AN INTERVENTION IN TRANSFORMATIONAL LEADERSHIP TO IMPROVE THE BEHAVIOR AND ATTRIBUTES OF FACULTY SUPERVISORS IN PRIVATE UNIVERSITIES IN PANAMA

by
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Abstract

Faculty engagement in private universities in Panama is low. This dissertation explores the underlying factors of part-time faculty engagement in the context of higher education in Panama, and studies the potential effectiveness of an intervention in transformational leadership with faculty supervisors as the participants. The dissertation includes a needs assessment, which contributes to a better understanding of the problem in the Panamanian context, where private university presidents participated in individual interviews regarding the topic of faculty engagement.

The study involves the application of an intervention in transformational leadership to faculty supervisors, with the objective of increasing the knowledge and awareness about transformational leadership and its impact in organizational culture and engagement. The design was experimental, with mixed methods, through the use of the Multifactor Leadership Questionnaire before and after the application of the intervention. The results suggest that the program produced a positive impact in the treatment group's knowledge and awareness regarding the importance of transformational leadership in the context of higher education.

The data and analysis produced in this study will allow university decision-makers and leaders to better understand some of the challenges regarding leadership of faculty supervisors. Furthermore, this study opens a path for future opportunities in studies of engagement and transformational leadership within the context of higher education in Latin America.

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Dedication

This dissertation is dedicated to the following people:

To my grandmother, Zoila; my mother, Tammy; my father, Oscar; and my husband, Alessandro. You have always believed in my potential, challenged me to be better, supported me through the process, and loved me no matter what. Thank you.

To Gianluigi, my son, who was born while I was completing my doctorate and this dissertation. I love you beyond understanding. I will always believe in your potential, challenge you to be better, support you through the process, and love you no matter what.

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Executive Summary

Faculty engagement in private universities in Panama is low (León, 2018). The factors that contribute to low engagement of faculty are: part-time status, satisfaction, identity, academic capitalism, organizational climate, and faculty supervisor leadership style. Nakamura and Csikszentmihalyi (2003) identify four areas where faculty engagement occurs: the education of students; conducting research or advancing the knowledge of a particular discipline; helping with the administrative needs of the institution of affiliation; and being active in serving the needs of the community.

This dissertation conceptualizes engagement using Shuck and Wollard's (2010) definition for employee engagement, which is: "an individual employee's cognitive, emotional, and behavioral state directed toward desired organizational outcomes" (p. 103). The definition of faculty engagement aligns with two different existing definitions for faculty engagement, which integrate cognitive, emotional, and behavioral elements of an employee's psychological state.

One definition for faculty engagement is when faculty "enjoy and care deeply about the work they do, and wholeheartedly value the people and the ends it is meant to serve, and that they are most likely to aspire to excellence and principled conduct" (Nakamura & Csikszentmihalyi, 2003, p. 61). Additionally, Livingston (2011) defined faculty engagement as: "Perpetual focused attention, enjoyment, and enthusiasm for the activities associated with faculty work through with the individual finds purpose, senses congruence with personal values and talents, is challenged to use knowledge and skills, and experiences productivity even during difficult times" (p. 11).

The definitions for employee engagement and faculty engagement demonstrate it is important to consider engagement as a conduit to achieving the goals of any organization. The

Gallup Organization (2004) suggests that there is a link between employee engagement, customer loyalty, business growth, and profitability. Therefore, leaders – university presidents, in this context – who are tasked with the goal of creating sustainable institutions should seek ways to increase faculty engagement.

Although engagement has received the attention of many researchers in past decades (Bakker & Schaufeli, 2008), faculty engagement and its effects on higher education are still very recent (Raina & Khatri, 2015). The research produced by this dissertation regarding faculty engagement and potential interventions that can increase levels of faculty engagement in an institution will contribute new knowledge that will allow for a deeper understanding of the relationship between faculty and their supervisors in a higher education context.

A needs assessment helped contribute to a better understanding of the problem in the Panamanian context, where private university presidents participated in individual interviews regarding the topic of faculty engagement. University presidents perceived that 36.6 percent of their faculty is engaged. University presidents also confirmed that faculty tend to be hired on a part-time basis, with an average of 9 out of 10 university professors having a part-time designation.

An important finding of the needs assessment is the type of relationship that exists between the professor and the institution. One university president mentioned: “The reality is that the professor in Panama teaches a class and that’s it. Few of them are engaged. The fault is also ours because we don’t look for mechanisms to engage them, so the professor who looks at dollars and cents sees it as a transactional relationship.” This statement suggested that the relationship between the employee and the employer should evolve into one that fosters a better relationship, and therefore elicits more engagement from the faculty. The assessment confirmed

the need to intervene and change the relationship that faculty have with their institutions. This change will not come as a result of an improvement in the leadership skills employed by faculty supervisors, and the effect that these skills have on organizational climate and engagement.

Studies demonstrate that transformational leadership is an intervention that has a positive effect on engagement (Avolio & Bass, 1999; Aryee et al., 2012; Walumbwa, Lawler, Avolio, Wang, & Shi, 2005; Breevaart et al., 2014) Transformational leaders have the ability to influence the behavior of their followers' psychological state, through changing how they feel about themselves and their work (Bass, 1985). The behaviors and attitudes that characterize a transformational leader result in followers who are willing to dedicate more of themselves in their work roles (Bass, 1985). Transactional leaders have the opportunity to build their existing attributes and behaviors to achieve an "augmentation effect" and display dimensions of both transactional and transformational leadership behaviors.

The study involves the application of an intervention in transformational leadership to faculty supervisors, with the objective of increasing the knowledge and awareness about transformational leadership and its impact in organizational culture and engagement. The design was experimental, where the treatment group received an online transformational leadership professional development program, and the control group did not receive the program. Participants were assigned randomly to treatment and control groups. All participants took the Multifactor Leadership Questionnaire at the beginning and at the end of the study, as a measure of frequency of behavior of passive-avoidant, transactional, and transformational leadership styles.

The research questions were for the study were:

1. What are the leadership behaviors and attributes that distinguish faculty supervisors in private higher education institutions in Panama, according to the Multifactor Leadership Questionnaire?
2. What change, if any, does a professional development program in transformational leadership generate among faculty supervisors in private higher education institutions in Panama?

The first research question was answered by data yielded through the pre-test application of the MLQ to the sample. The second research question was answered by a combination of pre-post MLQ data analysis and qualitative data analysis of the reflections written by treatment group participants as part of their participation in the professional development program in transformational leadership. The study also measured participation during the delivery of the intervention to ensure proper process evaluation and reporting.

Participants were recruited, selected, and randomly assigned in compliance with the designed processes. A smaller than expected number of universities opted to support the study, so participation in the study was low (n=17). All 17 participants completed the self-assessment instrument of the MLQ, and 42 raters completed the rater form MLQ for 11 of the participants. Post-test results were obtained for only 8 participants. High attrition in the intervention, coupled with low engagement from the participants, means that most of the quantitative data will not have statistical power. However, the descriptive analysis of the quantitative data looks into some of the noteworthy findings generated by the pre and post application of the MLQ.

Mann Whitney U tests were used in the daya analysis process to seek potential differences between treatment/control, male/female, and coordinators/directors. For all three categories, the group was homogenous throughout. The group of faculty supervisors that

participated in the study was characterized by having low levels of passive-avoidant behavior, where the two dimensions of this behavior were within desired ranges in self-evaluation and rater scores of the MLQ. The two dimensions that measure transactional leadership displayed frequency of behavior outside of the desired ranges of occurrence. Faculty supervisors in Panama engage in transactional leadership behaviors more often than is ideal. Last, the participants displayed transformational leadership behaviors within ideal ranges, with some exceptions that were found within specific items of the instrument.

Qualitative data was generated through the reflections produced by the participants in the treatment group, as part of their participation in the professional development program. The data were coded using descriptive coding, and divided into 10 categories that produced a total of 26 codes. The qualitative data demonstrated that engagement and positive organizational climate are outcomes of transformational leadership. Also, the data reflected a better knowledge and awareness regarding the different dimensions of transformational leadership, on behalf of the treatment group participants.

A comparison of the post-test MLQ results for the treatment and control group, as well as a comparison of the pre and post-test MLQ results for the treatment group were analyzed for all items and dimensions measured by the MLQ. Because of the small sample size, the quantitative data cannot be used to determine the impact of the professional development program. However, the qualitative data suggest that the program did produce a positive impact in the treatment group´s knowledge and awareness regarding the importance of transformational leadership in their context of higher education.

The data and analysis produced in this dissertation is new knowledge that will allow university decision-makers and leaders to better understand some of the specific challenges of

the leadership attributes and behaviors of their faculty supervisors. Furthermore, this dissertation opens the path for future opportunities in studies of engagement and transformational leadership within the context of higher education in Latin America.

Chapter 1

Introduction to the Problem of Practice of Part-time Faculty Engagement

Research suggests that part-time faculty tend to be less available to interact with students, spend less time preparing their course, and use less effective teaching methods than their full-time or tenure-track counterparts (Umbach, 2007). In Panama, the majority of faculty who teach at higher education institutions are part-time faculty (Castillo, 2005; Montoto, 2013). Part-time faculty at private universities in Panama are hired to teach, and usually they are not committed to supporting universities in essential activities outside of teaching, such as research, and administrative and community engagement (Castillo, 2005; Montoto, 2013). The lack of a terminal degree may have an impact on research knowledge, efficacy, and faculty self-beliefs regarding the definition of scholarship (Tiffin & Kunc, 2008). Furthermore, the lack of systems in place for institutions to support part-time faculty may be affecting satisfaction, attitudes, and teaching effectiveness.

The proportion of non-tenure-track positions utilized by higher education institutions has consistently increased since 1970, mirroring the overall labor market (Association for the Study of Higher Education, 2010; Ochoa, 2012). In community colleges in the United States, estimates show that part-time faculty make up nearly 70% of the total faculty population (Thirolf, 2012). In Panama, part-time faculty are also the academic majority (Castillo, 2005; Montoto, 2013). These positions have given rise to different terms or classifications for non-tenure-track hires, such as contingent faculty, visiting faculty, part-time faculty, adjunct faculty, instructors, and lecturers.

Despite the fact that the number of part-time faculty has been steadily rising since the 1970s, research regarding the implications of the hiring of part-time faculty became relevant in

the 1990s (Gappa & Leslie, 1993). The implications regarding the practice of part-time faculty hiring in higher education institutions includes research on engagement (Holland, 2005; Nakamura & Csikszentmihalyi, 2003), faculty identity (Kezar & Sam, 2011; Levin & Shaker, 2011), satisfaction (Eagan, Jaeger, & Grantham, 2015), academic capitalism (Montoto, 2013; Slaughter & Rhoades, 2004), and culture (Maxey & Kezar, 2015; Montoto, 2013). Therefore, the problem of practice in private universities in Panama is that part-time faculty are the academic majority, and faculty engagement is low.

Employee Engagement and Faculty Engagement

Studies show that employees with high engagement seek new challenges, are committed to results, participate in diverse activities outside of work, and are capable of facing new challenges (Jimenez, Fernandez, Juarez, Merino & Guimet, 2015; Schaufeli, Bakker, & Salanova, 2006). High engagement also refers to high levels of energy, activity, and effectiveness in the workplace. On the other end of the spectrum of engagement is disengagement, which Maslach and Leiter (2008) also identify as burnout. Burnout is the result of adequate rewards or recognition, lack of fairness and control, work overload, and a difference in values (Maslach & Leiter, 2008).

Table 1 portrays the different definitions of employee engagement found in the research literature since Kahn first introduced the construct in 1990. Most of the definitions that introduced since then have built upon or recognized Kahn's contribution and validity to research in the area. The working definition of employee engagement for this dissertation is "an individual employee's cognitive, emotional, and behavioral state directed toward desired organizational outcomes" (Shuck & Wollard, 2010, p. 103).

Although engagement has received the attention of many researchers in past decades (Bakker & Schaufeli, 2008), the concept of faculty engagement and its effects on higher education are still very recent (Raina & Khatri, 2015). Searches in research databases yield limited results of research and doctoral publications in the area of faculty engagement. Furthermore, researchers in the United States conduct most of the studies regarding faculty engagement, with few international studies available in research databases.

Faculty engagement is when faculty "enjoy and care deeply about the work they do, and wholeheartedly value the people and the ends it is meant to serve, and that they are most likely to aspire to excellence and principled conduct" (Nakamura & Csikszentmihalyi, 2003, p. 61). Faculty cannot feel engaged by force (Nakamura & Csikszentmihalyi, 2003). Faculty engagement occurs when they feel involved and committed to the work they do. Nakamura and Csikszentmihalyi (2003) identify four areas where faculty engagement occurs: the education of students; conducting research or advancing the knowledge of a particular discipline; helping with the administrative needs of the institution of affiliation; and being active in serving the needs of the community.

The four areas of engagement presented by Nakamura and Csikszentmihalyi (2003) demonstrate a correlation with the four factors that make up the base of higher education accreditation in Panama: teaching, research, outreach, and administration (Consejo Nacional de Evaluación y Acreditación Universitaria de Panamá, 2016). The teaching factor measures indicators such as teaching effectiveness, faculty performance and follow-up, faculty development, and faculty satisfaction. Example of research indicators are percentage of faculty who engage in research, number of research projects and publications, and alignment of research with the institution's mission and vision, as well as national reality. Outreach indicators related to

the university's involvement and contribution to the community are collaborative agreements and achievements with national and international institutions, and student and faculty mobility. The administrative factor measures indicators such as organizational structure and culture, and staff satisfaction and performance.

Nakamura and Csikszentmihalyi's (2003) definition of faculty engagement and the accreditation standards for Panamanian higher education under the Consejo Nacional de Evaluación y Acreditación Universitaria de Panamá (CONEAUPA) demonstrate that a cross-cultural alignment exists for the criteria that makes a good professor, and subsequently, a good university. In practice, not all higher education leaders in Panama may understand or hold views consistent with the definition of faculty engagement. As part of the needs assessment, this dissertation takes a closer look into university president perceptions of the different elements that make up faculty engagement. Other studies have used Boyer's (1990) model of scholarship to identify the areas in which faculty can apply their knowledge and be engaged with the institution and community (Braxton & Lyken-Segosebe, 2015). Boyer's (1990) model suggests that the conceptualization of faculty engagement through research should also include areas that are also representative of faculty scholarship, such as application, integration, and teaching.

There are certain limitations present with the study of engagement. Since engagement is a state of well-being, each individual expresses engagement to a different extent (Selmer & Lauring, 2016). Similarly, the exact form – physical, emotional, and cognitive – will also vary. Furthermore, Livingston (2011) points out that higher education research views the constructs of engagement and faculty engagement differently. A limitation to the existing research is that most studies regarding faculty engagement focus on existing definitions of work and employee engagement, and few expand on the definition of faculty engagement as its own construct. This

gap in the literature results in few discussions focused on faculty engagement research and the characteristics that define an engaged professor.

Faculty Satisfaction

The organizational policies and procedures used to hire, promote, and provide funding influence faculty engagement (Holland, 1997). Since research points out that higher education is heading towards higher numbers of part-time faculty, it is important to examine part-time faculty satisfaction and the impact of part-time faculty on teaching effectiveness (Eagan, Jaeger, & Grantham, 2015; Meixner, Kruck, & Madden, 2010; Umbach, 2007). However, most of the existing research on faculty engagement does not examine if faculty appointment or standing has an impact on this construct; instead, it looks at faculty as a single group (Umbach, 2007). The following chapter presents the results of a study where nine out of 10 professors in private universities in Panama are part-time, thus providing a different focus that allows comparison with previous engagement and satisfaction studies where the sample population has a different full-time versus part-time faculty composition.

Meixner, Kruck, and Madden (2010) point to research as one of the historical factors that generated a full-time tenure-track faculty profile:

> The two primary outputs of a university are the creation of knowledge through research and the dissemination of knowledge through teaching. For years, universities have relied on part-time faculty to help shoulder the teaching load, thus allowing full-time faculty members to direct more focus to their research endeavors (p. 141).

However, many challenges and changes that occurred in higher education stifled the consolidation of full-time or tenure-track faculty as the academic majority, giving part-time faculty a “dramatic and impactful” rise (Ochoa, 2012, p. 138).

Eagan, Jaeger, and Grantham (2015) perform a multivariate analysis using data from the 2010-2011 Higher Education Research Institute (HERI) Report, as well as institutional data from the Integrated Postsecondary Educational Data System (IPEDS). The data served to explore the construct of workplace satisfaction for part-time faculty, and how variables such as professional relationships with other faculty, leadership, autonomy, and course assignments relate to satisfaction. Maynard and Joseph (2008), in contrast, examine satisfaction by comparing different facets of satisfaction among full-time, voluntary part-time, and involuntary part-time faculty. Key findings are that 73% of part-time faculty identified as feeling underemployed and expressed desire to gain full-time employment, which the authors note may have negative implications such as low job satisfaction, decreased mental and physical health, and feelings of disillusionment and frustration (Eagan et al., 2015). Later, this chapter continues to explore underemployment and its effect on engagement.

Figlio, Schapiro, and Soter (2015) study the possible differences between non-tenure track (NTT) and tenure-track (TT) faculty in producing lasting and genuine student learning. Therefore, the model developed by the authors compares the relative performance between courses taught by a NTT professor and courses taught by a TT professor during the students' first semester. Figlio et al. find that contingent faculty, or faculty that have been hired specifically to teach, are more effective teachers than TT faculty, because their students are more likely to take subsequent courses in a given area and because they are more likely to do well in following courses. Findings point out that one of the potential reasons may be that contingent faculty that are not effective teachers are fired from their institutions, while TT faculty who are not effective teachers, but possibly good in other areas, continue to teach at the institution. Therefore, the tenure track system may be affecting the quality of teaching in institutions.

Baldwin and Wawrzynski (2011) explore possible differences in teaching methodologies among part-time contingent faculty and full-time faculty. Compared to Figlio et al.'s (2015) study, this study uses a different approach to measure faculty effectiveness and presents different findings. Figlio et al. (2015) find that part-time faculty as a whole are better teachers than full-time faculty, while Baldwin and Wawrzynski's (2011) findings seems to suggest the opposite. Using different variables to explore teaching effectiveness, and accepting differing conclusions allows us to explore and understand the strengths and weaknesses of part-time faculty.

Umbach (2007) uses several constructs in the study: the use of active and collaborative learning techniques, academic challenge, time spent preparing for class and grading, time spent with students on non-class-related activities, and frequency of course-related interactions with students. Results indicate, in general, that part-time faculty status has a negative correlation with job performance. Part-time faculty spend less time preparing for class and interacting with students, as compared to full-time non-tenure track and tenure track faculty (Umbach, 2007). Part-time faculty are also less likely to use active and collaborative teaching techniques and have lower academic expectations towards their students.

Umbach's (2007) findings contradict those of Figlio et al. (2015), where results show that part-time faculty produce positive long-lasting academic effects on their students, as opposed to full-time, tenure-track faculty. If part-time faculty make up the majority of faculty in a higher education institution or system, Umbach's (2007) findings suggest this may have a negative impact in the effectiveness of higher education teaching in general.

Faculty Identity

Levin and Shaker (2011) define faculty identity as the ways in which faculty understand and conceptualize their role in colleges and universities as well as their understandings of their

relationships to their institutions. Research demonstrates that part-time designation has an impact on faculty identity (Bedford & Miller, 2013; Kezar & Sam, 2011; Levin & Montero, 2014; Levin & Shaker, 2011; Rhoades, 2008). Understanding how part-time faculty conceptualize themselves and how they describe the role they play in education may be one of the factors affecting faculty engagement.

The identity of non-tenure-track faculty is a hybrid in which they identify their work as containing "some elements of a profession and some elements of a 'job'" (Levin and Shaker, 2011, p. 1462). This uncertain identity that non-tenure track faculty have is also seen in the dualistic way they express satisfaction as teachers but exhibit limited self-esteem as members of a community of faculty (Rhoades, 2008). The dual identity of part-time faculty comes from a positive feeling of value associated with teaching and being able to impact students' lives, and a feeling of separation and of not having value in the larger institutional context, compared to tenured members of faculty in the department (Levin & Montero, 2014).

Kezar and Sam (2011) argue that negative preconceived notions regarding non-tenure track faculty may affect the interactions that tenure-track faculty have with their non-tenure track counterparts. For example, tenure-track faculty will not treat non-tenure track faculty as a peer or colleague if the latter shows less engagement or productivity. Kezar & Sam (2011) explain that "this behavior creates a work environment that deters non-tenure track faculty commitment and satisfaction and propagates the stereotype that non-tenure track faculty are of less quality – reinforcing initial expectations" (p. 1421).

Bedford and Miller (2013) and Thirolf (2012) conduct research regarding faculty identity, focusing on online adjunct faculty and recently hired adjunct faculty, respectively. Both articles study specific groups within adjunct faculty and the implications that arise by the self-

characterization of adjunct faculty, such as low commitment and engagement. Bedford & Miller operationalize variables such as motivation, personal needs, pedagogy, career advancement, work schedule, and skill development. Previous research demonstrates a negative association of all adjunct faculty with the same low level of experience, skills, and engagement with the institutions and the students (Bedford & Miller, 2013). This study suggests adjuncts are not a heterogeneous group, and that future research should be focused on specifically exploring differences within adjunct faculty and how the support they receive from the institutions that employ them impacts their identity as professionals. Because of the high percentage of faculty with part-time designation, studying faculty engagement in Panama attends to the call of more need for research focused on part-time faculty.

Thirolf (2012) examines the identities that faculty begin to form as they are recently hired at a community college, using discourse analysis as the methodology. Studying newly hired faculty is relevant because professional identity occurs when the person first enters the institution and begins to learn the intricacies belonging to their role as professors (Thirolf, 2012). The knowledge, skills, and attitudes – engagement among them – developed by professors are more salient when they first enter the position. Through the discourse of the respondents, Thirolf (2012) finds that part-time faculty are aware of the negative association of part-time faculty within their contexts, and that this awareness affects their self-identities to a certain extent. The respondents reflected a strong and positive identity as teachers to their students. However, they conveyed a discourse that revealed they are less committed and satisfied with their identity as faculty peers, and part of a professional community. This study provides specific examples of cases that complement Levin and Shaker's (2011) conclusions that part-time faculty have a dualistic identity.

Academic Capitalism

Another conceptual foundation contributing to the rise of part-time faculty is the development of academic capitalism over the last 20 years (Association for the Study Higher Education, 2010). Academic capitalism is the concept that the commercialization of educational operations will better serve the needs of society, and that education should adjust to globalization and neoliberal principles (ASHE, 2010). Slaughter and Rhoades (2004) explore the positive and negative implications of academic capitalism in higher education. When academic institutions, both public and private, operate more like corporations and treat their students as "clients", they become more efficient and effective (Slaugher & Rhoades, 2004). For faculty, operating under the notion of academic capitalism means that educational organizations will prefer more cost-effective hiring practices, which translates into more part-time faculty. However, Slaughter & Rhoades (2004) also point out that academic capitalism also has its dangers. For example, using market principles to drive educational organizations could compromise academic quality.

Montoto (2013) also explores the implications of academic capitalism in higher education and faculty hiring in Panama. The author notes that higher education in the country includes a for-profit model that tends to hire a majority of part-time faculty. This practice of hiring part-time faculty almost exclusively drives higher education institutions – both non-profit and for-profit -- to focus more on instruction, and not research. Montoto states that "the model is similar to that of community colleges, but with less pay and job security for instructors" (p. 29).

