencies and that cross-cultural PsyCap mediated the relationship between multicultural personality traits and perceived service quality (Maslakci & Sesen, 2019). Finally, Yunlu and Clapp-Smith (2014) also adapted the PsyCap questionnaire. Their research found that cross-cultural PsyCap was strongly related to motivational cultural intelligence and metacognitive awareness; Yunlu and Clapp-Smith also confirmed while the three constructs are conceptually similar, they are distinctly separate. These findings support the results found in the earlier studies on

PsyCap in terms of the relationship with positive organizational outcomes; however, the domain of intercultural interactions in multicultural workplaces has only received minimal examination, and gaps remain in current literature. In particular, gaps in the literature remain in terms of intercultural interactions related to other positive organizational outcomes such as OC.

Organizational Commitment

Research on OC has continued to grow exponentially since the mid-1970s (Mowday, 1998); however, in terms of construct popularity, few OC constructs could compare to the popularity achieved by Meyer and Allen's (1991) three-component model of OC. Initially, Allen and Meyer defined OC as "a psychological link between the employee and his or her organization that makes it less likely that the employee will voluntarily leave the organization" (Allen & Meyer, 1996, p. 252). Subsequently, Meyer and Herscovitch (2001) developed a more generalized definition of OC by developing a general workplace commitment model. Meyer and Herscovitch proposed a new definition where "commitment is a force that binds an individual to a course of action of relevance to one or more targets" (p. 301). This new definition highlights that the individual/employee may be bound to something else such as their supervisor or a specific project rather than the organization. The literature on the three-component model of commitment separates the various concepts of OC into three main components, affective commitment (AC), normative commitment (NC), and continuance commitment (CC; Meyer & Allen, 1991). While AC is understood to describe an employee's emotional attachment towards an organization (Allen & Meyer, 1996), other

characteristics include a desire to pursue an action relevant to a target to which the employee is emotionally attached (Meyer & Herscovitch, 2001). NC is commonly understood to describe a sense of obligation towards an organization (Allen & Meyer, 1996); however, NC is also used to indicate a feeling that an individual is obligated to engage in a particular action or behavior relevant to a target (Meyer & Herscovitch, 2001). Finally, researchers often define CC as commitment based on the cost of alternatives (Allen & Meyer, 1996); however, they may also define CC in terms of the costs associated with ceasing a behavior or action relevant to a target (Meyer & Herscovitch, 2001). Studies on AC have shown a robust correlation with other positive organizational outcomes (Meyer et al., 2002; Meyer et al., 2004), including a predictive relationship with turnover. However, a few studies have shown in certain cultural contexts (i.e., collectivist cultures) that NC is a stronger predictor of turnover than AC (Chang et al., 2007; Vandenberghe, 2003). Similar to NC, some studies have shown cultural context to have an impact on CC. Certain cultures will seek to remove ambiguity by establishing precise alternatives and, as such, often exhibit much higher levels of CC as they perceive higher costs and fewer viable alternatives (Chang et al., 2007). While studies have found there to be a net positive correlation between PsyCap and OC (Hussain & Nawaz, 2019; Sen et al., 2017; Surucu et al., 2020; Yildiz, 2018), there remains a gap when it comes to the relationship between domain-specific PsyCap (i.e., cross-cultural PsyCap) and OC. It remains to be seen whether a similar relationship will endure in a different context. This study will examine that gap and highlight the specific

relationships between the psychological resources in cross-cultural PsyCap and each of the three components under OC.

Problem Statement

Organizations continue to pursue opportunities to establish a competitive advantage within a globalized environment (Christensen & Kowalczyk, 2017; Wood & Wilberger, 2015). The development of workplace PsyCap in employees, including context-specific forms, such as cross-cultural PsyCap, have been suggested as avenues through which organizations can build and maintain a competitive advantage in globally competitive marketplaces (Luthans & Youssef-Morgan, 2017). Furthermore, the collection of cross-cultural psychological resources that form cross-cultural PsyCap may indicate individual employees' ability to develop the cross-cultural competencies needed to succeed within culturally diverse work contexts (Dollwet & Reichard, 2014; Kotze & Massyn, 2019). Emerging research specific to cross-cultural PsyCap has provided some encouraging results about the positive relationships between cross-cultural PsyCap and specific positive organizational outcomes such as employee well-being (Kotze & Massyn, 2019) and service quality (Maslakci & Sesen, 2019). However, many other positive outcomes, such as OC, have yet to be explored (Kotze & Massyn, 2019; Maslakci & Sesen, 2019).

The specific problem is that as workplaces become more culturally diverse, it is essential to explore how organizations can leverage positive psychological resources to enhance AC, NC, and CC. Yet, the nature of cross-cultural PsyCap's influence on OC is unclear. Results from existing research indicate that cross-cultural PsyCap has a positive

effect on workplace well-being and a negative impact on burnout (Kotze & Massyn, 2019). However, to continue developing the intercultural interaction domain of the construct, further exploration into cross-cultural PsyCap's influence on positive organizational outcomes (Kotze & Massyn, 2019) and generalization of the construct in different industries (Maslakci & Sesen, 2019) must occur. Although globalization and social equality continue to influence and increase cultural diversity within organizations, employees' cultural competence has not increased at the same level. Suppose organizations do not acknowledge and address this disparity. In that case, they will not be able to leverage the advantages of a culturally diverse workforce, and employees may experience adverse psychological effects, resulting in reduced organizational success.

Purpose of the Study

The purpose of this quantitative correlational research is to explore the nature of the relationship between cross-cultural PsyCap and OC for employees at a health care organization in Canada. This study defines cross-cultural PsyCap as a context-specific form of PsyCap consisting of several specific psychological resources (Kotze & Massyn, 2019). The personal psychological resources included in this definition are cross-cultural hope, cross-cultural self-efficacy, cross-cultural resilience, and cross-cultural optimism (Kotze & Massyn, 2019). This study defines OC as a psychological attachment between the employee and the organization consisting of three sub-dimensions including AC (employees' emotional attachment), NC (employees' sense of obligation), and CC (employees' evaluation of loss if they were to leave; Peng et al., 2013). The personal psychological resources that make up cross-cultural PsyCap are the latent variables

contributing to cross-cultural PsyCap, the predictor variable. Similarly, AC, NC, and CC are the criterion variables contributing to overall OC.

The results of this study may help advance current theory on cross-cultural PsyCap. The results of this study may also contribute to the development of training and development interventions within Canadian health care organizations through highlighting the value, in terms of positive organizational outcomes, of developing and supporting employees' intercultural interaction skills.

Research Questions and Hypotheses

The following research questions and hypotheses were used in the current study and are visually depicted in Figures 1, 2, 3, and 4.

RQ1 – Quantitative: What is the nature of the relationship between cross-cultural PsyCap and the AC component of OC in employees at a Canadian health care organization?

$H_0$1 – There is no statistically significant, positive relationship between cross-cultural PsyCap and the AC component of OC in employees at a Canadian health care organization.

H_a1 – There is a statistically significant, positive relationship between cross-cultural PsyCap and the AC component of OC in employees at a Canadian health care organization.

RQ2 – Quantitative: What is the nature of the relationship between cross-cultural PsyCap and the NC component of OC in employees at a Canadian health care organization?

$H_0$2 – There is no statistically significant, positive relationship between cross-cultural PsyCap and the NC component of OC in employees at a Canadian health care organization.

H_a2 – There is a statistically significant, positive relationship between cross-cultural PsyCap and the NC component of OC in employees at a Canadian health care organization.

RQ3 – Quantitative: What is the nature of the relationship between cross-cultural PsyCap and the CC component of OC in employees at a Canadian health care organization?

$H_0$3 – There is no statistically significant, positive relationship between cross-cultural PsyCap and the CC component of OC in employees at a Canadian health care organization.

H_a3 – There is a statistically significant, positive relationship between cross-cultural PsyCap and the CC component of OC in employees at a Canadian health care organization.

RQ4 – Quantitative: Does Canadian health care organization employees' type of employment influence the relationship between their cross-cultural PsyCap and OC?

$H_0$4 – Canadian health care organization employees' type of employment does not influence the relationship between their cross-cultural PsyCap and OC.

H_a4 – Canadian health care organization employees' type of employment influences the relationship between their cross-cultural PsyCap and OC.

Figure 1

Research Question 1

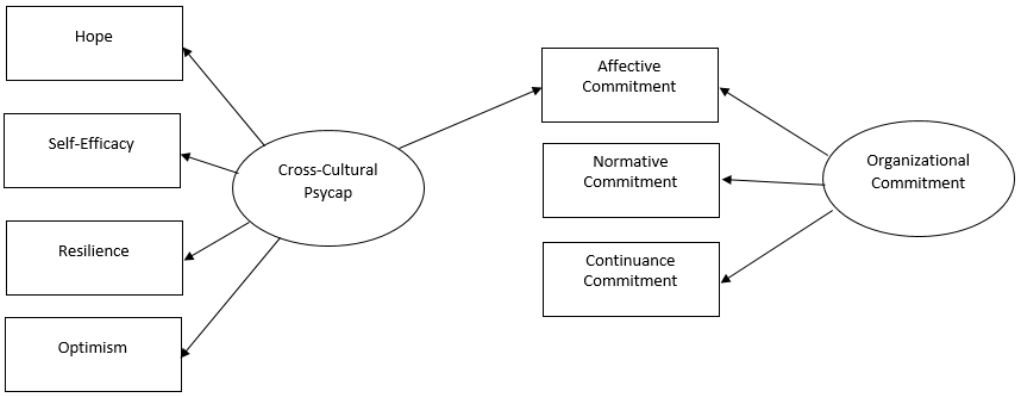


Figure 2

Research Question 2

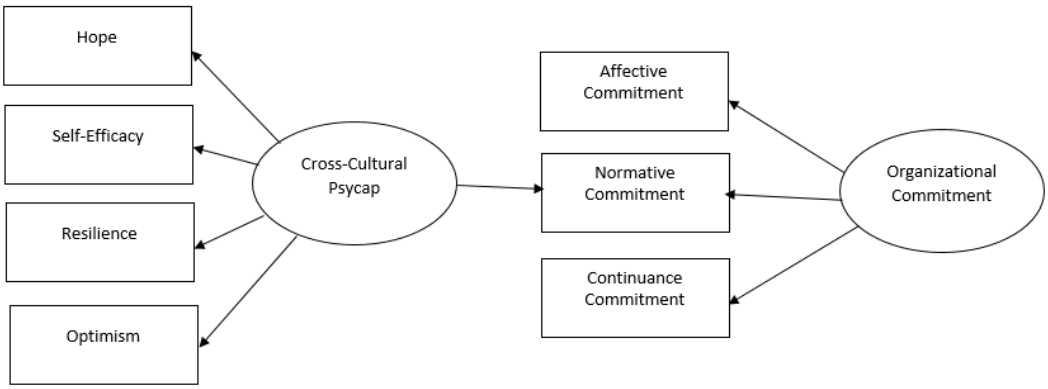


Figure 3

Research Question 3

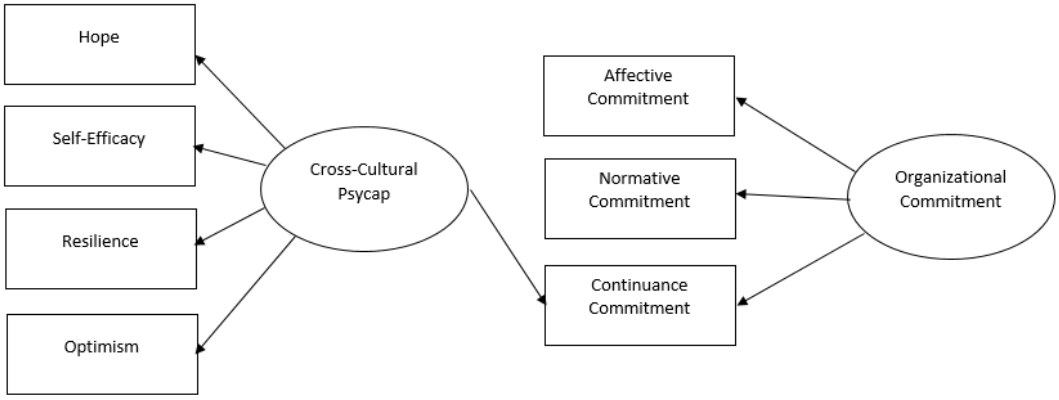
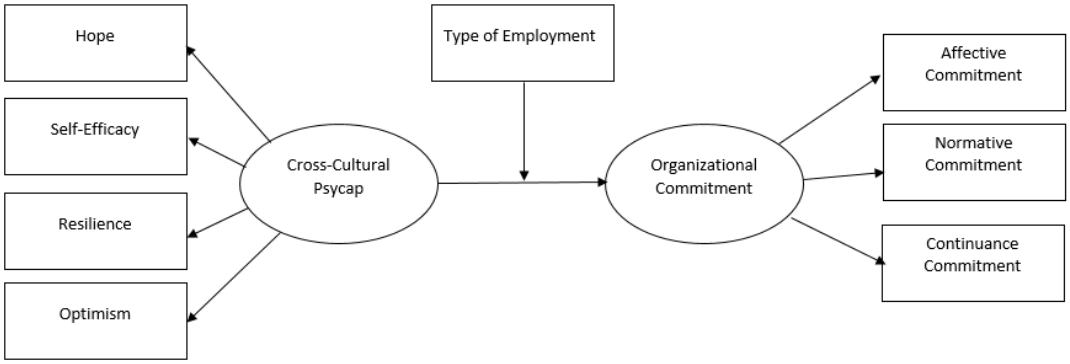


Figure 4

Research Question 4



Theoretical Framework

The theoretical base for this study is Hobfoll's (1989) theory of the conservation of resources (COR). Hobfoll's COR theory is a stress and motivation theory that identifies that employees who have or gain resources, including psychological resources, will pursue more resources to maintain their resources and prevent against future loss (Hobfoll, 2011). The theory of COR is rooted in four principles: 1) resource loss is disproportionately more impactful than resource gain, 2) resources must be invested to

prevent loss, to maintain, or to gain other resources, 3) when resources are low, or resource loss is high, resource gain becomes more significant and valuable, and 4) individuals will act defensively or in desperation to protect what they have when resources are scarce (Hobfoll et al., 2018). These principles assist in understanding the motivations behind an employee's response to stress and challenges in the workplace (Hobfoll, 2011). For example, if an employee's health, well-being, family, or sense of self are at risk, the behaviors the employee engages in to respond to the threat are understandable in the context of the four principles of COR theory.

Liu (2014) described cross-cultural PsyCap as "a type of cross-cultural dynamic competency in the family of personal resources" which "can be regarded as a cross-cultural personal resource in Hobfoll's COR theory's resource family" (p. 83). In practical terms, this means that individuals who develop (or already have) the personal psychological resources that make up cross-cultural PsyCap will actively seek to maintain or increase those resources through increased competence (Kotze & Massyn, 2019). To grow, maintain, or even protect against loss, the individual will have to invest a certain amount of their already existing resources. Furthermore, Hobfoll (2011) suggested individuals who have significant psychological resources may exhibit more resilience in stressful situations. This suggestion aligns with the conceptualization of resilience in cross-cultural PsyCap; individuals are more likely to achieve better results when confident in their ability to overcome communication issues and other obstacles when interacting with individuals from different cultures.

Consistent with COR theory, OC is a psychological state in which employees evaluate their relationship with the organization and subsequently decide whether they will stay with the organization or leave (Meyer & Allen, 1991). As such, any loss in resources that contribute to a positive evaluation of the relationship would be disproportionately more impactful than any increase (i.e., the primacy of loss). Additionally, Hobfoll's (2011) conceptualization of resource caravan passageways suggests that the environmental conditions in which employees operate (i.e., physical conditions, organizational culture) either enhance or impede the process of resource loss, maintenance, or development. In terms of OC, employees will strive to sustain or increase resources, particularly those that contribute to a positive evaluation of their relationship with the organization. The improved assessment of the employee-organization relationship reflects an increase in one or more components of commitment. However, organizational factors external to the employee influence an employee's ability to gain, maintain, or even lose resources, resulting in either stress or motivation, which are central to COR theory. Previous research has shown positive correlations between specific personal psychological resources such as optimism, hope, and self-efficacy and the components of OC (Durukan Kose et al., 2018; Yildiz, 2018). However, such results have not been generalized to the domain of intercultural interactions.

Nature of the Study

The nature of this study was quantitative research using a cross-sectional, correlational design and self-reported data collected through surveys. This study was designed to focus on the nature of the relationship between cross-cultural PsyCap and

OC. As such, the study was well-suited to a cross-sectional design using an online survey method (Creswell & Creswell, 2018). Furthermore, as Groves et al. (2009) discussed, while there is no one ideal method for every situation, some research methods more than others serve better for certain research attributes and scenarios. For example, health care organizations may have workforces in the tens of thousands of employees (or more). As such, an online survey tool is a cost-effective method of reaching out to a large population of employees who may work at numerous different facilities in several other geographic locations.

The cross-sectional design also captured the participants' self-reported data at the point in time when they were answering the survey. Capturing the data in this way was important as cross-cultural PsyCap is a state-like resource (Dollwet & Reichard, 2014). Although state-like resources are more stable than pure states, state-like resources are still malleable and can change due to external influences, particularly over extended periods (Luthans & Youssef-Morgan, 2017). In a longitudinal design, factors such as changes in leadership, organizational culture, or even employment level (i.e., front-line, supervisory, etc.) can influence a malleable state-like resource such as cross-cultural PsyCap, which may confound the results. Additionally, prior literature (e.g., Kotze & Massyn, 2019; Maslakci & Sesen, 2019) has established that a cross-sectional design is acceptable for research on this topic, and more analysis of this type is needed to inform the literature in this area better.

This research was well-suited to a quantitative approach. The survey collected self-reported data on cross-cultural PsyCap and OC from a population of employees at a

large health care organization in Canada. The intention was that the representative sample would consist of three different employment groups proportionate to the size of the existing groups within the population. The predictor variable in this research, cross-cultural PsyCap, reflects the personal cross-cultural psychological resources (i.e., cross-cultural HERO). In contrast, OC is a reflective variable consisting of the three components of commitment (i.e., affective, normative, and continuance), which are the criterion variables. Cross-cultural PsyCap was measured using Dollwet and Reichard's (2014) 20-item cross-cultural PsyCap scale. OC was measured using Meyer and Herscovitch's (2001) revised version of Meyer and Allen's (1991) three-component model of employee commitment scale; the revised version uses 18-items across three scales to measure the three components of OC.

Definition of Terms

The following terms are operationalized for the study as follows:

Affective commitment: Affective commitment describes an employee's "identification with, involvement in, and emotional attachment to the organization" (Allen & Meyer, 1996, p. 253).

Continuance commitment: Continuance commitment describes an employee's "commitment based on the employee's recognition of the costs associated with leaving the organization" (Allen & Meyer, 1996, p. 253).

Cross-cultural hope: Cross-cultural hope refers to a personal psychological resource focused on "pursuing and meeting goals related to working with people from different cultures" (Dollwet & Reichard, 2014, p. 1672).

Cross-cultural optimism: Cross-cultural optimism is a personal psychological resource focused on being able to "remain positive and motivated during cross-cultural interaction" (Kotze & Massyn, 2019, p. 2)

Cross-cultural psychological capital: Cross-cultural psychological capital describes a state-like, context-specific construct where the psychological resources of cross-cultural hope, cross-cultural self-efficacy, cross-cultural resilience, and cross-cultural optimism are applied directly to inter-cultural interactions in the workplace (Dollwet & Reichard, 2014).

Cross-cultural resilience: Cross-cultural resilience refers to a personal psychological resource focused on employees being "able to keep up their performance despite obstacles, such as language difficulties, cross-cultural conflict or other cross-cultural issues" (Kotze & Massyn, 2019, p. 2).

Cross-cultural self-efficacy: Cross-cultural self-efficacy is a personal psychological resource focused on having confidence in one's own ability to interact and communicate with employees from different cultural groups (Dollwet & Reichard, 2014; Kotze & Massyn, 2019).

Cultural competence: Cultural competence is a concept focused on understanding different cultures, enabling individuals to effectively communicate with others to achieve successful inter-cultural interactions (Kotze & Massyn, 2019).

Normative commitment: Normative commitment describes an employee's "commitment based on a sense of obligation to the organization" (Allen & Meyer, 1996, p. 253).

Organizational commitment: Organizational commitment refers to a multi-dimensional construct consisting of "a psychological link between the employee and his or her organization that makes it less likely that the employee will voluntarily leave the organization" (Allen & Meyer, 1996, p. 252).

Psychological capital: Psychological capital is a positive psychological state of development where hope, self-efficacy, resilience, and optimism work synergistically to create internal motivations, perseverance, and positive emotions (Luthans & Youssef-Morgan, 2017).

Resource caravans: This is a theory that personal resources, including psychological resources, "do not exist individually but travel in packs, or caravans, for both individuals and organizations (Hobfoll et al., 2018).

Resource caravan passageways: Included within Hobfoll's COR theory, resource caravan passageways are a set of environmental conditions which may encourage or impede the development of personal resources and resource caravans (Hobfoll et al., 2018).

Assumptions

In the development and execution of this study, I made the following assumptions. First, I assumed that using an online survey tool was the most efficient and effective method of collecting data for this study. Additionally, I assumed that employees would be familiar with completing an online survey tool as the organization has used similar tools in the past for their data collections. Second, I assumed that participants were truthful and honest in their responses, and they were not engaging in any intentional

efforts to mislead or distort the study's findings. Third, I assumed that the instruments used to collect data are reliable and valid and accurately measure cross-cultural PsyCap and OC.

Scope and Delimitations

Scope of the Study

The scope of this study included the employees at a large health care organization in Alberta, Canada. The research population included all staff, including corporate/business staff (i.e., human resources, finance, strategic planning), maintenance and support services (i.e., facilities management, environmental and nutrition services), and front-line staff (i.e., registered nurses, care support, unit clerks). The research sample consisted of those employees who responded to the survey. The minimum sample size suggested by Soper (2020) is 138; however, Memon et al. (2020) recommend that for proper data analysis, the sample should be between 160 and 300. The data collected from the sample were limited to demographic data, the responses to the cross-cultural PsyCap scale, and the three-component model employee commitment survey. The cross-cultural PsyCap scale was previously used in research by Reichard et al. (2014), Kotze and Massyn (2019), and Maslacki and Sesen (2019). Numerous studies use the three-component employee commitment survey (Allen & Meyer, 1996; Meyer & Allen, 1991; Meyer & Herscovitch, 2001; Meyer et al., 2002).

Delimitations of the Study

There are several delimitations or boundaries within this study. First, although I sent the digital invitation to all staff at the organization, there was no way to verify if all

staff received the invitation or which employees were willing to participate without risking the confidentiality and anonymity of the participant responses. Additionally, while this study is primarily concerned with the relationship between cross-cultural PsyCap and OC, cross-cultural PsyCap is one factor out of many that may influence OC. Furthermore, the literature states that cross-cultural PsyCap is a higher-order construct consisting of cross-cultural hope, efficacy, resilience, and optimism. However, Luthans and Youssef-Morgan (2017) have suggested this is not a finite list, and there may be other psychological resources that meet the characteristics required under PsyCap. These other psychological resources, such as mindfulness, gratitude, and courage, are outside this study's boundaries.

Limitations

There are certain limitations present in this study. First, there is a limitation concerning the generalizability of the study findings. The study used participants from one health care organization within a single province in Canada. While results may be generalizable within the province, further studies would be required to extend the generalizability of the results beyond those boundaries. Additionally, the health care organization would be considered a large, public-sector organization; as noted by Maslakci and Sesen (2019), intercultural interactions may differ in small, medium, or private-sector organizations. A second limitation is that the study used self-reported measures and, as such, was exposed to the potential of social desirability bias. As the survey asked participants to provide beliefs and attitudes about situations and interactions involving culturally diverse groups of individuals, there may be potential for responses to

reflect how the individual believes the organization would want them to respond (i.e., what is socially acceptable). I made all possible efforts to ensure participants' anonymity to allow for open and honest participation to address this limitation. A third limitation may include the use of online surveys for data collection. While measures to preserve anonymity were a key factor, such measures may prevent verifying that participants understand the survey questions and responses. The online survey interface may also be a barrier for those unfamiliar with responding to survey questions in a digital environment.

Significance

This research fills a gap in understanding cross-cultural PsyCap and how cross-cultural PsyCap influences OC in multicultural organizations. Kotze and Massyn (2019) indicated that interactions between different cultures within the workplace could be emotionally draining and deplete employees' psychological resources; however, cross-cultural PsyCap comprises positive psychological resources that can reduce or eliminate many of the negative experiences. Increased cross-cultural PsyCap may make working in a culturally diverse organization a more positive experience for all employees. Additionally, understanding the nature of the relationship between cross-cultural PsyCap and OC may provide additional insight into achieving positive organizational outcomes (i.e., OC) through supporting employees in developing cross-cultural skills and competencies.

The results of this study will also provide insight into *how* positive organizational outcomes can be achieved through training and developing employees. Multiple studies have shown that employees can build cross-cultural PsyCap through focused training and

development sessions (Dollwet & Reichard, 2014; Kotze & Massyn, 2019). Such insights will support the notion that organizations can develop competitive advantages by supporting and developing personal resources in employees.

The present study provides an original contribution to the current literature by focusing specifically on the nature of the relationship between the personal psychological resources that work together to form cross-cultural PsyCap and the affective, normative, and continuance components of OC in a multi-cultural employment setting. This research also contributes to the industrial and organizational psychology literature and, more specifically, to PP and POB.

Summary and Transition

In Chapter 1, the constructs of PsyCap, cross-cultural PsyCap, and OC were summarized, particularly in the context of being psychological states which are valuable and desirable to both employees and organizations. This study also highlighted the importance of the relationship between cross-cultural PsyCap and positive work outcomes within a multicultural environment. As globalization has changed the demographics of workforces worldwide, successful intercultural interactions have become crucial to individual performance and a vital component of establishing a competitive advantage in a global context. Chapter 1 also emphasized the importance of understanding how domain-specific and state-like constructs operate within specified contexts and stated this study's contributions to the current literature. Four specific and appropriate research questions were identified, aligning the research's background, problem statement, nature, and purpose. The chapter introduced COR theory to help

convey how the constructs function and interact with each other. Finally, the chapter presented essential definitions and assumptions and provided several limitations which underpin the research.

Chapter 2 summarizes the research and literature related to PsyCap, cross-cultural PsyCap, COR theory, and OC. The chapter provides an introduction that summarizes the constructs and theories in this study, followed by a summary of the literature search strategy used for the chapter. COR theory is discussed and presented as a theoretical framework to understand the variables of this study. The chapter then transitions to a discussion of PsyCap, including the historical development and the relationship between PsyCap, POB, POS, and PP. The chapter then moves into an overview on cross-cultural PsyCap, discussing the adaptation of the PsyCap measurement tools, results of research specific to cross-cultural PsyCap, and eventually summaries of each of the individual psychological resources which form the construct. Finally, an overview of OC is provided, including a discussion on the development of the three-component model of OC, including continued model modifications and critiques, which some researchers have provided. The chapter offers individual summaries on each component of OC and closes by summarizing the significant constructs and restating the literature gap, which this study fills.

Chapter 3 provides a detailed discussion on the methodology used within this study. The study design is discussed in detail within the chapter and explains the population and sampling procedures. The chapter provides the rationale for using structured equation modeling (SEM) and explains how the data are collected and how it

will be analyzed to test the hypotheses. Finally, the chapter presents the tools used to measure the constructs and operationalization of essential concepts before summarizing the threats to validity.

Chapter 2: Literature Review

Introduction

The higher-order concept of cross-cultural PsyCap has been adapted from earlier research on PsyCap by Luthans et al. (2007a). However, cross-cultural PsyCap exists as a context-specific form of PsyCap focused on intercultural interactions within an organization (Dollwet & Reichard, 2014; Kotze & Massyn, 2019). While researchers to date have contributed significantly to the concept of various context-specific forms of PsyCap, they have only scratched the surface regarding illuminating how organizations can leverage cross-cultural PsyCap to create organizational competitive advantage (Kotze & Massyn, 2019; Maslakci & Sesen, 2019). Specifically, researchers describe cross-cultural PsyCap as a "tool for the development, measurement, and effective management of the positive behaviors of employees in organizations" (Maslakci & Sesen, 2019, pg. 65); which in and of itself speaks to the potential the concept may hold for organizations to leverage for competitive advantage.

Whereas the literature identifies cross-cultural PsyCap as a higher-order construct, the construct has a more substantial cumulative effect than any individual components upon which cross-cultural PsyCap is built (Luthans et al., 2007a). Dollwet and Reichard (2014) incorporated this concept of a cumulative effect by adapting the earlier identified variables for workplace PsyCap to represent the intercultural interactions that occur within multicultural organizations. In Dollwet and Reichard's adaptation, cross-cultural hope, cross-cultural self-efficacy, cross-cultural resilience, and cross-cultural optimism contribute to overall cross-cultural PsyCap. The individual components reflect an

employee's ability to effectively function within a multicultural workplace and with colleagues who represent diverse and non-diverse cultures. In this conceptualization, cross-cultural hope generally describes the ability of employees to set and achieve goals in a multicultural environment. Cross-cultural self-efficacy describes significant confidence in one's ability to communicate and adapt in a multicultural setting. Cross-cultural resilience describes an ability to rise above differences in language or other cross-cultural difficulties and continue to perform. Finally, cross-cultural optimism defines the ability to remain positive about current and future intercultural interactions (Kotze & Massyn, 2019).

OC has been well-represented in the current literature; however, while many conceptualizations of OC exist, one of the most popular and enduring models has been Meyer and Allen's (1991) three-component model of OC. The model proposed by Meyer and Allen (1991) consists of three dimensions, namely AC, NC, and CC. The model intends to cover both the attitudinal and behavioral approaches to OC (Meyer & Allen, 1991), outlining both the attachment an employee has developed to an organization and their willingness to remain employed with the same employer (Sen et al., 2017). To outline this point, AC describes an emotional attachment to an organization, where commitment relates to a perception of shared values. NC represents a moral attachment, where commitment reflects loyalty. Finally, CC describes a continuation of a current attachment, where commitment includes an evaluation of suitable alternatives (Meyer & Allen, 1991; Sen et al., 2017). Previous literature has identified a significant relationship between OC and turnover intent (Sen et al., 2017; Seo & Chung, 2019). However,

organizations that maximize OC while minimizing turnover intent benefit from a more engaged workforce and reduced costs associated with recruit and training, which can set the groundwork for organizational competitive advantage (Basit, 2018; Peng et al., 2013).

Literature Search Strategy

I started my literature search using the *Thoreau Multi-Database Search* available through the Walden University Online Library. The initial search terms I used were psychological capital or PsyCap, which returned 5,632 results. I refined the results by filtering to include only peer-reviewed scholarly journal articles, only academic journal publication types and using the date range filter to limit results to those published between 2015 and 2021, which returned 3,388 results. For the second search attempt, I used the search terms cross-cultural psychological capital or cross-cultural PsyCap. I repeated the same date range and limiters; this search returned five results. I also used the search terms psychological capital, and cross-cultural psychological capital with the *PsycArticles*, *PsycBooks*, *PsycExtra*, *PsycInfo*, *PsycTests*, and *Business Source Complete* databases; however, the data range was expanded from 2014 to 2021, returning 672 and seven results, respectively. Both psychological capital and cross-cultural psychological capital search terms were next used on Google Scholar, using a date range of 2015 to 2021. Both search terms returned a significant number of results (3,260 and 670, respectively).

While the initial literature searches used single search terms, subsequent searches used the cross-cultural psychological capital search term combined with OC, cultural competence, hope, self-efficacy, resilience, and optimism, yielding mixed results. I

subsequently conducted multiple targeted searches based on relevant research articles and theoretical frameworks identified in the research studies obtained from the initial search efforts. Inclusion criteria for literature in this review were as follows: content explicitly related to cross-cultural PsyCap, content about PsyCap, content specific to relationships with positive organizational/work outcomes, and content specific to employees in work settings.

Conservation of Resources Theory

Hobfoll's (1989) COR theory is a stress and motivation theory that Hobfoll originally conceptualized as a testable model which explains the "ubiquitous stress phenomena and perhaps bridges the gap between environmental and cognitive viewpoints" (p. 516). The fundamental assertion in COR theory is that individuals will use essential resources to pursue, maintain, and protect those things, including resources, which they genuinely value (Hobfoll, 2011). Hobfoll (2011) suggested a universal nature exists within COR theory to provide more clarity regarding the concept of things of value. Hobfoll (2011) indicated that which individuals genuinely value "includes health, well-being, peace, family, self-preservation, and a positive sense of self, even if the core elements of sense of self differ culturally" (p. 117).

Beyond the fundamental aspects, four main principles underpin COR theory (Hobfoll, 1989; 2011). The first principle argues that resource loss is significantly more impactful than resource gain; for example, the "primacy of resource loss" (Hobfoll, 2011, p. 117) principle suggests that from a psychological perspective, a reduction in compensation is more impactful than an equivalent increase in compensation

(Halbesleben et al., 2014). The primacy of resource loss principle becomes even more relevant when a specific resource is finite. Halbesleben et al. (2014) suggested in such scenarios, the loss of resources could be devastating as the "resource gain cycle" (Hobfoll, 2011) is difficult to initiate due to the limited resources. The second principle echoes the impact of the primacy of resource loss principle as the second principle asserts that one must invest resources to pursue new resources, to protect against loss, and should loss occur, to recover from such loss (Hobfoll, 2011). If the individual has invested significant resources to protect against such loss, it may significantly exasperate the impact of initial resource loss. Alternatively, the individual may also invest resources to gain additional resources. However, the resultant gain of resources may buffer the resources lost through investment. The third principle, the gain paradox principle (Hobfoll et al., 2018), suggests that when resource losses already exist, resource gain becomes significantly more important. Initially, the gain paradox principle may appear to conflict with the first two principles of COR theory. However, resource loss would remain more psychologically impactful than resource gain. Once losses have occurred, an individual is more likely to deploy resources that focus on resource gain to recover from the loss (i.e., resource investment), creating a somewhat paradoxical scenario. Finally, the fourth principle describes a state of desperation. When resources are at significant risk of exhaustion, individuals may display irrational, aggressive behavior in defense of their resources (Hobfoll et al., 2018).

Three corollaries are also applicable within COR theory (Halbesleben et al., 2014; Hobfoll, 2011; Hobfoll et al., 2018). The first corollary identifies that individuals with

greater resources can better invest resources to buffer themselves against loss or propel them towards resource gain. Alternatively, individuals with fewer resources have less ability to deploy resources to prevent or protect against loss, allowing further losses to occur. The second corollary suggests a spiraling effect to the resource loss cycle (Hobfoll et al., 208). As described in the first principle of COR theory, resource loss is psychologically more impactful than resource gain; Hobfoll (1989; 2011) suggested that the disproportionate effect of resource loss is due to the additional stress. As such, with each successive loss of resources (i.e., loss spiral), fewer resources are available to protect against further loss, and thus the spiral gains momentum (Hobfoll et al., 2018). The third corollary suggests that just as resource loss has a spiraling effect, there is a spiraling effect to resource gain (Hobfoll et al., 2018). Unfortunately, whereas resource gain is somewhat more challenging to achieve and significantly less impactful (i.e., principle 1), resource gain spirals tend to be more difficult, sometimes monotonous and can be exceptionally slow processes (Hobfoll, 2011; Hobfoll et al., 2018).

Modern conceptualizations of COR theory also propose the existence of resource caravans and resource caravan passageways. The caravans and passageways provide "a greater understanding and emphasis on both the interrelationship between resources and how environments and contexts create fertile or infertile ground for creation, maintenance, and limitation of resources" (Hobfoll et al., 2018, p. 107). COR theory proposes that resources do not exist separately and independently of other resources; instead, resources tend to travel in packs or resource caravans with additional resources and synergistic effects (Halbesleben et al., 2014; Hobfoll, 2011; Hobfoll et al., 2018).

The conceptualization of the resource caravan passageway is, at the core, a recognition that individuals, and their resources, are influenced by the societal and ecological conditions in which they exist (Halbesleben et al., 2014; Hobfoll, 2011; Hobfoll et al., 2018). Hobfoll (2011) proposed that such environmental conditions may "support, foster, enrich, and protect the resources of individuals, sections or segments of workers, and organizations in total, or that detract, undermine, obstruct, or impoverish people's or group's resource reservoirs" (p. 118-119). This level of analysis may become acutely important within workplace settings as the organization and the organizational culture play significant roles in creating the societal and ecological conditions in which employees function.

Whereas COR theory is a stress and motivation theory, several types of resources are discussed based on the likelihood that resource gain or resource loss results in stress or well-being. Object resources are physical resources such as tools or a car (Hobfoll, 2011), which require resource investment to gain (i.e., purchase) and also require resource investment to prevent against loss (i.e., dilapidation). The personal value that an individual assigns to object resources would be closely related to the acquisition or replacement cost of the item (Hobfoll, 1989). Conditions or condition resources are terms that have been used in COR theory to describe external situations or social scenarios which are considered desirable for individuals due to "stress-resistance potential" (Hobfoll, 1989, p. 517). Condition resources could include marriage and tenure (Hobfoll, 1989) or even seniority and positive relationships within the workplace (Hobfoll, 2011). Energies, or energy resources, are often valued as resources due to the energies required

in acquiring, maintaining, and protecting other resources (Hobfoll, 1989). It is relatively straightforward that there must be an investment of time, effort, or money (i.e., energy resources) in the collection of or protection of object, condition, or personal resources. However, as Hobfoll (1989) suggested, the value of energy resources closely relates to the stress derived from their loss, often through investment. For example, wasted time or effort that did not result in gain, maintenance, or protection of other resources would be felt disproportionately as a loss, as suggested by the first principle of COR theory. The final resources in COR theory, and arguably the most relevant to PsyCap and cross-cultural PsyCap, are personal characteristics (Hobfoll, 1989), sometimes referred to as personal resources, skills, or traits (Hobfoll, 2011). Personal resources in this light would include the personal psychological resources (i.e., hope, efficacy, resilience, and optimism) which form and travel together within the PsyCap construct (Kotze & Massyn, 2019; Liu, 2014; Mao et al., 2020). Hope, efficacy, resilience, and optimism travel together (i.e., resource caravans) and show synergistic effects (Luthans & Youssef-Morgan, 2017). Through COR theory, we understand that such resources are valuable to individuals who would then invest further resources in pursuing, maintaining, and protecting these resources (Hobfoll, 1989; 2011). The principles and corollaries in COR theory also help explain how and why individuals deploy personal psychological resources (i.e., cross-cultural PsyCap) when presented with potentially stress-inducing interactions with people from different cultures in a multicultural workplace setting (Kotze & Massyn, 2019). Consistent with COR theory, Sungu et al. (2020) suggested that individuals will deploy significant resources when the deployment is likely to gain or

protect resources they genuinely value. Therefore, if OC is considered a desirable condition involving emotional attachment to the organization, COR theory would suggest that employees need resources they can deploy to support OC. These resources which support OC may include personal psychological resources such as those embedded in cross-cultural PsyCap. However, Wright and Hobfoll (2004) indicated that two other conditions must be present. In the first condition, which Sungu et al. (2020) also refer to, the individual must possess the required resources for deployment. In the second condition, the environment or organization must present the opportunity for individuals to deploy their resources. For example, an individual with high cross-cultural PsyCap (i.e., available personal resources) would need the opportunity to deploy such resources in situations requiring interacting with people from different cultures to support the gain, maintenance, or prevention of loss of OC.

Psychological Capital

Initially conceptualized as a specific construct to be included under POB, PsyCap can trace its roots to the broader movements of POS and PP (Luthans & Youssef-Morgan, 2017). PP is a field of study founded in the late nineties, which intends to focus on underrepresented areas in the annals of clinical psychology. More specifically, the focus was on the positive aspects of life, including “positive experience, positive institutions, and positive traits” (Seligman, 2019). While PP intended to divert research towards a field that considers the positive aspects of individuals (Seligman, 2019), there was also a need within such a field to apply this research focus in the domain of organizational science, which became known as POS. Cameron (2017) described POS as

"an umbrella framework used to unify a variety of concepts in organizational studies, each which incorporates the notion of the positive" (p. 13). In terms of what is considered *the positive* within the cross-cultural literature, Cameron further identified that researchers of POS generally expect several characteristics of anything included within the framework of POS. Expectations include positive deviance in which an outcome of the deviance dramatically exceeds the usual or expected outcome. The characteristics also include affirmative bias, where the intent is to focus on positive traits rather than negative factors, and virtuousness or eudemonism, where the *positive* has intrinsic value and is not just a pathway to achieve something else. Whereas PP and POS have a wide range of applications, POB is concerned with the characteristics of specific constructs. Luthans and Youssef-Morgan (2017) suggested that a construct must meet a broad set of attributes to align with PP and POS. However, there is a more specific set of characteristics that constructs must meet to align with POB. These characteristics include that theory and evidence provide the basis to the construct. The orientation of the construct is a positioning that is positive within the domains of PP and POS. The construct must be scientifically measurable. The construct must present the opportunity for further development, and finally, the construct must relate to desirable work outcomes (Luthans & Youssef-Morgan, 2017).

Aligning with PP, POS, and POB, PsyCap is:

> an individual's positive psychological state of development that is 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 toward 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 and even beyond (resilience) to attain success. (Luthans et al., 2015, p. 2)

As a higher or second-order construct, a combination of personal psychological resources, including hope, efficacy/self-efficacy, resilience, and optimism, form PsyCap and are often referred to by the acronym HERO. Further aligning with the requirements to be included under POB, PsyCap exists as a state-like resource. The state-like conceptualization means that PsyCap is more constant than certain emotional states but less stable than pure traits. There is a flexibility to the construct, which allows the construct to be further changed and developed through experiences and education (Luthans & Youssef-Morgan, 2017). Additionally, PsyCap is a context-specific or domain-specific construct (Dollwet & Reichard, 2014; Luthans & Youssef-Morgan, 2017). Individuals may have high levels of PsyCap (i.e., hope, self-efficacy, resilience, and optimism) related to their specific workplace, job, or tasks. However, the same individuals may have lower levels of PsyCap when it comes to other contexts or domains. These domains may include relationships and health (Luthans et al., 2013) or intercultural interactions (Dollwet & Reichard, 2014).

Cross-Cultural Psychological Capital

To address the context-specificity of PsyCap and extend the construct into the domain of intercultural interactions, Dollwet and Reichard (2014) proposed the concept of cross-cultural PsyCap. Rather than focusing specifically on workplace PsyCap, cross-

cultural PsyCap instead was focused on psychological resources which span cultural differences and contribute to successful intercultural interactions, including those which happen within the workplace (Dollwet & Reichard, 2014). This definition of cross-cultural PsyCap differs from Yunlu and Clapp-Smith's (2014) conceptualization of cultural PsyCap, which extends the PsyCap construct into the domain of cross-cultural experiences related to relocating and working in foreign countries. While both Dollwet and Reichard (2014) and Yunlu and Clapp-Smith (2014) started with Luthans et al.'s (2007a) Psychological Capital Questionnaire (PCQ), they independently developed separate scales for cross-cultural PsyCap and cultural PsyCap, respectively. Whereas Luthans et al.'s (2007a) original PCQ used terminology such as 'I always look on the bright side of things regarding my job,' Dollwet and Reichard (2014) used the wording 'I always look on the bright side of things regarding my cross-cultural interactions.' Yunlu and Clapp-Smith (2014) used the terminology 'I always look on the bright side of things regarding what I experience in other cultures,' highlighting that while conceptually similar, the measures are focused on different constructs.

In conceptualizing cross-cultural PsyCap, Dollwet and Reichard (2014) initially conducted two studies to validate the construct. The initial research uses an online survey to collect data from a diverse group of participants (N = 361) recruited through the Mechanical Turk (Mturk) database. In the second study, Dollwet and Reichard collected data from another 134 participants. The researchers employed a sampling strategy similar to the initial research to ensure a demographically diverse participant group. The initial investigation confirmed the higher-order conceptualization of cross-cultural PsyCap. The

second study analyzed the reliability and validity of the construct in terms of specific positive organizational outcomes, including cultural intelligence, cross-cultural adjustment, ethnocentrism, and openness to experience. After removing nine items from the initial cross-cultural PCQ for poor fit, Dollwet and Reichard reported high comparative and incremental fit indices (CFI = 0.91, IFI = 0.91), root mean square error of approximation (RMSEA) = 0.08, and Cronbach's alpha of 0.79 to 0.91 across all sub-scales, indicating both the goodness of fit and the superiority of the four-factor model of cross-cultural PsyCap. Similar fit indices were reported in study 2 (CFI = 0.88, IFI, 0.88), indicated a continued fit between the model and the data (Dollwet & Reichard, 2014). In addition to assessing fit, Dollwet and Reichard conducted regression analyses that indicated statistically significant positive relationships between cross-cultural PsyCap, cultural intelligence, openness to experience, and cross-cultural adjustment and a statistically significant negative relationship with ethnocentrism.

Building on the previous cross-cultural PsyCap research, Reichard et al. (2014) also focused on the relationship between cross-cultural PsyCap, cultural intelligence, and ethnocentrism; however, this study introduced a training intervention. The researchers obtained data from 130 participants from various organizations in California and another 71 participants employed by a university in South Africa (Reichard et al., 2014). The researchers used a pretest-posttest design in which a pre-intervention survey was initially completed. The researchers then provided participants with a two-hour training session "focused on creating self-awareness, reframing past events, building broad cross-cultural interaction skills, and identifying multiple strategies for success in cross-cultural

interactions" (Reichard et al., 2014, p. 155). Finally, participants completed post-intervention surveys. Similar to the initial studies on cross-cultural PsyCap, Reichard et al. assessed for model fit; fit indices for the US group (CFI = 0.97, IFI = 0.97) and the South African group (CFI = 0.98, IFI = 0.98) were high. All factor loadings for hope, self-efficacy, resilience, and optimism were significant, indicating a good fit. The researchers also performed paired-samples *t* test and repeated measures ANOVA, indicating statistically significant increases in cross-cultural PsyCap and cultural intelligence and decreases in ethnocentrism from pretest to posttest. The research by Reichard et al. was novel due to the inclusion of a training intervention, which indicated that organizations could increase employees' cross-cultural PsyCap and related positive organizational outcomes through relatively short bursts of training. Additionally, the research supported previous PsyCap intervention research (Luthans et al., 2010; Luthans et al., 2014) and extended it into the domain of intercultural interactions.