The rise of an academic capitalism mindset in higher education and faculty hiring suggests that part-time or contingent labor dramatically changes the dynamic between the employee (the professor) and the employer (the university) (ASHE, 2010; Slaughter & Rhoades. 2004). Labor market principles that are guided more and more by academic capitalism help

shape changes in working conditions for both full-time and part-time faculty are shaped by (ASHE, 2010). The laws of supply and demand determine wages and working conditions that apply to part-time faculty as well. A labor market based on part-time faculty requires a supply of faculty that are willing to work part-time and a demand from higher education institutions to hire part-time faculty (ASHE, 2010). For example, if there is a large supply of faculty willing to accept part-time employment, the wages and working conditions for part-time faculty are less likely to be favorable (ASHE, 2010).

Some of the literature regarding academic capitalism in higher education focuses on how this construct has influenced the contractual conditions of faculty and the academic profession. Eagan (2007) and Maynard and Joseph (2008) study underemployment theory and its relation to the changing dynamics of higher education. Underemployment is "when an individual holds a job that is somehow inferior to or of lower quality than a particular standard (Maynard & Joseph, 2008, p. 141). In the case of higher education, there are different reasons why a part-time professor teaches part-time. If the construct of underemployment is applied to the professoriate, part-time faculty are divided into two possible segments: involuntary part-time faculty (those that would prefer a full-time position), and voluntary part-time faculty (those who prefer part-time employment).

Maynard and Joseph's (2008) study found that most part-time faculty identify themselves as involuntary part-time faculty (IPTF). The authors consider it is relevant to research how satisfaction and engagement of faculty depends on whether they are voluntarily or involuntarily employed part-time. Voluntary part-time faculty are usually faculty whose teaching activities provide an additional income to supplement a full-time career or income (Eagan, 2007). For example, a businessperson may believe that teaching courses outside of full-time work enhances

prestige (Eagan, 2007). Part-time teaching may also provide flexibility to a professor raising small children, or provide valuable work experience for a graduate student. Involuntary part-time faculty teach part-time hoping to eventually secure a full-time teaching position (Eagan, 2007). This group may feel underemployed if part-time employment is involuntary and with lower pay relative to others with similar academic backgrounds.

Maynard and Joseph (2008) found that all faculty, regardless of their employment status, reported high job satisfaction, where there is little difference in satisfaction between part-time and full-time faculty. However, when the authors separated part-time faculty into IPTF and voluntary part-time faculty, they found a difference in the results of IPTF. These faculty reported significantly lower satisfaction with advancement, compensation, and job security in comparison to voluntary part-time faculty and full-time faculty (Maynard & Joseph, 2008).

Monks (2007) conducts a comparative analysis that complements Eagan's (2007) study, by exploring the differences in salary between part-time faculty and full-time faculty. Monks (2007) also looks at how faculty distribute their time between teaching, research, service, and other activities. The data also analyzes how gender, ethnicity, type of institution, discipline taught, age, research, and years of experience result in different earnings. Full-time non-tenure track faculty earn 26% less per hour and part-time faculty make 68% less per hour than tenured faculty (Monks, 2007). The study makes an important distinction between full-time tenure-track faculty, full-time non-tenure track faculty, and part-time non-tenure track faculty, which is an uncommon occurrence in research literature regarding faculty in higher education. The implications that underemployment theory and salary have on private higher education will be further explored in a needs assessment in the following chapter.

Regional Culture and Organizational Culture

Another one of the underlying factors identified as influencing faculty engagement is the particular context in which the faculty are located (ASHE, 2002). Situating faculty engagement and part-time faculty in the region of Latin America, and specifically in Panama, the context for the problem of practice, adds some considerations that may not be present in other contexts. Latin American national education systems have historically had particular patterns of organization, including what is taught and how it is taught; the evaluation systems and curriculum designs have, in many cases, become cultural icons (Navarro, Taylor, Bernasconi, & Tyler, 2000). For many countries, states, and municipalities, the education sector is one of the largest employers and a considerable source of income for professionals (Navarro et al., 2000). Accomplishing change when these structures exist is extremely difficult, because the education sector embeds itself as part of the culture of the country.

Latin American Culture and Higher Education

Situating the argument in the impact of culture in higher education, Montoto (2013) conducted an ethnographic study of United States cross-border higher education in Panama. The author observed a more relaxed classroom environment in Panama when compared with American cultural norms. For example, in Panama, professors sometimes arrived 10 to 15 minutes late to class, and students oftentimes arrived 30-45 minutes late. Montoto (2013) explains: "At first glance, the relaxed nature in regards to punctuality seems to be a dismissal of the rules, but the cultural norm of time being flexible permeates society in Panama and most of Latin America" (p. 193). Interviews of faculty (many from the United States) who teach in Panama "alluded to cultural norms as contributors to concerns regarding quality" (p. 227). Recognizing these nuances in the culture are relevant to understanding the potential underlying

causes of faculty engagement as applied to the specific context of private higher education in Panama.

The Latin American region has a different context in terms of the education level of faculty. This, in turn, affects faculty self-efficacy and research knowledge and production, one of the areas where faculty can be engaged within higher education (Livingston, 2011). Tiffin and Kunc (2008) and Svenson (2013) study education level of faculty and research production in Latin America, respectively. Tiffin & Kunc (2008) compare Latin American countries' rate of Ph.D. production to that of members of the Organization for Economic Co-operation and Development (OECD), where the average is one Ph.D. per every 5,000 inhabitants. In Latin America, Brazil has a ratio of one Ph.D. per every 70,000 inhabitants, Chile one per every 140,000 and Colombia, one per every 700,000. These numbers illustrate the lag of Latin American countries in producing Ph.D.'s in comparison to other developed countries.

Research Productivity in Latin America

Tiffin and Kunc (2008) find that one of the main challenges for higher education institutions in Latin America is insufficient funding for research, where it is uncommon for universities to receive grants and endowments. A study conducted by Holland (1997) draws a correlation between the availability of funding for research and other activities and a negative impact in faculty engagement. Another challenge found in Latin America is that the salaries that full-time salary can expect to earn are low, except for elite schools, where the authors report that faculty earn between $50,000 to $60,000 dollars per year (Tiffin & Kunc, 2008). The authors consider part-time faculty employment a contributing factor to the challenge of producing more Ph.D.'s in Latin America, because these faculty are not research-oriented, and therefore not

interested in pursuing doctoral degrees. The following chapter will continue to explore research and its relation to faculty engagement in Panama.

Svenson's (2013) study of Central American research efforts helps better understand the Panamanian context of the problem of practice. Central America does not contribute significantly to global research and development, where North America, Asia, and Europe contribute most of the research with 35.1%, 34.4%, and 25.7%, respectively (Svenson, 2013). Central America contributes 0.025% of global research, and is part of the Latin American region that accounts for 2.5% of global research. Comparatively, Panama has a productivity of 10.70 publications per 100,000 inhabitants and the United States produces 127.47 publications per 100,000 inhabitants. Svenson (2013) also reinforces the findings by Tiffin & Kunc (2008) regarding the relation of faculty self-efficacy and the low level of academics with doctoral degrees. A limitation to this statement is that there is a lack of reliable data of advanced degree holders (Svenson, 2013).

There is limited data regarding research, productivity, and PhDs in general for Panama, and its collection has been inconsistent throughout time (SENACYT, 2016). The National Secretariat for Science and Technology in Panama (SENACYT) reported that in 2011, there were 1,031 professionals who had a full-time dedication to research and development. Only 5% of these professionals had a terminal degree. The majority of full-time researchers were employed by the government, followed by universities, and then by non-governmental organizations, with a distribution of 66.7%, 30%, and 3.3%, respectively (SENACYT, 2016). In terms of research productivity, there are 100 Panamanian journals in the Latindex catalog, of which 14 are indexed journals, and of which only three comply with international publication standards (SENACYT, 2016). Even though these numbers reflect a growth through time, this growth is very small in

comparison to other countries in the region. To compare, Costa Rica, Panama's neighboring country, has 250 journals in the Latindex catalog (SENACYT, 2016).

Organizational Culture

Research suggests that organizational culture also influences faculty engagement and faculty beliefs (Finnegan, 1999; Holland, 1997; Maxey & Kezar, 2015). The organizational culture experienced within their professional environment fosters faculty beliefs. In the organizational culture of education in the United States, a professor must be a productive researcher to be considered successful in a scholarly environment (Finnegan, 1999). Research by Holland (2005) concludes that the mission of higher education institutions need to demonstrate congruence with the desire for faculty engagement and the subsequent availability of funds for faculty to be engaged. When institutions and their leaders change priorities and values, faculty engagement and behavior also change (Holland, 1997).

The findings presented in the research by Maxey and Kezar (2015) support those by Holland (1997; 2005). Maxey & Kezar (2015) determine that non-tenure track (NTT) faculty are not to blame for the current functional inefficiencies and shortcomings of the system; rather, higher education administrations are not providing NTT faculty with the proper resources and working conditions they require to maximize student success.

Conclusion

Existing research on engagement provides a clear conceptualization regarding the basic construct of the problem of practice. The works of Kahn (1990), Leiter and Maslach (1998), Schaufeli, Bakker, and Salanova (2002), Saks (2006), and Shuck and Wollard (2011) are recognized in this literature review as the evolving conceptual framework of employee engagement. Their work subsequently influences the construct of faculty engagement developed

by Nakamura & Csikszentmihalyi (2003). Even though research on faculty engagement and its effects on higher education is limited (Raina & Khatri, 2015), Nakamura & Csikszentmihalyi (2003) present four elements of faculty engagement that are aligned with the four factors of university accreditation in Panama, which are teaching, research, outreach, and administration (CONEAUPA, 2016).

Meixner, Kruck, and Madden (2010), and Ochoa (2012) look into the historical factors that generated the rise of full-time faculty, as well as the factors that later contributed to its decline in numbers. Today, part-time faculty are the academic majority in the United States, and the following chapter will explore data regarding part-time faculty numbers in Panama. The literature portrays faculty satisfaction as one of the factors that influences faculty engagement. Eagan, Jaeger, and Grantham (2015) use variables such as professional relationships with other faculty and autonomy, and Maynard and Joseph (2008) use voluntary and involuntary part-time employment to gather evidence to demonstrate that part-time faculty are usually less satisfied than full-time faculty.

The teaching effectiveness of part-time faculty versus full-time faculty has conflicting evidence. Figlio, Schapiro, and Soter (2015) present evidence that suggests that non-tenure track faculty are more effective than their tenure-track counterparts are. The results of this study grant a positive perspective to part-time faculty hiring, where part-time faculty are more effective as teachers. However, Baldwin and Wawrznski (2011) and Umbach (2007) suggest the opposite.

Studies of part-time faculty identity and self-conceptualization conducted by Bedford and Miller (2013), Kezar and Sam (2011), Levin and Montero (2014), Levin and Shaker (2011), and Rhoades (2008) all provide evidence that part-time faculty identity is dualistic, in that their roles contain elements of both a profession and a job. Furthermore, these authors find a link between

the identity of part-time faculty and faculty commitment or engagement, confirming the relevance of faculty identity as a factor that influences engagement.

Academic capitalism is one of the factors that has contributed to the rise of part-time faculty (ASHE, 2010). Academic capitalism in one of the few factors with research available for Panama. Montoto (2013) explores the implications of academic capitalism on higher education in Panama, concluding that Panamanian higher education is similar to that of community colleges in the United States, because the faculty-hiring model lends itself to a teaching focus, instead of research and other areas. Underemployment theory is also relevant in the study of part-time faculty engagement, and its relation to academic capitalism (Eagan, 2007; Maynard & Joseph, 2008). A study reveals that part-time faculty who feel that they are underemployed tend to report lower levels of satisfaction than part-time faculty who do not feel underemployed (Maynard & Joseph, 2008).

Lastly, it is important to consider regional culture and organizational culture as factors that contribute to the problem of practice. Montoto (2013) reveals that Panama has a more relaxed classroom environment when compared with United States cultural norms. The following chapter will demonstrate a concurrence with Montoto's findings regarding classroom culture and how it relates to faculty engagement. The Latin American region has a lower percentage of faculty with terminal degrees, which impacts self-efficacy and research knowledge and production, one of the possible areas for faculty engagement (Livingston, 2011). The impact of all of the factors presented in this literature review on part-time faculty engagement in private universities in Panama is further explored in the following chapter of this dissertation through a needs assessment study.

Chapter 2

Empirical Examination of the Factors and Underlying Causes: A Needs Assessment of University President Perceptions Regarding Faculty Engagement

As established in the previous chapter, research suggests that part-time faculty tend to be less available to interact with students, spend less time preparing their course, and use less effective teaching methods than their full-time or tenure-track counterparts (Umbach, 2007). In Panama, the majority of faculty who teach at higher education institutions are part-time faculty (Castillo, 2005; Montoto, 2013), but the exact figure is unknown. Part-time faculty at private universities in Panama are hired to teach, and usually they are not committed to supporting universities in essential activities outside of teaching, such as research, and administrative and community engagement (Castillo, 2005; Montoto, 2013). The previous chapter provided a synthesis of the literature regarding factors and underlying causes of the problem of practice. The factors impacting the practice of part-time faculty hiring in higher education institutions includes research on engagement (Holland, 2005; Nakamura & Csikszentmihalyi, 2003), faculty identity (Kezar & Sam, 2011; Levin & Shaker, 2011), satisfaction (Eagan, Jaeger, & Grantham, 2015), academic capitalism (Montoto, 2013; Slaughter & Rhoades, 2004), and culture (Maxey & Kezar, 2015; Montoto, 2013).

The data collected in the needs assessment reported in this chapter focuses on obtaining perspectives from leaders of higher education institutions – university presidents – regarding faculty engagement. The interviews explore potential contributing factors and other topics relevant to the problem of faculty engagement, such as part-time status, turnover, hiring practices, satisfaction measures, benefits provided to faculty, and thoughts on interventions to improve faculty engagement. Appendix 1 shows the full list of questions asked during the

interviews. This study demonstrated that private higher education institutions in Panama hire nine out of ten professors on a part-time status, providing a unique context apt for studying the problem of practice. An important result of this study is that university presidents perceived that 36.6% of their faculty are engaged. However, a coding analysis of the responses demonstrates that university presidents do not have a definition of faculty engagement that aligns with this dissertation's working definition of faculty engagement or with Panamanian accreditation criteria.

Goals and Objectives

The main goals and objectives of this study are to:

- Understand how university presidents conceptualize and define faculty engagement, as well as the behavior and characteristics of an engaged professor.
    - Obtain additional informational regarding the underlying factors that may affect faculty engagement.
- Obtain data that proves that part-time contingent faculty are the academic majority in private higher education in Panama.
- Understand certain internal administrative and academic processes that are important to the overall faculty experience.

Context of the Study

Description of the Context

Panama is a relatively young country and so is its higher education system. The United States government set up the first university in Panama, The Panama Canal Junior College, in the Canal Zone in 1933 to serve the United States military and civilian staff who were managing the Panama Canal (Montoto, 2013). In 1935, the University of Panama was established as Panama's

first public university, quite late if compared to other Latin American countries (Montoto, 2013). Thirty years later, the first private university in Panama, the Catholic University Santa Maria La Antigua (USMA), opened. The University of Panama and the USMA were the only two Panamanian universities until the 1980's, when more private and public universities arose. Similar to other countries in Latin America, the 1990s saw a plethora of private universities in Panama emerge, most of them for-profit institutions (Montoto, 2013).

The Ministry of Education serves as the government entity that recognizes and approves initial operation of universities in Panama. However, University of Panama and the other four state universities provide curricular approval of academic programs for private universities, and the Academic Development Technical Commission (CTDA) conducts oversight and supervision of private university academic and administrative operations. Twenty-six private universities currently operate in Panama (CTDA, 2017). Of these 26 operational universities, 18 are accredited by the National Council for Evaluation and Accreditation of Panamanian Universities (CONEAUPA), and the other eight have a provisional permission to operate for six years before they enter the accreditation process.

The higher education environment has experienced a drastic change in the last ten years due to accreditation. In 2006, the government passed a law that created the National Council for Evaluation and Accreditation of Universities of Panama (CONEAUPA). In 2010, the law was adopted, and the model and the process for accreditation was approved. In March of 2011, CONEAUPA presented its evaluation standards, and thus Panamanian universities entered their first national accreditation process. The evaluation standards matrix is composed of 185 indicators, divided into 4 factors of teaching, research, outreach, and administration.

Legally, private universities in Panama can operate either as for-profit or non-profit institutions. It is possible however, for a university to operate under the legal framework of a non-profit, but in practice be a for-profit institution (Levy, 2006). This point is crucial to the current concern because it underscores a primary practice relating to hiring part-time faculty. Montoto (2013) finds that the for-profit model uses a majority of part-time faculty. This "exclusive use of part-time faculty" drives private higher education institutions – both non-profit and for-profit -- to focus more on instruction, and not research. "The model is similar to that of community colleges, but with less pay and job security for instructors" (Montoto, 2013, p. 29). Furthermore, the use of part-time faculty is also a reality for public higher education in the country, where there is data from three the five public universities in Panama that reveal a trend of 69%, 62%, and 71% of part-time faculty, compared to 31%, 38%, and 29% of full-time faculty, respectively (Instituto Nacional de Estadística y Censo, 2013). These high percentages of part-time faculty beg the following question: if the majority of the faculty is engaged in teaching, then how are universities achieving research, outreach, and administrative goals without faculty?

Panamanian laws that regulate higher education foster a culture that is not conducive to faculty obtaining a doctorate degree. For example, the law requires that a professor have an undergraduate degree in order to teach courses at an undergraduate level (Castillo, 2005). In order to teach at a master's or doctorate level, the professor must have at least an equivalent degree that corresponds to the level of the program (Castillo, 2005). Therefore, a professor only needs to have a doctorate degree in order to teach at the doctorate level and with just a master's degree a professor can teach at an undergraduate and master's level. This information is relevant in understanding the context of Panamanian higher education, because low levels of faculty with

terminal degrees may have low self-efficacy for research, which is one of the areas of faculty engagement.

Affected Population

The problem of part-time faculty engagement in private universities in Panama affects the private higher education system as a whole. The participants of this study are university presidents, and the questions focus on their perception of faculty engagement, which in turn affects the student population. The stakeholders of this problem are:

- The 26 private universities that currently operate in Panama (CTDA, 2016).
- The more than 13,000 university faculty in the system of higher education (INEC, 2012).
- The more than 140,000 students in the higher education system (INEC, 2012).

Statement of Purpose and Research Questions

The purpose of this study is two-fold: to learn about the perceptions of university presidents regarding faculty engagement and the general faculty experience at their institutions, and to gather basic data that demonstrates that part-time faculty are the academic majority in private universities in Panama.

The research questions for this study are the following:

- What is the percentage of part-time faculty at private universities in Panama?
- How do university presidents conceptualize engagement and what are the characteristics that they associate with an engaged professor?
- What is the perceived percentage of engaged faculty?
- What are the sources of satisfaction and dissatisfaction for faculty in Panama?
- Do universities have in place manuals or procedures that outline a faculty classification?

Method

Research Design

This study will employ descriptive research to understand what is happening with faculty engagement in the Panamanian context. Using descriptive research, the goal is to provoke explanatory research, to demonstrate why the problem occurs, through a search for the underlying factors that may be causing or contributing to low part-time faculty engagement. Through a semi-structured interview conducted of university presidents of private universities in Panama, this study will obtain qualitative information that will generate information on the perspectives of university presidents regarding faculty engagement and its contributing factors. Furthermore, the interviews will also generate some quantitative data, specifically regarding the percentage of part-time faculty in Panama and the percentage of engaged, according to the perception of university presidents.

Participants

As previously mentioned, there are currently there are currently five state universities and 18 private universities that are accredited by the National Council for Evaluation and Accreditation of Universities of Panama (CONEAUPA). Additionally, there are eight private universities with a provision permission to operate in the country for six years, before they are required to seek accreditation (CTDA, 2017). The participants for this study are university presidents of accredited private universities in Panama. All universities' main campuses are located in Panama City, but some have branch campuses in other Panamanian cities as well. The institutions of affiliation of the university presidents that participated in this study are all degree granting at undergraduate and graduate levels. Most of these universities do not currently offer doctoral programs.

Of the nine participants in the study, four were female and five were male, with ages ranging from 45 to 65. In one case, the university president was also a majority stakeholder at another university, and in another case, the university president was the past president of the Panamanian Council for University Presidents (CRP). In both cases, these presidents provided data regarding their primary institution of affiliation, but provided additional information based on their knowledge of other institutions or the Panamanian context in general.

Measures and Instrumentation

This study aims to measure the perspective of university presidents regarding faculty engagement through the application of a semi-structured interview. Appendix 1 shows the list of questions asked during the interviews. Although this study is qualitative in nature, some of the data obtained is quantitative. Most of the quantitative data provided by the participants are estimates, which is the case of total number of faculty, faculty education, part-time faculty percentage, and turnover percentage. Furthermore, university presidents are asked to provide a quantitative value for faculty in their institution who they consider to be engaged.

The focus of the study is to view university president individual conceptualizations of faculty engagement, and what percentage of faculty in their institution is engaged. However, the interview also measures variables that may be influencing faculty behavior. The independent variable for this study is the faculty, regardless of their classification as part-time or full-time faculty. The dependent variables for this study are: part-time faculty, full time faculty, faculty turnover, faculty hiring practices, faculty satisfaction, student evaluation of faculty, faculty engagement (measured as both quantitative and qualitative variables), and benefits available to faculty. This study uses coding analysis and thematic analysis to identify existing and emerging themes during the interview process. Although certain questions have been individually coded to

reflect the particular content area they address, the interviews have also been coded to reflect the general themes that arise.

Procedure

Data Collection Methods

The university presidents of all accredited private universities in Panama were contacted via e-mail with an invitation to participate in this study, and suggestions with meeting times and days. In some instances, the presidents responded directly to the e-mail to set up appointments, and in other instances, additional follow-up was required. The additional follow-up occurred by contacting the president's assistants to follow up on the meeting request, by having my executive sponsor (who is a university president) contact some of the presidents pending a response, and by approaching the presidents in external meetings and requesting an interview. None of the contacted participants formally declined to be a part of the study; rather, they did not respond or provide a meeting date.

Data collection occurred through a semi-structured individual interview (see Appendix A for full list of questions). It is important to mention that the interviews were conducted in Spanish, and the recorded audio of the interview was later transcribed and translated to English. It is possible that the Spanish to English translation will distort some of the participant's responses. For example, some of the respondents used colloquialisms that are particular to the country and do not have the same meaning when translated to English. Furthermore, the construct of "engagement" does not have a literal translation to Spanish, which may have caused different understandings of the term among participants, when questions regarding engagement were asked. All of the participants signed an informed consent form and all agreed to a voice

recording of the interview. All of the interviews were conducted in the private offices of each university president.

It is important to note that there may be a bias present in the collection of the data. The researcher has worked in the field of higher education in Panama for 10 years, and is aware of the organizational practices of private institutions when it comes to faculty. Therefore, measures to mitigate or reduce bias were taken by asking pre-established questions that were revised an executive sponsor. A test interview was conducted, and recommendations were made to minimize expressive agreement or disagreement phrases; this was corrected for subsequent interviews.

Data Analysis

After the interviews were conducted, transcribed, and translated to English, the data collected was analyzed. To maintain anonymity of responses, all participants were assigned a number (1-9) to identify their responses in this study. Some of the questions asked during the interview were coded to reflect the expected themes. Some emerging themes that had not originally been considered arose during coding and those themes were also included. Some of the questions allow for a quantitative analysis through descriptive statistics. For the quantitative analysis, the data was organized into tables to organize the responses by participant, and a weighted mean was calculated to account for number of faculty per respondent.