Subsequent research using Dollwet and Reichard's (2014) cross-cultural PsyCap measure has shown that positive relationships exist between the construct and specific positive organizational outcomes. In a study using 213 employees from various South African organizations, Kotze and Massyn (2019) found a statistically significant positive relationship between cross-cultural PsyCap and work engagement and a statistically significant negative relationship with burnout. Using the vigor and dedication components of work engagement and the cynicism and emotional exhaustion components of burnout, Kotze and Massyn used partial least squares (PLS) and SEM not only to test the relationships with cross-cultural PsyCap but also to test for internal

consistency/composite reliability and construct validity (i.e., convergent and discriminant validity). Composite reliability scores for each construct in the model ranged from 0.842 to 0.934. The outer loadings ranged from 0.656 to 0.946, and the average variance extracted ranged from 0.577 to 0.826 indicating acceptable convergent validity (Kotze & Massyn, 2019). To test for discriminant validity, Kotze and Massyn used the heterotrait-monotrait (HTMT) ratio of correlations as suggested by Henseler et al. (2015). After removing two items due to high correlations between vigor and dedication and one due to a high correlation between cross-cultural self-efficacy and cross-cultural resilience, the researchers achieved the desired HTMT ratio of less than 0.85. Kotze and Massyn's results were significant as the findings provided context-specific support to previous studies involving the relationships between PsyCap, work engagement, and turnover (Du Plessis & Boshoff, 2018; Kotze, 2018a, 2018b; Peng et al., 2013).

Maslakci and Sesen (2019), similar to Kotze and Massyn (2019), also explored the relationship between cross-cultural PsyCap and positive organizational outcomes. In a study using 346 employees from several different five-star hotels in Northern Cyprus, Maslakci and Sesen identified that cross-cultural PsyCap positively mediates the relationship between multicultural personality traits and perceived service quality. The researchers used confirmatory factor analysis (CFA) to test the scales' validity and used SEM for hypothesis testing (Maslakci & Sesen, 2019). As suggested by Schreiber et al. (2006), the researchers reported common fit indices, goodness of fit (GFI) = 0.91, CFI = 0.90, IFI = 0.89, and RMSEA = 0.06 for the model. Maslacki and Sesen's findings aligned with previous research indicating the positive nature of PsyCap in the service

industry (Bouzari & Karatepe, 2017; Kim et al., 2018). However, the findings also supported research indicating that cross-cultural PsyCap had similar positive relationships with desirable organizational outcomes as workplace PsyCap (Dollwet & Reichard, 2014; Kotze & Massyn, 2019; Reichard et al., 2014).

The scales that Dollwet and Reichard (2014) adapted from Luthans et al.'s (2007a) earlier work utilized the same personal psychological resources present in the PCQ. However, Dollwet and Reichard conceptualized the psychological resources as domain-specific resources and extended the concept into the domain of intercultural interactions. As such, the researchers conceptualized *HERO* as cross-cultural *HERO*, including cross-cultural hope, cross-cultural efficacy/self-efficacy, cross-cultural resilience, and cross-cultural optimism (Dollwet & Reichard, 2014; Reichard et al., 2014).

Cross-Cultural Hope

Hope initially defined a personal psychological resource related to a motivational state consisting of agency, pathways, and goals (Luthans et al., 2007a). However, most research (Dollwet & Reichard, 2014; Khandelwal & Khanum, 2017; Newman et al., 2014; Reichard et al., 2014) has focused mainly on agency and pathways, as agency and pathways constructs subsume the goal construct. Much of our understanding of agency and pathways relies on the work of Snyder et al. (1996), whose research validated a measure of hope as a state consisting of the agency and pathway components. In this context, agentic thinking was the motivational aspect (Snyder, 2002), the determination to reach a goal (Snyder et al., 1996), and confidence in using one's pathways to achieve it

(Snyder, 2002). While pathways are primarily the means through which an individual achieves a goal (Snyder et al., 1996), pathway thinking refers to considering alternative options or pathways and the confidence in selecting a route (Snyder, 2002). Summarizing the difference between the agency and pathways concepts and agentic and pathway thinking, Khandelwal and Khanum (2017) suggested, "Thus, hope is not just the positive anticipation but also having plans to achieve the goals." (p. 89). This differentiation clarifies that hope is not just general positivity but rather the embedding of positivity in the actions taken towards achieving goals.

Hope, as a first-order component of PsyCap, has been positively related to many positive work outcomes, including work performance (Reichard et al., 2013), job satisfaction (Badran & Youssef-Morgan, 2015; Jung & Yoon, 2015; Olaniyan & Hystad, 2016; Sen et al., 2017; Tang et al., 2019), OC (Hussain & Nawaz, 2019; Sen et al., 2017; Tang et al., 2019; Yildiz, 2018), job involvement (Demir, 2018), psychological well-being (Avey et al., 2010; Reichard et al., 2013), organizational citizenship (Bogler & Somech, 2019; Jung & Yoon, 2015), and negatively related with stress (Demir, 2018; Hussain & Nawaz, 2019; Sen et al., 2017), anxiety (Demir, 2018; Zhou et al., 2018), and burnout (Demir, 2018; Kotze, 2018a; Peng et al., 2013; Zhou et al., 2018). However, inconsistent with the results of the other researchers, Idris and Manganaro (2017) were not able to find a relationship between PsyCap and either job satisfaction or OC; they hypothesized the contradictory results may have reflected a difference in cultural practices and language barriers.

Whereas there is a significant volume of research including hope as a component of PsyCap, there is significantly less research extending the psychological construct of hope into the domain of cross-cultural interactions. Building on the earlier studies by Snyder et al. (1996), Luthans et al. (2007a), and others, Dollwet and Reichard (2014) conceptualized cross-cultural hope as "pursuing and meeting goals related to working with people from different cultures" (p. 1672). As such, individuals with high cross-cultural hope are more likely to be positively motivated to interact with individuals from different cultures. These individuals may also be better able to identify and select pathways to avoid or overcome any problems which may impede their ability to interact with other individuals (Dollwet & Reichard, 2014; Reichard et al., 2014). The ability to "produce plausible alternative routes" (Snyder, 2002, p. 251) underpins the assertion that high cross-cultural PsyCap better equips individuals to interact cross-culturally. Particularly when language barriers, differences in cultural norms, and lack of information are routine (Dollwet & Reichard, 2014; Reichard et al., 2014), the individual can remain positive about the interaction and devise other pathways to reach success. Cross-cultural hope is essential in culturally diverse organizations. Whereas the positive organizational outcomes related to hope have been well-documented (Newman et al., 2014), researchers have postulated that cross-cultural hope would be associated with similar outcomes (Reichard et al., 2014). However, cross-cultural hope may also create an awareness of cultural assumptions and biases (Reichard et al., 2014) within the organization; addressing such assumptions and biases would be vital to leverage cross-cultural hope, and more broadly, cross-cultural PsyCap for organizational success.

Cross-Cultural Efficacy/Self-Efficacy

Often used interchangeably, efficacy or self-efficacy refers to individuals' confidence in their abilities to take on new challenges and mobilize their efforts towards completing those challenges successfully (Luthans & Youssef-Morgan, 2017). Based on the work of Bandura (1997), these personal expectations will determine the motivation and psychological resources that an individual invests into achieving their goal and how likely they are to quit should they run into barriers (Stajkovic & Luthans, 1998). Similar to hope, Bandura suggested that self-efficacy is rooted in human agency. The decisions made and actions taken are intentional; the individual is the 'agent' of their success or failure. Whereas Stajkovic and Luthans (1998) took the concept of self-efficacy and redefined it in terms of employees and a specific task within the context of the workplace, Luthans et al. (2007a) further refined the definition and extended the concept beyond the completion of individual tasks to a broader work domain in the conceptualization of PsyCap. For example, within the work context, an individual with high self-efficacy would be expected to have a higher level of confidence in their ability to complete a set or group of related tasks explicitly related to their position or role (Luthans et al., 2007b; Newman et al., 2014).

There is a positive link between self-efficacy and work-related performance, both when self-efficacy is an independent construct (Stajkovic & Luthans, 1998) and as a core component of PsyCap. Aligning with Hobfoll's (2011) COR theory, researchers investigating self-efficacy as a component of PsyCap have found often there are synergies when the psychological resources (i.e., hope, self-efficacy, resilience, and

optimism) travel together (Luthans & Youssef-Morgan, 2017). Stronger correlations are found between the higher-order PsyCap construct and various positive organizational outcomes when compared to the correlations between individual psychological resources (i.e., self-efficacy) and the same desirable outcomes (Luthans et al., 2007a). In other cross-cultural research not directly related to PsyCap, Luthans, Zhu, and Avolio (2006) found that self-efficacy was positively associated with OC and negatively associated with turnover intent. Furthermore, the findings also supported their hypothesis that the relationship would be more robust in individualistic cultures when compared with collectivist cultures.

Whereas self-efficacy describes individuals' belief in their abilities (Luthans & Youssef-Morgan, 2017), cross-cultural self-efficacy describes individuals' belief in their ability to interact with others. Including interaction with co-workers from different cultures (Dollwet & Reichard, 2014) and their confidence in their ability to employ various methods to make those interactions successful (Nunez, 2000). In this context, cross-cultural self-efficacy is more than simply knowing and understanding different cultures (Dollwet & Reichard, 2014). It focuses more on mutually successful interactions in diverse settings rather than merely delineating how one culture is different (Nunez, 2000). As such, individuals with high cross-cultural self-efficacy would feel more comfortable and confident in multicultural work settings (Dollwet & Reichard, 2014). They would feel confident in their ability to adapt to the needs of each situation (i.e., intercultural interaction) and motivated to find new ways of continuing to adapt (Nunez, 2000; Rehg et al., 2012). However, it is important to note that cross-cultural self-efficacy

is related to individuals' beliefs about their abilities (Dollwet & Reichard, 2014; Luthans &Youssef-Morgan, 2017) rather than their actual ability. Individuals may become overconfident in their ability to interact with others (e.g., belief that all interactions with people of a particular culture will be the same). Negative self-perception and previous failures may also distort individuals' evaluation of their abilities and result in feelings of incompetence (Bandura, 1997; Stajkovic & Luthans, 1998). As these misjudgments about perceived versus actual ability are less likely to occur when the individuals are likely to experience significant consequences due to their over or under-confidence (Bandura, 1997), organizations can help individuals close any gaps (Reichard et al., 2014). As a component of cross-culture PsyCap, cross-cultural self-efficacy is both state-like and malleable (Luthans et al., 2006; Luthans & Youssef-Morgan, 2017; Reichard et al., 2014), and individuals can increase cross-cultural self-efficacy through several methods. Bandura (1997) outlined several methods, including developing mastery (i.e., actual ability) through successful experiences, vicarious learning through watching others model success, social persuasion through positive encouragement and feedback from relevant sources, and increasing positivity and psychological well-being.

Cross-Cultural Resilience

There is an extensive volume of research on the concept of resilience which covers a variety of different domains, including developmental psychology (Luthans & Youssef-Morgan, 2017), military and fitness training (King et al., 2016), and diverse work environments (Meng et al., 2019). As a result, researchers developed many different definitions for resilience in these contexts, including some that ascribe trait-like

properties to resilience (Jackson et al., 2007) and others that consider resilience to be more of a state-like phenomenon open to development (Luthar et al., 2000). Such discrepancies led Luthar et al. (2000) to differentiate between the trait-like properties, which they termed as *resiliency,* and the state-like properties, termed *resilience*, "resiliency is a personality characteristic of the individual, whereas resilience is a dynamic developmental process" (p. 546). In this differentiation, Luthar et al. further identified that resilience requires an individual to experience a specific event, which can be positive or negative; resiliency, on the other hand, does not pre-suppose such an experience.

Building on Luthar et al.'s (2000) description of resilience as a "dynamic developmental process" (p. 546), resilience, particularly in the workplace, can be understood simply as an individual's ability to adapt and respond to a specific event or set of circumstances (Masten, 2001) within the workplace. The events or circumstances could be significant adversities (i.e., failures); or could represent generally positive but significant experiences (i.e., promotions), in which the individual would have to adapt to be successful (Dollwet & Reichard, 2014; Masten, 2001). In this context, resilience is the cumulative result of the deployment of personal assets when risk factors are present (Dollwet & Reichard, 2012; Reichard et al., 2014). For example, individuals who have developed high levels of resilience would strive to overcome adversity, both common and novel types. They would effectively deploy the necessary resources or personal assets to be successful, learning and developing higher levels of resilience in the process (Luthans et al., 2007b).

Resilience as a developmental process, as opposed to a rare innate trait, has been linked to many positive organizational outcomes. Avery et al. (2009) suggested the developmental process of resilience is "arguably the most important positive resource to navigating a turbulent and stressful workplace" (p. 682). While the concept of resilience relates to responding positively and overcoming various physically and psychologically stressful events (Rook et al., 2018), researchers have paid particular focus to the relationships between resilience and stress-related burnout, turnover (Avey et al., 2009; Jackson et al., 2007; Lee Cooke et al., 2019), and OC (Meng et al., 2019). Broadly, these results remain consistent with earlier research on resilience which revealed a positive influence with coping mechanisms (Masten, 2001), particularly as related to experiencing stressful events and adversity. These characteristics of overcoming stressful events and developing resilience towards future stressful experiences become more important in terms of workplace resilience and the globalization of workplaces. Increased global competition and changing workforce demographics have required organizations to transition and embrace change which is often stressful for employees (Avey et al., 2009).

In keeping with earlier conceptualizations of resilience by Luthar et al. (2000) and Masten (2001), cross-cultural resilience in the workplace directly relates to employees' ability to overcome and be successful when working and interacting with people from different cultures despite negative experiences or adversity (Dollwet & Reichard, 2014; Reichard et al., 2014). The adaptive nature of individuals with high levels of cross-cultural resilience (Masten, 2001) is particularly important in multicultural work settings (Dollwet & Reichard, 2014; Reichard et al., 2014). Employees will seek to improve on

previous less successful or outright negative experiences and are more likely to deploy the personal resources needed to maintain performance despite cross-cultural adversity (Luthans et al., 2007a).

As a component of cross-cultural PsyCap, cross-cultural resilience is both state-like and context-specific, meaning the development of cross-cultural resilience in the domain of intercultural interactions may exist mutually exclusive of any other domain. Luthans et al. (2010) suggested that individuals can develop resilience by increasing personal assets and reducing risk factors due to the state-like nature of the construct. Personal assets include "measurable characteristics that predict positive outcomes and adaptation to adverse circumstances" (p.47). In contrast, risk factors include "measurable characteristics that predict negative outcomes and poor adaptation in the workplace" (Luthans et al., 2010, p. 47). Reichard et al. (2014) extended this idea to the domain of intercultural interactions. They indicated individuals could develop cross-cultural resilience by building a variety of intercultural interaction skills (i.e., personal assets) and role-playing strategies for successful interactions (i.e., reducing risk factors).

Cross-Cultural Optimism

As a personal resource, researchers often define optimism as two independent but related concepts. The first concept considers optimism a positive general expectancy for any given situation (Scheier & Carver, 1992). In contrast, the second concept considers optimism as an explanatory style (Seligman, 1998) which "attributes positive events to personal, permanent, and pervasive causes, and interprets negative events in terms of external, temporal, and situation-specific factors" (Luthans & Youssef-Morgan, 2017). In

dispositional optimism (Scheier & Carver, 1992), optimism and pessimism are polar opposites, with the terms indicating either a positive (i.e., optimism) or negative (i.e., pessimism) general expectancy towards events (Gillhem et al., 2001). In this context, dispositional optimism relates closely to hope and self-efficacy (Carver & Scheier, 2014), particularly when it comes to the role of agency. Agency or agentic thinking within the hope construct is a motivator of determination and confidence (Snyder, 2002). In the self-efficacy construct, agency implies that individuals make intentional decisions or actions (Bandura, 1997). Finally, in dispositional optimism, personal agency is involved in pursuing positive expectancies and may be partially or wholly dependent on sustained efforts (Scheier & Carver, 1992). However, as Gillham et al. (2001) argued, being optimistic in the context of dispositional optimism could indicate more than just a general positive expectancy for all things. Instead, being optimistic may also show an expectancy of a certain level of control in achieving a positive outcome.

Optimism as an explanatory style (Seligman, 1998) is a concept that maintains a significant degree of independence while still related to dispositional optimism. While there are several differences between the two constructs, one significant divergence is the concept of *explanation* rather than *expectation* (Gillham et al., 2001). While an individual with high dispositional optimism may have a general expectancy of a positive outcome to a particular event, such as a test, there is a possibility that a negative outcome (i.e., failure) may still occur. When presented with the same scenario, an individual with an optimistic explanatory style would associate a positive outcome (i.e., high test score) with personal and pervasive causes, such as their ability or aptitude. In contrast, a low score or

negative outcome would be explained by external and temporal causes, such as noise and other distractions (Gillham et al., 2001). It is important to note; there is also a notable difference between the explanation and expectancy concepts of optimism regarding the role of pessimism. The current literature on dispositional optimism suggests that optimism and pessimism hold opposite ends of a continuum (Gillham et al., 2001; Scheier & Carver, 1992). Individuals generally expect positive events to occur or expect adverse events to occur; the concept of dispositional optimism subsumes the concept of pessimism (Carver & Scheier, 2014). However, researchers have begun to reconsider the bi-polar nature of dispositional optimism. Researchers are starting to study optimism and pessimism as independent constructs (Scheier et al., 2020), similar to how explanatory style research views optimism and pessimism. In Seligman's (1998) conceptualization, optimism is a positive explanatory style where positive events are assigned internal, stable, and global explanations and negative events are assigned external, unstable, and specific explanations. Alternatively, a pessimistic explanatory style would assign external, unstable, and specific explanations to positive events and internal, stable, and global expectations to negative events (Luthans & Youssef-Morgan, 2017; Seligman, 1998). As such, while high levels of optimism are desirable from the PsyCap (Luthans & Youssef-Morgan) and cross-cultural PsyCap (Dollwet & Reichard, 2014) lens. The context-specific nature of the psychological resource means that an individual could lean heavily towards an optimistic explanatory style in certain scenarios while leaning heavily towards a pessimistic explanatory style in other situations.

In cross-cultural PsyCap, cross-cultural optimism incorporates both the expectancy and explanatory viewpoints (Dollwet & Reichard, 2014; Reichard et al., 2014). Aligning with the expectancy view, individuals who are high in cross-cultural optimism "will expect the best when interacting with people from different cultures and have a positive outlook on future transactions" (Dollwet & Reichard, 2014, p. 1672). Aligning with the explanatory view, those same individuals with high cross-cultural optimism are likely to believe that positive intercultural interactions resulted from their skills and abilities. In contrast, negative interactions result from something external and out of their control (Dollwet & Reichard, 2014). While, to a large degree, existing literature has not yet investigated the individual relationships between cross-cultural optimism and the various positive organizational outcomes; cross-cultural optimism as a part of the overall cross-cultural PsyCap construct has a positive relationship with employee work engagement and well-being (Kotze & Massyn, 2019), cultural intelligence and positive emotions (Reichard et al., 2014), and negative relationships with burnout (Kotze & Massyn, 2014), and ethnocentrism (Reichard et al., 2014). As a primary component of cross-cultural PsyCap, cross-cultural optimism also has a role in mediating the relationship between multicultural personality traits and perceived service quality (Maslakci & Sesen, 2019). Similarly, few studies on workplace PsyCap have investigated the direct relationships between optimism as a second-order construct and positive organizational outcomes. The studies that evaluated relationships at the component level have identified positive relationships between optimism, work engagement (i.e., vigor, dedication, and absorption), OC (i.e., affective, continuance, and

NC; Simons & Buitendach, 2013). Several studies investigating optimism embedded within the workplace PsyCap construct have identified a positive relationship between workplace PsyCap and OC (Hsing-Ming et al., 2017; Hussain & Nawaz, 2019; Sen et al., 2017; Surucu et al., 2020; Yildiz, 2018), with only Idris and Manganaro (2017) identifying no significant relationship between the constructs.

Organizational Commitment

There is a long history of scholarly research on OC, including initial research into OC as a unidimensional construct and, more recently, using a multi-dimensional model (Allen & Meyer, 1996). Interest in OC continued to grow throughout the last few decades, prompting Mowday (1998) to conclude that although some research may have a recency effect, OC remained an ever-growing construct of interest for researchers. A meta-analysis confirmed the continued interest observing an increase from 29 relevant articles in the 1970s to 186 in the 1990s (Mowday, 1998). Much of the research on OC can at least partially trace roots back to the development of the organizational commitment questionnaire (OCQ; Mowday et al., 1979). However, research dates to the 1950s that incorporates certain unidimensional factors of OC, including faithfulness and commitment (Yildiz, 2018). The OCQ included 15 items in a 7-point Likert scale ranging from strongly agree to strongly disagree and was intended to assess the identification and involvement with an organization based on an individual's belief in organizational goals, a willingness to exert effort, and a desire to remain with the organization (Mowday et al., 1979). Whereas researchers believed the commitment construct encompassed the three components, they still considered the construct unidimensional; the OCQ produced a

single score and all items loaded on a single factor (Mowday, 1998). Both the definition of OC presented by Mowday et al. (1979) and the OCQ primarily focused on attitudinal commitment, where an individual identifies with and attaches themselves to an organization. However, OC and the OCQ also incorporated the concept of behavioral commitment, which researchers often defined as "overt manifestations of commitment" (p. 225).

After Mowday et al. 's (1979) development of the OCQ, Meyer and Allen (1991) acknowledged that while there were several different conceptualizations for OC, the various concepts reflected three distinct themes, including affective attachment, obligation to remain, and the perceived costs of leaving. This assertion led Meyer and Allen (1991) to propose a three-component model for OC identifying AC, CC, and NC as distinct components of commitment, rather than different types of commitment (Allen & Meyer, 1996; Meyer and Allen, 1991; Meyer et al., 2004). The purpose of identifying three distinct components was to acknowledge that although each component effectively binds the employee to the organization to a greater or lesser degree, each component could develop out of different antecedents and result in vastly different behaviors (Meyer & Allen, 1991; Meyer et al., 2004). Meyer and Allen's (1991) conceptualization considers the possibility that an individual may have different levels of commitment under each component. Each component could be higher or lower depending on internal and external factors, suggesting that OC is somewhat state-like, malleable, and flexible to development over time.

While studies widely use the Meyer and Allen (1991) conceptualization of a three-component model of OC, some researchers question the model's applicability in light of empirical findings. Solinger et al. (2008) argued that while the three-component model of OC has dominated the literature on OC, a more applicable model would be Eagly and Chaiken's (1993) attitude-behavior model. Solinger et al. (2008) based their argument on a critique suggesting that AC describes an attitude towards the organization within the three-component model. In contrast, NC and CC actually describe behaviors (i.e., staying with an organization based on evaluating the perceived costs of leaving). Furthermore, Solinger et al. (2008) argued that the three-component model of OC proposed by Meyer and Allen (1991) is a model for predicting turnover rather than actual OC from an attitudinal perspective. Mercurio (2015) further argued that the focus should be on AC as the primary component of OC, suggesting that "the stream of organizational commitment literature remains confounding, fragmented and difficult to access" (p. 391). Mercurio's (2015) meta-analysis of the available literature on OC suggested that most researchers agreed on an affective, emotional, or attitudinal core to OC. Furthermore, significant correlations exist between AC, organizational citizenship behaviors, turnover, absenteeism, and stress (Meyer et al., 2002; Mowday et al., 1979; Solinger et al., 2008). CC rarely correlates with such variables, and NC often correlates so strongly with AC that it can be hard to separate the components from an empirical perspective (Ko et al., 1997; Mercurio, 2015; Solinger et al., 2008).

Despite critiques from other researchers, the Meyer and Allen (1991) model of OC endures and remains a very popular construct with organizational researchers

(Mercurio, 2015; Solinger et al., 2008). The popularity of the three-component model is evidenced in PsyCap research by the significant number of researchers who have used the model in their articles (Babalan et al., 2018; Peng et al., 2013; Pillay et al., 2014; Simons & Buitendach, 2013; Surucu et al., 2020; Wu & Chen, 2018; Xu et al., 2020; Yildiz, 2018). However, some existing studies related to PsyCap use only a single component of OC, primarily AC (Luthans et al., 2007b), or a one-dimensional approach (Rego et al., 2016; Tang et al., 2019). Overwhelmingly, the studies have shown positive relationships between PsyCap and OC as a three-component model and PsyCap and AC as a single dimension of OC.

Affective Commitment

The development of the three-component model of OC (Meyer & Allen, 1991) came out of a belief that previous conceptualizations of OC captured three distinct themes. Including emotional attachment to an organization, perceived costs in leaving an organization, and a sense of obligation (Allen & Meyer, 1996; Meyer & Allen, 1991; Meyer & Herscovitch, 2001; Meyer et al., 2002). Within these distinct themes, the theme relating to the emotional attachment between an individual and an organization is AC. Researchers defined AC as "the employee's emotional attachment to, identification with, and involvement in the organization" (Meyer & Allen, 1991, p. 67). The description of AC by Meyer & Allen (1991) revealed a construct rooted in Kanter's (1968) attitudinal commitment theory and is characterized by an employee's desire to remain with an organization based on their attachment, identification, and involvement (Meyer & Herscovitch, 2001). In this context, the employee's emotional attachment plays a

significant influence; the employee does not particularly need to stay with an organization; rather, they want to remain with the organization (Allen & Meyer, 1996) based on a positive evaluation of several antecedent factors. Antecedents generally proposed in AC research primarily fall under personal characteristics, work experiences, role or job-related characteristics, and organizational or structural characteristics (Meyer & Allen, 1991; Mowday, 1998). While there could be numerous individual experiences and attributes within each of these categories, it is essential to recognize that employees evaluate whether these experiences and characteristics provide personal satisfaction and the extent to which the factors align with their values (Meyer & Allen, 1991). The resulting positive or negative evaluation thus influences the strength of their emotional attachment (i.e., AC).

AC has been called the "core essence" (Mercurio, 2015, p. 391), or the "core concept" (Solinger et al., 2008, p. 72) of OC, revealing the importance of AC for the OC construct. However, several researchers base their critiques of the model on these descriptions of AC. One argument is that AC and NC are strongly correlated (Meyer et al., 2002; Solinger et al., 2008), to the point where, from an empirical perspective, the components are difficult to differentiate from each other (Ko et al., 1997; Solinger et al., 2008). These critiques and others have led some researchers to advocate for a reconceptualization of OC as a construct consisting of an attitudinal component (i.e., AC) and a behavioral component (Solinger et al., 2008). This reconceptualization considers NC and CC as "an attitude toward a specific behavior (i.e., staying)" (p. 74). To address some of the critiques, Meyer and Herscovitch (2001) engaged in the development of a

"general model of workplace commitment" (p. 317), in which AC was re-conceptualized as belonging to a mindset characterized by desire. However, the previous definition for AC remained (i.e., emotional attachment) remained. Of note, Meyer and Herscovitch identified that the *target* of the emotional attachment component of AC could include the organization, an occupation, a supervisor, but could also include much more, such as an outcome to a course of action (e.g., continued employment). While Meyer and Herscovitch initially suggested the "sense of being bound to a course of action of relevance to a particular target" (p. 317) as the core essence of their general model of workplace commitment; they acknowledged, first that such an essence would be challenging to measure, and second, that rarely do pure forms of commitment exist and as such it is preferential to focus on the development of AC. The reasoning behind the latter acknowledgment is to identify that NC and CC often have very narrow focal behaviors (i.e., staying with an organization out of obligations or perceived costs), whereas, with AC, the focal behavior is much broader (Meyer & Herscovitch, 2001). The sense of being bound to an action comes from the individual's emotional attachment to the target (e.g., the organization). There is a high likelihood that the individual would engage in other behaviors (i.e., discretionary behaviors), which are still of value to the organization or target, although separate from the target behavior. Based on Meyer and Herscovitch's work, the potential for discretionary behaviors suggests that AC is preferable to NC or CC, as an individual with high levels of AC is more likely to be engaged and go above and beyond in the course of their work-related duties.

Whereas research on AC has highlighted the construct as being a preferable component of commitment due to its strong positive correlation with positive work outcomes (Meyer et al., 2002), research has also highlighted a correlation between PsyCap and AC (Avey et al., 2011; Gurbuz & Yildirim, 2019; Luthans et al., 2008). Through conducting a meta-analysis, Avey et al. (2011) identified a relationship as "the organization (as a referent) fulfills needs for efficacy and accomplishment for those high in PsyCap" (p. 132), which supports the employee's identification and attachment (i.e., AC) towards the organization. Gurbuz and Yildirim (2019) broke this down further by investigating the relationship between the individual personal psychological resources and AC, identifying the most substantial predictive relationship between optimism and AC. Gurbuz and Yildirim suggested the results reflected that a favorable opinion towards the organization and the future, along with the other psychological resources, "will provide the necessary fuel for motivational drive" (p. 66), resulting in higher levels of (affective) commitment.

Normative Commitment

A sense of obligation towards an organization often characterizes NC (Allen & Meyer, 1996; Meyer & Allen, 1991; Meyer & Herscovitch, 2001; Meyer et al., 2002). However, this sense of obligation may reflect feelings that an employee *ought* to remain with an organization due to specific pressures (e.g., family or cultural) or prior investments (e.g., training costs, tuition reimbursement) made by the organization (Allen & Meyer, 1996; Meyer & Allen, 1991). Meyer and Herscovitch (2001) extended the sense of obligation to other types of targets beyond the organization in their

conceptualization of a general model of workplace commitment. In their model, NC is used to explain commitment which falls under the obligation mindset, "NC is characterized by the mindset that one has an obligation to pursue a course of action of relevance to a target" (Meyer & Herscovitch, 2001, p. 316), as such a target could take many forms such the organization, a manager, or even a work project. In this context, the course of action may be better understood as a behavior, for example, staying with the organization, pleasing the manager, or completing the work project. However, somewhat different from AC, the associated behaviors would likely remain relatively narrow and specific to the target, meaning there would be a lower likelihood of exhibiting discretionary behaviors of value or relevance to the target (Meyer & Herscovitch, 2001). Similar to AC, though, employees will evaluate several antecedent factors, including personal characteristics, family and societal expectations, and organizational investments (Meyer et al., 2002). Evaluating such factors generates the feeling of obligation the employee feels towards the target, particularly when it comes to organizations and organizational investments. The sense of obligation may continue until the employee feels they have paid back their *debt* (Meyer & Allen, 1991).

While NC, along with AC and CC, remains prevalent in modern literature, some researchers present arguments, particularly about NC and CC, questioning the validity three-component model (Ko et al., 1997; Mercurio, 2015; Solinger et al., 2008). In particular, Ko et al. (1997) argued that there is little that distinguishes NC from the more widely accepted AC from a conceptual and empirical viewpoint. Based on their research, Ko et al., Bergman (2005), and later Solinger et al. (2008) argued that while empirical

differentiation between AC and NC was difficult, the issue was primarily a conceptual one. Ko et al. highlighted that believing it is right to stay with an organization (i.e., obligation) cannot be separated from choosing to stay with an organization that one identifies with and is involved in (i.e., AC). Ko et al. based their assessment of NC on Meyer and Allen's (1991) conceptualization of NC as being rooted in antecedent factors. Where the individual experiences both socialization to norms and feelings of reciprocity for prior or future organizational investment. Meyer et al. (2002), in response to the critiques of NC, suggested that the high correlation between NC and AC "is not unity" (p. 40). They pointed to variance in correlations due to geographic location and subsequent modifications to the concept of NC to focus more on the sense of obligation as opposed to the socialization of norms as evidence to the dimensionality of NC. However, while the rebuttals provided by Meyer and colleagues have not completely satisfied their critics, they have added scope and value to the OC construct. Critics have acknowledged that despite perceived conceptual issues with NC, there continues to be value in the concept in terms of the consequences of not staying with an organization, "which is paramount in a vast number of studies on the matter" (Solinger et al., 2008, p. 76). Furthermore, researchers acknowledge that NC is the least studied component of the three-component model, including limited research on NC-specific antecedents, consequences, and correlations. Researchers have suggested that the NC concept requires more empirical research to contribute to a more robust understanding of the commitment component (Allen & Meyer, 1996; Bergman, 2006; Meyer et al., 2002; Solinger et al., 2008).

Research that has focused on NC, particularly in health care organizations, has shown some interesting results. Mousa and Puhakka (2019), in a study using physicians at four Egyptian hospitals, identified statistically significant positive relationships between responsible leadership, organizational inclusion, and NC. The researchers used organizational inclusion and responsible leadership as indicators of the organizations' adherence to being inclusive and supportive of individual and cultural differences and their leaders' ethical, socially aware, and engaging practices. Mousa and Puhakka suggested that the positive relationship with NC "highlights that individuals (physicians in this case) seek to balance their work behavior and attitude (OC in this case) with the benefits (e.g., recognition, respect, non-work time, justice) granted from their employer" (p. 218).

In other research specific to health care workers, Du et al. (2019) examined "employee's perception about their organizations' commitment to develop their new skills and competencies" (p. 3) in relation to their turnover intent. In this study, NC was negatively correlated with the employees' intent to leave and found to completely mediate the relationship between the variables (Du et al., 2019). The researchers found a significant mediating effect, particularly for employees who had received some level of government subsidy. In contrast, the mediating effect was negligible for employees who had not received any government assistance, leading the researchers to surmise that government/organizational investment in the careers of health care workers was crucial to enhancing NC and reducing turnover. Additionally, traditional views on NC have suggested that AC provides a more robust prediction of employee behavior than NC;

however, as research has expanded beyond the North American population, research by Du et al. and others have challenged that view. In particular, cross-cultural research with Asian and other collectivist cultures has shown that NC has a much stronger predictive relationship with turnover intent in those communities (Du et al., 2019; Yao & Wang, 2006). Occasionally the predictive relationship is even more significant than the predictive relationship between AC and turnover intent (Chang et al., 2007) found in most North American settings.

Continuance Commitment

Arguably, CC may be the most straightforward component of OC to understand. The continuance component of commitment has been defined, relatively simply, as "commitment based on the employee's recognition of the costs associated with leaving the organization" (Allen & Meyer, 1996, p. 253). The employee will decide, primarily whether to remain with or leave the organization, based on an evaluation of alternatives. Decades ago, Becker (1960) and Kanter (1968) described continuance-related concepts of commitment, with Becker identifying that employees will commit themselves to certain behaviors which arise out of the development of desirable side bets. For example, a side bet could include a comfortable salary paid to an employee in return for their ongoing employment; as such, an employee will commit themselves to the behavior (i.e., remaining with the organization) to maintain the side bet. Kanter suggested a similar continuance-related concept where commitment occurs if profits result from engaging in a particular activity and costs result from discontinuing the activity. According to Kanter, an employee would be committed to an organization if they profit (e.g., salaries, benefits,

promotions) from remaining with the organization, and if those salaries, benefits, and promotions are lost (i.e., costs) if they leave the organization. Incorporating certain aspects of these earlier concepts, the three-component model of CC suggests that the accumulated side bets represent something desirable to the employee (i.e., a profit), which the employee can lose (i.e., a cost). Strong CC could reveal that the profit is highly valued or that the alternatives (e.g., salaries and benefits at other companies) are not as valuable. Alternatively, low CC could reveal that the profit is not as highly valued (e.g., a low salary, poor benefits) or that the potential alternatives are more desirable.

In their discussion of antecedents to CC, Meyer and Allen (1991) suggested that any side bets, investments, or alternatives that would increase the costs perceived by the employee, could potentially be included as an antecedent. This concept may be best understood when thinking about it in the context of staying with or leaving an organization. If the costs associated with leaving the organization are too significant, the employee will be more committed to staying with the organization and engage in behaviors that support staying. As such, anything that contributes to the imbalance between costs and profits could potentially be an antecedent. Similar to what they did with AC and NC, Meyer and Herscovitch (2001) attempted to reconceptualize CC within their general model of workplace commitment. CC represents a mindset characterized by cost avoidance in the general model of commitment (Meyer & Herscovitch, 2001). While the theoretical evaluation of costs and potential alternatives, or lack thereof, remains the same as Meyer and Allen's initial conceptualization of CC, they suggested there could be a broader range of potential targets. However, Meyer and Herscovitch acknowledged that

the range of focal behaviors associated with the cost avoidance mindset would still be relatively narrow. “If cost-avoidance is the only basis for commitment, the individual is unlikely to engage in any other course of action not specified in the terms of the commitment” (Meyer & Herscovitch, 2001, p. 319). This acknowledgement suggests individuals with high levels of CC will engage in behaviors that support their target (i.e., do what it takes to remain employed). However, they are less likely to engage in other behaviors (i.e., discretionary behaviors) that would benefit the employer or target.

As with NC, some researchers have argued that there are some conceptual problems with CC. First, Ko et al. (1997) suggested that the concept of CC, which included high personal sacrifices (i.e., costs) and lack of alternatives as subdimensions, was flawed. The argument was that the lack of other options contributed to the increased costs and, as such, would be an antecedent to CC rather than a subdimension (Ko et al., 1997). Meyer and Herscovitch (2001) attempted to respond to this criticism with their reconceptualization of CC and a renewed focus on the mindset of cost avoidance. Solinger et al. (2008) further argued that CC often has a negative or no relationship with the other components in the three-component model or with positive organizational outcomes. Solinger et al. referred to Meyer et al.’s (2002) research which indicated near-zero relationships between CC, organizational citizenship behaviors, absenteeism, and a negative relationship between CC and job performance. Other researchers have achieved similar results regarding the relationship with job performance finding negative or non-significant relationships (Kaplan & Kaplan, 2018).

In direct conflict with some of the critiques of CC, some studies have found significant positive results in the relationship between CC and positive organizational outcomes. Lin and Chang (2015) identified that affective, normative, and continual (i.e., continuance) commitment had a significant positive relationship with organizational citizenship behaviors, including altruistic behavior, employee voice, and loyal responsibility in a sample of front-line nurses in southern Taiwan. Lin and Chang's results indicated that continual (i.e., continuance) commitment held the most substantial relationship. In other research, Chang et al. (2007) suggested that cultural differences played a significant role in findings related to OC. As such, individuals who belong to high uncertainty avoidance cultures will "shun ambiguous situations and look for precise alternatives" (Chang et al., 2007, p. 365), which may result in high levels of CC. Finally, in a study of physicians in public institutions in Turkey, Yagar and Dokme (2019) found levels of CC to be higher than levels of NC and AC. However, the differences were relatively small; these results and others may indicate that culture and professional context play a role in CC.

Summary and Transition

This chapter summarized the available research cross-cultural PsyCap, both in terms of the development of the construct and the personal psychological resources, which are the components of the higher-order construct. As a psychological state of development (Luthans et al., 2015), the roots of PsyCap trace back to the domains of POB, POS, and PP (Luthans & Youssef-Morgan, 2017). While a modest volume of research exists related directly to PsyCap (i.e., workplace PsyCap), the context-specific

nature of the construct points towards a need for a better understanding across a range of contexts, including extending knowledge into the domain of intercultural interactions within multicultural workplaces.

A limited number of studies exist exploring cross-cultural PsyCap, with even fewer focusing on the predictive nature of the first-order components of the construct. The available studies have suggested that individuals with high cross-cultural hope are more likely to be motivated to pursue intercultural interactions, including identifying various pathways to achieve a successful interaction (Dollwet & Reichard, 2014; Reichard et al., 2014). Individuals with high cross-cultural self-efficacy are more likely to feel comfortable and confident in their ability to continually adapt to the needs of each intercultural interaction (Dollwet & Reichard, 2014). Individuals with high cross-cultural resilience are more likely to overcome difficulties and be successful when working and interacting with people from different cultures due to their deployment of personal resources (Dollwet & Reichard, 2014; Reichard et al., 2014). Finally, individuals with high cross-cultural optimism expect the best and have a positive outlook towards future intercultural interactions and believe that successful interactions result from their skills and abilities (Dollwet & Reichard, 2014).

COR theory is a stress and motivation theory (Hobfoll, 1989). It explains how personal psychological resources such as cross-cultural hope, self-efficacy, resilience, and optimism travel together in resource caravans and work synergistically to form cross-cultural PsyCap. Additionally, COR theory outlines four principles, suggesting first that from a psychological perspective, resource loss is more impactful and resource gain

(Hobfoll, 2011). Second, individuals must invest resources to gain, maintain, or recover other resources (Hobfoll, 2011). Third, resource gain becomes considerably more critical when resource losses have already occurred (Hobfoll et al., 2018). Finally, individuals will engage in increasingly irrational and desperate behaviors to defend resources at risk of exhaustion or loss (Hobfoll et al., 2018). Through COR theory, organizations can act as a resource caravan passageway that provides the societal and ecological conditions that may foster, support, and enrich the personal resources of employees (Hobfoll, 2011). COR theory also explains how and why employees would deploy personal psychological resources during intercultural interactions. Individuals will deploy resources to gain or protect what they genuinely value (Sungu et al., 2020), including desirable conditions such as emotional attachments to the organization. Wright and Hobfoll (2004) identified that in such a scenario, employees must possess the required personal psychological resources (i.e., cross-cultural hope, self-efficacy, resilience, and optimism) and must have the opportunity to deploy them (e.g., intercultural interactions within a multicultural organization).

This chapter also summarized the three-component model of OC, including history, a reconceptualization of the construct, ongoing critiques, and a summary of each component. Meyer and Allen (1991) developed the three-component model of OC to explain what they felt were three consistent themes about what binds an employee to an organization that appeared throughout OC literature. AC is an employee's emotional attachment to an organization (Allen & Meyer, 1996), characterized by a sense of desire (i.e., want to remain with the organization). CC is an employee's commitment based on

evaluating costs and alternatives (Allen & Meyer, 1996), characterized by a sense of need (i.e., costs of leaving the organization are too great). Finally, NC is an employee's sense of obligation towards an organization (Allen & Meyer, 1996), characterized by an employee feeling that it is the right thing to do (i.e., should remain as the organization has invested resources in developing the employee). Meyer and Herscovitch (2001) built upon and extended the three-component model into a general model of workplace commitment by expanding the range of focal targets to include occupations, supervisors, work projects, and more. Additionally, they theorized that each commitment mindset (i.e., desire, perceived cost, and obligation) binds the employee to a course of action despite the expanded range of potential focal targets. The action may be of specific relevance to the commitment (i.e., focal behavior) or non-specific to the commitment but still relevant to the target (i.e., discretionary behavior; Meyer et al., 2004).

While there is a considerable amount of literature regarding PsyCap, cross-cultural PsyCap, and OC, underscoring the importance of the constructs, the nature of cross-cultural PsyCap's influence on OC is still unclear. Researchers have called for further research on the context-specific nature of cross-cultural PsyCap and the relationship with other positive organizational outcomes such as OC (Kotze & Massyn, 2019; Maslakci & Sesen, 2019). Chapter 3 will address the research design and rationale for this study, including focusing on the methodology, participant population, sampling procedures, instrumentation, and data analysis.

Chapter 3: Research Method

Introduction

The purpose of this study is to examine the nature of the relationship between cross-cultural PsyCap and OC for employees at a health care organization in Canada. Health care organizations in Canada are well-known for being multicultural workplaces. Studies using samples of health care aides from western Canada have indicated that roughly 50% of the health care aides were born in countries other than Canada and spoke native languages other than English (Estabrooks et al., 2015). Health care staff are also often required to work in multidisciplinary teams, which requires collaborating with numerous individuals to provide care to a patient (McTighe & Donovan, 2017), making intercultural interactions relatively common-place occurrences. However, how these intercultural interactions impact employees' commitment to the organization has received little attention.

The research design uses an online survey that includes the scales from Dollwet and Reichard's (2014) cross-cultural PsyCap questionnaire and the revised version of the three-component model of employee commitment survey (Meyer et al., 1993). The data collected were analyzed using PLS-SEM in a two-step process. In Chapter 3, I discuss PLS-SEM in detail and summarize the research design, rationale, and methodology used in the study. The methodology discussion includes overviews of the population and sampling, recruitment and data collection, the instrumentation used and operationalization of the constructs.

Research Design and Rationale

I deemed a correlational non-experimental research design appropriate for this study as data were collected in a cross-sectional manner, and the study did not use control groups or interventions. Rather, the data were self-reported by participants via online surveys and were used to examine the nature of the relationship between cross-cultural PsyCap (predictor) and OC (criterion) variables and the relationships between each of the components of the latent variables. The preferred quantitative approach assumes that the cross-cultural PsyCap and OC concepts are measurable and statistically analyzed through numerical comparison and statistical inference. Similar procedures were used by Kotze and Massyn (2019), who suggested that similar research would benefit from quantitative analysis using larger sample sizes and multi-group analysis, and by Maslacki and Sesen (2019) who suggested conducting additional research in different industry sectors to increase the generalizability of the results. Such measurement and analysis would not be possible using a qualitative method; participants would report the data based on their lived experiences, and the results could not be generalized beyond the group that provided the data. As such, similar data analysis would not be possible. Additionally, the focus of the current study was to analyze the relationship between two constructs; describing the relationship in terms of the socially and psychologically constructed points of view of the employees (Gelo et al., 2008), while an admirable goal, was beyond the scope of this study.

Methodology

Target Population

The participants for this study came from a health care organization in Alberta, Canada. The organization employs over 10,000 staff in many different roles (over 12,000 unique positions as staff may hold multiple positions), including direct care nursing/front-line care (front-line), maintenance/environmental services/nutrition services/other general support (general support), and corporate/administrative/non-care related (administrative) positions. I intended the study to be generalized to the average age range of the adult working population; as such, I included only participants who indicated an age between 18 and 65 in the participant pool. However, as I performed data analysis using PLS-SEM, the question of the ideal sample size was not always so clear (Memon et al., 2020). A calculation using the Soper's (2020) A-priori sample size for structural equation models online calculator resulted in a recommended minimum sample size of 138. The A-priori sample size calculator is considered a superior method of calculation as it takes into consideration the number of variables within a model, both the latent (i.e., cross-cultural PsyCap, OC) and the observable (i.e., cross-cultural hope, AC, etc.; Memon et al., 2020). The A-priori minimum sample size used an anticipated effect size of 0.3, a desired statistical power level of 90%, and a probability of 0.05. Two other popular methods for calculating minimum sample sizes in SEM research include the inverse square and gamma-exponential methods. When the path coefficient value with the minimum absolute magnitude is unknown in advance, the inverse square method indicates a minimum sample size of 160, whereas the gamma-exponential method indicates a

minimum sample size of 146 (Kock & Hadaya, 2016; Memon et al., 2020). Such results are similar to the A-priori sample size calculator and align with the general suggestion from Memon et al. (2020), which indicated an effective sample size for most PLS-SEM research is greater than 160 and less than 300, but at times may be higher or lower, dependent on the size of the population.