Findings and Discussion

Size of Affected Population

This section focuses on the findings generated by the university president interviews and discuss the relevance and meaning of the data. Table 2 presents the number of faculty employed per university, as well as the percentage of part-time faculty employed by each institution and the

percentage of engaged faculty. The responses in this interview are all rough estimates based on the perspectives of each university president. An analysis of the data shows that the nine universities in this study total the affiliation of approximately 3,015 faculty. The most recent data presented by the Panamanian Institute of Statistics and Census (INEC) is from 2013, and details that there were total of 3,432 professors teaching at private universities. This would mean that the studied institutions represent 87.8% of the total faculty population of Panama affiliated with a private university.

Since 50% of private institutions participated in this study, it is unlikely that the remaining 50% of institutions only make up 12.2% of the remaining faculty population. Since it is not mandatory for private institutions to report their demographic data to the INEC, it is possible that INEC does not have the complete data of all private universities. This brings into evidence the lack of existing information regarding faculty in private higher education in Panama. Table 2 also provides evidence to support that private higher education in Panama is made up of a majority of part-time faculty, where results have a weighted mean of 92.6. Having 9 out of 10 faculty in a higher education system hired on a part-time basis justifies the need for a comprehensive study regarding the implications of having part-time faculty as the academic majority.

Part-Time Faculty Engagement

One of the objectives of this study was to obtain perspectives from university presidents regarding the percentage of engaged faculty in their institutions. It is important to note that for this measure, one university president refrained from providing a specific percentage of engaged faculty. Five of the presidents provided faculty engagement levels between 10% and 40%. In contrast, three university presidents provided faculty engagement levels of 75% to 80%. Two of

the three universities that reported high levels of engagement among faculty are small universities, as seen in Table 2. The general perception held by university presidents resulted in a weighted mean of 36.6% engaged faculty. This perception confirms the problem of low faculty engagement at private universities in Panama.

The connection between low faculty engagement and part-time faculty status is visible in two areas of the study. First, the study is conducted in a context where university presidents report high numbers of part-time faculty (92.6%) and low levels of engaged faculty (36.6%), and this establishes the possibility of a link between both. Second, university presidents reported perceiving a difference in engagement between professors that have a full-time dedication and those who have a part-time dedication. Some of the considerations provided by the presidents regarding engagement and how it is affected by part-time faculty status are below:

It's clear that the professor with a full time dedication feels more engaged with the institution because he is only dedicated to the university. Each time we need them they are there. They are very responsible and those will be a 100%. If you ask the others (part-time faculty), you will get a 10-15% participation. The difference is very marked.

Another participant noted:

None of the responsibilities of an engaged professor is the responsibility of an adjunct professor. They do it by sheer will… The reality is that the professor in Panama teaches a class and that's it. Few of them are engaged. The fault is also ours because we don't look for mechanisms to engage them, so the professor who looks at dollars and cents sees it as a transactional relationship.

As discussed in the previous chapter, Nakamura and Csikszentmihalyi (2003) identify four areas where faculty engagement can occur: the education of students; conducting research

or advancing the knowledge of a particular discipline; helping with the administrative needs of the institution of affiliation; and being active in serving the needs of the community. These four areas align with the four factors that make up the base of higher education accreditation in Panama: teaching (docencia), research (investigación), outreach (extensión), and administrative (gestión). Nakamura and Csikszentmihalyi's (2003) definition of engagement and CONEAUPA's accreditation standards demonstrate that a cross-cultural alignment exists for the criteria that makes a good professor, and subsequently, a good university.

The university presidents were asked to provide their description of faculty engagement. The participants could answer this question broadly, and the specific questions was framed as: What is your definition of faculty engagement, and what are the characteristics of a professor who is engaged? Data coding provides information regarding the frequency with which the participants identify the four areas of faculty engagement as posed by the literature.

Table 3 presents the different ways in which university presidents conceptualize and characterize faculty engagement. Thematic analysis through coding helps identify the main themes that arose from the participants' conceptualization of faculty engagement. Most of the participants make the distinction that the description they provide is based on the expected level of engagement from a part-time professor, suggesting that part-time faculty have different levels or behaviors that make up engagement, as compared to their full-time counterparts. Other participants, although they do not specifically point out that their definition uses part-time faculty as a base, define engagement as being on time and honoring their commitment with the students. This basic starting level of what is qualified as engagement creates a relation between part-time faculty and low expectations of what constitutes faculty engagement.

Table 4 presents the frequency found in each of the areas of engagement. The two recurrent areas mentioned by the participants as related to faculty engagement are the education of students and being active in serving the needs of the community. Seven out of nine participants mention outreach, and six participants mention teaching. Education of students is described in different ways such as faculty concern over student success, the importance of mentoring, and the importance of having updated material and resources in class. Participants describe serving the needs of the community as participation in cultural activities and community outreach, problem solving applied to real problems in the community, and coordination of student volunteer hours necessary to graduate. Four of the nine participants mentions the correlation of research with faculty engagement. Lastly, two participants mention engagement in administrative duties, such as participation in academic committees. The mixed definition that each participant provides shows that the conceptualization of faculty engagement varies by leader. In some cases, the participants allude to the specific context of their institution to explain why a certain element of faculty engagement occurs at their institute.

The coding analysis of university president's description of faculty engagement resulted in three emerging themes additional to those already considered. First, five out of nine universities mention part-time faculty in some way during their description of faculty engagement, usually to explain or excuse lack of engagement from part-time faculty. Two university presidents included being on time for class as an example of faculty engagement. This mention, although not by a majority of respondents, aligns with Montoto's (2013) findings that also analyze a culture where faculty tend to late to class. Through an analysis of the interview responses, it seems that when faculty are punctual, the professor is an engaged. Lastly, four out of nine university presidents mention time availability of faculty as a deterrent to faculty

engagement as part of their description. One university president summarized: “Those who do not participate work during the day, teach courses at night, and the rest of their time is dedicated to their family.”

The data collected demonstrates that university presidents do not have a complete understanding of the meaning of engagement and the different elements that make up faculty engagement. These four elements coincide with the four main factors that are required for Panamanian accreditation: teaching (docencia), research (investigación), outreach (extension), and administrative (gestión). This means that Nakamura and Csikszentmihalyi’s (2003) explanation aligns with the Panamanian context through Panamanian accreditation standards. If university presidents do not have a complete conceptualization of faculty engagement, how can they clearly and completely conveying their vision to faculty? How can the institution provide more opportunities for faculty engagement if the leadership is not clear to begin with? How can part-time faculty be engaged with the institution if the relationship between faculty and the institution is considered a transactional relationship?

Another relevant question posed during the interviews was the existence of policies or manuals that formally classify or categorize faculty. These responses were also coded. They reveal that two out of nine institutions currently have in place policies that situate each professor within a category or classification. Five institutions are in progress of developing or implementing classification policies, and the remaining two do not have any policy in place or currently being developed. The lack of policy and policy implementation regarding faculty classification in private universities in Panama may be a driver to the problem of faculty engagement. Table 5 shows the detailed answers received by each university president regarding the existence of faculty classification policy.

The third question of the interview that was coded separately referred to the areas that faculty identified as areas in need of improvement in faculty satisfaction surveys conducted individually by each university. Table 6 portrays the responses given to that question. Six out of nine institutions conduct faculty evaluations. The six institutions that conduct faculty evaluations all report that faculty identify salary and compensation as an area that needs to be improved. This finding connects to the literature regarding academic capitalism and underemployment theory. Slaughter and Rhoades (2004) explain that a university that applies notions of academic capitalism will prefer more cost effective hiring practices, which means hiring part-time faculty. Furthermore, the Association for the Study of Higher Education (ASHE) present a 2010 report that explains that an academic capitalism mindset has dramatically changed the dynamic between the employee (the professor) and the employer (the university).

The result of the analysis of the interviews is the identification of a theme that had not been considered in the original coding. All of the universities interviewed mention faculty training and development and the importance to them that faculty participate in these opportunities for development. This theme may be a fifth area of faculty engagement specific to the context of Panama, which is participation in faculty training and development. All of the universities have current efforts to help to improve the quality of professors, and they view participation in training and development provided by the institution as an example of faculty engagement.

To summarize, this study reveals that an estimated nine out of ten professors in Panama are part-time faculty. University presidents consider that 36.6% of faculty are engaged. An analysis of the conceptualization of faculty engagement demonstrates that participants describe faculty engagement differently, and apply it to different areas for possible engagement. Faculty

engagement, therefore, seems to not only be a problem created by faculty, but by a lack of understanding from the leadership on what it means to be engaged, and by the transactional nature of the relationship between faculty and the educational institution. An opportunity for future research is to triangulate the results of this study by surveying faculty at the participating institutions to confirm some of the data and considerations provided by university presidents.

Chapter 3

Literature Review for an Intervention in Transformational Leadership

The needs assessment presented in Chapter Two confirms a two-fold problem of practice in private higher education in Panama:

- Part-time faculty are the academic majority in private higher education in Panama. The needs assessment, surveying half of the accredited private universities in Panama, found that universities hire 92.6% of faculty on a part-time basis.
- Regardless of part-time or full-time status, the perception held by university presidents is that 36.6% of their faculty are engaged in their work.

The needs assessment also confirms some of the underlying causes of the problem found in the review of literature in the previous chapter. Compensation and salary is the area that faculty in Panama identify as needing the most improvement. University presidents comment on the issue of part-time faculty having other professions that limit the time that they can dedicate to faculty work. This finding is connected with research regarding academic capitalism (Montoto, 2013; Slaugher & Rhoades, 2004), underemployment theory (Eagan, 2007; Maynard & Joseph, 2008), and faculty identity (Bedford & Miller, 2013; Kezar & Sam, 2011; Levin & Montero, 2014; Levin & Shaker, 2011; Rhoades, 2008).

The needs assessment also helped to discover emerging themes that had not been previously considered in the review of literature of the problem of practice. For example, interviews with university presidents brought into light the nature of the relationship between faculty and the institution as a transactional relationship. This finding prompts most of the review of intervention literature, to explore research on leader-member exchange, as well as

transactional and transformational leadership. Furthermore, university presidents identify an area of engagement not previously contemplated in the working definition of faculty engagement. Nakamura and Csikszentmihalyi (2003) identify four areas where faculty engagement occurs: the education of students; conducting research or advancing the knowledge of a particular discipline; helping with the administrative needs of the institution of affiliation; and being active in serving the needs of the community. The results of the needs assessment added a fifth area of engagement: participation in training and development. All of the respondents mentioned the importance of professional development as part of institutional efforts to improve as a university. Lastly, this review of intervention literature will explore a salient theme from the needs assessment, faculty promotion policies. The needs assessment revealed that two out of nine institutions had faculty promotion policies in place. The rest of the surveyed institutions were either in the process of creating or in the process of implementing these policies, or did not have these policies in place.

Theoretical Framework

Smart (2005) suggests that the lack of theory-based research in higher education occurs as a result of a lack of theories of higher education, and highlights the value in drawing from theories of other disciplines to improve the quality of higher education research. Noting a reluctance among higher education researchers to draw upon other academic disciplines to ground research in the area, Smart (2005) states that theories in economics, psychology, sociology, and organizational theory and behavior can provide valuable contributions to the understanding of factors that influence phenomena in higher education. Following the approach suggested by Smart, and followed by the Association of Higher Education (ASHE) Report (2010), the review of literature of the problem of practice draws upon economic, sociological,

psychological and labor relations theories to understand the underlying factors and causes that impact part-time faculty engagement in private universities in Panama. Similarly, this chapter will conduct a review of existing research literature regarding potential interventions, grounded on leadership theory.

Conceptualizing Transactional and Transformational Leadership Theory

Transactional leaders are those who provide their workers with the essentials they need to complete their jobs: the expectation and description of the job they need to do and the resources they need to complete it (Robbins & Judge, 2011). Furthermore, Walumba, Cropanzano, and Goldman (2011) explain that a transactional relationship is a low quality, economic exchange between the leader and the employee, characterized by short-term interactions and a quid pro quo exchange. Transactional leadership theory is comprised of two factors:

- Contingent reward, described as an exchange that takes place between the leader and the employee, where the accomplishment of a certain task comes with the expectation of a reward (Antoniakis, Avolio, & Sivasubramaniam, 2003).
- Management-by-exception, described as the active and corrective supervision by the leader to ensure that the employees meet the expected objectives (Antoniakis et al., 2003).

Transformational leadership was initially developed by Burns (1978), who defined a "transforming" leader as one "seeks to satisfy the higher needs and engages the full potential of the follower" (p. 4). Bass (1985) continued to elaborate on transformational leadership theory, stating that transformational leaders have the ability to influence the behavior of their followers' psychological state, through changing how they feel about themselves and their work.

Transformational leadership is regarded as one of the most effective styles of leadership (Judge & Piccolo, 2004).

In 1985, Bernard Bass expanded on Burns' (1978) work regarding transformational leadership by developing the Multifactor Leadership Questionnaire (MLQ), an instrument that could measure transactional and transformational leadership. Bass (1985) also highlighted the impact of transformational leadership on follower motivation and performance, through the premise that the feelings of trust, admiration, and loyalty generated by a transformational leader among followers resulted in followers willing to dedicate more of themselves in their work roles. The transformational leader is able to transform the workplace environment into that stimulates higher performance and success (Bass, 1985).

The four main elements of transformational leadership, according to Avolio and Bass (1999) are:

- Idealized influence for building trust;
- Inspirational motivation to inspire a sense of purpose;
- Intellectual stimulation to value creativity and involving employees in the decision-making process;
- Individualized consideration to attend to specific employees wishes.

Avolio and Bass (1999) used confirmatory factor analysis (CFA), replicate sample tests of fit, and explore alternative hierarchical factors models. The authors use 14 individual external studies, conducted in different contexts, to test the validity and replicability of the different elements identified as part of transformational leadership to evaluate the model. With a large and varied sample size of 3,786 respondents, the authors reduce the likelihood of the multivariate normality assumption. It is relevant to note that the study controlled for the variable of hours

worked per week, on the premise that employees who work more hours are likely to have higher levels of performance. This premise aligns with Umbach's (2007) findings that suggests that part-time faculty have lower levels of performance than their full-time counterparts, and with Eagan, Jaeger, and Grantham's (2015) study that finds that involuntary part-time faculty are less satisfied than voluntary part-time faculty or full-time faculty.

The Multifactor Leadership Questionnaire has evolved throughout the years to take into consideration the analyses, review, and critiques published by researchers to utilized the MLQ, and the instrument is known today as the MLQ 5X. Avolio and Bass' (1999) work constitutes the main source of transformational leadership research; their work is seminal and provides part of the conceptual framework for the proposed intervention. A website that sells the MLQ as one of its services explains that the instrument has been used "in thousands of research programs, doctoral dissertations, and master's theses…" ("Multifactor Leadership Questionnaire – Mind Garden", n.d.). The fact that the MLQ is still relevant – 31 years after its original introduction – demonstrates the possibility for replicability in the context of Panamanian private higher education.

While Burns' (1978) earlier theories of transformational leadership compared transactional leadership and transformational leadership as two separate and opposite styles of leadership, Bass (1985) suggested that effective leaders could display attributes of both transactional and transformational leaders. This "augmentation effect" proposed that transformational and transactional leadership are not opposites or substitute of each other; rather, the transactional leader could build up on existing attributes to also become a transformational leader, and achieve an increase in performance of their followers (Bass, 1985). Bass (1985) stated that the best leaders had both transactional and transformational leadership characteristics.

Shuck and Herd (2012) build up this theory by suggesting that transactional leadership allows leaders to meet the "lower level" needs of their followers, and transformational leadership moves them to another level, through the use of idealized influence, inspirational motivation, intellectual stimulation, and individualized consideration (p. 172).

Leadership in the Context of Engagement

Engagement is "the harnessing of organization members' selves to their work roles; in engagement, people employ and express themselves physically, cognitively and emotionally during role performances (Kahn, 1990, p. 694). Furthermore, work engagement is characterized by vigor, dedication, and absorption (Schaufeli, Bakker, & Salanova, 2002), as well as energy, involvement, and efficacy (Leiter & Maslach, 1998). The working definition of employee engagement for this dissertation is "an individual employee's cognitive, emotional, and behavioral state directed toward desired organizational outcomes" (Shuck & Wollard, 2010, p. 103). The objective of using a transformational leadership intervention is to create a positive work environment, and to develop and increase the level of skill and potential of employees (Aryee, Walumbwa, Zhou, & Hartnell, 2012).

Shuck & Herd (2012) find a connection between transformational leadership theory and Kahn's (1990) perspective regarding engagement. The combination of both theoretical frameworks creates a leadership process that is possible to achieve for everyone, not just for leaders who possess certain traits or characteristics (Shuck & Herd, 2012). This merging of theoretical frameworks can potentially lead to the development of a new conceptual framework for employee engagement as an outcome of leadership behaviors (Shuck & Herd, 2012), which is what the proposed intervention seeks to explore.

Evidence points to transformational leadership as an intervention approach that has a positive effect on engagement (Avolio & Bass, 1999; Aryee, Walumbwa, Zhou, & Hartnell, 2012; Walumbwa, Lawler, Avolio, Wang, & Shi, 2005; Breevaart et al., 2014; Bayram & Dinç, 2015). Organizational environments that demonstrate a high level of transformational leadership tend to have highly engaged employees. Furthermore, research also demonstrates that transformational leadership leads to high productivity and innovative behavior (Aryee et al., 2012). The link between transformational leadership and engagement exists in the education context as well. Most of the research has been conducted in schools (Choochom, 2016; McCarley, Peters, & Decman, 2016; Sayadi, 2016), and one study was found to be conducted in higher education (Bayram and Dinç, 2015).

Transformational Leadership and Engagement, Innovative Behavior, and Task Performance

Aryee, Walumbwa, Zhou, and Hartnell (2012) conduct a study that also uses the Bass and Avolio's (1999) Multifactor Leadership Questionnaire as the guiding instrument. The authors test a hypothesized model that proposes that transformational leadership, through the creation of meaningfulness of work and responsibility for work, has a positive impact on engagement. Furthermore, the authors contend that the leader-member relationship fostered through transformational leadership can also increase innovative behavior and task performance. The hypothesis is tested in a large telecommunication company in China with a total sample size of 200. The authors successfully prove their hypotheses through the application of the MLQ, which measures elements such as consideration, stimulation, and motivation.

Aryee et al.'s (2012) findings provide evidence indicating that it is worthwhile to pursue the proposed intervention of using a transformational leadership approach to increase part-time

faculty engagement in Panama. The study not only demonstrates a link between transformational leadership and engagement, but also presents the connection between transformational leadership and innovative behavior and ask performance in employees. It also goes further into the benefits of using transformational leadership by demonstrating the positive effect on employee innovation and task performance. The use of the Multifactor Leadership Questionnaire seems to perform an adequate job of evaluating leadership competencies among supervisors, with a special focus on transformational leadership.

Transformational Leadership Research in a Multinational Context

One of the challenges encountered in a review of the literature regarding leadership interventions for the problem of part-time faculty engagement in Panama is the lack of multinational studies in the area. Walumbwa, Lawler, Avolio, Wang, and Shi (2005) help fill the aforementioned research gap through a study that measures the effect of transformational leadership on employee organizational commitment and job satisfaction for 644 individuals in 37 bank branches in China, India, and the United States. The authors use hierarchical linear modeling and find that transformational leadership has a positive impact on employee attitudes across cultures. The authors successfully demonstrate their hypothesis that regardless of the country and culture, transformational leadership increases commitment and satisfaction. This makes the intervention generalizable in different contexts, and provides enough evidence to indicate that similar positive results are possible through a transformational leadership intervention.

In their literature review, Walumbwa et al. (2005) reference Bandura (1986) and the importance of understanding self-efficacy and the role it plays on work performance. Self-efficacy is one of the identified factors that contributes to the problem of part-time faculty

engagement in private universities in Panama, making this a relevant contribution not only to the problem literature review, but also to the intervention literature review. In the previous chapter, the result of the needs assessment demonstrates that approximately 7% of higher education faculty in private universities in Panama have doctoral degrees. This means that a small percentage of professors in higher education have received academic training to conduct research. According to Nakamura and Csikszentmihalyi (2003), research is one of the four areas where faculty engagement occurs. Panamanian accreditation standards support this statement, where research is one of the four factors evaluated for accreditation. The results presented in the needs assessment and supporting literature by Bandura (1986) and Nakamura and Csikszentmihalyi (2003) suggest that due to efficacy issues, only 7% of Panamanian faculty are trained to contribute in one of the areas of faculty engagement. An improvement in transformational leadership practices on behalf of higher education leaders could contribute to policies aimed to increase the number of faculty with terminal degrees.

Transformational Leadership Studies in Education Environments

Several studies conducted in education contexts demonstrate that transformational leadership has a positive effect on teacher engagement. Choochom (2016) conducts a study that demonstrates that support from supervisors positively affects employee engagement in an education context. The author surveys 417 teachers in Bangkok to create a causal relationship model of teachers' engagement. Through the use of confirmatory factor analysis (CFA) and structural equation modeling (SEM), the model tests the influence that job resources (such as job control, access to information, supervisory support, school climate, and social climate) have on teacher engagement.

Sayadi (2016) uses the Multifactor Leadership Questionnaire (MLQ) to conduct a comparative leadership study that examines the effect of transformational, transactional, and non-leadership on job satisfaction and commitment among 387 teachers in the province of Kermanshah in Iran. The study found that charismatic leadership, a characteristic that identifies transformational leaders, was the strongest positive predictor of satisfaction and commitment. Furthermore, the results for the three factors of transformational leadership measured in the study were high and implied that teachers had a strong association with their school of affiliation (Sayadi, 2016). Similarly, in southeast Texas, McCarley, Peters, and Decman (2016) use the MLQ as one of the instruments to conduct an analysis of transformational leadership related to school climate. The authors analyze the data gathered from 399 teachers trough hierarchical linear modeling, and conclude that there is a statistically significant relationship between all of the factors of transformational leadership and three characteristics that define school climate: support (positive), engagement (positive), and frustration (negative) (McCarley et al., 2016).

Wepner, Henk, Clark Johnson, and Lovell (2014) conduct a qualitative investigation of the skills that are necessary for academic deans as leaders. Four academic deans coded their daily work interactions with over 35 different categories of stakeholders inside and outside of their institutions. The main conclusion of the study is that professional development for academic deans needs to focus on improving on the ability of deans to interact and work closely with others. When considering the four different areas of transformational leadership, the four areas have an implicit requirement that the leader have good interpersonal and communication skills.

Bayram and Dinç (2015) study the role of transformational leadership in job satisfaction in private universities in Bosnia and Herzegovina. This study provides an idea of how the intervention's effectiveness is quantitatively measurable. The authors use factor analysis, means,

standard deviations, correlation, and regression analysis to measure the relationship between the presence of transformational leadership in the workplace and employee satisfaction. This article is relevant because it studies data for private universities in Bosnia and Herzegovina, and helps understand how to approach the study and measurement of transformational leadership for the context of private universities in Panama.

The hypotheses tested in this study separately measure the factors that make up transformational leadership, so the authors test for the impact of idealized influence, inspirational motivation, intellectual stimulation, and individualized consideration on overall job satisfaction. The authors use the Multifactor Leadership Questionnaire developed by Avolio and Bass (1999). The literature review structure of this study, as well as its research design and methodology, provide a framework that is applicable in measuring the impact of the proposed intervention. The article quotes Avolio and Bass (1999) on the importance of measuring leadership in higher education: "Knowledge work will dominate the 21st century. It requires more envisioning, enabling, and empowering leadership, all of which are central to transformational leadership" (p. 131). Bass and Avolio (1999) highlight the relevance and timeliness of a leadership intervention in the context of education.