Geographically the organization is spread throughout the province with roughly 18 different facilities consisting of acute care hospitals, long-term care, supportive living, and mixed care facilities. The province of Alberta has a little over 4.4 million residents. While roughly 1 million residents belong to a visible minority or aboriginal population, a census taken in 2016 indicated that approximately 21% of the population (845,220) identified as immigrants. Studies specific to health care in the western provinces have shown that a disproportionate number of immigrants to Alberta work in the health care sector (Estabrooks et al., 2015). For example, research conducted with health care aides, who would be considered front-line health care workers, indicated that roughly 50% of this employee group were born outside of Canada. Additionally, most of these staff spoke a native language other than Canada's two official languages (i.e., English and French; Estabrooks et al., 2015). These results would indicate that while Alberta is diverse in terms of the places of origin of the immigrant population, health care organizations specifically have recruited heavily from these various groups.

Sampling and Sampling Procedures

For this study, I anticipated using a proportionate stratified sampling method. The current research focuses on healthcare employees; therefore, it made sense to stratify the

population into three substantial employment groups: front-line, general support, and corporate employees. The overall sample consisted of employees from each stratified group using proportionate stratification. I determined the sample size for each stratum based on the proportional size of the employment group within the overall population (Groves et al., 2009), which the organization provided. For example, should the front-line staff stratum be 70% of the general population (i.e., 7,505 employees), the proportional sample should consist of 70% front-line staff. Acharya et al. (2013) identified that stratified sampling ensures an accurate representation between different groups from which researchers can make estimations. Furthermore, as noted by Acharya et al., researchers may make comparisons between such groups; however, to estimate values for the population, researchers would need to combine the results from all the groups or strata (Groves et al., 2009), making the stratified sampling an appropriate method when generalizing results. Unfortunately, the sample obtained from the surveys did not meet the required percentage for the proportionate stratified sampling method. Rather than discarding any data, I used a slightly disportionate sample for the analysis.

Recruitment, Participations, and Data Collection

This study used a population of employees from one organization. The employee population is widely dispersed geographically across the province of Alberta. I made initial inquiries with the chief human resources officer of the organization and held follow-up meetings before the data collection phase of the study. As the organization is a not-for-profit health care organization, research is an integral part of the medical operations, resulting in an organization familiar with empirical research methods and an

established system through which researchers may partner with the organization. The organization has an internal research ethics requirement in which the organization partners with a local university ethics review board to conduct third-party research ethics approvals. In addition, I agreed to and signed an internal knowledge transfer and data use agreement before conducting any research with the organization.

The organization sent an email on my behalf, including an invitation to participate in the study to staff (see Appendix A). The study invitation email provided a link to an online informed consent form, to which the participants had to agree before being able to begin the survey. Survey data were accessible only by me, and I saved the data in a password-protected file on a USB drive. Through working with a partner organization, I did not require access to any personally-identifying information. Rather, data were collected through the web-based form and consisted of demographics and survey response data. This study posed a minimal risk as defined by the 2013 Secretary's Advisory Committee on Human Research Protections (Department of Health and Human Services, 2013).

Instrumentation and Operationalization of Constructs

Instrumentation

Cross-Cultural Psychological Capital Scale

Cross-cultural PsyCap was measured using Dollwet and Reichard's (2014) Cross-Cultural PsyCap scale. Dollwet and Reichard adapted the PCQ previously developed by Luthans et al. (2007a). While the initial PCQ contained 24 items, Dollwet and Reichard's adapted version focuses on cross-cultural interactions and has 20 items. The adapted PCQ

uses a 7-point Likert scale ranging from 1-strongly disagree to 7-strongly agree and using items such as *I believe I can succeed at almost anything I set my mind to when working across different cultures*. Initial reliability analysis from the cross-cultural PsyCap scale indicated Cronbach's alpha of 0.79-0.91 for the subscales of cross-cultural hope, cross-cultural self-efficacy, cross-cultural resilience, and cross-cultural optimism, with an overall Cronbach's alpha of 0.94 for the entire scale. Dollwet and Reichard determined the scale's reliability and validity through a multi-survey assessment exploring cultural intelligence, openness to experience, ethnocentrism, and cross-cultural intelligence. The results support the scale's reliability and validity in cross-cultural skills and effectiveness assessment (Dollwet & Reichard, 2014). Researchers have used the cross-cultural PsyCap scale with samples from the United States (Dollwet & Reichard, 2014; Reichard et al., 2014), South Africa (Dollwet & Reichard, 2014; Kotze & Massyn, 2019; Reichard et al., 2014), and Northern Cyprus (Maslakci & Sesen, 2019). Studies using the cross-cultural PsyCap scale require permission from the publisher; however, the publisher freely offers the scale for thesis or dissertation purposes. The only caveat is that researchers must request permission again if the work is going to be published.

Three-Component Model Employee Commitment Survey

OC was measured using the shortened version of Meyer and Allen's (1991) Three-Component Model of Commitment survey (Meyer et al., 2013). Meyer and Allen conceptualized the original tool to evaluate the three sub-dimensions of OC: AC, NC, and CC. The shortened version of the tool uses an 18-item scale, consisting of a 7-point Likert scale ranging from 1-strongly disagree to 7-strongly agree, and uses items such

as *This organization has a great deal of personal meaning to me*. Meyer and Allen performed reliability testing for the scale resulting in Cronbach's alphas of 0.87 for AC, 0.75 for CC, and 0.79 for NC. Later, Allen and Meyer (1996) sought to further support the scale's validity by developing a nomological net that supported the previous evidence establishing the construct validity of the three commitment scales. Over the years since the development of the OC scale, numerous researchers have adapted it to other languages and further confirmed the scale's applicability across multiple contexts and cultures. The three-component model employee commitment survey does not require permission when used for non-commercial, academic purposes.

Operationalization of Variables

Cross-Cultural Psychological Capital

As previously discussed, cross-cultural PsyCap is the predictor variable in this research. In the current study, I defined cross-cultural PsyCap as a state-like, context-specific construct. A construct where the psychological resources of cross-cultural hope, cross-cultural self-efficacy, cross-cultural resilience, and cross-cultural optimism are applied directly to inter-cultural interactions in the workplace (Dollwet & Reichard, 2014). A high score on the cross-cultural PsyCap scale is assumed to indicate a higher level of comfort, confidence, and ability in successfully interacting with people from different cultural backgrounds. A low score indicates a lack of confidence, comfort, and difficulties in successfully navigating such interactions. In terms of the psychological resources which make of cross-cultural PsyCap, I defined cross-cultural hope as "pursuing and meeting goals related to working with people from different cultures"

(Dollwet & Reichard, 2014, p. 1672). Cross-cultural self-efficacy reflects having confidence in one's ability to interact and communicate with employees from different cultural groups (Dollwet & Reichard, 2014; Kotze & Massyn, 2019). Cross-cultural resilience reflects employees being "able to keep up their performance despite obstacles, such as language difficulties, cross-cultural conflict or other cross-cultural issues" (Kotze & Massyn, 2019, p. 2). Finally, I defined cross-cultural optimism as being able to "remain positive and motivated during cross-cultural interaction" (Kotze & Massyn, 2019, p. 2). The cross-cultural PsyCap scale includes four items specific to the cross-cultural hope subscale, nine items specific to the cross-cultural self-efficacy subscale, four specific to the cross-cultural optimism subscale, and three items specific to the cross-cultural resilience subscale (Dollwet & Reichard, 2014).

Organizational Commitment

The criterion variable in this study is OC; in the context of this research, I defined OC as a multi-dimensional construct in which "a psychological link between the employee and his or her organization that makes it less likely that the employee will voluntarily leave the organization" (Allen & Meyer, 1996, p. 252). A high score on the three-component employee commitment survey is assumed to indicate a low likelihood that the individual will voluntarily choose to leave the organization. A low score on the survey indicates an increased possibility that the individual will leave the organization. In terms of the individual components, I defined AC as an employee's "identification with, involvement in, and emotional attachment to the organization" (Allen & Meyer, 1996, p. 253), NC as an employee's "commitment based on a sense of obligation to the

organization" (Allen & Meyer, 1996, p. 253), and CC as an employee's "commitment based on the employee's recognition of the costs associated with leaving the organization" (Allen & Meyer, 1996, p. 253). A high score in one component scale will not be considered predictive of high scores in the other components (e.g., employees' may have high CC but low AC). The lack of predictive relationship between AC, NC, and CC may indicate one or more components may influence the individual's decision to stay with or leave the organization. However, should the attachment described by a component change, the other two components may not have the combined strength to influence the decision one way or another. The revised version of the three-component employee commitment survey (Meyer et al., 2013) includes six items under the AC scale, six items under the NC scale, and six items under the CC scale.

Data Analysis Plan

I used SmartPLS version 3.3.3 (SmartPLS) for the data analysis. To test the hypothesis that a positive relationship exists between the latent variables cross-cultural PsyCap and OC, I used PLS-SEM. This data analysis method allows a researcher to evaluate the measurement model before assessing the structural model (Hair et al., 2019a). I evaluated the indicator loadings, followed by an assessment of internal consistency. I then performed additional assessments to identify convergent and discriminant validity. The evaluation of the structural model included estimations of the coefficient of determination (R^2), effect size (f^2), predictive relevance (Q^2), and an assessment of the path coefficients (Hair et al., 2019a). I performed in-sample and out-of-sample tests for the predictive power of the models and multigroup moderation analysis

to identify whether a statistically significant difference exists based on the type of employment the participants identified.

Research Questions and Hypotheses

The current study used the following research questions and hypotheses:

RQ1 – Quantitative: What is the nature of the relationship between cross-cultural PsyCap and the AC component of OC in employees at a Canadian health care organization?

$H_0$1 – There is no statistically significant, positive relationship between cross-cultural PsyCap and the AC component of OC in employees at a Canadian health care organization.

H_a1 – There is a statistically significant, positive relationship between cross-cultural PsyCap and the AC component of OC in employees at a Canadian health care organization.

RQ2 – Quantitative: What is the nature of the relationship between cross-cultural PsyCap and the NC component of OC in employees at a Canadian health care organization?

$H_0$2 – There is no statistically significant, positive relationship between cross-cultural PsyCap and the NC component of OC in employees at a Canadian health care organization.

H_a2 – There is a statistically significant, positive relationship between cross-cultural PsyCap and the NC component of OC in employees at a Canadian health care organization.

RQ3 – Quantitative: What is the nature of the relationship between cross-cultural PsyCap and the CC component of OC in employees at a Canadian health care organization?

$H_0$3 – There is no statistically significant, positive relationship between cross-cultural PsyCap and the CC component of OC in employees at a Canadian health care organization.

H_a3 – There is a statistically significant, positive relationship between cross-cultural PsyCap and the CC component of OC in employees at a Canadian health care organization.

RQ4 – Quantitative: Does Canadian health care organization employees' type of employment influence the relationship between their cross-cultural PsyCap and OC?

$H_0$4 – Canadian health care organization employees' type of employment does not influence the relationship between their cross-cultural PsyCap and OC.

H_a4 – Canadian health care organization employees' type of employment influences the relationship between their cross-cultural PsyCap and OC.

Threats to Validity

In SEM research, researchers measure validity through convergent and divergent validity (Kumar & Upadhaya, 217); however, that is not to say that researchers ignore other forms of validity. While the construct validity subtypes, convergent and divergent validity, are critical pieces of the measurement model analysis, external and statistical conclusion validity are also important considerations.

Construct Validity

Construct validity can be understood as an indicator that a test measures the phenomenon that the researcher is interested in (Matthay & Glymour, 2020). Construct validity is of particular importance in this study, as the constructs are latent variables that are otherwise unobservable (Matthay & Glymour, 2020). Dollwet and Reichard (2014) noted in their development of the cross-cultural PsyCap scale that fit indices and reliability analysis indicated that the four-component model of cross-cultural PsyCap was superior when compared to a one-factor model. Furthermore, Dollwet and Reichard reduced nine items from their original hypothesized model. An analysis of regression weights indicated the items were not accurately measuring the cross-cultural PsyCap construct they were proposing. Based on this research, Dollwet and Reichard identified the cross-cultural PsyCap scale as having appropriate levels of construct validity. Meyer et al. (1993) also started with additional items as part of their scale (i.e., 30 total items across three components); starting with additional items enabled the researchers to perform item analyses to identify the items which best captured the commitment scales. Meyer et al. also assessed antecedent and outcome variables to validate their selection of items, including nursing program satisfaction, career-related work involvement, and career plans. Based on their analysis, Meyer et al. deemed the revised three-component model of employee commitment survey as having appropriate construct validity.

External Validity

Referring to Shadish, Cook and Campbell's validity typology, Matthay and Glymour (2020) defined external validity as "the extent to which study results can be

generalized to other units, treatments, observations made on units, and setting of study conduct" (p. 376). Essentially, external validity is concerned with the generalizability of the study findings. To avoid bias in the current study, I maintained the anonymity of the participants throughout the research. Participants self-identified which employee group they belonged to, and I used the demographic information to perform a multigroup analysis. The study uses multigroup analysis to separate participants into each employment group and determine any statistical differences. Statistical differences between groups may indicate an underlying difference in participants' cross-cultural PsyCap and OC. These underlying differences, if significant, may suggest that individual group results or overall results are not generalizable to other groups beyond health care employees. The study also used inclusion criteria to ensure that results are generalizable to the average age of the working population in Canada.

Statistical Conclusion Validity

Statistical conclusion validity is the "appropriate use of statistical methods to assess the relationships among study variables" (Matthay & Glymour, 2020, p. 376). Essentially, in this study, statistical conclusion validity equates to the question, *does a relationship exist between the variables or not*? Threats statistical conclusion validity can include; fishing, where data is analyzed repeatedly until the researcher finds a significant result. Additionally, threats may consist of low statistical power, resulting in researchers drawing an inaccurate conclusion about the relationship between the variables. Finally, threats may include violating test assumptions, resulting in erroneous conclusions about the size of an effect (Matthay & Glymour, 2020). The study addresses these threats and

mitigates the chances of making Type I and Type II errors by using a sufficient sample size. In terms of SEM research, a rule of thumb is to use a sample size between 160 and 300 (Memon et al., 2020) to ensure sufficient data is analyzed to lead to accurate conclusions. PLS-SEM also separates the analysis of the measurement and structural model relationships. The separation allows researchers to use PLS-SEM for small and large sample sizes (Hair et al., 2019a). In SEM, violating test assumptions such as normality and multicollinearity may also threaten statistical conclusion validity. PLS-SEM is particularly robust in protecting against violations of normality (Hair et al., 2019a) and does not require the data distribution to be normal. Additionally, PLS-SEM also benefits from a "high degree of statistical power" (p. 7), making the analysis method particularly useful in exploratory and confirmatory research.

Ethical Procedures

I received ethics approval from the IRB at Walden University and the Human Research Ethics Board at the University of Alberta (HREB) for the current study. Alberta's primary health care organizations have contracted out the ethics review and approval for any research involving the organizations to the HREB. Beyond approval from the IRB and the HREB, the organization's research department must also approve any research. The Chief Human Resources Officer and I had initial discussions to gauge interest and had additional meetings after my chair and committee member approved the study proposal. The HREB required that external student researchers receive approval from their university ethics review (i.e., IRB at Walden University) before reviewing any proposed research. The organization also required approval from the HREB before the

research department provided the final research approval. I have included the approvals from the Walden IRB, the research department, and the HREB as Appendices G, E, and F.

Confidentiality

The participants and data in this study will remain confidential at all times. The study used protocols ensuring no influence upon the participants from either the researcher or the organization. Protocols included having the organization send out the email invite to participate, completing the survey through Survey Monkey, and avoiding personally-identifying information. Computer devices and USB drives used for the research were password-protected to ensure the security of the stored data.

Informed Consent

While this study posed a minimal risk as defined by the 2013 Secretary's Advisory Committee on Human Research Protections (Department of Health and Human Services, 2013), I still provided participants with a digital informed consent form. After reading the description of the study and the informed consent; the participant must indicate *YES* to whether they consent to participate in continuing with the survey. An answer of *NO* sent the participant to the disqualification page. The informed consent, obtained from Walden University (2020), includes a description of the study, the name and role of the researcher, the procedures involved in the study, a statement regarding the voluntary nature of the study, discussion of any expected risks, a privacy statement, and finally contact information for the IRB.

Summary and Transition

Chapter 3 discussed the research design and rationale for this study, presented the research questions and hypotheses, and introduced the study's methodology. The chapter also introduced the population, the sampling procedures, the recruitment of participants, and the data collection method. Additionally, the chapter reviewed the instrumentation for the study, discussed the operationalization of the constructs, discussed threats to the validity, and described the ethical procedures which will take place. In summary, the purpose of this quantitative study is to examine the nature of the relationship between cross-cultural PsyCap and OC for employees at a health care organization in Canada. Data will be collected from the employees at a health care organization in Alberta with the organization's assistance to ensure confidentiality. The study used digital versions of the cross-cultural PsyCap scale and the three-component model employee commitment survey to collect the data. After collection, I assessed the data using PLS-SEM. Chapter 4 will include a comprehensive breakdown of the data collection and a detailed discussion about the results.

Chapter 4: Results

Introduction

The purpose of this study is to examine the relationship between cross-cultural PsyCap and OC for staff at a health care organization in Canada. Cross-cultural PsyCap was operationalized as a latent construct consisting of cross-cultural hope, cross-cultural self-efficacy, cross-cultural resilience, and cross-cultural optimism and was measured using Dollwet and Reichard's (2014) cross-cultural PsyCap scale. OC was operationalized as a latent construct consisting of AC, NC, and CC and was measured using a shortened version of Meyer and Allen's three-component model employee commitment survey (Meyer et al., 2013). I chose the cross-cultural PsyCap scale and the three-component model employee commitment survey for this study as previous studies have shown both measures to be reliable and valid in cross-cultural PsyCap and OC research. I used PLS-SEM in a two-step approach, similar to the process used by Kotze and Massyn (2019), to analyze the relationship between cross-cultural PsyCap and workplace psychological well-being. The two-step approach included data analysis to confirm the internal consistency and construct validity and the proposed model and a structural model assessment to test the proposed hypotheses (Sarstedt et al., 2017).

The four research questions and hypotheses upon which this research study was structured include:

RQ1 – Quantitative: What is the nature of the relationship between cross-cultural PsyCap and the AC component of OC in employees at a Canadian health care organization?

$H_0$1 – There is no statistically significant, positive relationship between cross-cultural PsyCap and the AC component of OC in employees at a Canadian health care organization.

H_a1 – There is a statistically significant, positive relationship between cross-cultural PsyCap and the AC component of OC in employees at a Canadian health care organization.

RQ2 – Quantitative: What is the nature of the relationship between cross-cultural PsyCap and the NC component of OC in employees at a Canadian health care organization?

$H_0$2 – There is no statistically significant, positive relationship between cross-cultural PsyCap and the NC component of OC in employees at a Canadian health care organization.

H_a2 – There is a statistically significant, positive relationship between cross-cultural PsyCap and the NC component of OC in employees at a Canadian health care organization.

RQ3 – Quantitative: What is the nature of the relationship between cross-cultural PsyCap and the CC component of OC in employees at a Canadian health care organization?

$H_0$3 – There is no statistically significant, positive relationship between cross-cultural PsyCap and the CC component of OC in employees at a Canadian health care organization.

H_a3 – There is a statistically significant, positive relationship between cross-cultural PsyCap and the CC component of OC in employees at a Canadian health care organization.

RQ4 – Quantitative: Does Canadian health care organization employees' type of employment influence the relationship between their cross-cultural PsyCap and OC?

H_04 – Canadian health care organization employees' type of employment does not influence the relationship between their cross-cultural PsyCap and OC.

H_a4 – Canadian health care organization employees' type of employment influences the relationship between their cross-cultural PsyCap and OC.

In this chapter, I address the data collection process, sample demographics, and descriptive statistics of the research sample. Subsequently, I review the results of both the measurement model evaluation and the structural model assessment (i.e., hypothesis testing). Finally, I outline the results of the moderation analysis to address research question number four, before summarizing the chapter and transitioning to Chapter 5.

Data Collection

The Walden University Institutional Review Board approved data collection for this study (IRB – approval #05-28-21-0662235), the University of Alberta Health Research Ethics Board (HREB – study ID Pro00109018), and the Covenant Health Research Centre (CHRC – study# 20558). I sent an email invitation to staff at a Canadian health care organization, inviting them to participate in an online survey by clicking a link in the email. The link took participants directly to an online survey provided through Survey Monkey. Participants had the opportunity to review the informed consent page

before indicating their agreement to participate. I received a total of 535 survey responses to the survey. I downloaded the survey responses from the Survey Monkey website and cleansed the data before uploading it into SmartPLS. As suggested in the current literature, I manually deleted any surveys in which the respondents did not answer a minimum of 85% of the items (Hair et al., 2017; Samani, 2016). In addition, four of the items on the OC scale were reverse coded and, as such, required recoding. Items AC3, AC4, AC5, and NC1, were recoded 7=1, 6=2, 5=3, 4=4, 3=5, 2=6, and 1=7 based on the direction from the *TCM Employee Commitment Survey Academic Users Guide* 2004 (Meyer & Allen, 2004). Once uploaded to SmartPLS, mean replacement was used in further data analysis to address any missing values. Hair et al. (2017) suggested that if any indicators contain 5% or greater missing values, researchers should use casewise deletion to remove the missing values. However, as the indicators in the current study had less than 5% missing data per indicator, the existing literature suggests using mean replacement to recode any missing values with the mean value specific to the individual indicator. Missing values within the dataset were coded as -999, as suggested by Hair et al. SmartPLS allows for this *missing value indicator* to be identified and automatically replaces the missing values with the indicator mean when mean replacement is selected. The data cleansing process removed 153 survey responses, leaving 382 responses (71.4% completion rate) for further data analysis.

Timeframe

The online survey was active for participant completion from July 15, 2021, until August 5, 2021. It is important to note that data collection occurred while the 2021

COVID-19 pandemic was still active. Health care employees have been particularly busy during the COVID-19 pandemic. While I did not collect data to confirm this, the lingering toll of COVID-19 on health care staff may have impacted survey response rates. Additionally, as I collected data over a short period during the summer (July-August), some employees may not have had the opportunity to respond before the survey closed due to vacations and other leaves from work.

Normality

According to Hair et al. (2017), unlike covariance-based SEM, normal data distribution is not required for PLS-SEM. However, whereas PLS-SEM does not assume a normal distribution, researchers are still encouraged to differentiate between normal and non-normal data distributions through identifying the measures of skewness and kurtosis of their data (Hair et al., 2017). Similarly, Finney and DiStefano (2006) suggested that one of the first analyses researchers should conduct is an assessment of the skewness and kurtosis of the data as the results may guide some their future decisions. Skewness measures the symmetry of the data, for example, whether the data skew to the left or right of the distribution.

In contrast, kurtosis measures the data distribution peak (Hair et al., 2017). Data skewed greater than +1 or less than -1 or peaked higher than +1 or lower than -1 are considered non-normal. I calculated the skewness and kurtosis for the survey data and included the results in Table 1. Results indicate that most data distributions are non-normal. However, this result was expected as the data is ordinal and was collected through a survey using a Likert scale. As mentioned by Hair et al. (2017), while

researchers must differentiate between normal and non-normal data, PLS-SEM is a nonparametric statistical method and, as such, does not require satisfaction of the normality assumption to perform data analysis.

Table 1

Normality of Data Distribution

Indicator	Excess kurtosis	Skewness
CCHOPE1	0.046	0.740
CCHOPE2	2.056	1.064
CCHOPE3	1.220	0.999
CCHOPE4	2.118	1.264
CCEFF1	1.951	1.224
CCEFF2	1.771	1.216
CCEFF3	0.451	0.757
CCEFF4	-0.197	0.665
CCEFF5	5.925	1.801
CCEFF6	4.820	1.701
CCEFF7	3.409	1.409
CCEFF8	1.736	1.113
CCEFF9	0.459	0.815
CCOPT1	0.223	0.634
CCOPT2	3.626	1.532
CCOPT3	2.909	1.399
CCOPT4	0.293	0.720
CCRES1	3.637	1.375
CCRES2	4.192	1.495
CCRES3	1.030	0.805
AC1	0.810	1.139
AC2	-0.962	0.247
AC3	-1.046	0.316
AC4	-0.966	0.397
AC5	-0.847	0.527
AC6	-0.414	0.607
CC1	-0.436	0.685
CC2	-0.956	0.381

Indicator	Excess kurtosis	Skewness
CC3	-0.924	0.401
CC4	-1.143	-0.047
CC5	-1.050	-0.190
CC6	-1.195	0.145
NC1	-1.147	0.015
NC2	-1.140	-0.031
NC3	-1.257	-0.056
NC4	-0.954	0.259
NC5	-0.623	0.457
NC6	-1.058	0.024

CCHOPE, cross-cultural hope; CCEFF, cross-cultural self-efficacy; CCRES, cross-cultural resilience; CCOPT, cross-cultural optimism; AC, affective commitment; NC, normative commitment; CC, continuance commitment

Study Results

Sample Demographics

The sample includes 382 participants from various positions within the organization. From the sample, 232 (60.73%) participants identified holding front-line positions, 52 (13.61%) held general support positions, 96 (25.13%) held administrative positions, and two (0.52%) chose not to answer. In terms of age, participants ranged between 18 and 65. Demographic responses indicate 71 (18.59%) participants were between the ages of 18 and 34, 182 (47.64%) between 35 and 49, 128 (33.51%) between 50 and 65, and one (0.26%) participant chose not to answer. Finally, 322 (84.29%) participants identified as female, 53 (13.87%) identified as male, and seven (1.83%) preferred not to answer. Table 2 includes the sample demographics.

Table 2

Sample Demographics (Type of Employment, Age, and Gender)

Variable	Description	Frequency	Percent
Type of employment	Direct nursing care/front-line	232	60.73%
	General support/maintenance	52	13.61%
	Corporate/administrative	96	25.13%
	Did not answer	2	0.52%
Age	18-34	71	18.59%
	35-49	182	47.64%
	50-65	128	33.51%
	Did not answer	1	0.26%
Gender	Female	322	84.29%
	Male	53	13.87%
	Did not answer	7	1.83%

Descriptive Statistics

I calculated descriptive statistics for the survey responses under each of the indicators. Table 3 includes the descriptive statistics for the indicators. Each survey scored all indicators or items on a 7-point scale, with 1 indicating *strongly agree* and 7 indicating *strongly disagree.* The descriptive statistics revealed that overall, the mean (*M*) for all the cross-cultural PsyCap scale indicators was below the midpoint, ranging from *M* = 1.8 to *M* = 3.0, with standard deviation (*SD*) ranging from *SD* = 0.908 to *SD* = 1.459. In terms of descriptive statistics for the OC scale, seven indicators (AC1, AC5, AC6, CC1, CC2, CC3, and NC5) had an *M* below the midpoint ranging from *M* = 2.6 to *M* = 3.5 with *SD* ranging from *SD* = 1.538 to *SD* = 1.863. The remaining 11 indicators had an *M* above the midline ranging from *M* = 3.5 to *M* = 4.3, with *SD* ranging from *SD* = 1.747 to *SD* = 1.955.

Table 3

Descriptive Statistics

Construct	Indicator	Mean	Min	Max	Standard deviation
CCPsyCap					
CCHOPE					
	CCHOPE1	2.7	1.000	7.000	1.457
	CCHOPE2	2.4	1.000	7.000	1.113
	CCHOPE3	2.6	1.000	7.000	1.180
	CCHOPE4	2.6	1.000	7.000	1.241
CCEFF					
	CCEFF1	2.2	1.000	7.000	1.128
	CCEFF2	2.4	1.000	7.000	1.221
	CCEFF3	2.8	1.000	7.000	1.236
	CCEFF4	3.0	1.000	7.000	1.459
	CCEFF5	1.8	1.000	7.000	0.908
	CCEFF6	1.9	1.000	7.000	0.959
	CCEFF7	2.0	1.000	7.000	0.986
	CCEFF8	2.4	1.000	7.000	1.163
	CCEFF9	2.8	1.000	7.000	1.329
CCOPT					
	CCOPT1	2.8	1.000	7.000	1.193
	CCOPT2	2.2	1.000	7.000	1.071
	CCOPT3	2.2	1.000	7.000	1.093
	CCOPT4	2.7	1.000	7.000	1.274
CCRES					
	CCRES1	2.1	1.000	7.000	0.966
	CCRES2	2.1	1.000	7.000	0.982
	CCRES3	2.4	1.000	7.000	1.021
OrgCommit					
AC					
	AC1	2.6	1.000	7.000	1.538
	AC2	3.8	1.000	7.000	1.747
	AC3	3.6	1.000	7.000	1.821
	AC4	3.5	1.000	7.000	1.778
	AC5	3.4	1.000	7.000	1.863
	AC6	3.2	1.000	7.000	1.641

Construct	Indicator	Mean	Min	Max	Standard deviation
CC					
	CC1	3.1	1.000	7.000	1.633
	CC2	3.5	1.000	7.000	1.815
	CC3	3.5	1.000	7.000	1.813
	CC4	4.0	1.000	7.000	1.829
	CC5	4.3	1.000	7.000	1.756
	CC6	3.9	1.000	7.000	1.885
NC					
	NC1	4.1	1.000	8.000	1.827
	NC2	4.2	1.000	7.000	1.803
	NC3	4.2	1.000	7.000	1.955
	NC4	3.7	1.000	7.000	1.837
	NC5	3.4	1.000	7.000	1.706
	NC6	4.0	1.000	7.000	1.804

CCHOPE, cross-cultural hope; CCEFF, cross-cultural self-efficacy; CCRES, cross-cultural resilience; CCOPT, cross-cultural optimism; AC, affective commitment; NC, normative commitment; CC, continuance commitment; CCPsyCap, cross-cultural psychological capital; OrgCommit, organizational commitment

Model Estimation

To begin analysis in PLS-SEM, the models, both measurement and structural, must first be estimated and can subsequently be evaluated (Sarstedt et al., 2017). Whereas people often think of PLS-SEM as one single process, it is two distinct sets of equations. The measurement model (outer model), which focuses on the relationship between a construct and related indicators, and the structural model (inner model), which focuses on the relationships that exist between constructs (Henseler et al., 2016). As a result, PLS-SEM requires an estimation of model fit; researchers then assess the fit estimation for quality. Hair et al. (2017) suggested that within SmartPLS, researchers completed the model estimation through running the *PLS algorithm* using a *path* weighting scheme, 300

maximum iterations, and a specific stop criterion of $1x10^{-7}$. Table 4 includes the estimation results in terms of standardized coefficients. Figures 5 and 6 visually represent the measurement (inner) and structural (outer) models.

Table 4

Model Estimation (Outer and Inner Models)

Construct	AC	CC	NC
CCEFF	0.097	0.061	0.014
CCHOPE	0.065	0.026	0.183
CCOPT	0.310	0.052	0.202
CCRES	-0.037	-0.012	-0.010
CCPsyCap	0.379	0.109	0.320

CCHOPE, cross-cultural hope; CCEFF, cross-cultural self-efficacy; CCRES, cross-cultural resilience; CCOPT, cross-cultural optimism; AC, affective commitment; NC, normative commitment; CC, continuance commitment; CCPsyCap, cross-cultural psychological capital

Figure 5

Model Estimation of Lower-Order Constructs

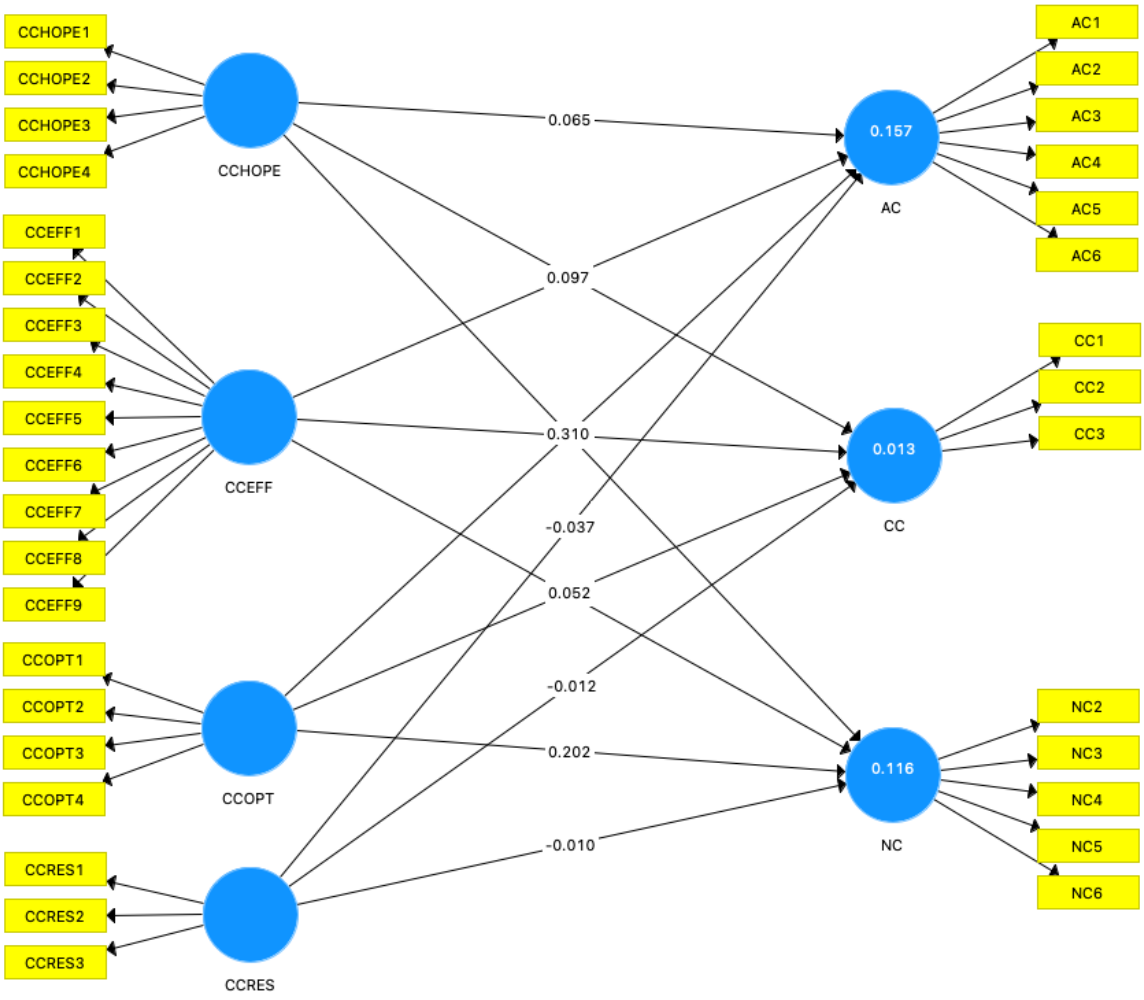
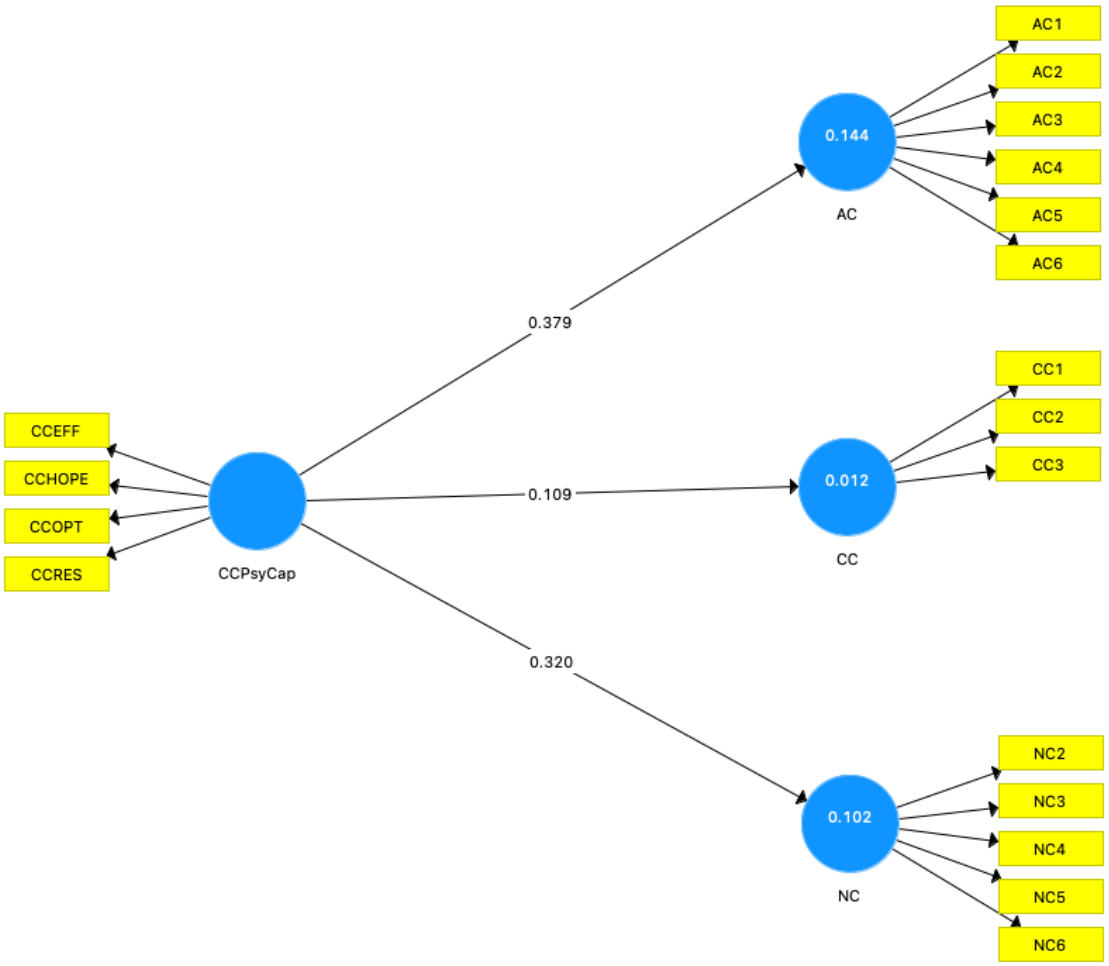


Figure 6

Model Estimation of Higher-Order Constructs



Measurement Model Assessment

Sarstedt et al. (2017) mentioned that a two-stage process best serves PLS-SEM analysis. The two-stage process includes an analysis of the measurement model and, subsequently, an analysis of the structural model and hypothesis testing. I used the *disjoint two-stage approach* in which the initial measurement model is constructed and estimated using the initial indicators and lower-order constructs. Then the subsequent

structural model estimation uses the lower-order constructs as the indicators for the higher-order construct (Sarstedt et al., 2019). As a "reflective-reflective second-order construct" (Kotze & Massyn, 2019, p. 4), the cross-cultural PsyCap construct reflects the four personal psychological resources. Similarly, the higher-order OC construct reflects the three components of commitment, and both the psychological resources and commitment components reflect their indicators. Current literature identifies that reflective constructs require a specific set of analyses to evaluate the measurement model within PLS-SEM. The collection of analyses includes reviews of indicator loadings, composite reliability, outer loadings, average variance extracted, and heterotrait-monotrait (HTMT) ratio of correlations (Hair et al., 2011; Hair et al., 2017, Hair et al., 2019a; Sarstedt et al., 2017). The first step in assessing the measurement model is to evaluate the indicator loadings, then assess the internal consistency and the construct validity (Hair et al., 2011; Hair et al., 2019a; Sarstedt et al., 2017). To conduct such an assessment, I used the SmartPLS *PLS algorithm* with the weighting scheme set to path, the maximum iterations set to 300, and the stop criterion set to seven; as previously mentioned, the mean replacement process automatically recoded all missing values.

Indicator Loadings

Indicator loadings, also referred to as *outer loadings,* are a measure of "an item's absolute contribution to its assigned construct" (Hair et al., 2017, p. 315). Before moving forward with the measurement model assessment, I reviewed the indicator loadings to ensure the associated latent construct explains more than 50% of the variance in the indicator (Hair et al., 2019a; Sarstedt et al., 2017). Indicator loadings should be above

0.70; however, researchers may retain indicator loadings between 0.40 and 0.70 if the removal of such indicators does not increase the composite reliability of the construct above the suggested minimum. Researchers should always remove indicators with loadings below 0.40 (Hair et al., 2011). Table 5 includes the initial indicator loadings. Indicators CC4, CC5, and CC6 had values lower than 0.40; based on the direction from Hair et al. (2011), I removed these indicators from the model. I then considered removing other indicators with low values to improve the construct validity (Hair et al., 2011). I conducted an additional validity analysis for any indicators falling below the threshold, resulting in indicator NC1 being removed from the model due to substantial loading on the AC construct. Table 6 shows indicator loadings after the removal of the four indicators. While some indicator loadings still fell between 0.40 and 0.70 (e.g., CC1, CCEFF3, CCEFF4, CCEFF9, and CCHOPE4), a review of cross-loadings indicated these indicators were loading substantially on the appropriate constructs, and thus the indicators were retained.

Table 5

Indicator Loadings (Prior to Removal of Indicators)

Indicator	AC	CC	CCEFF	CCHOPE	CCOPT	CCRES	NC
AC1	0.818						
AC2	0.725						
AC3	0.770						
AC4	0.783						
AC5	0.787						
AC6	0.826						
CC1		0.640					
CC2		0.765					
CC3		0.681					
CC4		**0.128**					
CC5		**-0.128**					
CC6		**0.003**					
CCEFF1			0.744				

Indicator	AC	CC	CCEFF	CCHOPE	CCOPT	CCRES	NC
CCEFF2			0.774				
CCEFF3			0.689				
CCEFF4			0.576				
CCEFF5			0.796				
CCEFF6			0.789				
CCEFF7			0.795				
CCEFF8			0.729				
CCEFF9			0.671				
CCHOPE1				0.810			
CCHOPE2				0.840			
CCHOPE3				0.823			
CCHOPE4				0.623			
CCOPT1					0.797		
CCOPT2					0.775		
CCOPT3					0.855		
CCOPT4					0.768		
CCRES1						0.902	
CCRES2						0.905	
CCRES3						0.868	
NC1							**0.555**
NC2							0.735
NC3							0.778
NC4							0.840
NC5							0.793
NC6							0.799

CCHOPE, cross-cultural hope; CCEFF, cross-cultural self-efficacy; CCRES, cross-cultural resilience; CCOPT, cross-cultural optimism; AC, affective commitment; NC, normative commitment; CC, continuance commitment

Table 6

Indicator Loadings (After Removal of Indicators)

Indicator	AC	CC	CCEFF	CCHOPE	CCOPT	CCRES	NC
AC1	0.818						
AC2	0.726						
AC3	0.770						
AC4	0.783						
AC5	0.786						
AC6	0.827						
CC1		0.696					
CC2		0.862					
CC3		0.850					
CCEFF1			0.742				
CCEFF2			0.775				
CCEFF3			0.693				
CCEFF4			0.579				
CCEFF5			0.794				
CCEFF6			0.786				

Indicator	AC	CC	CCEFF	CCHOPE	CCOPT	CCRES	NC
CCEFF7			0.793				
CCEFF8			0.730				
CCEFF9			0.674				
CCHOPE1				0.816			
CCHOPE2				0.841			
CCHOPE3				0.828			
CCHOPE4				0.610			
CCOPT1					0.798		
CCOPT2					0.773		
CCOPT3					0.855		
CCOPT4					0.769		
CCRES1						0.899	
CCRES2						0.903	
CCRES3						0.872	
NC2							0.744
NC3							0.773
NC4							0.842
NC5							0.791
NC6							0.805

CCHOPE, cross-cultural hope; CCEFF, cross-cultural self-efficacy; CCRES, cross-cultural resilience; CCOPT, cross-cultural optimism; AC, affective commitment; NC, normative commitment; CC, continuance commitment

Internal Consistency

Internal consistency is synonymous with reliability; it measures outcome consistency (Hair et al., 2017) and is vital for replicating and generalizing study results. To analyze the internal consistency of the measurement model, I calculated a composite reliability (CR) value for each construct. CR values greater than 0.70 indicate an acceptable level of internal consistency (Hair et al., 2011, Hair et al., 2019a; Sarstedt et al., 2017). CR for the lower-order constructs ranged from 0.813 to 0.921, indicating an acceptable internal consistency/reliability level. While CR is a measure of internal consistency, there is some evidence that it may be too liberal and most likely represents the upper boundary of reliability values. Whereas Cronbach's alpha represents the more conservative lower boundary of reliability, and true reliability of the measurement model

falls somewhere in-between (Hair et al., 2019a; Sarstedt et al., 2017). While Cronbach's alpha represents the lower boundary, values should still represent acceptable levels to contribute to an acceptable internal consistency/reliability (Hair et al., 2011; Hair et al., 2017, Hair et al., 2019a; Sarstedt et al., 2017). Cronbach's alpha for the constructs ranged from 0.726 to 0.880, consistently representing the lower boundary for each construct. Table 7 displays the Cronbach's alpha and composite reliability results.

Table 7

Internal Consistency Analysis (Cronbach Alpha and Composite Reliability)

Construct	Cronbach's alpha	Composite reliability
AC	0.880	0.906
CC	0.726	0.847
CCEFF	0.891	0.912
CCHOPE	0.779	0.859
CCOPT	0.813	0.876
CCRES	0.874	0.921
NC	0.852	0.893

CCHOPE, cross-cultural hope; CCEFF, cross-cultural self-efficacy; CCRES, cross-cultural resilience; CCOPT, cross-cultural optimism; AC, affective commitment; NC, normative commitment; CC, continuance commitment

Table 8 indicates CR and Cronbach's alpha results for the higher-order cross-cultural PsyCap and OC constructs. Whereas internal consistency results for cross-cultural PsyCap (CR = 0.907, $\alpha = 0.863$) indicated an acceptable level of construct reliability, the Cronbach's alpha result (CR = 0.794, $\alpha = 0.636$) for OC was somewhat low; however, still satisfactory as it represented the lower boundary of reliability, and the reliability coefficient was above 0.70 ($\rho_A = 0.794$).