The five studies analyzed in this section provide strong evidence towards the link that transformational leadership has with a positive organizational climate and positive employee engagement in an educational context, as well as the need to provide professional development opportunities for faculty supervisors in areas directly related to transformational leadership.

Organizational Climate and Engagement

The literature demonstrates a connection and transition beginning with the dimensions of transformational leadership, continuing with an improved organizational climate, and resulting in

increased engagement. Brown and Leigh (1996) state: "When employees perceive the organizational environment positively (i.e., as consistent with their own values and self-interests), they are likely to identify their own personal goals with those of the organization and to invest greater effort pursuing them" (p. 358). This statement connecting organizational environment and engagement aligns with the research by Aryee et al. (2012) that finds that the transformational leader is able to connect the self-concept of the follower to the institution's mission and vision. This connection between employee self-concept and institutional mission and vision transitions into a positive organizational environment, helping transformational leaders achieve engagement from their followers.

The medium-term outcome of an improved organizational climate is necessary to achieve the main outcome of the intervention – a long-term outcome – which is engagement. A work environment that promotes positive behaviors and elicits positive emotions allows employees to have flexible thinking, an open mind, feel more self-control, and have better coping mechanisms (Saks, 2006). It is important to view engagement as two-way relationship between the employer and the employee. Social exchange theory applies to employee engagement because the employer and the employee have an interdependent relationship (Aryee et al., 2012). Over time, it is ideal for the relationship to evolve into one of trust, loyalty, and mutual commitment, as long as both parties can comply with certain rules of behavior and exchange (Aryee et al., 2012). When the employee receives economic and/or socio-emotional resources from the organization they work for, they feel obliged to respond in kind and repay the organization (Saks, 2006). This, in turn, creates a higher level of engagement, which is one way for the individuals to repay the organization.

The importance of organizational climate as a transitional step between transformational leadership and the achievement of engagement can be witnessed in a model hypothesized by Aryee et al. (2012), as well as a model hypothesized by Brown and Leigh (1996). Figure 1 shows the first model, where the authors demonstrate how a leader-member exchange involving a transformational relationship versus a transactional relationship is able to develop feelings of meaningfulness and responsibility, which in turn result in the employee engagement of the member. Furthermore, Figure 2 shows Brown and Leigh's (1996) hypothesized model where a positive psychological climate precedes job involvement. Both models provide evidence to demonstrate that for engagement to occur, the employee must experience a positive work environment.

Kataria, Garg, and Rastogi (2013) also contribute to the literature regarding the role of work environment as an outcome that precedes engagement. In order for employees to exert their maximum effort in their job, they must feel they have "managerial support, clear and consistent job descriptions, and workplace motivation to co-create a vision for the organization" (Kataria et al., 2013, p. 218). These statements align with the conceptualizations provided by Shuck, Rocco, and Albornoz (2011) that engagement is a manifestation of how the employee interprets certain work-related environmental inputs and outcomes. Organizational climate is an important factor within the proposed intervention because it is a medium term outcome expected to occur before higher levels of engagement occur within the context of private higher education in Panama.

Faculty Promotion Policy and Engagement

An alternate intervention approach involves the development and implementation of a faculty promotion policy to improve part-time faculty engagement in private universities in Panama. As part of a needs assessment conducted in the previous chapter, results revealed that

two out of nine institutions had faculty promotion policies in place. Five institutions were in the process of development or implementation, and the remaining two did not have any policy in place or currently being developed. The lack of policy and policy implementation regarding faculty promotion in private universities in Panama is a driver to the problem of faculty engagement.

Literature that analyzes research motivation has found that the strongest incentive for research is promotion (Reyes-Cruz & Perales-Escudero, 2016; Ruscio, 1987). Nakamura and Csikszentmihalyi (2005) identify that research engagement is one of the four areas in which faculty can display engagement. Uzuner-Smith and Englander (2015) explain how performance policy and its "normalization" (p. 63) has widely taken place in developed countries, and is currently in under development in other countries who seek to follow suit. This normalization highlights the "presence of policy documents that regulate the social practices of hiring, promotion and remuneration" (Uzuner-Smith & Englander, 2015, p. 63).

The ASHE Report (2002) reflects on the importance of aligning policy with institutional expectations of faculty responsibility, more specifically with what they refer to as "the scholarship of engagement" (p. 128). They state: "For a faculty member, the work that counts is ultimately the work that is rewarded, by retention, promotion, tenure, and monetary rewards" (p. 135). The report suggests that institutions need to reconsider the way they conceptualize faculty work and their roles within the institution. An approach they recommend is to acknowledge the interdependent nature of faculty roles as teachers, researchers, and service providers. The work of Boyer (1990) concurs with these assertions, through the belief that faculty are more likely to lead more balanced and rewarding lives when they take on a variety of roles within their institution. The report also reveals a gap in the literature regarding the topic of

early faculty socialization, which may prove an influential component of the proposed intervention. If entering faculty receive training and development regarding the different ways that they can contribute to their institution, they will have a mindset of engagement from the beginning of their role at the institution (ASHE, 2002).

An intervention based on faculty promotion policy will require the participation of university leaders who are involved with both academic and administrative aspects of faculty management. It will be necessary to work with leaders to develop the profile that describes the characteristics, behaviors, and attitudes of an engaged professor, according to the specific context of Panamanian higher education. Furthermore, another component of the intervention would be to develop the promotion incentives universities could provide to professors who demonstrate engagement.

An Intervention in Transformational Leadership

Higher education institutions are complex organizations with diverse needs in terms of management and leadership (Dunbar, 2014). Employees (including faculty) in higher education institutions usually face high workloads and constant changes, which make their management challenging for the leaders (Dunbar, 2014). A review of the literature of the problem of part-time faculty engagement, as well as the results of a needs assessment conducted among private universities in Panama confirmed the need to intervene and change the relationship that faculty have with their institutions of affiliation. This change will not come from faculty themselves, but can be a result of an improvement in the leadership skills employed by faculty supervisors, and the effect that these skills have on organizational climate and engagement.

The ASHE Higher Education Report (2010) calls for "more research that documents context-based solutions to address the concerns and issues of non-tenure-track faculty and

studies that are formulated and framed with context as an important factor" (p. 68). The proposed intervention will address this gap in research literature, and provide the higher education community with mixed methods research regarding specific recommendations to improve the relationship that universities have with part-time faculty.

The proposed intervention involves the improvement of the leader-follower relationship between faculty supervisors and faculty in private universities in Panama, through a transformational leadership professional development intervention directed towards faculty supervisors, such academic vice presidents, deans, and program coordinators. A transformational leadership intervention stems from findings of a needs assessment conducted in the previous chapter with university presidents of private universities in Panama, suggesting that the relationship between faculty supervisors and faculty is transactional. While some of the earlier leadership literature tends to compare transactional leadership and transformational leadership as two separate and opposite styles of leadership (Burns, 1987), other proponents have suggested an augmentation effect for transformational and transactional leadership (Bass, 1985). Evidence points to transformational leadership as an intervention approach that has a positive effect on engagement (Avolio & Bass, 1999; Aryee, Walumbwa, Zhou, & Hartnell, 2012; Walumbwa, Lawler, Avolio, Wang, & Shi, 2005; Breevaart et al., 2014; Bayram & Dinç, 2015). Organizational environments that demonstrate a high level of transformational leadership tend to have highly engaged employees.

A professional development intervention in transformational leadership will have the objective of increasing the knowledge and self-awareness of higher education leaders regarding the benefits generated by adopting transformational leadership behaviors and attributes. This connection between leader self-awareness and leadership style is how transformational leaders

achieve engagement from their followers (Aryee et al., 2012). “In essence, transformational leaders positively influence employee work engagement by raising followers to higher levels of potential, developing their skills, and expressing confidence in their followers’ ability to perform beyond expectations” (Aryee et al., 2012). The degree to which faculty supervisors are able to stimulate these elements will translate to the degree of engagement that the part-time professor will have.

In the short-term, the informative stages of the intervention should result in an increase in the self-awareness and knowledge that university leaders have regarding the problem of part-time faculty engagement. They should also result in an increase in the self-awareness and knowledge regarding the influence that leadership styles and policy development and implementation have on organizational culture and engagement. At the beginning of the application of the intervention, university leaders will be receiving information regarding the problem and the content of the intervention. This result comes from the framework proposed by Shuck and Herd (2012) suggesting that “leadership starts with the self” (p. 173) and that leaders need to understand the importance of self-awareness in order to engage in a process of change towards becoming a transformational leader. This information should drive a change in the way that leaders envision the role of an engaged professor in their institution. An understanding of the problem and the importance of dedicating resources to the problem is a short-term outcome of the intervention that should lead the transition to the medium and long-term outcomes.

Based on a review of the literature regarding organizational climate and its impact on employee engagement, the proposed intervention will consider an improvement in organizational climate as a medium-term outcome. There is evidence to demonstrate that transformational leaders are able to create positive work environments in the workplace (Aryee et al., 2012), and

that a positive work environment results in positive behaviors and outcomes among employees (Saks, 2006). The expected long-term outcome is to achieve an increase in part-time faculty engagement. The Gallup Organization (2004) demonstrates that there is a link between employee engagement, customer loyalty, business growth, and profitability. This outcome is of importance for private university presidents, who are constantly thinking about the sustainability of their institutions. University presidents are the stakeholders who will ultimately make the decision of whether their institution will participate in the intervention study. An effective intervention has the potential of yielding an improvement in the leadership characteristics of their faculty supervisors, improving knowledge and awareness about transformational leadership, as well as improving work climate and faculty engagement.

Professional Development for Academic Leaders

The review of research literature in this chapter calls for an intervention that will improve the leadership behaviors and attributes of faculty supervisors in private universities in Panama. Preston and Floyd (2016) conduct a study of the leadership development experiences of Associate Deans in the United Kingdom. The authors establish the importance of studying the leadership preparation of academic middle managers in higher education, as well as the importance in providing adequate support, training, and development to enable these leaders to improve their job performance. The study's theoretical framework proposes that leadership and management development is more effective if it is practice-based and contextually situated (Burgoyne & Stewart, 1977). The data demonstrated that 60% of participants had received little or no leadership and management training, and that 24% of the participants who had received training found it to be moderately useful, or of little to no use (Preston & Floyd, 2016). Furthermore, the authors found that middle level leaders in universities "appreciate leadership

development opportunities that involved working closely with other colleagues across the university and beyond" (Preston & Floyd, 2016, p. 274).

Bragg (2000) holds the same view put forth by Preston & Floyd (2016) which strongly recommends that leadership training and development should focus on the specific context of the practitioner. Providers of leadership professional development need to pay closer attention to the role complexities of the participants they train (Bragg, 2000). This means that it is possible to tailor professional development to meet specific industry needs, and in the case of the proposed intervention, focus on achieving educational change. Bragg (2000) also presents the example of Waubonsee Community College in Illinois, which not only offers an annual leadership development program for its academic leaders, but also embeds a continuous follow-up component with weekly cabinet meetings and monthly in-depth discussions. The studies from Preston & Floyd (2016) and Bragg (2000) coincide on the importance of building a professional support community that can continue to work together and build on professional relationships once participants complete the learning aspect of the professional.

Wepner, O'nofrio, and Wilhite (2008) study the leadership and decision-making qualities of education deans through self-concept and professional identity theory. Through qualitative analysis, the authors find emerging themes from individual interviews to education deans in the United States, and assign their responses into one of four dimensions: moral, social, intellectual, or emotional. The authors find that education deans "have an initial tendency to frame problems in intellectual terms, grounded in the reality that they and others function differently" (p. 163). Although this study is most likely not generalizable to faculty supervisors in private universities in Panama, it provides a probable example of certain mindsets that university administrators may have that, in turn, frame their approach to leadership.

Evidence demonstrates that it is possible to increase levels of engagement using a transformational leadership approach (Avolio & Bass, 1999; Aryee et al., 2012; Walumbwa, Lawler, Avolio, Wang, & Shi, 2005; Breevaart et al., 2014; Bayram & Dinç, 2015). Transformational leadership is one of the most effective styles of leadership (Judge & Piccolo, 2004). Four leadership dimensions characterize transformational leadership: idealized influence, inspirational motivation, intellectual stimulation, and individualized consideration (Avolio & Bass, 1999). When a leader possesses competencies in these four dimensions, workers are more likely to exhibit high levels of engagement, innovative behavior, and task performance (Aryee et al., 2012). Transformational leadership also has a positive effect on engagement in countries outside of the United States of America (Walumbwa, Lawler, Avolio, Wang, & Shi, 2005). These studies conducted internationally provide evidence to support that a transformational leadership intervention could be replicable in Panama.

The problem in private universities in Panama is that faculty engagement is low. Through a professional development intervention in transformational leadership, it is possible to achieve employee engagement. The literature demonstrates a connection and transition beginning with the dimensions of transformational leadership, continuing with an improved organizational culture, and resulting in increased engagement (Aryee et al., 2012; Brown & Leigh, 1996). The ASHE Report (2002) furthers these findings by making specific recommendations towards institutional changes that need to occur in terms of policy, for faculty to participate in the scholarship of engagement.

Chapter 4

Methodology

The previous chapter focuses on a revision of research literature and concludes that a professional development program in transformational leadership is an intervention that can create a more positive organizational environment for part-time faculty, and improve levels of engagement as well. The objective of using a transformational leadership intervention is to create a positive work environment, and to develop and increase the level of skill and potential of employees (Aryee, Walumbwa, Zhou, & Hartnell, 2012). Studies demonstrate that transformational leadership is an intervention that has a positive effect on engagement (Aryee et al., 2012; Avolio & Bass, 1999; Breevaart et al., 2014; Walumbwa, Lawler, Avolio, Wang, & Shi, 2005;). Furthermore, research also supports the connection between transformational leadership and engagement in the educational context (Bayram and Dinç, 2015; Choochom, 2016; McCarley, Peters, & Decman, 2016; Sayadi, 2016).

Most of the studies evaluated in the literature review use the Multifactor Leadership Questionnaire, developed by Avolio and Bass (1999) as the main instrument, and it will be the proposed instrument for this study as well. The theoretical framework for transformational leadership, as well as the studies evaluated in the previous chapter guide the research questions for this study. The research questions are:

3. What are the leadership behaviors and attributes that distinguish faculty supervisors in private higher education institutions in Panama, according to the Multifactor Leadership Questionnaire?

4. What change, if any, does a professional development program in transformational leadership generate among faculty supervisors in private higher education institutions in Panama?

A mixed methods approach towards designing an intervention for the problem of part-time faculty engagement in private higher universities in Panama is justified because one data source for the intervention may be insufficient, and because the research questions may be more appropriately addressed through the use of a variety of stages or projects (Cresswell & Plano Clark, 2011). The first research question is related to the leadership behaviors and attributes that characterize faculty supervisors. This question is answered through the data that will be provided by the initial application of the Multifactor Leadership Questionnaire among the participants.

The second research question seeks to evaluate the outcomes of a professional development program in transformational leadership applied to faculty supervisors. This question may be answered quantitatively, through a second application of the Multifactor Leadership Questionnaire, after the professional development program has been completed. The pre and post-test data of the MLQ will be analyzed for the treatment group, to look for changes. The post-test results of the MLQ will also be compared between the treatment and control groups. The question may also be answered qualitatively, through a focus group that will evaluate changes in knowledge and awareness of transformational leadership as a tool to improve organizational climate and employee engagement.

The design for this intervention is an embedded design because it will use a quantitative instrument –the Multifactor Leadership Questionnaire – as the primary source of data, but will be complemented by a qualitative measure, in the form of focus groups for faculty supervisors. This justification is aligned with Cresswell & Plano Clark's (2011) explanation to choose an

embedded design: “The embedded design is appropriate when the researcher has different questions that require different types of data in order to enhance of application of a quantitative or qualitative design to address the primary purpose of the study” (p. 91).

Method

Participants

The participant population for the study are professionals with the role of faculty supervision at private, accredited universities in Panama.

Participant recruitment and selection. The recruitment process will be composed of two main steps. First, the co-investigator will present the study to the university presidents of the 18 private, accredited universities in Panama, who will also receive a formal invitation to allow or faculty supervisors from their institution to be a part of the study. This first step is important because it creates commitment among university presidents, who will have the opportunity to approve and help implement project to improve organizational culture and faculty engagement as a result of the treatment applied to faculty supervisors. Second, the co-investigator will send the faculty supervisors as these institutions an invitation to participate in the study. The invitation will be sent both in e-mail and letter formats. The co-investigator will also coordinate and lead information sessions in the institutions that allow it, to provide the opportunity for faculty supervisors so receive information about the project firsthand, and to ask questions about their participation in the study.

Based on the number of accredited private universities in Panama (18) and the number of institutions who agreed to participate in the needs assessment (9), it is expected that a similar number of institutions will show interest and be committed in participating in the study. Each institution can nominate up to two faculty supervisors to participate in the study. The maximum

of participants will be 36 (two participants from up to eighteen institutions). Allotting a cap of participants that can participate in the study will provide opportunities for participants to learn from professionals of different institutions, and allow the facilitator to have a manageable class size. Appendix B and C show the invitation letter format for both university presidents and faculty supervisors, respectively, to join the study. Furthermore, Appendix D shows the sample informed consent form that will be distributed to the participants of the study.

Selection criteria. Potential participants must comply with a set of criteria in order to be included in the study. An electronic file will be created for each participant, and the information will be stored in a password-secure digital cloud source. The criteria that participants must meet in order to be included in the study are:

- Recommendation for participation in the study by their institution;
- At least two academic periods (to be determined by the institution) with the current institution as a faculty supervisor;
- At least a part-time workload with the institution as faculty supervisor (documented through a letter or statement of employment from the institution);
- The responsibility of supervising faculty at said institution, (documented through a letter or statement of the position and/or responsibilities held by the faculty supervisors from the institution);
- To provide a Curriculum Vitae (in Word or PDF format).

A potential participant may be excluded from the study if he or she does not meet one or more of the aforementioned criteria. Also, a potential participant may be excluded if coercion on behalf of the participant's institution or supervisor is detected.

Incentives. The ASHE Report (2002) highlights the importance of efforts from the top down, where administrators and boards support engagement. The report states:

> Engagement, however, will not arise solely from presidential proclamations and changes in mission statements. Faculty who are called on to make the engaged campus a reality will not undertake the efforts necessary if they worry that their institutions will not support them. (p. 136).

In order to achieve engagement, university presidents must support faculty supervisors, and faculty supervisors must support their faculty. Although the main participants of the intervention are faculty supervisors, the intervention is designed for university presidents to have some involvement, through the approval to implement the final project proposals at their institutions.

Faculty supervisors will receive a certificate of completion of the professional development program in transformational leadership. This certificate will be recognized and granted by either the Council of University Presidents of Panama or the Association of Private Universities of Panama. Formal written letters will be used to invite institutions (through their university presidents) and faculty supervisors to participate in the study. Furthermore, a Power Point presentation (a shorter version of the dissertation proposal) will be presented to university presidents with all of the literature and research gathered so far, as a means of persuasion and convincing about the positive impact that can be generated by the intervention.

University presidents and their institutions will also receive an incentive to participate in the study, in the form of a certificate acknowledging the leadership and commitment required on their behalf to push forward the project. This incentive should not only encourage university presidents to participate in the study, but to engage in the process and to enable their faculty

supervisors to execute the projects they propose as a result of the professional development activities. Participation in the project will also provide benefits to the universities, through the direct compliance of accreditation indicators in areas of teaching, research, and administration. Most private universities are preparing for national reaccreditation between 2019 and 2020, and participation in this study will provide evidence that universities can use to prove that they comply with certain accreditation indicators.

Measures and Instrumentation

The study proposes the use of two different measures or instruments. One is the Multifactor Leadership Questionnaire, which will be applied before and after the intervention takes place. The second is a focus group with the purpose of evaluating certain processes during the intervention and expected outcomes once the professional development program has been completed.

Multifactor Leadership Questionnaire. The primary instrument of this study is the Multifactor Leadership Questionnaire (MLQ), in its most recent version, Form 5X. Bass and Avolio (2004) state that "MLQ scores before and after training can be the basis for evaluative research" (p. 17). The MLQ is available in Spanish, and participants will be able to select to fill out the questionnaire in the language they feel most comfortable with (Spanish or English). The MLQ measures a full range of leadership styles through transactional and transformational leadership factors. The instrument has two questionnaire forms: the Self-Rating Form, a questionnaire that leaders fill out themselves, and the Rater Form, a questionnaire where the employees rate their leader (Bass & Avolio, 2004). For this intervention, the ratees will be faculty supervisors, and the raters will be faculty. The MLQ Manual establishes a minimum of three raters per participant and recommend a maximum of 10 (variability of leader ratings tends

to increase as the number of raters increases). The distribution of the instrument will be web-based.

The MLQ will focus on finding those individual behaviors and attributes exhibited by faculty supervisors that are observed by their faculty in terms of leadership characteristics. At one end of the spectrum, the MLQ will be able to find perceptions that faculty may hold of faculty supervisors that are related to the avoidance of responsibility and action (laissez faire leadership). At the other end of the spectrum, the MLQ will also be able to identify behaviors that have a positive effect on performance (transformational leadership). The creators of the MLQ believe that this range between ineffective and effective leadership behavior is broader than that of other existing leadership surveys (Bass & Avolio, 2004).

The MLQ contains 45 items across six leadership factors; 32 of these items are specific behaviors, and the remaining items are attributes. A five-point scale is used to rate the frequency or degree of behaviors and attributes of the leader, where 0 is "not at all" and 4 is "frequently, if not always." The MLQ Manual provides the operational definitions for the six factors measured in the MLQ (Bass & Avolio, 2004):

1. Charisma/Inspirational - Provides followers with a clear sense of purpose that is energizing; a role model for ethical conduct which builds identification with the leader and his/her articulated vision.
2. Intellectual Stimulation - Gets followers to question the tried and true ways of solving problems; encourages them to question the methods they use to improve upon them.
3. Individualized Consideration - Focuses on understanding the needs of each follower and works continuously to get them to develop to their full potential.

4. Contingent Reward - Clarifies what is expected from followers and what they will receive if they meet expected levels of performance.
5. Active Management-by-Exception - Focuses on monitoring task execution for any problems that might arise and correcting those problems to maintain current performance levels.
6. Passive Avoidant - Tends to react only after problems have become serious to take corrective action and may avoid making any decisions at all (p. 52).

Bass and Avolio (2004) provide a rationale for the external validity of the MLQ by citing numerous studies that have used the MLQ as the main instrument and were able to support the theoretical framework established by Burns (1978) and expanded by Bass (1985) regarding transformational leadership as a generator of high commitment and engagement among followers. Bass and Avolio (2004) also discuss the relevant studies conducted outside of the United States, and mention that the MLQ has been used in more than 300 research programs, doctoral dissertations, and master's theses around the world between 1995 and 2004. The authors also provide data to support the reliability of their studies, by presenting results for the 2004 overall normative sample, with a size of 27,285 participants, and achieving reliability scores between .69 and .83.

Evaluative Focus Group. A second measure used for this study will be a focus group, with the purpose of evaluating the fulfillment of certain processes during the intervention application and expected outcomes of the intervention. This qualitative measure has been chosen as a feasible way to collect information that will complement the quantitative data obtained through the application of the Multifactor Leadership Questionnaire. Some of the benefits of using a focus group are that focus groups tend to be an inexpensive and fast method to obtain

data from multiple participants simultaneously (Krueger & Casey, 2000). There are also social benefits to using a focus group, where a sense of belonging and cohesiveness among the participants helps create a setting where participants feel that they can openly discuss their thoughts about a specific topic (Onwuegbuzie, Dickinson, Leech, & Zoran, 2009).