Table 8

Internal Consistency Analysis (Cronbach Alpha and Composite Reliability – Second-Order Constructs)

Construct	Cronbach's alpha	Composite reliability
Cross-cultural PsyCap	0.863	0.907
Organizational Commitment	0.636	0.794

Construct Validity

In PLS-SEM, construct validity is established through assessing the level of convergent and discriminant validity. In this context, convergent validity is "the extent to which a construct converges in its indicators by explaining the items' variance" (Sarstedt et al., 2017, p. 16). As previously mentioned, an initial review of the outer loadings (i.e., indicator loadings) revealed issues with four indicators resulting in their removal. Typically, outer loadings greater than 0.70 and average variance extracted (AVE) greater than 0.50 are used to determine convergent validity (Hair et al., 2011, Hair et al., 2019a; Sarstedt et al., 2017).

As previously outlined, outer loadings for the lower-order indicators ranged from 0.579 to 0.903, suggesting that most items have acceptable levels of validity with only CCHOPE4, CCEFF3, CCEFF4, CCEFF9, and CC1 falling under the 0.70 mark. Additionally, the outer loadings for the higher-order indicators ranged from 0.402 to 0.895, with only CC falling below the 0.70 level. I reviewed AVE for each latent construct (higher and lower-order) to assess whether I should remove any additional indicators. AVE ranged between 0.537 and 0.795 for the lower-order constructs and between 0.586 and 0.710 for the higher-order constructs indicating the proposed

measurement model had acceptable convergent validity. Based on the acceptable convergent validity, I retained all the remaining items. Table 9 displays the results for the outer loadings and AVE.

Table 9

Convergent Validity Analysis (Factor Loadings and Average Variance Extracted)

Construct	Variable	Indicator	Outer loadings	AVE
Cross-cultural PsyCap				0.710
	CCHOPE		0.768	0.617
		CCHOPE1	0.816	
		CCHOPE2	0.841	
		CCHOPE3	0.828	
		CCHOPE4	0.610	
	CCEFF		0.888	0.537
		CCEFF1	0.742	
		CCEFF2	0.775	
		CCEFF3	0.693	
		CCEFF4	0.579	
		CCEFF5	0.794	
		CCEFF6	0.786	
		CCEFF7	0.793	
		CCEFF8	0.730	
		CCEFF9	0.674	
	CCRES		0.842	0.795
		CCRES1	0.899	
		CCRES2	0.903	
		CCRES3	0.872	
	CCOPT		0.866	0.639
		CCOPT1	0.798	
		CCOPT2	0.773	
		CCOPT3	0.855	
		CCOPT4	0.769	
Organizational Commitment				0.586
	AC		0.892	0.617
		AC1	0.818	
		AC2	0.726	
		AC3	0.770	
		AC4	0.783	
		AC5	0.786	
		AC6	0.827	
	NC		0.895	0.627
		NC1	-	
		NC2	0.744	
		NC3	0.773	
		NC4	0.842	

Construct	Variable	Indicator	Outer loadings	AVE
		NC5	0.791	
		NC6	0.805	
	CC		0.402	0.650
		CC1	0.696	
		CC2	0.862	
		CC3	0.850	
		CC4	-	
		CC5	-	
		CC6	-	

CCHOPE, cross-cultural hope; CCEFF, cross-cultural self-efficacy; CCRES, cross-cultural resilience; CCOPT, cross-cultural optimism; AC, affective commitment; NC, normative commitment; CC, continuance commitment; blank (-), indicates the indicator was removed from analysis

The final step in the measurement model assessment is to evaluate the discriminant validity of the constructs in the model. Discriminant validity "is the extent to which a construct is truly distinct from other constructs, in terms of how much it correlates with other constructs, as well as how much indicators represent only a single construct" (Hair et al., 2017, p. 307). While researchers traditionally used the Fornell-Larcker criterion and cross-loadings to determine discriminant validity, these measures do not have an appropriate level of sensitivity in detecting when issues with validity are present (Hair et al., 2017; Henseler et al., 2015). Instead, a more reliable alternative, the HTMT ratio of correlations, was proposed by Henseler et al. (2015) and is now used more commonly to evaluate discriminant validity. The HTMT ratio of correlations is "the mean value of the item correlations across constructs relative to the (geometric) mean of the average correlations for the items measuring the same construct" (Hair et al., 2019, p. 9). When constructs are conceptually distinct, the HTMT criterion should not exceed 0.85 (Hair et al., 2019a; Sarstedt et al., 2017). As seen in Table 10, the HTMT ratio of

correlations ranged from 0.090 to 0.838, confirming the discriminant validity of the lower-order constructs in the measurement model.

Table 10

Discriminant Validity Analysis (Heterotrait-Monotrait Ratio of Correlations)

Construct	AC	CC	CCEFF	CCHOPE	CCOPT	CCRES	NC
AC							
CC	0.204						
CCEFF	0.313	0.132					
CCHOPE	0.285	0.129	0.725				
CCOPT	0.422	0.128	0.784	0.669			
CCRES	0.275	0.090	0.838	0.587	0.773		
NC	0.689	0.424	0.278	0.355	0.348	0.239	

CCHOPE, cross-cultural hope; CCEFF, cross-cultural self-efficacy; CCRES, cross-cultural resilience; CCOPT, cross-cultural optimism; AC, affective commitment; NC, normative commitment; CC, continuance commitment

The HTMT ratio of correlations between the higher-order construct cross-cultural PsyCap and the criterion variables AC, CC, and NC are present in Table 11. The HTMT ratio of correlations ranged from 0.136 to 0.689, further confirming the discriminant validity of the constructs.

Table 11

Discriminant Validity Analysis (Heterotrait-Monotrait Ratio of Correlations – Higher-Order Constructs)

Construct	AC	CC	CCPsyCap	NC
AC				
CC	0.204			
CCPsyCap	0.383	0.136		
NC	0.689	0.424	0.364	

CCPsyCap, cross-cultural PsyCap; AC, affective commitment; NC, normative commitment; CC, continuance commitment

With the internal consistency and construct validity of the measurement model confirmed, I continued to the next step of the data analysis, which was the structural model assessment.

Structural Model Assessment

Step two in the disjoint two-stage PLS-SEM analysis (Hair et al., 2019a; 2019b; Sarstedt et al., 2017; Sarstedt et al., 2019) analyzes the phenomenon through the structural pathways. Sarstedt et al. (2017) suggested researchers must evaluate the collinearity between latent constructs to conduct such an analysis. Should collinearity be acceptable, researchers should then proceed to a calculation of the R^2, Q^2, f^2, and finally, the path coefficients (Sarstedt et al., 2017). Whereas Hair et al. (2019a) suggested similar analysis methods (R^2, Q^2, path coefficients), they also suggested that researchers conduct a PLSpredict procedure that will assess the out-of-sample predictive power of the model.

Multicollinearity

Collinearity issues exist when two variables are highly correlated. Evaluation of the collinearity assesses the level of correlation between the independent (predictor) variables. I used the variance inflation factor (VIF) to conduct this evaluation (Hair et al., 2019a). The VIF is the reciprocal of the tolerance, the variance in one variable that the other variables cannot explain (Hair et al., 2017). With formative models, researchers evaluate VIF during the measurement model assessment. Indicators combine to form the latent variable and are not interchangeable as they contribute to a specific piece of the construct (Hair et al., 2017).

In contrast, with reflective models, the indicators are assumed to be a sampling of all possible indicators of the latent variable and are relatively interchangeable. As such, in reflective models, the assessment of multicollinearity is performed on the latent constructs in the structural model as all indicators stemming from a construct should be highly correlated (Hair et al., 2017). VIF results greater than 5.0 indicate critical collinearity issues. Results between 3.0 and 5.0 suggest that possible collinearity issues exist, and finally, results of less than 3.0 indicate that high levels of correlation between independent variables do not exist (Hair et al., 2019a; Sarstedt et al., 2017). To conduct the initial evaluation of multicollinearity, I ran the PLS algorithm using the lower-order psychological resources as the indicators of the cross-cultural PsyCap variable. The algorithm used maximum iterations of 300 and a stop criterion of 7. Table 12 includes the VIF results for each variable. The VIF for all variables fell below 3.0, indicating that a high level of correlation between latent constructs was not present.

Table 12

Multicollinearity (Variance Inflation Factor – VIF)

Construct	AC	CC	NC
CCEFF	2.914	2.914	2.914
CCHOPE	1.622	1.622	1.622
CCOPT	2.090	2.090	2.090
CCRES	2.537	2.537	2.537

CCHOPE, cross-cultural hope; CCEFF, cross-cultural self-efficacy; CCRES, cross-cultural resilience; CCOPT, cross-cultural optimism; AC, affective commitment; NC, normative commitment; CC, continuance commitment

Once I assessed the structural model for collinearity issues, I could conduct the subsequent analysis to evaluate the R^2, Q^2, f^2, and the path coefficients (Hair et al., 2019a;

Sarstedt et al., 2017). The R^2 serves as a measure of the explanatory power of the model, sometimes referred to as the in-sample predictive power of the model, and can range between 0 and 1, researchers including Sarstedt et al. (2017) and Hair et al. (2019a), have indicated that results of 0.75, 0.50, and 0.25 are substantial, moderate, and weak results. I used the SmartPLS bootstrapping procedure using 5000 subsamples, complete bootstrapping, and bias-corrected and accelerated confidence intervals on a two-tailed test with a significance level of 0.05. Table 13 displays the R^2 results for the model. Results indicate cross-cultural PsyCap explains 14.4% of the variance in AC, 10.2% of the variance in NC, and 1.2% of the variance in CC.

I also used the bootstrapping procedure to obtain the f^2. The f^2 is an indicator of "the change in the R^2 value when a specific exogenous construct is omitted from the model" (Hair et al., 2017, p. 211). Typically, f^2 results from 0.02 to 0.14 are considered small, from 0.15 to 0.34 are medium, and 0.35 are large (Hair et al., 2017). Results of the f^2 analysis can be seen in Table 13, removal of the exogenous construct cross-cultural PsyCap would have a medium effect on AC ($f^2 = 0.168$), a small effect on NC ($f^2 = 0.114$), and essentially no effect on CC ($f^2 = 0.012$).

According to Sarstedt et al. (2017) and Hair et al. (2019a), another method of assessing the predictive accuracy of the structural model is assessing the model for cross-validated redundancy (i.e., Q^2). The Q^2 assessment uses a blindfolding procedure and assesses the extent to which the structural model predicts the endogenous latent construct indicators (Hair et al., 2011). However, as stated by Shmueli et al. (2016) and Sarstedt et al., "the Q^2 is not a measure of out-of-sample prediction, but rather combines the aspects

of out-of-sample prediction and in-sample explanatory power" (Hair et al., 2019a, p. 12). Typically, Q^2 scores above zero indicate a level of predictive accuracy in the model, with values above 0.025, 0.15, and 0.35 indicating small, medium, and large predictive relevance of the path model of the endogenous construct (Hair et al., 2019a; Sarstedt et al., 2017). I conducted the SmartPLS blindfolding procedure using a maximum omission distance of seven. Positive Q^2 results between cross-cultural PsyCap, and the constructs AC and NC, reflect a relatively small predictive relevance. In contrast, the results between cross-cultural PsyCap and CC indicate an extremely low predictive relevance. Table 13 indicates the results for Q^2. Hair et al. (2017) further suggested researchers should calculate the effect size for Q^2 (q^2); however, SmartPLS does not calculate q^2 automatically, and as such, I calculated manually using the equation q^2 (= Q^2_included-Q^2_excluded)/(1-Q^2_included). As there is a single exogenous variable in the structural model (i.e., cross-cultural PsyCap), I set the Q^2_excluded to 0 within the calculation. The resulting calculations are provided for AC (0.070-0)/(1-0.070) = 0.075, CC (0.006-0)/(1-0.006) = 0.006, and for NC (0.060-0)/(1-0.060) = 0.064. Hair et al. (2017) suggested similar to Q^2, q^2 results of 0.02, 0.15, and 0.35 indicate small, medium, and large effect size, meaning the q^2 effect size for AC and NC were small, whereas the effect size for CC was minimal. Table 13 includes the results for q^2.

Table 13

Coefficients of Determination, Cross-Validated Redundancy, and Effect Size

Relationship	R^2	*Adjusted* R^2	f^2	Q^2	q^2
CCPsyCap > AC	0.144	0.141	0.168	0.070	0.075
CCPsyCap > CC	0.012	0.009	0.012	0.006	0.006
CCPsyCap > NC	0.102	0.100	0.114	0.060	0.064

CCPsyCap, cross-cultural psychological capital; CCHOPE, cross-cultural hope; CCEFF, cross-cultural self-efficacy; CCRES, cross-cultural resilience; CCOPT, cross-cultural optimism; AC, affective commitment; NC, normative commitment; CC, continuance commitment; R^2, coefficient of determination; Q^2, cross-validated redundancy; f^2, effect size; q^2, effect size of Q^2.

Researchers use an assessment of path coefficients to establish both the significance and relevance of the PLS-SEM correlations (Hair et al., 2014). In terms of significance, "A path coefficient is significant at the 5% probability of error level if zero does not fall in the 95% (bias-corrected and accelerated) confidence interval" (Sarstedt et al., 2017, p. 22). If the lower and upper bound of the path coefficient includes zero, the coefficient is not statistically significant. Hair et al. (2011) suggested that *t*-values greater than 1.65 but less than 1.96 are significant at the 0.10 level. *t*-values greater than 1.96 but less than 2.58 are significant at the 0.05 level and *t*-values greater than 2.58 are significant at the 0.01 level. In terms of relevance, path coefficients between 0 and +1 indicate a statistically significant positive relationship, whereas path coefficients 0 and -1 indicate a statistically significant negative relationship (Sarstedt et al., 2017). Additionally, the strength of the relationship increases as the path coefficient gets closer to +1 or -1 (Sarstedt et al., 2017). Table 14 includes the model path coefficients, *t*-values, and bias-corrected and accelerated confidence intervals. Results in Table 14 indicate that there is a statistically significant, positive relationship between cross-cultural PsyCap and AC ($t = 8.967$, $p < 0.000$) and a statistically significant, positive relationship between cross-cultural PsyCap and NC ($t = 7.018$, $p < 0.000$). While positive and significant at the $p < 0.10$ level, the relationship between cross-cultural PsyCap and CC was not significant

at the $p < 0.050$ level. The lower and upper bound of the path coefficient also included zero, indicating the relationship was not significant.

Table 14

Path Coefficient Assessment

Relationship	Path coefficient	Standard deviation	*t*-value	*p*-value (two-tailed)	95% BCCI lower limit (2.5%)	95% BCCI upper limit (97.5%)
CCPsyCap > AC	0.379	0.042	8.967	0.000***	0.289	0.455
CCPsyCap > CC	0.109	0.065	1.691	0.091*	-0.094	0.210
CCPsyCap > NC	0.320	0.046	7.018	0.000***	0.225	0.400

CCPsyCap, cross-cultural psychological capital; AC, affective commitment; NC, normative commitment; CC, continuance commitment; BCCI, bias corrected confidence interval.

* p < 0.10, *** p < 0.010;

As mentioned previously, researchers use the PLSpredict procedure to evaluate the out-of-sample predictive power of the structural model (Hair et al., 2019a; 2019b; Shmueli et al., 2019). Unfortunately, as Shmueli et al. (2019) noted, PLSpredict is still a relatively new procedure. While developers have incorporated PLSpredict into some PLS-SEM software, such as SmartPLS, many researchers are still uncertain about interpreting the PLSpredict results resulting in an inconsistently used procedure. While an in-depth discussion about PLSpredict is beyond the scope of this study, Shmueli et al. outline three significant features of the PLSpredict procedure. First, PLSpredict uses both *training* and *holdout* samples, whereas the "training sample is a portion of the overall dataset used to estimate the model parameters" (p. 2325), the holdout sample is "the remaining part of the dataset not used for model estimation" (p. 2325). Second, the PLSpredict procedure uses indicator values from the holdout sample and the training

sample model estimates to generate a prediction. Third, Shmueli et al. suggest that a slight difference between the actual and PLSpredict values indicates a high predictive power for the model. In contrast, a considerable variation in actual and predicted results implies a model has lower predictive power.

Researchers can evaluate the prediction statistics using k=10-fold cross-validation splits and r=10 prediction repetitions, as Shmueli et al. (2019) suggested. Prediction statistics include the mean absolute error (MAE; when prediction errors are highly non-symmetrically distributed) and root mean squared error (RMSE; when prediction errors are highly symmetrically distributed) to assess the predictive power of the model. If the naïve benchmark ($Q^2_{Predict}$) is less than zero, the model lacks predictive power; however, if the $Q^2_{Predict}$ is greater than zero, MAE and RMSE can be assessed. The PLSpredict procedure also uses a linear regression model (LM) as a second benchmark and compares the LM RMSE/MAE with the PLS-SEM RMSE/MAE. If the PLS-SEM values are less than the LM values for none of the indicators, the model lacks any predictive power. If PLS-SEM values are less than the LM values for a minority of the indicators, the model has low predictive power. If PLS-SEM < LM for most of the indicators, the model has moderate predictive power, and if PLS-SEM < LM for all indicators, the model has high predictive power (Shmueli et al., 2019). As seen in Table 15, PLS-SEM RMSE is less than LM RMSE for most indicators, implying that the model has a moderate, out-of-sample predictive power.

Table 15

PLSpredict Procedure

Item	PLS-SEM RMSE	MAE	Q^2_predict	LM RMSE	MAE	Q^2_predict	PLS-SEM - LM RMSE
AC3	1.805	1.549	0.022	1.800	1.550	0.027	0.005
Item	PLS-SEM RMSE	MAE	Q^2_predict	LM RMSE	MAE	Q^2_predict	PLS-SEM - LM RMSE
AC5	1.845	1.561	0.025	1.841	1.559	0.029	0.004
AC6	1.556	1.266	0.105	1.557	1.252	0.104	-0.001
AC1	1.425	1.126	0.147	1.422	1.102	0.150	0.003
AC2	1.660	1.404	0.104	1.673	1.407	0.091	-0.013
AC4	1.779	1.522	0.003	1.766	1.505	0.018	0.013
CC1	1.637	1.323	0.000	1.656	1.332	-0.023	-0.019
CC3	1.814	1.539	0.004	1.829	1.550	-0.013	-0.015
CC2	1.821	1.563	0.000	1.841	1.579	-0.022	-0.020
NC5	1.652	1.342	0.056	1.664	1.346	0.042	-0.012
NC6	1.731	1.457	0.067	1.735	1.468	0.062	-0.004
NC4	1.751	1.461	0.087	1.758	1.456	0.080	-0.007
NC2	1.763	1.507	0.043	1.764	1.501	0.042	-0.001
NC3	1.911	1.649	0.040	1.924	1.662	0.026	-0.013

AC, affective commitment; NC, normative commitment; CC, continuance commitment; RMSE, root mean squared error; MAE, mean absolute error; LM, linear model; PLS, partial least squares; SEM, structural equation model; Q^2_predict, naïve benchmark.

Moderation Analysis

I conducted a multigroup moderation analysis to determine whether the participants' employment type (i.e., front-line care staff, general support staff, and administrative staff) moderates the relationship between cross-cultural PsyCap and OC. To calculate the moderation effects of employment type on the relationship between cross-cultural PsyCap and OC, I used a multigroup analysis (MGA). SmartPLS allows the researcher to separate data into the defined groups; for the present study, one of the goals was to identify if there was a significant difference in the relationship between

cross-cultural PsyCap and OC displayed by each employment type. Cheah et al. (2020) suggested MGA is superior to a moderated regression for this purpose as simply using pooled data for an assessment may not identify differences in heterogeneous groups, whereas MGA will. The MGA function in SmartPLS allows the researcher to generate specific data groups based on the number of unique values (i.e., indicators) contributing to the variable. The *employment type* variable contained three unique values, 1) front-line staff, 2) corporate/administrative staff, and 3) general support staff. SmartPLS generated individual groups by employment type and computed the MGA. Table 16 includes the path coefficients of the relationships between cross-cultural PsyCap, AC, NC, and CC for each group. The table shows that the path coefficients for the relationship between cross-cultural PsyCap and AC for all three employment groups were statistically significant ($p < 0.01$). Path coefficients for the relationships between cross-cultural PsyCap and CC were statistically significant ($p < 0.01$) for the front-line group. Path coefficients were also statistically significant between and cross-cultural PsyCap and NC for both the front-line ($p < 0.01$) and the general support groups ($p < 0.01$). SmartPLS provides parametric testing results in the MGA calculation to determine whether the difference between groups was significant. As shown in Table 17, while there were minimal differences in the relationships (i.e., path coefficients) between cross-cultural PsyCap and AC, NC, and CC between the three employment groups, the differences between groups did not reach statistical significance for any of the relationships.

Table 16

Multi-Group Analysis Bootstrapping Results

	Path coefficients (CA)	Path coefficients (FL)	Path coefficients (GS)	t-Value (CA)	t-Value (FL)	t-Value (GS)	p-Value (CA)	p-Value (FL)	p-Value (GS)
CCPsyCap -> AC	0.302	0.391	0.481	2.703	8.397	4.257	0.007***	0.000***	0.000***
CCPsyCap -> CC	0.160	0.181	-0.092	1.040	2.789	0.326	0.298	0.005***	0.744
CCPsyCap -> NC	0.239	0.357	0.391	1.772	7.116	2.612	0.077*	0.000***	0.009***

CA, Corporate/Admin; FL, Front Line; GS, General Support; AC, affective commitment; NC, normative commitment; CC, continuance commitment;

CCPsyCap, cross-cultural psychological capital.

**p < 0.05, *** p < 0.01,

Table 17

Multi-Group Analysis Parametric Testing

	Path coefficients-diff (CA vs FL)	Path coefficients-diff (CA vs GS)	Path coefficients-diff (FL vs GS)	t-Value (CA vs FL)	t-Value (CA vs GS)	t-Value (FL vs GS)	p-Value (CA vs FL)	p-Value (CA vs GS)	p-Value (FL vs GS)
CCPsyCap -> AC	-0.089	-0.179	-0.09	0.872	1.038	0.810	0.384	0.301	0.419
CCPsyCap -> CC	-0.022	0.252	0.273	0.154	0.862	1.439	0.878	0.390	0.151
CCPsyCap -> NC	-0.118	-0.153	-0.034	1.019	0.718	0.271	0.309	0.474	0.787

CA, Corporate/Admin; FL, Front Line; GS, General Support. AC, affective commitment; NC, normative commitment; CC, continuance commitment;

CCPsyCap, cross-cultural psychological capital.

Hypothesis Testing

RQ1 – Quantitative: What is the nature of the relationship between cross-cultural PsyCap and the AC component of OC in employees at a Canadian health care organization?

$H_0$1 – There is no statistically significant, positive relationship between cross-cultural PsyCap and the AC component of OC in employees at a Canadian health care organization.

H_a1 – There is a statistically significant, positive relationship between cross-cultural PsyCap and the AC component of OC in employees at a Canadian health care organization.

The path coefficient between cross-cultural PsyCap and AC was 0.379 ($p < 0.01$), indicating a statistically significant positive relationship. As the path coefficient was statistically significant and positive, I rejected the null hypothesis and accepted the alternative hypothesis, meaning AC increases in correlation with cross-cultural PsyCap.