A review of literature on focus groups conducted by Onwuegbuzie et al. (2009) recommends that focus groups should last between one to two hours, and consist between six to twelve participants. Therefore, that is the range of duration and participants that will guide the focus group for this study. The focus group will have a moderator who will have the task of facilitating the discussion, guiding the questions, ensuring all participants have a chance to speak, and leading the conversation towards other questions that may emerge during the focus group.

Procedure

Intervention. Based on a review of the intervention literature, the intervention proposal will involve a professional development program in transformational leadership, directed towards faculty supervisors in private accredited universities in Panama.

Inputs. In order for the intervention to be successful and help the recruiting strategy, a partnership with either the Association of Private Universities of Panama or the Council of University Presidents will be explored. If the intervention is linked with one of these associations, potential participants will be more interested in being part of the study. Furthermore, this partnership would allow for a certificate of completion to be issued by the association, thus providing an additional value to the professional development. A certificate completion would act as an incentive to help maintain engagement and reduce risk of attrition throughout the study.

The professional development program will require facilitators who are willing to give their time to this project, and have the academic and professional expertise in transformational leadership and facilitation. A virtual learning platform will be the main tool to conduct the professional development. The proposed platform for this intervention is Schoology, a virtual learning platform where the sessions, resources, materials, and deliverables can be stored. Schoology is also a good communication channel for participants to exchange their experiences, thoughts, and ideas throughout the program. Finally, Schoology allows the facilitator to track the progress, provide feedback, and monitor time spent for each participant, which will be helpful as an evaluation tool for participants and for the study overall. Aside from a virtual learning platform, meeting space will also be required for face to face group sessions, along with access to Internet and projector. Furthermore, the main instrument that will be used for the study, the Multifactor Leadership Questionnaire (MLQ) is available at a cost, and funds will have to be secured in order for the MLQ to be applied among all of the participants.

Activities and outputs. The professional development program will be made up of six sessions, and each session will have a duration of two weeks, for a total of 12 weeks in the program. The program sessions will be delivered via online format, and each session will have one face-to-face group meeting, for a total of six face-to-face meetings. The purpose of face-to-face meetings is to maintain a high level of engagement among the participants, and to provide opportunities for the participants to exchange experiences and create rapport.

Each session will introduce a topic related to transformational leadership, and will require participants to be engaged in online discussions, where they will be expected to write posts related to the topic of the session, and to engage in online dialogue with the their peers.

Participants will also be required to complete reflective exercises at the end of each, except for the sixth session, for a total of 5 reflective exercises per participant.

Sessions 3-6 of the program will introduce a project-based component, where participants will have the opportunity to either work individually or in groups to develop a proposal of improvement of organizational climate and/or faculty engagement at their institution. This brainstorm process for this project will begin in session 3, and culminate with a proposal presentation in session 6 of the program. Participants will be expected to work collaboratively with their superiors to ensure that the proposal is feasible for implementation at their institutions.

Short-term outcomes. In the short-term, the informative stages of the intervention should result in an increase in the self-awareness and knowledge that participants have regarding the problem of part-time faculty engagement. The application of the MLQ will allow each participant to receive an individual report of strengths and weaknesses regarding leadership style, as well as the individual starting point for each leader, and leadership development path to become a transformational leader. The previous chapter examines literature that presents transactional leadership as a starting point for effective leaders, and transformational leadership as a style that can augment the effectiveness of the leader, through the use of idealized influence, inspirational motivation, intellectual stimulation, and individualized consideration (Bass, 1985; Shuck and Herd, 2012).

At its beginning, the intervention should also result in an increase in the self-awareness and knowledge regarding the influence that leadership styles have on organizational culture and engagement. At the beginning of the application of the intervention, university leaders will be receiving information regarding the problem and the content of the intervention. This information should drive a change in the way that leaders envision the role of an engaged

professor in their institution. Due to time constraints, the evaluation of the study will only be able to measure the achievement of short-term outcomes. However, the expected medium-term and long-term outcomes are also discussed.

Medium-term outcomes. The intervention should accomplish among the participants a willingness and ability to modify behavior and leadership style towards transformational leadership. Based on a review of the intervention literature, the medium-term outcome is an improvement of the organizational climate in the context of each participant. If participants are able to internalize and implement the qualities of a transformational leader that are presented and discussed in the professional development, the participants will contribute to create a more positive work environment within their professional context. Furthermore, the outputs discussed in this section, which include the development of a proposal intended to improve organizational climate and/or faculty engagement within the participant's institution should also help achieve the medium term outcome of enabling participants with the tools they need to be conducive of a more positive work environment.

Long-term outcomes. The expected long-term outcome, product of a successful implementation of the intervention should be an increase in the levels of part-time faculty engagement who are led by the faculty supervisors who benefitted from the professional development program. This outcome is supported by the research literature that presents a positive relationship between transformational leaders and employee engagement. The achievement of higher levels of engagement among part-time faculty as a long-term outcome is also grounded in research literature. Shuck and Herd's (2012) framework suggests that leadership must be looked at as a process, and not a set of characteristics that are attained. Although the achievement of faculty engagement through transformational leadership is not a

short-term outcome of the intervention, Shuck & Herd's framework also suggests that it is something all leaders can reach.

Data collection. The Multifactor Leadership Questionnaire (MLQ) and the Focus Group are the two main sources of data that will be collected. Additional sources of data will be gathered as part of the process evaluation, discussed in the Research Design section. The MLQ will be applied previous to both the treatment and control groups, prior to the application of the intervention, and after the intervention has been completed. The pre-test of the MLQ will be explained to the participants during an introductory session of the professional development, and will be completed online. Participants must complete the Self-Rating Form at any time before Session 1 of the professional development formally begins. Furthermore, the Rater Form, to be filled out by faculty must also be completed before Session 1 begins. The data will be gathered and stored electronically through a hosting option that is given by the provider of the MLQ, Mindgarden Inc. The post-test of the MLQ will be applied a week after the professional development program has been completed, and will follow the same protocol of completion as the pre-test.

A focus group will be conducted a week after the professional development program has been completed. Participants will be asked to give their consent for the session to be recorded via audio. The audio recording of the focus group will be transcribed and then translated to English. The English translation of the recording will become the main sources of data from the focus group, and will be analyzed. The audio recording and the Spanish and English transcriptions will be stored in the principal investigator and co-investigators computers. A backup will also be saved in a "cloud" drive.

The data that will be collected to measure process implementation is detailed in Table 7. The indicators that will be measured are: engagement in online sessions, frequency of participation in face-to-face sessions, quality of final projects, coverage of all topics of the program, engagement of university presidents in intervention process, and quality of facilitator and resources provided by facilitator. Table 7 provides the data collection tools that will be used for each of these indicators, as well as the frequency with which the data will be collected. A thorough description of the indicators and their collection is explained in the design section.

Data analysis.

Multifactor Leadership Questionnaire data analysis. Data gathered from the MLQ responses will be analyzed using descriptive statistics, including means, frequencies, percentages, and standard deviations. An analysis of the MLQ pre-test data will provide information regarding the starting leadership behaviors and attributes of faculty supervisors in private higher education institutions in Panama. This analysis is aligned with the first research question of the study, and will also answer related questions, such as: Did the responses provided by the faculty supervisors show similarity in certain answers to show that as a group, higher education supervisors have similar leadership behaviors and attributes? According to the MLQ, what is the most common leadership style employed by faculty supervisors, transactional leadership, transformational leadership, or laissez-faire leadership? An analysis of the pre and post-tests of the MLQ will answer the second research question of the study, related to the effectiveness of a professional development intervention in transformational leadership. A comparison of the pre and post-tests with the treatment and control groups will allow for an analysis of the expected increase in behaviors and attributes related to transformational leadership.

Focus group data analysis. The main source of data from the focus group will be the transcribed text, and notes taken by the moderator during the focus group will serve as a complement to the analysis. The data will be analyzed using classical content analysis, through the following process: a) data are grouped into small units, b) a descriptor, or code is assigned to each unit, c) each code is placed into similar groupings and counted. Onwuegbuzie et al. (2009) recommend that researchers present both information regarding frequency of themes or codes (quantitative information) and thorough descriptions of each code (qualitative information) to create a mixed methods content analysis from the focus group data.

The analysis from the focus group will help answer the second research question, related to the effectiveness of the intervention. A focus group will allow the researchers to determine whether the perceptions of faculty supervisors regarding the effect that they, as leaders, have on organizational climate and faculty engagement, have changed as a result of the professional development program.

Process Evaluation

The evaluation question related to the process of the intervention implementation is:

- To what extent were faculty supervisors engaged and participative during the delivery of the intervention?

The working definition for fidelity of implementation that will be used for the proposed intervention is a measure of the achievement of intended programmatic objectives through the successful practical implementation of policies and programs (Dusenbury, Brannigan, Falco, & Hansen, 2003). The plan to measure fidelity of implementation will use two different conceptual frameworks. The first is the framework presented by Dane and Schneider (1998) and further explained by Dusenbury et al. (2003) and Nelson, Cordray, Hulleman, Darrow, and Sommer

(2013), where fidelity of implementation is measured by adherence, dose, quality of program delivery, participant responsiveness, and program differentiation. The fidelity data collection matrix presented in Table 7 and the narrative of indicators in the next section show that this framework is used to create fidelity indicators that will measure adherence to the program, dose, quality of program delivery, and participant responsiveness. Program differentiation will not be used for the process evaluation plan, as it is more closely related to program outcomes.

The second framework used as part of the process evaluation is presented by Fixsen, Naoom, and Blasé (2005) in the Nelson et al. (2012) article. Fixsen et al. (2005) suggest that program fidelity in some contexts should be separated into "personnel fidelity (the implementation of the actual intervention) and organizational fidelity (the implementation of intervention supports such as training and coaching)" (p. 375). Since the intervention involves participants from different higher education institutions in Panama, participant success will in part depend on the fidelity of the instruction, material and content participants receive, but will also depend on the support and commitment participants obtain from their supervisors (university presidents) to continue to move their institutions towards projects and practices that provide a more positive and engaging environment for faculty. Most of the fidelity indicators in the data collection matrix are focused on the measurement of personnel fidelity, and one indicator – engagement of university presidents in intervention process – will focus on measuring organizational fidelity.

All of the indicators presented in the following section (see Table 7) are related to the logic model (see Figure 3) because they measure fidelity of process-related areas of the intervention, namely the inputs, activities, participants, and outputs. A consideration of all of the process evaluation indicators presented in this paper will provide the level of fidelity attained

throughout the implementation of the intervention. O'Donnell (2008) explains that high fidelity is achieved when the intervention is highly similar to the theory and design, while low fidelity occurs when the intervention strays away from the program as it was originally conceptualized. In the particular case of a professional development program in transformational leadership for faculty supervisors in private higher education institutions in Panama, high fidelity will be attained if most of the indicators present a high level of attainment as well. Low fidelity will mean that most or all of the fidelity indicators demonstrated low levels of attainment.

Indicators for the Process Evaluation

With the previously discussed conceptual framework as the basis, six indicators have been created to help measure the achievement of the intended programmatic objectives, as outlined by the working definition of fidelity of implementation (Dusenbury et al., 2003). The indicators are: engagement in online sessions, frequency of participation in face-to-face sessions, quality of final projects, coverage of all topics of the program, engagement of university presidents in the intervention process, and quality of the facilitator and resources provided by the facilitator. The indicators, although several, have simple data collection methods that will allow for easy measurement and thorough alignment of fidelity with the conceptual framework and the logic model for the process implementation.

Engagement in online sessions. The level of engagement of participants in the online sessions will measure participant responsiveness to the intervention. Participant engagement in online sessions corresponds to the activities and participants section of the logic model, as seen in Figure 3. The level of engagement of participants will be determined by the level of individual participation in session discussions, and the data will yield ranges of participation. Low engagement will be considered not completing the minimum discussion post requirements,

which will be one discussion post per session and at least two replies to other participants. Moderate engagement will be considered completing the minimum discussion post requirements, and high engagement will be surpassing the minimum discussion post requirements.

Frequency of participation in face-to-face sessions. The intervention will have a total of 6 sessions that will be held face-to-face, and attendance to these sessions will also provide data regarding two relevant measures for the intervention: dose and participant responsiveness. This measure corresponds with the activities and participants section of the logic model (see Figure 3). Attendance will be monitored for each of the six sessions through attendance sheets, and participants will be highly encouraged to attend the face-to-face sessions, as they will provide an opportunity for participants to create a professional learning network that does not currently exist in the context.

Quality of final projects. The quality of the final projects will provide a fidelity measure for adherence to the intervention design. This measure is also considered an output of the intervention in the logic model, and participants will be expected to produce this output once the program content has been delivered. Quality will be determined through an evaluative rubric that will be completed for each project by the facilitator of the professional development program. The measure will provide information regarding whether the participants understood and internalized the key objectives and elements of the program (Dusenbury et al., 2003).

Coverage of all topics of the program. Topic coverage throughout the delivery of the program provides a measure for adherence to the intervention. Both for online and face-to-face sessions, a checklist will help the principal investigator ensure that all of the topics and sub-topics have been successfully covered. Furthermore, this measure can be monitored per session, providing an opportunity for the facilitator to "make up" relevant missed content in subsequent

online sessions or scheduled face-to-face meetings. The logic model presented in Figure 3 depicts the format of delivery of the program as part of its activities.

Engagement of university presidents in intervention process. Engagement of university presidents in the intervention process corresponds to a conceptual framework of fidelity which suggests that certain contexts should not only measure personnel fidelity, but also organizational fidelity (Fixsen et al., 2005). Organizational fidelity provides an additional layer of data that can be measured through the support that each participant received from their organization of affiliation. Since participants will be producing final projects that will aim to improve organizational climate and/or faculty engagement in their contexts, it will be important for their project to be revised and approved by their superiors, in order for the project to receive the necessary support for future implementation. This measure is aligned with the intervention logic model, because a partnership with university presidents is considered an input needed to move forward with the project (see Table 7).

Quality of facilitator and resources provided by facilitator. The measurement of the quality of the facilitator and the resources provided ensures fidelity in the quality of delivery of the program, defined by Dusenbury et al. (2003) as "ratings of provider effectiveness which assess the extent to which a provider approaches a theoretical ideal in terms of delivering program content" (p. 244). Facilitator quality aligns with the logic model because a facilitator is included as an input of the intervention. This indicator also utilizes a tool that is commonplace in any professional development, which is a participant evaluation of the facilitator. To ensure timely fidelity of implementation, the same tool will be applied twice: once at the half-way point of the program, and once at the end of the program. Applying the evaluation half-way through

the program will allow the facilitator an opportunity to review opportunities for improvement, and make adjustments, if necessary.

Outcome Evaluation

The outcomes of the study will be evaluated through the research questions presented at the beginning of this chapter. The hypothesis is that an analysis through descriptive statistics will demonstrate that a professional development program in transformational leadership increases leadership characteristics as measured by the Multifactor Leadership Questionnaire for faculty supervisors in private higher education institutions in Panama.

Effect Size

An analysis of transformational leadership studies conducted in education environments that use the Multifactor Leadership Questionnaire as the main instrument demonstrate a trend of approximate sample size that ranges between $n = 387$ to $n = 417$. Choochom (2016) conducted a study that demonstrated that support from supervisors positively affected employee engagement in an education context, with a sample of 417 teachers in Bangkok. Sayadi (2016) conducted a comparative leadership study that examined the effect of transformational, transactional, and non-leadership on job satisfaction and commitment among 387 teachers in the province of Kermanshah in Iran. Similarly, in southeast Texas, McCarley, Peters, and Decman (2016) used data gathered from 399 teachers to conduct an analysis of transformational leadership related to school climate.

However, geographic sampling of the proposed study and total possible sample size of participants do not allow for these numbers to be achieved. Bowman (2011) notes that it is common for research studies in higher education to face challenges regarding effect sizes. A study conducted by Peterson and Brown (2005) examined over 1,500 studies in the social

sciences and found that β and r are highly correlated (r = .84), and present a basic effect size equation where effect size and the correlation coefficient are equal. Cleverly-Thompson (2016) conducts a study to measure the entrepreneurial orientation of academic deans in private universities in upstate New York. Due to the same sampling and geographic restrictions that my proposed study faces, the sample size for the author is n = 37 and r = -.391. The similarity in design and instrumentation of the study (quantitative analysis through application of questionnaire), type of participants (academic leaders in higher education), and limitations (sample size due to geographic restrictions) suggest that a similar effect size is to be expected of the proposed study.

Design for the Outcome Evaluation

A mixed methods approach will be used as part of the design for the outcome evaluation because one data source for the intervention may be insufficient, and because the research questions may be more appropriately addressed through the use of a variety of stages or projects (Cresswell & Plano Clark, 2011). The research questions seek to evaluate the outcomes of a professional development program in transformational leadership applied to faculty supervisors. The study will use an experimental design with a treatment and control group through randomized assignment of participants. Each participant will be assigned to a treatment or control condition by chance. Randomization facilitates causal inference because it "ensures that alternative causes are not confounded with a unit's treatment condition", it reduces threats to validity by distributing the participants randomly to the different possible conditions, and "it allows computation of a valid estimate of error variance" (Shadish et al., 2002, p. 248).

Without treatment, the control group is expected to remain the same. Table 8 presents the indicators that will be measured through the outcome, control, and mediating variables. The three

outcome variables will measure the change in levels of different capabilities that define the construct of transformational leadership, and are obtained through data from the application of the Multifactor Leadership Questionnaire. The mediating variables and control variable are measured qualitatively through the focus group.

The design for the outcome evaluation is an embedded design because it will use a quantitative instrument –the Multifactor Leadership Questionnaire (MLQ) – as the primary source of data, but will be complemented by a qualitative measure, in the form of a focus group for faculty supervisors. This justification is aligned with Cresswell & Plano Clark's (2011) explanation to choose an embedded design: "The embedded design is appropriate when the researcher has different questions that require different types of data in order to enhance of application of a quantitative or qualitative design to address the primary purpose of the study" (p. 91).

The MLQ will focus on finding the individual behaviors and attributes exhibited by faculty supervisors that are observed by their faculty in terms of leadership characteristics. Data gathered from the MLQ responses will be analyzed using descriptive statistics, including means, frequencies, percentages, and standard deviations. An analysis of the MLQ pre-test data will provide information regarding the starting leadership behaviors and attributes of faculty supervisors in private higher education institutions in Panama. A comparison of the pre and post-tests, and a comparative data analysis of the treatment and control groups, will allow for an analysis of the expected increase in behaviors and attributes related to transformational leadership. The focus group as a qualitative measure has been chosen as a feasible way to collect information that will complement the quantitative data obtained through the application of the MLQ. A focus group will allow the researchers to determine whether the knowledge and

awareness of faculty supervisors regarding the effect that they, as leaders, have on organizational climate and faculty engagement, have changed as a result of the professional development program. The focus group will provide data to measure the mediating variables, as displayed in Table 8.

Strengths and limitations of the outcome evaluation design. Avolio and Bass (2004) provide a rationale for the external validity of the MLQ by citing numerous studies that have used the MLQ as the main instrument and were able to support the theoretical framework established by Burns (1978) and expanded by Bass (1985) regarding transformational leadership as a generator of high commitment and engagement among followers. The authors also provide data to support the reliability of their studies, by presenting results for the 2004 overall normative sample, with a size of 27,285 participants, and achieving reliability scores between .69 and .83. Furthermore, some of the strengths of using a focus group to evaluate research outcomes are that focus groups tend to be an inexpensive and fast method to obtain data from multiple participants simultaneously (Krueger & Casey, 2000). There are also social benefits to using a focus group, where a sense of belonging and cohesiveness among the participants helps create a setting where participants feel that they can openly discuss their thoughts about a specific topic (Onwuegbuzie, Dickinson, Leech, & Zoran, 2009).

The experimental design of the study will facilitate causal inference (Shadish et al., 2002). The random assignment of participants to a treatment or a control group reduces the possibility of threats to validity from occurring, by distributing the participants randomly over the two possible conditions (Shadish et al., 2002). This means that the design will demonstrate causality, where the treatment (professional development program in transformational

leadership) was responsible for the desired outcomes (improvement in levels of transformational leadership capabilities).

Randomization will prevent selection bias from occurring, but cannot prevent other internal validity threats, such as history or maturity, for example (Shadish et al., 2002). However, these other threats to internal validity are not considered to be a threat in this study. A recognizable threat to this study is construct validity which can be limited by construct confounding, because some of the constructs have been explored in English do not have literal translations to Spanish. For example, "engagement" one of the key constructs of the problem of practice does not have a literal translation to Spanish.

Statistical conclusion validity can be threatened by low statistical power, which is a possibility for his study, because the projected sample size is small. In Panama, there are 18 accredited private universities, of which 9 responded to the invitation and participated in the needs assessment last year. For the study, all 18 universities will be invited to participate again, and university presidents will have the opportunity to refer or recommend 1 or 2 faculty supervisors from their institution to participate in the study. This means that the maximum number of participants will be 36. Shadish, Cook, and Campbell (2002) recommend that researchers can mitigate this threat by ensuring that the selection of participants is as homogeneous as possible. This can be achieved by specifying the criteria that faculty supervisors must meet in order to participate in the study.

Chapter 5

Analysis of Results

This chapter will describe the process of implementation of the intervention, the results obtained from the study, and analyze and discuss these results.

Process of implementation

This section will analyze the process through which the intervention and study was implemented. The section will reference the process evaluation indicators described in the methodology chapter, to develop an understanding of the level of implementation that was accomplished during before, during, and after the intervention.

Recruitment Process

University presidents received email and letter invitations that requested institutional support for the study. The letter included relevant information, such as short, medium, and long term objectives of the study; format and duration of the professional development program; instrumentation that would be applied in the study; confidentiality topics; and institutional and individual participant benefits of participation in the program (See Appendix B).

The e-mails were sent to the institutional e-mail addresses of 18 university presidents and individually addressed to each university president. The same was done with the physical letters that were sent via messenger service to the institutional offices of each president. All of the emails were successfully sent, and all of the physical letters were signed as received at each institution. Some university presidents responded asking additional questions and one institution granted a meeting with staff to introduce the study to potential participants. Most university presidents did not respond to the invitation.

After two weeks, follow-up e-mails were sent. Also, individualized phone calls were made to ensure that the invitations had been received. Two institutions declined to participate in the study due to small number of staff and other commitments. Two institutions granted a meeting with university authorities and required institutional approval of the study in order to recruit participants within the institution. One institution displayed interest, but did not provide a final response.

In a period of approximately two months, institutional approvals to recruit participants for the study were received by five universities. Three universities provided a list of names and contact information of faculty supervisors for the institution, in order for them to be contacted by the investigators and be invited to participate in the study. The other two universities provided a list with names and contact information of faculty supervisors that they recommended participate in the program.

Selection and Group Assignment Process

The five lists provided by the universities totaled 20 potential participants. All participants were sent an e-mail invitation that contained: the name of the study; information regarding the pertaining prior approvals from the institution, a Panamanian ethics committee, and Johns Hopkins' IRB; research design; the format of the professional development program and the time commitment; individual and institutional benefits of participating in the study; requirements to participate in the study; and the contact information for the researchers of the study (see Appendix C).

Participants were given two weeks to reply to the invitation. 18 of the potential participants accepted the invitation to participate in the study and 2 potential participants declined the invitation. The participants who accepted the invitation were sent follow-up e-mails

containing additional information about the study, including the informed consent form. All 18 participants complied with the selection criteria for the study. The participant recruitment and selection process complied with the process that was detailed in the previous chapter of this dissertation, despite setbacks due to delays in responses from the institutions and the participants.

Once the participant selection process was completed, the participants were randomly assigned to control or treatment groups. The process used to assign participants to a group was the following:

- The names of each participant were inserted to an Excel table and each participant was assigned a number.
- The numbers were inserted into a list randomizer, available through the Internet. The site generated a new random order for the participants. This was done so that the participants were listed in an order not assigned by the researcher.
- The treatment and control groups were assigned through a random team generator with parameters for two groups and 18 participants. The site randomly assigned nine participants into "Team 1" (treatment) and nine participants into "Team 2 (control).

Instrument Application

Participants received an individual e-mail with information regarding the group they had been assigned and the different tasks they would have to complete based on the group they had been assigned to. All participants were required to complete the Multifactor Leadership Questionnaire (MLQ) self-evaluation form. All participants were also asked to provide the researcher with a list of names and e-mail addresses of people who would complete the MLQ rater form. After these e-mails were sent, one participant in the treatment group withdrew from the study, leaving eight participants in the treatment group, and 17 participants total.

11 participants – 6 from the treatment group and 5 from the control group – provided names and e-mails of raters. Participants were asked to select a minimum of three raters, who could be working above, below, and directly at the same organizational level as the participant, as recommended by the MLQ Manual. The Rater Form was distributed to the raters by the researcher through e-mail. Bass and Avolio (2018) explain: "if the leader distributes the MLQ to associates, they may feel an obligation to rate the leader more favorably" (p. 37). Further, the authors favorably recommend efforts be taken to ensure that rater's responses remain anonymous. In the MLQ Manual, a warning is provided against allowing leaders to select and contact their raters. In this case, raters were selected by the leaders, but were contacted by an independent authority. This procedure implicates a possible degree of inflation in the ratings (Bass & Avolio, 2004).

The instruments were administered through an online survey development cloud-based software called SurveyMonkey. The account that was used to administer the surveys had access to survey application features, which allowed the researchers to send personalized notifications and notes to the participants, and keep track of the responses that were generated. The Multifactor Leadership Questionnaire has a self-evaluation form and a rater form, and both were applied before and after the start of the professional development program. 17 study participants completed the Multifactor Leadership Questionnaire pre-test and 42 raters completed the MLQ rater form for 11 of those participants. 9 study participants completed the MLQ post-test (4 in the treatment group and 5 in the control group) and 29 raters completed the MLQ rater form for 8 of those participants.

Delivery of the Professional Development Program

The professional development program in transformational leadership was delivered to the participants in the treatment group. Schoology was used as a learning management system (LMS) to deliver and administer the content of the program, as well as to facilitate interactions among the participants.

The content was divided into different modules, based on the four main dimensions of transformational leadership. The modules were:

- Introduction
- Results and Reflections about MLQ Results – Self-Evaluation
- Results and Reflections about MLQ Results – Raters
- Idealized influence
- Individualized Consideration
- Intellectual Stimulation
- Inspirational Motivation

The content for the program was obtained from the MLQ Trainer's Guide by Bass and Avolio (2018), a proprietary resource that is available for online purchase through the company, Mindgarden (www.mindgarden.com). "The Leadership Challenge Trainer's Guide", by Kouzes and Posner (n.d.) was also used for content for the program. The Leadership Challenge is based on five "exemplary practices of leadership" (Kouzes & Posner, n.d.), some of which closely resemble leadership dimensions of transformational leadership.

Each module contained a discussion board with questions with the objective to help the participant reflect on certain behaviors and aspects of the dimension. The reflection exercises also provided an opportunity for participants to think about leadership within the context of

higher education. The reflections that were generated by the participants were coded and analyzed. The analysis of the qualitative data is explored in further sections.

The welcome page for the program contained a presentation of the program with short, medium, and long-term objectives, and the expected outcome process of transformational leadership. The introduction module contained information that described passive-avoidant leadership, transactional leadership, and transformational leadership, the three leadership styles measured by the MLQ. The content also featured a table with the different dimensions of each style, and the desired frequency of behavior of each dimension. Images were included throughout the text to make the modules more engaging.

The discussion board for the introduction module asked participants to introduce themselves. The discussion board included the following reflection questions:

- What mix of characteristics do you think are indispensable for a leader in the context of higher education?
- In what ways does the leadership style of a leader influence the organizational environment of a university? In what way does it have an influence on faculty?

The module "Results and Reflections about MLQ Results – Self-Evaluation" did not contain new content for the participants. Rather, participants individually received private messages containing the mean scores of each dimension of the three leadership styles measured by their MLQ self-evaluation. The reflection board for this module asked participants to compare the results of their self-evaluation with the ideal ranges for each dimension, and to ask the following questions:

- What are specific behaviors do you exhibit that help you transform your institution?

- What are your strongest behaviors of transformational leadership? How can you leverage or maximize these behaviors?
- What are the transformational leadership behaviors that your institution requires the most to improve its organizational climate= How can I improve those behaviors?

The module "Results and Reflections about MLQ Results – Raters" included content about important considerations the participants need to think about before they read the results from their raters. It also featured a list of "do's" and "don'ts" related to interpretation of rater results. For this module, it was important that the participant be open to feedback that they might not agree with or expect from their raters. Furthermore, participants were reminded of the objectives of the project and some specific goals related to the particular exercise of having people evaluating their leadership style. An example of a reminder provided to the participants in the content of this module was: "The project seeks to reduce the discrepancy in scores between participants and their raters. There is research that shows that the smaller the discrepancy between self-evaluations and their raters, the greater the leadership effectiveness of the leader".

The reflection questions for this module were:

- What strengths do you see in you that you already knew about?
- What strengths do others see in you that you were not aware of?
- What weaknesses do others see in you that you already knew about?
- What weaknesses did others see in you that you were not aware of?
- How can you be a more effective leader?
- What problems can affect what you seek to accomplish through your leadership?
- What would you do differently now that you have seen these results?

The module for idealized influence included specific ideas of behaviors and actions that leaders can implement to increase idealized influence. The module included a voluntary, individual exercise to help participants develop the ability to elaborate, articulate, and communicate a mission and vision. Furthermore, the module asked participants to briefly develop their ideal image of the future for the advancement of their institution.

The module for individualized consideration developed the general characteristics and actions that distinguished a leader who displays individualized consideration, as well as certain behavioral indicators. The reflection exercise for this module asked participants to reflect on the following questions:

- In what ways do I practice individualized consideration toward the faculty that I supervise?
- In what ways can I be a leader that exhibits individualized consideration more frequently?

The module for intellectual stimulation developed the different considerations and characteristics that leaders must have in order to develop this dimension. The reflection exercise for this module asked participants to reflect on the following questions:

- In the context of higher education, what opportunities exist for me, as a leader, to create opportunities of intellectual stimulation for my faculty?
- How do I currently practice this dimension with my faculty? Is it enough or can I do more?

The module for inspirational motivation discussed different ways in which leaders can effectively recognize the accomplishments and work of their followers. The module also

provided specific ideas and tips related to encouragement and motivation. The reflection exercise for this module asked participants to reflect on the following questions:

- In what ways do you motivate your faculty?
- Are there initiatives or systems in your institution in place that allow you to recognize faculty that are committed with the institution?
- What other things could you do or implement within your organization so that your faculty feel more motivated?

Fidelity can be measured through adherence to the intervention, and one of the indicators was to ensure coverage of all topics of the program. All of the topics mentioned previously were covered through the online modules.

Participation and Engagement

There were seven participants in the treatment group that would receive the professional development program described in the previous section. Of those seven participants, five participated in the program, and only three completed a minimum of 80% of the assigned reflections. The other two participants completed some of the reflections, but stopped participating in the modules. All of the participants – those who completed the program and those who did not – cited work commitments and little or no time availability to participate in the program. This also indicates a low level of support from the supervisors of the participants, who did not take into account their participation in the program and adopt measures to ensure that participants had enough time to engage in the program.

Engagement in online sessions was one of the process outcome indicators. There was low engagement from the participants in the online sessions. Responses were usually shorter than

required, so participant reflections were – on some occasions – lacking in depth and substantive content.

High attrition in the intervention, coupled with low engagement from the participants, means that most of the quantitative data will not have statistical power. However, the descriptive analysis of the data looks into some of the noteworthy findings generated by the pre and post application of the MLQ.

Analysis Constructs and Rationale

Before the findings are presented, it is important to define and operationalize the different constructs that are measured by the MLQ. The MLQ measures the frequency of behavior of three different styles of leadership, which in turn can be disaggregated into different dimensions within each style. Transformational leadership is the style that occupies most of the items and dimensions measured by the MLQ, because transformational leadership is considered by the authors of the instrument to be the style that leaders can aspire to achieve, and "augment" their behaviors and attributes from their current leadership style to a transformational leadership style.

Passive-Avoidant Leadership

Passive-avoidant leaders tend to avoid conversations, change, getting involved or intervening, and making decisions. The presence of a passive-avoidant leader tends to have a negative effect on the desired outcomes of the institution (Bass & Avolio, 2004). The laissez faire and passive management-by-exception dimensions make up the passive-avoidant leadership style.

Laissez-Faire. The "laissez faire" dimension of leadership is in the range of the least effective leadership behaviors, where the term "laissez-faire" means "no leadership". The MLQ evaluates this dimension through behavior perceptions such as avoidance of responsibility and

action. A sample item that measures "laissez faire" is: "I avoid getting involved when important issues arise".

Passive management-by-exception. Passive management-by-exception (MBEP) is described as the corrective supervision of the leader to ensure that the follower achieves certain objectives (Bass & Avolio, 2004). A leader with MBEP characteristics waits for mistakes to be made before taking action, and focuses on identifying mistakes. This dimension is also referred to as "fights fires" (Bass & Avolio, 2018).

Transactional Leadership

As conceptualized previously in this dissertation, a transactional leadership relationship is a low quality, economic exchange between the leader and the employee, characterized by short-term interactions and a quid pro quo exchange (Walumba, Cropanzano, & Goldman, 2011). Transactional leaders engage in behaviors that are constructive and corrective, where the leader "defines expectations and promotes performance to achieve these levels" (Bass & Avolio, 2004, p. 104). Two dimensions characterize transactional leadership: active management-by-exception and contingent reward.

Active management-by-exception. Active management-by-exception (MBEA) is the corrective supervision of the leader to ensure the follower achieves the expected results. A leader with MBEA characteristics monitors the mistakes that followers may make, and takes action when followers do not comply with standards (Bass & Avolio, 2004).

Contingent reward. Contingent reward is the exchange that takes place between the leader and follower, where the achievement of a task is accompanied by the expectation of a reward (Antoniakis, Avolio, & Sivasubramaniam, 2003). A leader who employs behaviors of

contingent reward recognizes achievements, accomplishes agreements, manages exchanges, congratulates, and provides clear a clear understanding of roles and responsibilities.

Transformational Leadership

As conceptualized previously in this dissertation, a transformational leader has the ability to influence the behavior of their followers' psychological state, through changing how they feel about themselves and their work (Bass, 1985). Transformational leadership is regarded as one of the most effective styles of leadership (Judge & Piccolo, 2004), where the leader transforms the workplace environment into one that stimulates higher performance and success (Bass, 1985). Transformational leaders are characterized and measured through four dimensions: idealized influence, inspirational motivation, intellectual stimulation, and individual consideration.

Idealized influence. Idealized influence is the leadership dimension that allows leaders to build trust with followers. Idealized influence is also synonymous with charisma, and associated with the charismatic style of leadership (Bass & Avolio, 2004). The MLQ measures two different manifestations of idealized influence, through attributes (who the leader is) and behavior (what the leader does). Through the dimension of idealized influence, the leader is perceived as a role model, authentic, with high credibility. Some of the defining characteristics of the idealized influence dimension are pride, faith, respect, sense of mission, trust, and integrity.

Inspirational motivation. Inspirational motivation is the ability of a leader to inspire a sense of purpose among followers. A motivating and inspirational leader is able to provide meaning to and simplify ideas and complex problems. A leader who employs inspirational motivation establishes high standards, clearly articulates a vision, expresses purposes in simple ways, communicates high expectations, and gives encouraging speeches.

Intellectual stimulation. Intellectual stimulation is used to encourage followers to question the usual ways to do things, to question assumptions, and to break with the past. Leaders who obtain high rankings in intellectual stimulation value creativity and involve followers in the decision-making process.

Individualized consideration. Individualized consideration is a dimension that focuses on the specific desires of followers, where people are treated equally, but in an individualized manner. A leader who portrays individualized consideration develops and "coaches" followers. A leader with high rankings in the individualized consideration dimension provides learning opportunities, asks "how are you?", treats each follower as an individual, coaches, gives advice, instructs, and provides help and support.

Findings and Discussion

General Group Characteristics

17 participants across 5 private universities voluntarily consented to participate in the study. These participants were randomly assigned to a treatment and control group. 8 participants were assigned to the treatment group and 9 participants were assigned to the control group. 11 participants were female and 6 were male. 11 participants had positions at a coordination level and 6 participants had positions at a higher level, with positions such as manager, director, or dean (see Table 9).

The data generated through the instrument applied before the intervention began were used to test for homogeneity of the group. A Mann-Whitney U test was used in SPSS, and applied to the 45 items of the instrument. The null hypothesis for this test was that the distribution of each of the 45 items of the instrument would be the same across categories of treatment or control group. All 45 tests resulted in a decision to retain the null hypothesis.

The pre-test data were also used to test for potential differences between gender groups and position in the institution. A Mann-Whitney U test was applied to the 45 items of the instrument, where the null hypothesis for the test was that the distribution of each item would be the same across categories of male and female. All of the 45 items retained the null hypothesis. In terms of position (coordinator or director), a Mann-Whitney U test was applied to all of the items in the instrument, and the test found that the group had the same distribution across each item, with a rejection of the null hypothesis for that test.

In general, the group was homogeneous throughout, with no differences found among treatment/control groups, coordinators/directors, and males/females. Although the study participants were employed in different levels throughout different organizations, no significant differences were found in the distribution of the data.

The Mann-Whitney U tests for homogeneity of the sample were only applied on data produced by the participant self-evaluations prior to the beginning the treatment. Tests could not be applied for the rater responses because not all participants provided raters.

Passive-Avoidant Leadership Results

Items in the MLQ measure two dimensions for passive-avoidant leadership – laissez-faire and passive management-by-exception. The self-evaluation grand mean results for the passive avoidant leadership style were .53, and the rater grand mean results for the same style were .83.

Laissez-faire. The ideal rating for this dimension in the MLQ is below 1, where the perceived frequency of occurrence of laissez-faire behaviors should not exist, and, at most, occur "once in a while". The pre-test results for the laissez-faire dimension, through both participant self-evaluations and rater evaluations were characterized by means below 1. The item "I delay

responding to urgent questions" received the mean score closest to 1 with a mean participant self-evaluation score of .82 and a rater score of .84 (See Table 10). This score may be due to cultural characteristics of the surveyed population, where time and urgency does not have the same importance than in other cultures.

The grand mean of participant self-evaluations for the laissez faire dimension was .53, and the grand mean of rater evaluations for the same dimension was .68. Both means were within the ideal range of the laissez faire dimension. In this case, raters qualified the participants as having slightly higher laissez-faire tendencies than the participants did themselves. The post-test results for the treatment and control group, as well as a comparison of the pre and post-test results for the treatment group for the laissez-faire dimension do not show significant change (see Tables 23 and 24).

Passive management-by-exception (MBEP). Similar to the laissez-faire dimension, the ideal range of presence of MBEP dimension in leaders is below 1. A sample question that measures MBEP is: "I fail to interfere until problems become serious". The pre-test results for the MBEP dimension, through both participant self-evaluations and rater evaluations were mostly characterized by means below 1. Rater means for the item "Fails to interfere until problems become serious" were 1.77, outside the ideal range. There was a considerable difference between the participant self-evaluation mean and the rater mean of .83, where the raters believed that the participants displayed this behavior more often than the participants themselves (See Table 11).

The grand mean of participant self-evaluations for the MBEP dimension was .53, and the grand mean of rater evaluations for the same dimension was .97. Similar to the grand means in the laissez-faire dimension, the raters reported higher frequency of passive management-by-

exception than the leaders themselves. Although both results were within the desired range, the rater grand mean was closer to 1, and therefore, relevant as a potential area of improvement. A comparison of the post-test results for the treatment and control group, as well as a comparison of the pre and post-test results for the treatment group for the passive management-by-exception dimension does not show significant change (see Tables 25 and 26).

Transactional Leadership

Items in the MLQ measure two dimensions for transactional leadership – active management-by-exception and contingent reward. The grand mean for transactional leadership was not computed because the desired ranges for the two dimensions of this style were different. The desired range for MBEA behaviors was 1 to 2 and the desired range for contingent reward behaviors was 2 to 3. Item means and grand means by dimension are described below.

Active management-by-exception (MBEA). The ideal range of MBEA is between 1 and 2, where 1 is "once in a while" and 2 is "sometimes". This means that is desirable for leaders employ MBEA behaviors with a certain frequency. Pre-test means for this dimension demonstrated that the group tends to practice MBEA more often than is desirable. For example, the item: "I keep track of all mistakes", had a mean of 3.00 among participants and a mean of 2.90 among raters, indicating that the frequency of this behavior was "fairly often" instead of the ideal range between "once in a while" and "sometimes" (See Table 12).

Another item with means outside of the desired range was: "I direct my attention toward failures to meet standards", with a mean participant self-evaluation rating of 3.53 and a mean rater score of 2.73. The term "standards" may have been associated with accreditation, and participants and raters may have believed that it was positive to demonstrate a high frequency of behavior regarding this item, because of its relationship to achieving accreditation goals for the

institution. Furthermore, standard deviations for MBEA items, both among participant self-evaluations and raters were higher than standard deviations for other dimensions, indicating that there was a wide distribution in the responses that characterized this dimension.

The grand mean of participant self-evaluations for the MBEA dimension were 2.41, and the grand mean of rater evaluations for the same dimension was 2.55. A comparison of the post-test results for the treatment and control group, as well as a comparison of the pre and post-test results for the treatment group for the active management-by-exception dimension does not show significant change (see Tables 27 and 28).

Contingent reward. The ideal range of contingent reward is between 2 and 3, where 2 is "sometimes" and 3 is "fairly often". An example of an item that falls under contingent reward is: "I discuss in specific terms who is responsible for achieving performance targets".

The group displayed means higher than the desired ranges for contingent reward, with the four items of this dimension obtaining participant self-evaluation means of 3.39, 3.23, 3.41, and 3.88 (See Table 13). Rater means for two items fell within the desired ranges, and the other two items displayed higher than desired means, similar to those displayed by the participant self-evaluations. Participants may have misconstrued contingent reward as a positive behavior best displayed as frequently as possible. However, the literature affirms that contingent reward should be displayed as little as sometimes and no more than fairly often.

The grand mean of participant self-evaluations for the contingent reward dimension was 3.48 and the grant mean of rater evaluations for this dimension was 3.06. Both of these dimensions, measured by participants and their raters, displayed results outside of the desired ranges, were the behaviors are displayed more frequently than is desired. This means that a high frequency of transactional leadership behaviors characterizes the group. A comparison of the

post-test results for the treatment and control group, as well as a comparison of the pre and post-test results for the treatment group for the contingent reward dimension does not show significant change (see Tables 29 and 30).

Transformational Leadership

Items in the MLQ measure two dimensions for transformational leadership – idealized influence, intellectual stimulation, individualized consideration, and inspirational motivation. The grand mean for transformational leadership was 3.43 among participant self-evaluations and 3.28 among raters.

Idealized influence (attributes and behavior). The ideal rating for idealized influence in the MLQ is above a 3, with an ideal frequency of behavior where 3 is ¨fairly often¨ and 4 is ¨frequently, if not often¨. The items that measured attributes for idealized influence were mostly in the ideal range of above 3.0. There was one item that obtained a participant self-evaluation mean below range (2.74), but the same item obtained a rater mean of 3.17, which is within the desired range (See Table 14). Three of the four items that measured behavior for idealized influence were within the desired ranges above 3, for both participant self-evaluation means and for rater means. The item: “I talk about my most important values and beliefs” obtained lower than desired mean scores from both participants and raters, with 2.65 and 2.57, respectively (see Table 15).

Two items that measured behavior for idealized influence were within the highest desirable ranges among the all items that measure transformational leadership. These items were: “I specify the importance of having a strong sense of purpose”, with a participant rating of 3.82 and “I consider the moral and ethical consequences of my decisions”, also with a participant rating of 3.82. These two results demonstrate that the group placed a high importance on sense of

purpose of what the team does, as well as the value of moral and ethical decision-making on their quality as leaders. These two items also obtained a low standard deviation (both .39), indicating little variation and no self-evaluations below 3.

The grand mean for idealized influence was computed using the 8 items of attributes and behavior, with a result of 3.37 for participant self-evaluations and 3.25 for raters. A comparison of the post-test results for the treatment and control group, as well as a comparison of the pre and post-test results for the treatment group for the idealized influence dimension does not show significant change (see Tables 31 through 34).

Inspirational motivation. The desired range for the inspirational motivation dimension is above 3, with an ideal frequency of behavior where 3 is ¨fairly often¨ and 4 is ¨frequently, if not often". All of the self-evaluation means and rater means were above a 3.0, and in most items, were above 3.5 (See Table 16). Standard deviation was low for the items in this dimension. Inspirational motivation seems to be an area of strength for the group. Sample items for inspirational motivation are: "I talk optimistically about the future," and "I express confidence that goals will be achieved".

The grand mean results for inspirational motivation were 3.70 among participant self-evaluations and 3.58 among raters. Inspirational motivation is a leadership dimension that was rated the most favorably among the group, and is a strength that characterizes the participants. A comparison of the post-test results for the treatment and control group, as well as a comparison of the pre and post-test results for the treatment group for the inspirational motivation dimension does not show significant change (see Tables 35 and 36).

Intellectual stimulation. The desired range for the intellectual stimulation dimension is above 3, with an ideal frequency of behavior where 3 is ¨fairly often¨ and 4 is ¨frequently, if not

often". Three out of four items that measure intellectual stimulation obtained the ideal range of above 3. One item obtained a score below 3.0 for both participant self-evaluation mean and for rater mean, of 2.80 and 2.97, respectively (See Table 17). The item was: "I re-examine critical assumptions to question whether they are appropriate". A score below the desired range for this item indicates an area of opportunity of improvement for the group.

The grand mean results for intellectual stimulation were 3.36 among participant self-evaluations and 3.17 among raters. A comparison of the post-test results for the treatment and control group, as well as a comparison of the pre and post-test results for the treatment group for the intellectual stimulation dimension does not show significant change (see Tables 37 and 38).

Individualized consideration. The desired range for this dimension is above 3, with an ideal frequency of behavior where 3 is ¨fairly often¨ and 4 is ¨frequently, if not often". The pre-test results for this dimension exhibit some variability among items. Two of the four items were rated above 3, both for participant self-evaluation means and rater means (See Table 18). However, one of the items was ranked below the desired range, both by participants and raters. The item was: "I treat others as individuals rather than just as members of a group", and its participant mean was 2.62 and rater mean was 2.98.

Furthermore, another item of this dimension demonstrated a high difference in scores between participants and raters. The item was: "I consider an individual as having different, needs, abilities, and aspirations from others", and its participant mean was 3.82, which is a high, favorable ranking for this item, but raters evaluated the participants with a mean of 2.81, which falls below the desired range for this item. The self-perception that the group had regarding their ability to provide individualized consideration for their followers does not match the perception provided by the followers regarding the leader.