RQ2 – Quantitative: What is the nature of the relationship between cross-cultural PsyCap and the NC component of OC in employees at a Canadian health care organization?

$H_0$2 – There is no statistically significant, positive relationship between cross-cultural PsyCap and the NC component of OC in employees at a Canadian health care organization.

H_a2 – There is a statistically significant, positive relationship between cross-cultural PsyCap and the NC component of OC in employees at a Canadian health care organization.

The path coefficient between cross-cultural PsyCap and NC was 0.320 ($p < 0.01$), indicating a statistically significant positive relationship. As the path coefficient was statistically significant and positive, the null hypothesis was rejected, and the alternative hypothesis was accepted, indicating NC increases in correlation with cross-cultural PsyCap.

RQ3 – Quantitative: What is the nature of the relationship between cross-cultural PsyCap and the CC component of OC in employees at a Canadian health care organization?

$H_0 3$ – There is no statistically significant, positive relationship between cross-cultural PsyCap and the CC component of OC in employees at a Canadian health care organization.

$H_a 3$ – There is a statistically significant, positive relationship between cross-cultural PsyCap and the CC component of OC in employees at a Canadian health care organization.

The path coefficient between cross-cultural PsyCap and CC was 0.109 ($p = 0.091$), indicating a statistically non-significant positive relationship. As the path coefficient was statistically non-significant, the alternative hypothesis was rejected, and the null hypothesis was accepted, meaning that while CC increases slightly in correlation with cross-cultural PsyCap, the increase was not statistically significant.

RQ4 – Quantitative: Does Canadian health care organization employees' type of employment influence the relationship between their cross-cultural PsyCap and OC?

$H_0$4 – Canadian health care organization employees' type of employment does not influence the relationship between their cross-cultural PsyCap and OC.

H_a4 – Canadian health care organization employees' type of employment influences the relationship between their cross-cultural PsyCap and OC.

The MGA results indicate statistically significant positive relationships between cross-cultural PsyCap and AC for all employment types ($p < 0.01$). Between cross-cultural PsyCap and CC ($p < 0.01$) for the front-line group. Finally, between cross-cultural PsyCap and NC for both the front-line and the general support groups ($p < 0.01$). When comparing the path coefficients for each employment type, the resulting differences were not statistically significant. As the MGA results are not statistically significant, I rejected the alternative hypothesis and accepted the null hypothesis. Meaning the type of employment did not influence the relationship between cross-cultural PsyCap and OC.

Summary and Transition

The current study collected data via an online survey link emailed out to employees of a local health care organization with an invitation to participate in the research. The survey link directed interested participants to an online survey created and hosted on Survey Monkey. The online survey link remained active for three weeks, and a reminder invitation was emailed to employees roughly halfway through the collection period. I removed data that did not meet the specific requirements of the analysis model

and recoded the remaining missing values before loading the data into SmartPLS. A review of normality indicated that the data had a non-normal distribution; however, data analysis continued as the analysis model did not assume a normal distribution. I calculated sample demographics and descriptive statistics before using a PLS-SEM disjoint two-stage analysis. First, the measurement model was analyzed, resulting in the removal of four indicators before confirming the internal consistency/reliability, convergent validity, and discriminant validity of the model. With the quality of the measurement model confirmed, I assessed the structural model for path coefficients, bias-corrected confidence intervals, R^2, Q^2, f^2, and q^2, and finally, out-of-sample predictive power. Results from the structural model analysis indicated that statistically significant positive relationships existed between cross-cultural PsyCap and two components of OC (AC and NC). There was also a positive relationship with the CC component; however, the relationship did not reach statistical significance. Finally, the current study used an MGA analysis to identify differences in the relationships specific to each employment group. Results of the MGA indicated that while there were slight differences in terms of the relationships between cross-cultural PsyCap and OC, the differences did not reach the level of significance.

Chapter 5 includes an interpretation of the statistical results identified in the previous chapter, an acknowledgement of any study limitations, and further discussion in terms of recommendations and implications resulting from the research. Finally, the chapter ends with a discussion of the conclusions resulting from the study.

Chapter 5: Discussion, Conclusions, and Recommendations

The purpose of this quantitative correlational study was to explore the nature of the relationship between cross-cultural PsyCap and OC for employees at a health care organization in Canada. The nature of this study was quantitative research using a cross-sectional, correlational design and self-reported data collected through surveys. The online survey consisted of the Three-Component Model Employee Commitment Survey (Meyer et al., 1993) and the Cross-Cultural Psychological Capital Scale (Dollwet & Reichard, 2014). I sent out a survey link to all employees of a health care organization in Canada, and 535 individuals responded. Data were reviewed and cleansed, and I included 382 responses for further statistical analysis using the PLS-SEM method.

The results from the PLS-SEM analysis indicated that statistically significant positive relationships exist between cross-cultural PsyCap and both AC and NC. Results also showed that while a positive relationship existed between cross-cultural PsyCap and CC, the relationship was not statistically significant and yielded little explanatory power or predictive accuracy. Additionally, I performed a MGA using the three employment types identified in the study. The MGA indicated that the strength of the relationship between variables was different in each group; however, these differences did not reach statistical significance. The following chapter will include an interpretation of the results, the limitations of the study, recommendations resulting from the research, implications for social change, and a summary of conclusions.

Interpretations of Findings

Research on PsyCap has consistently shown positive relationships with positive organizational outcomes regardless of the domain (Adler & Aycan, 2018; Badran & Youssef-Morgan, 2015; Bergheim et al., 2015; Blanchet-Garneau & Pepin, 2015; Bogler & Somech, 2019; Firestone & Anngela-Cole, 2016; Kotze & Massyn, 2019). Additionally, most research has shown that in terms of the relationship between PsyCap and OC, the most significant relationship is usually with AC (Avey et al., 2011; Gurbuz & Yildirim, 2019; Luthans et al., 2008). However, until the current study, there was a gap in the scholarly literature regarding the intercultural interactions domain and how cross-cultural PsyCap specifically interacted with OC. Results from the present study supported the prior findings in terms of a positive relationship with positive organizational outcomes and the strength of the relationship with AC. Results from the present study also supported specific findings by Gurbuz and Yildirim (2019), showing the most significant relationship between the personal psychological resources and the components of OC existed between optimism and AC.

The present study used the disjoint two-stage approach to analyze the hierarchical PLS-SEM's lower-order and higher-order constructs. Upon initial review of the model estimation, it was clear that several indicator loadings had variances not substantially explained by the associated latent variable requiring removal from the model. Removal of the indicators improved the CR and AVE for both CC and NC, which confirmed the model's reliability and convergent validity (Hair et al., 2017). Discriminant validity of the model was confirmed via the HTMT criterion, reflecting all the remaining indicators

were representing a single, distinct construct (Hair et al., 2017). Within the disjoint two-stage approach, once the lower-order constructs are estimated, latent variables are then used as the indicators for the higher-order construct (i.e., cross-cultural PsyCap). Subsequently, I assessed the inner/structural model for path coefficients, bias-corrected confidence intervals, R^2, Q^2, f^2, q^2, and finally, out-of-sample predictive power.

The results from these analyses indicated several interesting findings. First, a statistically significant relationship exists between cross-cultural PsyCap and AC and cross-cultural PsyCap and NC; second, a positive relationship exists between cross-cultural PsyCap and CC; however, that relationship was not statistically significant. Third, there was no statistically significant difference in the relationships when analyzed by employment type. While the relationships were the focus, it is also important to note the following. Despite showing statistically significant results, the relationship between cross-cultural PsyCap and AC had relatively weak explanatory power ($R^2 = 0.144$), a moderate effect size ($f^2 = 0.168$), and low predictive relevance ($Q^2 = 0.070$). The relationship with NC had weak explanatory power ($R^2 = 0.102$), a small effect size ($f^2 = 0.114$), and low predictive relevance ($Q^2 = 0.060$). Finally, the relationship with CC was essentially non-existent for each of the measures. However, the PLSpredict procedure indicated that the overall model had moderate out-of-sample predictive power. The MGA results indicated that while each employment group experienced the relationship between their cross-cultural PsyCap and their OC differently, there was not a significant enough difference in that experience to suggest that employment type moderates the relationship.

The current study extends the understanding of intercultural interactions within the health care industry in Canada. Results indicate that, on average, the health care workers were confident in their ability to interact across different cultures as the mean for all indicators skewed to the positive with a relatively small standard deviation. However, results showed a negative trend in OC; six indicators skewed towards the negative and nine were positive. Additionally, whereas cross-cultural PsyCap explains only 14.4% of the variance in AC, 10.2% variance in NC, and 1.2% variance in CC, further increases in cross-cultural PsyCap would result in only a modest rise in OC.

The present study extends the understanding of Hobfoll's COR theory as higher levels of cross-cultural PsyCap were observed in health care workers in an environment that provided them with the opportunity to use their personal skills and resources (Wright & Hobfoll, 2004). These findings align with our understanding of COR theory and support Sungu et al.'s (2020) research. While confirmation of whether a causal relationship exists was beyond the scope of the current study, scholarly literature on cross-cultural PsyCap may benefit from future research into this relationship in comparison with environments that do not provide a similar opportunity to use the resources and skills.

This study also addresses a gap in the scholarly literature. The present study is the only study that evaluates how cross-cultural PsyCap influences affective, normative, and CC and how that relationship may differ across employment groups. The study results indicate that while cross-cultural PsyCap positively influences all three components, the strength of that influence varies from moderate (AC) to relatively insignificant (CC).

Results of the present study also indicate that identified relationships do not significantly differ across different employment groups.

Limitations of the Study

Unfortunately, proportionate stratification was not possible due to lower response rates in front-line and general support staff groups. Front-line staff make up roughly 63% of the employees at the organization; however, only 61% of respondents to the survey identified as belonging to this group. Similarly, whereas 19.4% of total staff in the organization hold general support positions, only 13.4% of respondents self-identified as such, meaning that proportionate stratification was not possible. As respondents self-reported their employment type through the demographic questions of the survey, the study used the *employment type* variable to differentiate between employment groups when performing the MGA.

Other study limitations include the generalizability of the results beyond the health care environment, the research design, and the use of self-reported data. Whereas there is a relatively large body of research on general and workplace PsyCap (Luthans & Youssef-Morgan, 2017), cross-cultural PsyCap research remains in its infancy. While it is generally assumed that the various domains of PsyCap will follow similar patterns in terms of findings as general PsyCap, it remains to be proven true in all instances. The present study used participants from a single health care organization with facilities in a single province in Canada. Specific research has shown that the environment and cultural context can vary the expected results (Chang et al., 2007; Vandenberghe, 2003). There is

a limitation where researchers may find different results leading to different conclusions when using participants within a different cultural context, workplace, or environment.

A second limitation to the present study is the quantitative analysis of the data. While robust and informative from a correlational perspective, the quantitative analysis does not allow for a deeper understanding of *why* health care workers experience cross-cultural PsyCap in the reported manner. Additionally, the quantitative analysis does not explain *why* OC does not appear to be impacted to the same degree as seen in previous research on general PsyCap and OC. While appropriate for exploratory study and particularly robust for such data analysis (Hair et al., 2019a), PLS-SEM can only estimate the relationships in a model and is therefore limited in its ability to explain the correlation. A final related but distinct limitation is the use of self-reported data. The current study used an email invitation linked to an online survey to collect data from participants. Despite efforts to maintain the confidentiality of the participants, there is potential that participants were still subject to social desirability bias. Social desirability bias may have existed due to the survey questioning participants' beliefs and attitudes towards situations and interactions involving culturally diverse individuals and their commitment to their employer. The self-reported data via online survey may also present issues with common method bias due to collecting data from a single source (Bogler & Somech, 2019), collecting data in sequential order (Munyaka et al., 2017), or collecting data on multiple constructs with the same composite survey (Xu et al., 2017).

Recommendations

While this research addressed a gap in understanding how cross-cultural PsyCap relates to positive organizational outcomes, future research has many avenues. The current study evaluated the relationship between cross-cultural PsyCap and OC specifically. As the literature on cross-cultural PsyCap is still relatively scant, future research may consider extending this to other positive organizational outcomes such as job satisfaction, job involvement, organizational citizenship behaviors, and performance (Kotze & Massyn, 2019). Additionally, while the current study extended the concept of cross-cultural PsyCap into the health care industry in Canada, future research may extend similar lines of questioning into other contexts (Maslakci & Sesen, 2019). Contexts for prospective study may include different industries, public and private entities, and other cultural and environmental contexts. Future researchers may also pursue research designs and other inquisitive methods to better understand the qualitative nature of cross-cultural PsyCap. A deeper understanding may include investigating how it interacts with different constructs and what those relationships and constructs signify to individuals. Finally, the scholarly literature would benefit from future research which uses research designs (i.e., longitudinal) and data collection methods (i.e., multi-source feedback) that explore causality (Maslakci & Sesen, 2019) and reduce common method bias.

Implications

Intercultural interactions within a workplace can be significantly stressful and psychologically draining for employees when they do not have the confidence, motivation, and personal resources to interact across cultures effectively (Kotze &

Massyn, 2019). The current study investigated the nature of the relationship between a combination of synergistic personal resources, namely cross-cultural PsyCap and OC, which previous research has associated with turnover intent (Sen et al., 2017; Seo & Chung, 2019) and workforce engagement (Basit, 2018; Peng et al., 2013). This study fills a gap in the literature regarding the relationship between these variables and can provide several original contributions to the scholarly literature. Whereas previous literature on workplace PsyCap has shown a statistically significant positive relationship with OC, this study supported those earlier findings by extending the research into a new and scarcely researched domain of intercultural interactions. The study further supported the similarities across the various domains of PsyCap, as the observed results aligned with the prior research showing a dominant relationship between different domains of PsyCap and AC compared to the other components of OC.

This study may also provide an original contribution to the scholarly literature on OC. Although the three-component model of OC is well-researched, the impact of cross-cultural PsyCap on OC was not well-understood until the current study. The results indicated that while statistically significant positive relationships existed with AC and NC, the real-world impact of those relationships was relatively minimal and did not reflect similar levels of impact to prior research on workplace PsyCap and OC. Additionally, the current study added to the scholarly literature by outlining that there was essentially no relationship between cross-cultural PsyCap and CC for this group of participants. CC represents the employees' evaluation of the costs associated with leaving an organization. This study's results indicate that employee confidence and motivation

towards their ability to interact interculturally may not figure highly into their cost-avoidance analysis.

Finally, this study may also provide a basis for several positive social change implications. The findings indicated that cross-cultural PsyCap, like PsyCap in other domains, is correlated with positive organizational outcomes such as OC. These results, similar to research on employee well-being (Kotze & Massyn, 2019), cultural intelligence, cross-cultural adjustment, ethnocentrism, openness to experience (Dollwet & Reichard, 2014), multicultural personality traits, and perceived service quality (Maslakci & Sesen, 2019), reflect the PP underpinnings of cross-cultural PsyCap. Whereas PP focuses on the positive aspects of life (Seligman, 2019), the results show that improvements in employee cross-cultural PsyCap correlate with positive increases in employee personal resources and the overall outcomes for the organizations. The positive focus towards intercultural interactions adds additional importance as workplaces continue to grow and advance in cultural diversity. This study may also contribute to positive social change by providing a quantitative basis for organizations to allocate valuable learning and development resources. Organizations that invest in their employees want to know what kind of return on their investment they can expect, both in terms of financial return and other positive outcomes. This study provides organizations with a better understanding of the positive organizational outcomes obtained with increased investment in the development of cross-cultural PsyCap. Prior research has shown that relatively short training sessions can enhance cross-cultural PsyCap (Dollwet & Reichard, 2014; Kotze & Massyn, 2019). While the overall impact of increased cross-

cultural PsyCap on OC may be somewhat limited, the findings contribute to a body of research indicating that short bursts of training result in several positive individual and organizational outcomes.

Conclusions

Cultural diversity is growing in many organizations. If employees do not have the confidence, motivation, and personal resources to work in such environments effectively, the employees and the organization could experience significant adverse impacts. This quantitative study aimed to explore the nature of the relationship between cross-cultural PsyCap and OC in health care employees in Canada. I developed a model to examine this relationship between two hierarchical constructs, and after estimation, I found the model to be appropriate for further analysis. I used the disjoint two-step procedure, including measurement and structural models, to assess the quality of data and the significance of the relationships. My assessment found statistically significant, positive relationships between cross-cultural PsyCap and affective and NC. The study also found a connection between cross-cultural PsyCap and CC; however, the relationship was minimal and not significant. In addition, this study found that despite working in different positions, the health care employees did not experience substantial variance in their relationship between their cross-cultural PsyCap and OC based on their employment type.

This study fills a gap in the scholarly literature on these constructs and concepts. Through fill that gap, this study supports the currently available research on cross-cultural PsyCap, personal psychological resources, and the three-component model of OC. It provides original contributions to understanding cross-cultural PsyCap, OC, and

positive social change. Additionally, future research will be needed to understand the qualitative context in which these relationships exist and continue to add to a fuller understanding of cross-cultural PsyCap. Organizations that view their workforce as a source of competitive advantage may interpret the findings from this study, along with other research on cross-cultural PsyCap, and use this evidence to help inform decisions on valuable resource allocations to improve outcomes for the workforce and the organization.

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Appendix A: Email Invitation

Email Invitation Subject Line: Invitation to Participate in Doctoral Dissertation Research Study

Online survey study seeks participants who work in the Canadian health care industry.

*** [redacted] is sending this email invitation on behalf of an external student researcher and will not be involved in the collection of the anonymous response data. ***

There is a new study called *"The Relationship Between Cross-Cultural Psychological Capital and Organizational Commitment"* that could help researchers better understand the link between inter-cultural interactions and turnover within health care organizations. For this study, you are being invited to complete a survey through the link provided below.

This survey is part of the doctoral study for Steve Snell, a Ph.D. student at Walden University. You may recognize the researcher's name as a former employee of [redacted]; however, this research is not affiliated in any way with his previous role and [redacted] will not have access to the data being collected.

About the study:

- One 15-20 minute online survey
- To protect your privacy, no names will be collected

Volunteers must meet these requirements:

- Between 18 and 65
- Currently work for a health care organization in Canada

This link will be active from July 15, 2021 to August 5, 2021. This timeline may be extended until a minimum of 300 participants is reached.

To confidentially volunteer, click the following link:
https://www.surveymonkey.com/r/FW5CY2Y

Appendix B: Approval from Organization

July 6, 2021
Steven Snell, email: [redacted]
RE: Study# 20558, REB# Pro00109018, "The Relationship between Cross-Cultural Psychological Capital and
Organizational Commitment"
Dear Mr. Snell,
Thank you for submitting information on your research study to the [redacted] Research Centre ([redacted]). I
am pleased to inform you that your study has received [redacted] Operational/Administrative Approval for
the [redacted]. Such approval is provided with the proviso that all COVID-19 notices,
restrictions and relevant policies are strictly observed.
We have a copy of the current Health Research Ethics Board (HREB) approval letter on file. We do not require that
you submit protocol amendments as these will be reported to HREB; however, it is important that we receive
updated copies of:
• HREB approval letters;
• consent forms and study information sheets; and
• Reports of serious adverse events if applicable.
We would be very interested in having you present - especially to our Diversity & Inclusion council, with the
findings of your study; so when appropriate please do let us know when you are available, and we can facilitate
accordingly. We would also appreciate a copy of your final research report and any associated published articles
upon completion of the study. You are eligible to submit a paper, article or abstract for inclusion in the
"[redacted] Research" publication. The [redacted] may reference your name, study name, and location of study

in various [redacted] research publications, reports, sessions or internal website, unless you advise us to
the contrary in writing. All documents can be emailed to research@[redacted].ca or mailed to the [redacted]
[redacted] Research Centre, [redacted] Community Hospital, [redacted] Room 812, [redacted]
Edmonton, Alberta, [redacted].
If you would like to receive monthly research updates, you can subscribe to Research Notes. In addition, you can
access our website for information, news, events and research tools.
On behalf of the [redacted], I would like to extend our congratulations and wish you success with this project. If you
have any questions or require assistance, please do not hesitate to contact the office at [redacted].

Manager
/ml

Appendix C: Approval from University of Alberta HREB

6/22/2021
https://arise.ualberta.ca/ARISE/sd/Doc/0/1GCLM0T7KBIKV4GTTQBEES7G21/fromString.html
https://arise.ualberta.ca/ARISE/sd/Doc/0/1GCLM0T7KBIKV4GTTQBEES7G21/fromString.html 1/1

Approval Form

Date: June 22, 2021
Study ID: Pro00109018
Principal Investigator: Steven Snell
Study Title: The Relationship between Cross-Cultural Psychological Capital and Organizational Commitment
Approval Expiry Date: Tuesday, June 21, 2022
Thank you for submitting the above study to the Health Research Ethics Board - Health Panel. Your application has been
reviewed and approved on behalf of the committee.

Approved Documents:

Letter of Initial Contact

Recuitment email template - S.Snell (22-June-2021 clean).docx

Consent Forms

Informed Consent Form - S.Snell (22-June-2021 clean).doc

Questionnaires, Cover Letters, Surveys, Tests, Interview Scripts, etc.

Cross-Cultural Psychological Capital Scale.docx
TCM Employee Commitment Survey.docx

Protocol/Research Proposal

PhD_Proposal (28-Mar-2021).docx

Any proposed changes to the study must be submitted to the REB for approval prior to implementation. A renewal report
must be submitted next year prior to the expiry of this approval if your study still requires ethics approval. If you do not
renew on or before the renewal expiry date, you will have to re-submit an ethics application.
Approval by the Research Ethics Board does not encompass authorization to recruit and/or interact with human
participants at this time. Researchers still require operational approval as applicable (eg [redacted]
etc) and where in-person interactions are proposed, institutional and operational requirements as outlined in the
Resumption of Human Participant Research - June 24, 2020 must be met.
Sincerely,
Anthony S. Joyce, PhD.
Chair, Health Research Ethics Board - Health Panel

Note: This correspondence includes an electronic signature (validation and approval via an online system).

Appendix D: Approval from Walden IRB

Notification of Approval to Conduct Research - Steve Snell
IRB <[redacted]>
Fri 6/25/2021 10:36 AM
To: Steve Snell <[redacted]>
Cc: IRB <[redacted]>; Derek M. Rohde <[redacted]>
Dear Steve Snell,
This email confirms receipt of the notification of approval for UofA HREB and also serves as
your notification that Walden University has approved BOTH your doctoral study proposal and
your application to the Institutional Review Board. As such, you are approved by Walden University to conduct research.
Congratulations!
Elyse Abernathy
Research Ethics Support Specialist, Office of Research Ethics and Compliance
Leilani Gjellstad
IRB Chair, Walden University
Information about the Walden University Institutional Review Board, including instructions for
application, may be found at this link:
http://academicguides.waldenu.edu/researchcenter/orec
Sincerely,
Elyse V. Abernathy, MSL, MSM
Research Ethics Support Specialist
Office of Research Ethics and Compliance
Walden University
100 Washington Avenue South, Suite 1210
Minneapolis, MN 55401
Email: [redacted]
Phone: [redacted]
Fax: [redacted]
Information about the Walden University Institutional Review Board, including instructions for application, may be found at this link:
http://academicguides.waldenu.edu/researchcenter/orec