The grand mean results for individualized consideration were 3.30 among participant self-evaluations and 3.13 among raters. Intellectual stimulation and individualized consideration, although within desired ranges, displayed results, especially among raters that are close to falling out the desired range of 3. A comparison of the post-test results for the treatment and control group, as well as a comparison of the pre and post-test results for the treatment group for the individualized consideration dimension does not show significant change (see Tables 39 and 40).

Additional Factors. The MLQ asks study participants and their raters to consider additional factors that are relevant in leadership, such as effectiveness, satisfaction, and extra effort. These additional factors are considered outcomes of leadership that are consistent with transactional and transformational leadership (Bass & Avolio, 2004). Extra effort, in particular is important in the context of this study because it examines the frequency of behaviors that are related to engagement. For example, the items measured in extra effort are: "I get others to do more than they expected to do", "I heighten others' desire to succeed", and "I increase others' willingness to try harder". The effectiveness dimension measures the both the individual effectiveness of the leader, as well as the ability of the leader to lead an effective team. The satisfaction dimension measures across two items, both related to the satisfaction that should be generated on behalf of the follower by working with his or her leader.

The ideal range of results for the three factors was above 3. All of the items in effectiveness, extra effort, and satisfaction received a mean score above 3 for both participant self-evaluations and raters (See Tables 19 through 21). A comparison of the post-test results for the treatment and control group, as well as a comparison of the pre and post-test results for the treatment group for the additional factors does not show significant change (see Tables 41 through 46).

Qualitative Analysis

The professional development program instructed participants to write reflections regarding the different dimensions of transformational leadership from the lens of private higher education. These reflections produced rich data for qualitative analysis. A qualitative data analysis computer software called NVivo was used. The participant responses were exported from Schoology into NVivo, and separated into three files. One file contained the reflections of the participants pertaining to the self-evaluation and rater results of the MLQ; another file contained the reflections of the four dimensions of transformational leadership applied to higher education; and the last file contained reflections regarding the professional development program itself.

Saldaña's (2009) "Coding Manual for Researchers" was used to guide the process of data coding and analysis. Descriptive coding was employed to summarize the primary topics and ideas that arose in the reflections. Initially, 33 codes were produced. These codes had descriptive names such as: empathy, inspire others, teamwork, positive work climate, and self-confidence. The codes reflected leadership behaviors and attributes, as well as leadership outcomes, benefits, and challenges.

After careful revision of the generated codes, 33 codes were reduced to 26, and the 26 codes were distributed among 10 categories. The categories were as follows:

- Passive-Avoidant
- Transactional Leadership
- Idealized Influence
- Inspirational Motivation
- Intellectual Stimulation

- Individualized Consideration
- Communication
- Teamwork
- Leadership Outcomes
- Limitations and Challenges

The first two categories are two styles of leadership – additional to transformational leadership – mentioned by the MLQ. The following four categories are the four dimensions of transformational leadership. These dimensions were disaggregated into separate categories because the professional development program's objective was to improve transformational leadership attributes and behaviors in the participants. Therefore, much of the content produced by the participants' reflections are based on the different dimensions that make up transformational leadership. The final categories – communication, teamwork leadership outcomes, and limitations and challenges – are categories that emerged due to the frequency of recurrence as codes during the coding process. These were topics that arose throughout the participant reflections, and merit separate categories to further reflect and analyze their meaning.

Passive-Avoidant and Transactional Leadership

Reflections regarding passive-avoidant leadership behaviors and transactional leadership were infrequent, because the professional development program focused on transformational leadership. Some reflections regarding these two leadership styles arose through the revision of the results from the self-evaluations and rater forms. These results were sent to the participants individually so they could see their score separated by dimensions, and reflect on certain behaviors that are assigned to the different leadership styles. The passive-avoidant category had two codes, and each code generated one mention each. In one mention the participant recognized

attention to failure as an unexpected weakness the raters pointed out in their evaluation. In another mention, a participant expressed the belief that it was acceptable to practice "it if isn't broken, don't fix it" mentality.

Three codes were generated for the transactional leadership category. Problem-solving was mentioned on five occasions by two participants. This behavior is aligned with both passive and active management-by-exception. A sample response under this code was: "…must be able to solve the problems that are within their reach" referring to a leader's responsibility.

Idealized Influence

Idealized influence was a category and transformational leadership dimension that generated reflection in participants. Within this dimension, participants reflected on clarity of vision, employee's sense of belonging and loyalty, relationship with employees, values, and leading by example. Lead by example, as a code, included participant reflections such as:

"Leadership behaviors can be maximized through setting an example."

"The strongest transformational leadership behavior I possess is the sense of mission, respect, integrity, and trust, which serves as an example to employees, so that these become behavioral changes towards the institution or organization."

"A leader influences faculty in such as way that he/she becomes a role model, fostering respect, admiration, and recognition at all times, which for me is key in leadership."

"A leader must inspire trust, be an example, know to listen opinions and suggestions, which must be taken into consideration if they are useful to solve problems and facilitate work flow."

Individualized Consideration

The category and dimension of individualized consideration generated 5 codes, with noteworthy references. The codes that were generated through participant reflections were: active listening, coaching and mentoring, empathy, professional development, and advice and support. Active listening was the code that generated the most references within the category of individualized consideration, with statements such as:

> "The transformational, inspirational, and intellectual leader has an influence in the organizational environment by being a person who works as part of a team, and asks questions to not make mistakes because the persona asks and listens before making decisions."

> "I love to say what I think and listen to others even through I don't consider they are not right, but it is good to share ideas and reach agreements".

Intellectual Stimulation

Intellectual stimulation as a category encompasses three codes, each with few references. Few reflections merited a code in the category of intellectual stimulation. Only one code was produced for "innovative thinking", which is one of the main ideas of intellectual stimulation. This code states: "A leader requires intellectual stimulation. This facilitates alternating different thoughts and being innovative and entrepreneurial".

It seems that participants mistake employee development with intellectual stimulation, when employee development falls under individual consideration. Participants believe that intellectual stimulation occurs when they provide opportunities for professional development to their employees. However, Bass and Avolio (2004, 2018) contend that professional development is related to individualized consideration, which is the dimension of transformational leadership that identifies, attends, and elevates to the developmental needs of the employee, in an effort to

help said employee reach their maximum potential. The MLQ results also demonstrate that intellectual stimulation is a transformational leadership dimension with room for improvement.

Inspirational Motivation

Inspirational motivation also merited three codes with few references each. One participant referred to the importance of inspirational motivation by stating: “We need to consistently transmit motivation, vocation, and passion for what we like”. Furthermore, a participant discovered a strength in the rater scores of the MLQ through “trying to inspire others”.

Communication and Teamwork

The categories of communication and teamwork were created as separate categories because of two reasons:

- Both areas had a high frequency of recurrence during the coding process;
- Neither area is a clear part of one transformational leadership dimension; rather, good communication skills, and teamwork abilities are embedded within all four transformational leadership dimensions and are necessary attributes and behaviors that a transformational leader must possess.

Teamwork generated 12 references throughout the coding process and communication skills generated 6 references. The communication category encompassed topics such as the importance of institutional communications, as well as the role of participant communication skills in leadership. Examples of reflections provided by participants were:

“To improve the actual state of the organization it is necessary to have better communication among departments”.

“Good communication is a tool that must prevail in every institution”.

Teamwork was mentioned repeatedly throughout the reflections, and it was mentioned in diverse modules. None of the reflection questions in the professional development program asked participants to discuss teamwork. Rather, the topic emerged as part of the reflections as an important area of focus, both for transformational leaders and employees. Some examples of coded references in this category were:

> "Teamwork or collaborative work is the best, because it requires to have an imaginary rope to understand that, being at the same level, we must all pull in the same direction to achieve goals."
>
> "A good leader injects positivism in the staff and achieves better results from the perspective that we all work or steer the boat in the same direction".

Participants reflected about how leadership influences the ability to reach certain outcomes. For this category, two codes were created: positive work climate and institutional goals. Positive work climate aligns with the research literature that confirms that a positive work climate is an outcome of leadership that precedes engagement. Therefore, when an institution has transformational leaders, it is more likely that there will be a positive organizational climate, and that the positive climate will lead to employee engagement. One participant reflected:

> "It is important to create a work climate that is favorable to conduct the functions that have been assigned to each of the employees, which means that there will be interpersonal relations based on collaboration, solidarity, support, and teamwork."

Institutional Goals

The code for institutional goals includes participant references about the different goals that will be accomplished through transformational leadership. Some of the goals that would be achieved, according to the participants were: "good education", "good quality of customer

service", "joint strategies of great value for the institution", and "optimal attention to students on behalf of faculty". These reflections are relevant because they indicate that participants are aware of a variety of institutional goals, and are relating the knowledge they have gained about transformational leadership dimensions to its applicability, not just for managing people, but also for achieving the greater goals of the institution.

Limitations and Challenges

Participants described certain limitations throughout their reflections. These reflections were added to a category called limitations, to allow for better analysis. All of the references in this category mention institutional limitations, which become challenges in their ability to reach desired institutional outcomes. Most of these references are directed toward faculty situations regarding part-time status, engagement, and research. These references are aligned to the exploration of the problem of practice in this dissertation. Some of the comments made by the participants include:

> "I consider that I can do more, but often times the system does not allow for it".
>
> "We constantly have to motivate faculty because they feel unmotivated even for the payment they receive and the work that implies to do research, prepare a class, spend many hours preparing and reading to face the day to day challenges".
>
> I think that in every job there are highs and lows, because people on occasion feel very motivated and want to accomplish a lot, but the administration at times does not understand that more could be accomplished with sufficient support."
>
> "Institutions often times are not prepared to advance. They want to continue doing more of the same".

Through these comments regarding different challenges and limitations, participants

displayed ample knowledge of the problem of practice explored in this dissertation, and some of the limitations that are present because of the local context. However, some of the final reflections showed that participants were able to understand the important of their role as transformational leaders, and the potential that their leadership has in transforming the o culture of the organization, and therefore the engagement of faculty.

Research Limitations

There were some challenges in the process and outcomes of the study, as well as some limitations that were apparent before the study took place. First, the total population of faculty supervisors in private universities in Panama is small, which increased the possibility of a small sample size for the study. This means that it was unlikely for statistically relevant conclusions to be drawn from the results of the study. The initial sample size of the group (n=17) was low, and due to attrition, the final numbers were lower (n=8).

The decision to have an experimental study instead of a quasi-experimental study limited the total number of participants who could participate in the professional development program. Only the participants assigned to the treatment group received the professional development program, splitting an already low sample size in half.

Furthermore, the study only recruited participants from private universities in Panama. Using participants from only one country, and one that has a small population limits the generalizations that can be drawn from the results of the study. Future studies can aim to seek a stratified sample from different countries in Latin America, in order to generate a study with a population that can be considered as representative of the Latin American culture.

Another design limitation of this study is that faculty engagement is not measured before and after the intervention. The focus of this dissertation was to learn about the leadership

attributes and behaviors that characterize faculty supervisors in private universities in Panama, and to establish whether an intervention in transformational leadership had an effect in faculty supervisor leadership abilities. However, faculty engagement levels have not been measured for Panama, and few comprehensive studies regarding faculty engagement were found in the research literature.

Conclusion

This dissertation study implemented an experimental research design with the objective of understanding the leadership attributes and behaviors of faculty supervisors in private universities in Panama. The study also aimed to find if the application of a professional development program in transformational leadership had an effect in the leadership scores obtained in the Multifactor Leadership Questionnaire (MLQ).

Most of the processes of the study were executed according to their original design and description in the Methods section of this dissertation. The recruitment, selection, group assignment of the sample, and instrument application were carried out according to what was planned. However, participation was lower than anticipated (expected participation of n=30 and actual participation of n=17). Low initial participation and high attrition resulted in the inability to make causal inferences from the results of the study, and created a restriction in the use of inferential statistics to analyze the results.

The program modules were delivered via online as originally planned, and are thoroughly described in this chapter. However, due to low participation and participant attrition, it was not possible to conduct face-to-face sessions that had been originally contemplated in the design of the program. Focus groups were not conducted, also due to low number of participants. Instead, the reflections generated by the participants throughout the modules were used for qualitative

analysis, and to search for any similarities or discrepancies with the qualitative data produced by the MLQ application.

The group of faculty supervisors that participated in the study was characterized by having low levels of passive-avoidant behavior, where the two dimensions of this behavior were within desired ranges in self-evaluation and rater scores of the MLQ. The two dimensions that measure transactional leadership displayed frequency of behavior outside of the desired ranges of occurrence. Faculty supervisors in Panama engage in transactional leadership behaviors more often than is ideal. Last, the participants displayed transformational leadership behaviors within ideal ranges, with some exceptions that were found within specific items of the instrument. The exceptions were found in one item below the desired range in intellectual stimulation, one item below the desired range for individualized consideration, and one item with significant discrepancies between self-evaluations and rater evaluations for individualized consideration.

A qualitative analysis of the reflections produced by the participants during the professional development program permitted a deeper understanding of the meaning behind some of the scores. For example, the items in intellectual stimulation and individualized consideration may have scored lower than expected because of participant misconceptions over what behaviors encompass intellectual stimulation and individualized consideration. Furthermore, qualitative analysis unveiled certain traits – teamwork and communication – that do not belong to a particular dimension of transformational leadership, but are relevant in its consideration.

Because of the small sample size, the quantitative data cannot be used to determine the impact of the professional development program. However, the qualitative data suggest that the

program did produce a positive impact in the treatment group´s knowledge and awareness regarding the importance of transformational leadership in their context of higher education.

The data and analysis produced in this dissertation is new knowledge that will allow university decision-makers and leaders to better understand some of the specific challenges of the leadership attributes and behaviors of their faculty supervisors. Furthermore, this dissertation opens the path for future opportunities in studies of engagement and transformational leadership within the context of higher education in Latin America.

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Tables

Table 1

Definitions of Employee Engagement

Author	Year	Definition of Engagement
Kahn	1990	Engagement is "the harnessing of organization members' selves to their work roles; in engagement, people employ and express themselves physically, cognitively and emotionally during role performances" (p. 694).
Leiter and Maslach	1998	Engagement is an "energetic experience of involvement with personally fulfilling activities that enhance a staff member's sense of professional efficacy" (p. 351). In engagement, people are characterized by "energy, involvement and efficacy."
Schaufeli, Bakker, and Salanova	2002	Engagement is "a positive fulfilling work-related state of mind that is characterized by vigor, dedication, and absorption" (p. 74).
Saks	2006	A distinct and unique construct that consists of cognitive, emotional, and behavioral components that are associated with individual role performance (p. 602).
Britt, Dickinson, Greene-Shortridge, and McKibben	2007	Engagement is "feeling a sense of responsibility for and commitment to a performance domain so that performance 'matters' to the individual" (p. 1476).
Shuck and Wollard	2010	Engagement is "an individual employee's cognitive emotional, and behavioral state directed toward desired organizational outcomes" (p. 103).

Table 2

Percentage of part-time faculty and engaged faculty

Participant	Number of Faculty	Percentage of Part-time Faculty	Percentage of engaged faculty
Participant 1	600	95%	25%
Participant 2	400	99%	40%
Participant 3	110	100%	10%
Participant 4	120	80%	75%
Participant 5	370	95%	n/a
Participant 6	65	85%	75%
Participant 7	500	90%	80%
Participant 8	250	100%	20%
Participant 9	600	90%	10%

Table 3

University president conceptualizations of faculty engagement

Participant	Conceptualization of Faculty Engagement (specific question: How would you define faculty engagement? What elements or characteristics make up an engaged professor?
Participant 1	We observe it when you ask them to attend a meeting. In these universities where the majority doesn't have full-time it's hard for them to attend. They don't come to meetings, then you notice those who are always there and generally attend to the different invitations you extend for cultural and academic events of the university. The professor that honors your invitation despite the fact that they don't have class that day that s an element that we notice of a professor that has a commitment to the institution, which are very few, because of the nature that they are not full-time.
Participant 2	Well, I think there are two things. One is the non-negotiable aspects, where I mean permanent attendance to classes, being on time, which is part of the hiring but also part of the respect for the university and work, and unfortunately, it's not as common as we would like. Normally, there are professors that miss class, easily postpone it, make up for it another day with only two students, but they still sign that they attended and that the work was done. To me, a professor that is really a mentor has always been important because he has to want that his students be better than him. He has to be concerned for his students to actually go to class. So, when a student doesn't go to class it has to be a professor's problem not just the student's problem. When there is that concern of improvement and of responsibility in the classroom, the professor is engaged. And second, a professor who sees as an opportunity the different activities that they university does. It's very difficult to accomplish the attendance of faculty for activities because the schematics of the job. They have three or four universities, so they have the time to come to the hour of class and then they leave, but really we want them to grow professionally, and that means participating in projects. At the level of our network, we have many projects and sometimes we don't get the quorum of participation for them. So a professor who is there sees that we have technological support, that we have a faculty portal, from an app on your cell phone, so many things that really make their life easy. So that they have that willingness to do new things, a project worth making an effort for, to have that visibility, is also a professor I think is engaged.
Participant 3	An engaged professor, under the concept that we're talking about an adjunct professor, because we have to start from that. It's a professor that does additional field trips, a professor that does some mentoring, a

	professor that complies with the schedule, which is a problem here in the city. It's a professor that places enough evaluation tests and that, for example, updates his/her slides. The one who isn't engaged did it one time, 20 years pass and the slides and powerpoint presentation are from yesteryear. The engaged professor, and they are out there, is a professor that writes. It's a professor that when there's an ad hoc meeting, he/she attends. An adjunct professor can't be forced to attend. They have to do it by pure will.
Participant 4	In essence, we can measure the proactivity of a professor in several scales. Evidently, with the model of an institution with face to face programs, the professor must have a permanent commitment in complying with and honoring the courses and with the students. This is one of the main engagements the professor must have. At the same time, the level of commitment is also valued in the active participation in all of the curricular topics related to the specific formation that the university provides. Then you have the institutional extracurricular life where you evidently have professors with a higher level of belonging with the institution who try to participate in the different schemes of the institution. This implies greater time availability in many cases. In the measure that we have a professor for more years teaching courses, they will have a greater sense of belonging with the university.
Participant 5	I believe an engaged professor is one that is clear with the model of the institution. We have a particularity that we want our courses to have some elements of knowledge transfer or teaching, a lot of research, and for that research to be applied in solving a real problem within the community. The professor that can understand that, which involves a bit more work, because its not just repeating a story or developing a conventional class, is the professor that is truly engaged.
Participant 6	Well, first they have to have proven work and at a high level, that is essential above any diplomas. It's one of the things that characterizes them the most, and it's a professor that's willing to participate in activities. It's a professor that is always active and creating activities with the students. A very, very passive professor generally does not stay with us or is not hired back, so we are left with what I call my "faculty team". They are the best of the best. But they have to identify with the institution, have a capacity to produce work, and be able to transmit what they are going to teach.
Participant 7	Contingent faculty, when they have several years of working for the institution, participate a lot. The permanent part-time faculty participate a lot as well, their sense of belonging is high with what is being done at the university. You can go do the, and even though they may

	not be working during a particular semester, they still participate in forums, conferences, whatever is going on.
Participant 8	The professors are already commited in supporting the students. They really want to help the students and coordinate activities so that the students have the necessary hours of outreach to graduate. Those who do not participate work during the day, teach courses at night, and the rest of their time is dedicated to their family.
Participant 9	I measure engagement in thee important elements. In their development and training, and more in my case because I have the opportunity to offer it to my faculty for free. Two, everything that has to do with extracurricular activities, and by extracurricular, understanding that it is community outreach. And third the topic of research. So in those three areas I measure it. And I have to say that even though there's a good disposition to participate, the levels are barely insipient.

Table 4

Frequency of four elements of faculty engagement

Element of Engagement	Frequency	Percentage
Teaching	6	66.6%
Research	4	44.4%
Outreach	7	77.7%
Administration	3	33.3%

Table 5

Analysis of Existence of Faculty Classification Policies

Participant	Is there a faculty classification policy in place in your institution?
Participant 1	In Progress. "It's a commitment with the process of accreditation. We have done a call for faculty to update their information, and we have a faculty classification that we have included in our statutes. Our project is to locate the faculty in categories."
Participant 2	In progress. "Recently, we modified the faculty code. Within it is a tiered structure that has three categories, each one with its requirments to belong to that category, and we have a faculty evaluation system that complements all of the evaluations from the administrative point of view, and from the student, and the professor who gets a score within that ranking and each one has a characterization to know when you belong to whch. The faculty code was recently approved in the academic council, and its expected for it to start being implemented soon, and really be effective."
Participant 3	No. "There is no formal faculty structure in place".
Participant 4	In progress. "It is not well structured. The academic department has a structure in function of the basic needs of the institution. In terms of a scale, we don't have one defines a certain status or distribution, but we have a scale of the opportunities faculty can access, but not a scale in terms of consideration for years of service and the sort, is not well structured."
Participant 5	No. "We are trying to determine it, but we have been trying to do it for three years and have not succeeded."
Participant 6	Yes "We have an internal structure where faculty are classified by academic formation and by capacities, this structure is directly tied to a salary structure"
Participant 7	Yes. "We have regular faculty, permanent faculty, and part-time faculty."
Participant 8	In progress. "This year we have implemented it in the Graduate program, by year of service, and if you have a Doctorate

	you will have a higher position. In the undergraduate program, everyone is the same."
Participant 9	In progress. "In the moment you walked through the door, I was writing one of the objectives for 2016, and it is to approve the faculty structure. The commitment is that for 2017 the faculty structure will be implemented".

Table 6

Feedback from Evaluations of Faculty Satisfaction

Participant	Challenges
Participant 1	No faculty evaluation
Participant 2	1. Space. Faculty lounge is small. There is no space for faculty aside from the library and external areas. 2. Salary. Obviously is one of the areas that always come through in evaluations. 3. Human Resource Procedures. They wish the hiring process were easier and faster.
Participant 3	1. Salary. 2. Classification. "Many have asked for that classification you mentioned. They say 'I have worked here 20 years and I have the same status I started with' 3. "An academic council and more governance." 4. "For them to receive some sort of recognition for their service."
Participant 4	No faculty evaluation.
Participant 5	1. Salary. "We could pay the professor better but the tuition we charge is so low".
Participant 6	1. Salary. "This is where there is always a… request of reconsideration."
Participant 7	1. Permanent status. 2. Salary incentives. There is a flat rate that is paid to all professor regardless of the amount of time they have been working at the university.
Participant 8	No faculty evaluation. There is a self-evaluation of faculty and a student evaluation of faculty.
Participant 9	1. Compensation. "We hope that with the implementation of the faculty scale that will be resolved. It should attend the issue of seniority, and how you grow depending on the contributions you have made to the university".

Table 7

Fidelity Data Collection Matrix

Fidelity indicator	Data source(s)	Data collection tool	Frequency	Responsibility
Engagement in online sessions	Faculty supervisors	Level of participation in session discussions.	Bi-weekly (at the end of each session)	Principal investigator
Frequency of participation in face-to-face sessions	Faculty supervisors	Attendance sheets	Bi-weekly (at the end of each session)	Principal investigator
Quality of final projects	Faculty supervisors	Final projects, and final project rubric score	Once	Principal investigator
Coverage of all topics of the program	Principal investigator	Checklist of topics and sub-topics that were successfully covered	Bi-weekly (at the end of each session)	Principal investigator
Engagement of university presidents in intervention process	University presidents and faculty supervisors	Final project implementation approval sheet signed by university presidents	Once	Principal investigator
Quality of facilitator and resources provided by facilitator	Faculty supervisors	Participant evaluation of facilitator and resources	Twice	Principal investigator

Table 8

Data Collection Matrix

Indicator	Role of Indicator	Data Source	Frequency	Responsibility
Change in of levels of "charisma/inspirational" factor in MLQ	Outcome Variable	Faculty Supervisors	Twice - Pre and Post Intervention	Co-Investigator
Change in levels of "intellectual stimulation" factor in MLQ	Outcome Variable	Faculty Supervisors	Twice - Pre and Post Intervention	Co-Investigator
Change in levels of "individualized consideration" factor in MLQ	Outcome Variable	Faculty Supervisors	Twice - Pre and Post Intervention	Co-Investigator
Change in knowledge of transformational leadership	Mediating Variable	Faculty Supervisors	Once - Post Intervention	Co-Investigator
Change in awareness of importance of transformational leadership	Mediating Variable	Faculty Supervisors	Once - Post Intervention	Co-Investigator
Previous knowledge and/or awareness of transformational leadership	Control Variable	Faculty Supervisors	Once - Pre Intervention	Co-Investigator

Table 9

Participant Demographics

Demographic	Pre-Test	Post-Test
Sample size	n=17 treatment, n=8 control, n=9	n=8 treatment, n=4 control, n=4
Female	n=11 treatment, n= 5 control, n=6	n=7 treatment, n=3 control, n=4
Male	n=6 treatment, n=3 control, n=3	n=1 treatment, n=1 control, n=0
Director/Dean	n=6 treatment, n=4 control, n=2	n=3 treatment, n=2 control, n=1
Coordinator	n=9 treatment, n=4 control, n=5	n=5 treatment, n= 2 control, n=3

Table 10

Sample Means by Item for Laissez-Faire (Pre-Test)

Item Description	Pre-Test Self-eval. Mean	Pre-Test Rater Mean	Difference between Self-eval. and Rater (Mean)	Pre-Test Self-eval. SD	Pre-Test Rater SD	Difference between Self-eval. and Rater (SD)
Avoids getting involved when important issues arise.	.65	.84	.19	1.17	.61	.56
Is absent when needed.	.12	.47	.35	.33	.57	.24
Avoids making decisions.	.53	.57	.04	.80	.53	.27
Delays responding to urgent questions.	.82	.84	.02	1.13	.60	.53

Table 11

Sample Means by Item for Passive Management-by-exception (Pre-Test)

Item Description	Pre-Test Self-eval. Mean	Pre-Test Rater Mean	Difference between Self-eval. and Rater (Mean)	Pre-Test Self-eval. SD	Pre-Test Rater SD	Difference between Self-eval. and Rater (SD)
Fails to interfere until problems become serious.	.94	1.77	.83	1.30	.99	.31
Waits for things to go wrong before taking action.	.18	.55	.37	.53	.53	0
Shows that he/she is a firm believer in "If it isn't broke, don't fix it".	.94	.92	.02	1.43	.64	.79
Demonstrates that problems must become chronic before taking action.	.06	.65	.59	.24	.65	.41

Table 12

Sample Means by Item for Active Management-by-exception (Pre-Test)

Item Description	Pre-Test Self-eval. Mean	Pre-Test Rater Mean	Difference between Self-eval. and Rater (Mean)	Pre-Test Self-eval. SD	Pre-Test Rater SD	Difference between Self-eval. and Rater (SD)
Focuses attention on irregularities, mistakes, exceptions, and deviations from standards.	1.59	2.55	.96	1.54	.72	.82
Concentrates his/her full attention on dealing with mistakes, complaints, and failures.	1.53	2.03	.50	1.46	.94	.52
Keeps track of all mistakes.	3.00	2.90	.10	1.06	.69	.37
Directs my attention towards failures to meet standards.	3.53	2.73	.80	.51	.79	.28

Table 13

Sample Means by Item for Contingent Reward (Pre-Test)

Item Description	Pre-Test Self-eval. Mean	Pre-Test Rater Mean	Difference between Self-eval. and Rater (Mean)	Pre-Test Self-eval. SD	Pre-Test Rater SD	Difference between Self-eval. and Rater (SD)
Provides me with assistance in exchange for my efforts.	3.39	2.45	.94	.65	1.15	.50
Discusses in specific terms who is responsible for achieving performance targets.	3.23	2.82	.41	.83	.57	.26
Makes clear what one can expect to receive when performance goals are achieved.	3.41	3.37	.04	.87	.72	.15
Expresses satisfaction when others meet expectations.	3.88	3.81	.07	.33	.41	.08

Table 14

Sample Means by Item for Idealized Influence - Attributes (Pre-Test)

Item Description	Pre-Test Self-eval. Mean	Pre-Test Rater Mean	Difference between Self-eval. and Rater (Mean)	Pre-Test Self-eval. SD	Pre-Test Rater SD	Difference between Self-eval. and Rater (SD)
Instills pride in me for being associated with him/her.	2.74	3.17	.43	1.30	.68	.62
Goes beyond self-interest for the good of the group.	3.35	3.07	.28	1.00	.64	.36
Acts in ways that builds my respect.	3.59	3.61	.02	.51	.57	.06
Displays a sense of power and confidence.	3.53	3.19	.34	.62	.53	.09

Table 15

Sample Means by Item for Idealized Influence - Behavior (Pre-Test)

Item Description	Pre-Test Self-eval. Mean	Pre-Test Rater Mean	Difference between Self-eval. and Rater (Mean)	Pre-Test Self-eval. SD	Pre-Test Rater SD	Difference between Self-eval. and Rater (SD)
Talks about his/her most important values and beliefs.	2.65	2.57	.08	1.27	.75	.52
Specifies the importance of having a strong sense of purpose.	3.82	3.57	.25	.39	.32	.07
Considers the moral and ethical consequences of decisions.	3.82	3.34	.48	.39	.53	.14
Emphasizes the importance of having a collective sense of mission.	3.47	3.51	.04	1.01	.51	.50

Table 16

Sample Means by Item for Inspirational Motivation (Pre-Test)

Item Description	Pre-Test Self-eval. Mean	Pre-Test Rater Mean	Difference between Self-eval. and Rater (Mean)	Pre-Test Self-eval. SD	Pre-Test Rater SD	Difference between Self-eval. and Rater (SD)
Talks optimistically about the future.	3.76	3.65	.11	.48	.35	.13
Talks enthusiastically about what needs to be accomplished.	3.69	3.66	.03	.48	.37	.11
Articulates a compelling vision of the future.	3.65	3.46	.19	.49	.57	.08
Expresses confidence that goals will be achieved.	3.70	3.53	.17	.47	.55	.08

Table 17

Sample Means by Item for Intellectual Stimulation (Pre-Test)

Item Description	Pre-Test Self-eval. Mean	Pre-Test Rater Mean	Difference between Self-eval. and Rater (Mean)	Pre-Test Self-eval. SD	Pre-Test Rater SD	Difference between Self-eval. and Rater (SD)
Re-examines critical assumptions to question whether they are appropriate.	2.80	2.97	.17	1.01	.76	.25
Seeks differing perspectives when solving problems.	3.65	3.31	.34	.61	.65	.04
Gets me to look at problems from many different angles.	3.35	3.18	.17	.61	.98	.37
Suggests new ways of looking at how to complete assignments.	3.65	3.23	.42	.49	.81	.32

Table 18

Sample Means by Item for Individualized Consideration (Pre-Test)

Item Description	Pre-Test Self-eval. Mean	Pre-Test Rater Mean	Difference between Self-eval. and Rater (Mean)	Pre-Test Self-eval. SD	Pre-Test Rater SD	Difference between Self-eval. and Rater (SD)
Spends time teaching and coaching.	3.23	3.43	.20	1.15	.77	.38
Treats me as an individual rather than just as a member of a group.	2.62	2.98	.36	1.86	.85	1.01
Considers me as having different needs, abilities, and aspirations from others.	3.82	2.81	1.01	.40	.72	.32
Helps me develop my strengths.	3.53	3.30	.23	.51	.74	.23

Table 19

Sample Means by Item for Additional Factors - Effectiveness (Pre-Test)

Item Description	Pre-Test Self-eval. Mean	Pre-Test Rater Mean	Difference between Self-eval. and Rater (Mean)	Pre-Test Self-eval. SD	Pre-Test Rater SD	Difference between Self-eval. and Rater (SD)
Is effective in meeting my job-related needs.	3.06	3.51	.45	.55	.55	0
Is effective in representing me to higher authority.	3.18	3.42	.24	.73	.67	.06
Is effective in meeting organizational requirements.	3.41	3.43	.02	.51	.70	.19
Leads a group that is effective.	3.59	3.30	.29	.51	.64	.13

Table 20

Sample Means by Item for Additional Factors - Satisfaction (Pre-Test)

Item Description	Pre-Test Self-eval. Mean	Pre-Test Rater Mean	Difference between Self-eval. and Rater (Mean)	Pre-Test Self-eval. SD	Pre-Test Rater SD	Difference between Self-eval. and Rater (SD)
Uses methods of leadership that are satisfying.	3.30	3.38	.08	.59	.78	.19
Works with me in a satisfactory way.	3.59	3.55	.04	.51	.55	.04

Table 21

Sample Means by Item for Additional Factors – Extra Effort (Pre-Test)

Item Description	Pre-Test Self-eval. Mean	Pre-Test Rater Mean	Difference between Self-eval. and Rater (Mean)	Pre-Test Self-eval. SD	Pre-Test Rater SD	Difference between Self-eval. and Rater (SD)
Gets me to do more than I expected to do.	3.18	3.30	.12	.73	.75	.02
Heightens my desire to succeed.	3.47	3.40	.07	.62	.70	.08
Increases my willingness to try harder.	3.47	3.36	.11	.62	.72	.10

Table 22

Pre-Test Sample Means by Dimension (Mean of Means)

Item Description	Pre-Test Self-eval. Mean	Pre-Test Rater Mean	Difference between Self-eval. and Rater (Mean)	Pre-Test Self-eval. SD	Pre-Test Rater SD	Difference between Self-eval. and Rater (SD)
Laissez-Faire	.53	.68	.15	.26	.16	.10
Management-by-Exception (Passive)	.53	.97	.44	.48	.19	.29
Management-by-Exception (Active)	2.41	2.55	.14	1.01	.38	.63
Contingent Reward	3.48	3.06	.42	.28	.53	.25
Idealized Influence	3.37	3.25	.12	.44	.34	.10
Inspirational Motivation	3.70	3.58	.12	.05	.10	.05
Intellectual Stimulation	3.36	3.17	.19	.40	.15	.25
Individualized Consideration	3.30	3.13	.17	.51	.28	.23
Additional Factors – Effectiveness	3.31	3.41	.10	.24	.09	.15
Satisfaction	3.44	3.46	.02	.21	.12	.09
Extra Effort	3.37	3.36	.01	.17	.05	.12

Table 23

Sample Means by Item for Laissez-Faire (Post-test, separated by Treatment and Control)

Item Description	Treatment Self-eval. Mean	Treatment Rater Mean	Difference between self-eval. And rater (treatment)	Control Self-eval. Mean	Control Rater Mean	Diff. betw. Self-eval and rater (control)
Avoids getting involved when important issues arise.	.00	.83	.83	.25	.46	.21
Is absent when needed.	.00	.78	.78	.00	.79	.79
Avoids making decisions.	.33	2.17	1.84	.25	.46	.21
Delays responding to urgent questions.	1.67	1.67	0	.25	1.35	1.1

Note: n=3 for treatment group post-test; n=4 for treatment group post-test

Table 24

Treatment Means by Item for Laissez-Faire (Pre and Post Comparison)

Item Description	Pre Test Self-eval. Mean	Post Test Self-Eval Mean	Diff. betw. Self-eval. Pre and post	Pre Test Rater Mean	Post-Test Rater Mean	Diff. betw. Rater pre and post
Avoids getting involved when important issues arise.	.67	.00	.67	1.20	.84	.36
Is absent when needed.	.00	.00	0	.52	1.07	.55
Avoids making decisions.	1.00	.33	.67	1.03	2.17	1.14
Delays responding to urgent questions.	.33	1.67	1.34	1.20	1.17	.03

Note: n=3 for treatment group post-test

Table 25

Sample Means by Item for Passive Management-by-exception (Post-test, separated by Treatment and Control)

Item Description	Treat-ment Self-eval. Mean	Treat-ment Rater Mean	Diff. betw. self-eval. And rater (treat-ment)	Control Self-eval. Mean	Cont-rol Rater Mean	Diff. betw. Self-eval and rater (control)
Fails to interfere until problems become serious.	.33	2.50	2.17	1.75	2.44	.69
Waits for things to go wrong before taking action.	.33	1.05	.72	.00	.52	.52
Shows that he/she is a firm believer in “If it isn’t broke, don’t fix it”.	.50	1.22	.72	.50	1.83	1.33
Demonstrates that problems must become chronic before taking action.	.00	1.05	1.05	.00	1.12	1.12

Table 26

Treatment Group Means by Item for Passive Management-by-exception (Pre and Post Comparison)

Item Description	Pre Test Self-eval. Mean	Post Test Self-Eval Mean	Diff. betw. Self-eval. Pre and post	Pre Test Rater Mean	Post-Test Rater Mean	Diff. betw. Rater pre and post
Fails to interfere until problems become serious.	.33	.33	0	2.20	2.50	.30
Waits for things to go wrong before taking action.	.00	.33	.33	.89	1.05	.16
Shows that he/she is a firm believer in "If it isn't broke, don't fix it".	.00	.50	.50	1.28	1.22	.06
Demonstrates that problems must become chronic before taking action.	.00	.00	0	1.05	1.05	0

Table 27

Sample Means by Item for Active Management-by-exception (Post-test, separated by Treatment and Control)

Item Description	Treat-ment Self-eval. Mean	Treat-ment Rater Mean	Diff. betw. self-eval. And rater (treat-ment)	Control Self-eval. Mean	Cont-rol Rater Mean	Diff. betw. Self-eval and rater (cont-rol)
Focuses attention on irregularities, mistakes, exceptions, and deviations from standards.	2.33	3.11	.78	2.50	2.12	.38
Concentrates his/her full attention on dealing with mistakes, complaints, and failures.	.33	2.28	1.95	2.00	2.10	.10
Keeps track of all mistakes.	1.67	2.72	1.05	3.25	3.21	.04
Directs my attention towards failures to meet standards.	3.33	2.67	.66	3.75	2.54	1.21

Table 28

Treatment Group Means by Item for Active Management-by-exception (Pre and Post Comparison)

Item Description	Pre Test Self-eval. Mean	Post Test Self-Eval Mean	Diff. betw. Self-eval. Pre and post	Pre Test Rater Mean	Post-Test Rater Mean	Diff. betw. Rater pre and post
Focuses attention on irregularities, mistakes, exceptions, and deviations from standards.	1.33	2.33	1.00	2.50	3.11	.61
Concentrates his/her full attention on dealing with mistakes, complaints, and failures.	.67	.33	.34	2.00	2.28	.28
Keeps track of all mistakes.	3.00	1.67	1.33	2.500	2.72	.22
Directs my attention towards failures to meet standards.	4.00	3.33	.67	2.25	2.67	.42

Table 29

Sample Means by Item for Contingent Reward (Post-test, separated by Treatment and Control)

Item Description	Treat-ment Self-eval. Mean	Treat-ment Rater Mean	Diff. betw. self-eval. And rater (treat-ment)	Control Self-eval. Mean	Control Rater Mean	Diff. betw. Self-eval and rater (cont-rol)
Provides me with assistance in exchange for my efforts.	1.33	3.00	1.67	2.50	3.37	.87
Discusses in specific terms who is responsible for achieving performance targets.	1.67	2.78	1.11	2.00	2.94	.94
Makes clear what one can expect to receive when performance goals are achieved.	3.33	2.94	.39	3.75	3.42	.33
Expresses satisfaction when others meet expectations.	4.00	2.94	1.06	3.50	3.29	.21

Table 30

Treatment Group Means by Item for Contingent Reward (Pre and Post Comparison)

Item Description	Pre Test Self-eval. Mean	Post Test Self-Eval Mean	Diff. betw. Self-eval. Pre and post	Pre Test Rater Mean	Post-Test Rater Mean	Diff. betw. Rater pre and post
Provides me with assistance in exchange for my efforts.	2.50	1.33	1.17	2.33	3.00	.67
Discusses in specific terms who is responsible for achieving performance targets.	3.00	1.67	1.33	2.44	2.78	.34
Makes clear what one can expect to receive when performance goals are achieved.	4.00	3.33	.67	3.08	2.94	.14
Expresses satisfaction when others meet expectations.	4.00	4.00	0	3.47	2.94	.53

Table 31

Sample Means by Item for Idealized Influence - Attributes (Post-test, separated by Treatment and Control)

Item Description	Treat-ment Self-eval. Mean	Treat-ment Rater Mean	Diff. betw. self-eval. And rater (treat-ment)	Control Self-eval. Mean	Control Rater Mean	Diff. betw. Self-eval and rater (cont-rol)
Instills pride in me for being associated with him/her.	3.00	2.94	.06	1.75	2.60	.85
Goes beyond self-interest for the good of the group.	3.67	3.17	.50	3.50	3.41	.09
Acts in ways that builds my respect.	4.00	2.78	1.22	3.50	3.33	.17
Displays a sense of power and confidence.	4.00	2.28	1.72	3.25	3.64	.39

Table 32

Treatment Group Means by Item for Idealized Influence - Attributes (Pre and Post Comparison)

Item Description	Pre Test Self-eval. Mean	Post Test Self-Eval Mean	Diff. betw. Self-eval. Pre and post	Pre Test Rater Mean	Post-Test Rater Mean	Diff. betw. Rater pre and post
Instills pride in me for being associated with him/her.	2.67	3.00	.33	2.89	2.94	.05
Goes beyond self-interest for the good of the group.	3.67	3.67	0	3.28	3.17	.11
Acts in ways that builds my respect.	4.00	4.00	0	3.39	2.78	.61
Displays a sense of power and confidence.	3.33	4.00	.67	3.00	2.28	.72

Table 33

Sample Means by Item for Idealized Influence - Behavior (Post-test, separated by Treatment and Control)

Item Description	Treat-ment Self-eval. Mean	Treat-ment Rater Mean	Diff. betw. self-eval. And rater (treat-ment)	Control Self-eval. Mean	Control Rater Mean	Diff. betw. Self-eval and rater (cont-rol)
Talks about his/her most important values and beliefs.	2.67	2.50	.17	2.50	2.87	.37
Specifies the importance of having a strong sense of purpose.	3.67	2.50	1.17	3.75	3.67	.08
Considers the moral and ethical consequences of decisions.	4.00	3.05	.95	3.75	3.54	.21
Emphasizes the importance of having a collective sense of mission.	4.00	3.00	1.00	3.75	3.33	.42

Table 34

Treatment Group Means by Item for Idealized Influence - Behavior (Pre and Post Comparison)

Item Description	Pre Test Self-eval. Mean	Post Test Self-Eval Mean	Diff. betw. Self-eval. Pre and post	Pre Test Rater Mean	Post-Test Rater Mean	Diff. betw. Rater pre and post
Talks about his/her most important values and beliefs.	2.33	2.67	.34	2.50	2.50	0
Specifies the importance of having a strong sense of purpose.	4.00	3.67	.33	3.36	2.50	.86
Considers the moral and ethical consequences of decisions.	4.00	4.00	0	3.19	3.05	.14
Emphasizes the importance of having a collective sense of mission.	4.00	4.00	0	3.44	3.00	.44

Table 35

Sample Means by Item for Inspirational Motivation (Post-test, separated by Treatment and Control)

Item Description	Treat-ment Self-eval. Mean	Treat-ment Rater Mean	Diff. betw. self-eval. And rater (treat-ment)	Control Self-eval. Mean	Control Rater Mean	Diff. betw. Self-eval and rater (cont-rol)
Talks optimistically about the future.	3.33	2.89	.44	4.00	3.54	.46
Talks enthusiastically about what needs to be accomplished.	4.00	2.89	1.11	4.00	3.64	.36
Articulates a compelling vision of the future.	3.67	2.72	.95	3.75	3.60	.15
Expresses confidence that goals will be achieved.	4.00	2.78	1.22	3.50	3.54	.04

Table 36

Treatment Group Means by Item for Inspirational Motivation (Pre and Post Comparison)

Item Description	Pre Test Self-eval. Mean	Post Test Self-Eval Mean	Diff. betw. Self-eval. Pre and post	Pre Test Rater Mean	Post-Test Rater Mean	Diff. betw. Rater pre and post
Talks optimistically about the future.	4.00	3.33	.67	3.55	2.89	.66
Talks enthusiastically about what needs to be accomplished.	3.67	4.00	.33	3.36	2.89	.47
Articulates a compelling vision of the future.	4.00	3.67	.33	2.28	2.72	.44
Expresses confidence that goals will be achieved.	4.00	4.00	0	3.47	2.78	.69

Table 37

Sample Means by Item for Intellectual Stimulation (Post-test, separated by Treatment and Control)

Item Description	Treat-ment Self-eval. Mean	Treat-ment Rater Mean	Diff. betw. self-eval. And rater (treat-ment)	Control Self-eval. Mean	Control Rater Mean	Diff. betw. Self-eval and rater (cont-rol)
Re-examines critical assumptions to question whether they are appropriate.	2.00	3.11	1.11	3.50	3.40	.10
Seeks differing perspectives when solving problems.	3.33	2.55	.78	4.00	3.25	.75
Gets me to look at problems from many different angles.	3.33	2.44	.89	4.00	3.06	.94
Suggests new ways of looking at how to complete assignments.	3.67	2.44	1.23	4.00	3.50	.50

Table 38

Treatment Group Means by Item for Intellectual Stimulation (Pre and Post Comparison)

Item Description	Pre Test Self-eval. Mean	Post Test Self-Eval Mean	Diff. betw. Self-eval. Pre and post	Pre Test Rater Mean	Post-Test Rater Mean	Diff. betw. Rater pre and post
Re-examines critical assumptions to question whether they are appropriate.	2.67	2.00	.67	3.14	3.11	.03
Seeks differing perspectives when solving problems.	3.67	3.33	.34	2.97	2.55	.42
Gets me to look at problems from many different angles.	4.00	3.33	.67	2.55	2.44	.11
Suggests new ways of looking at how to complete assignments.	4.00	3.67	.33	2.78	2.44	.34

Table 39

Sample Means by Item for Individualized Consideration (Post-test, separated by Treatment and Control)

Item Description	Treat-ment Self-eval. Mean	Treat-ment Rater Mean	Diff. betw. self-eval. And rater (treat-ment)	Control Self-eval. Mean	Control Rater Mean	Diff. betw. Self-eval and rater (cont-rol)
Spends time teaching and coaching.	4.00	2.61	1.39	4.00	3.71	.29
Treats me as an individual rather than just as a member of a group.	4.00	1.55	2.45	3.75	2.79	.96
Considers me as having different needs, abilities, and aspirations from others.	4.00	1.17	2.83	4.00	2.79	1.21
Helps me develop my strengths.	3.67	2.28	1.39	3.75	3.25	.50

Table 40

Treatment Group Means by Item for Individualized Consideration (Pre and Post Comparison)

Item Description	Pre Test Self-eval. Mean	Post Test Self-Eval Mean	Diff. betw. Self-eval. Pre and post	Pre Test Rater Mean	Post-Test Rater Mean	Diff. betw. Rater pre and post
Spends time teaching and coaching.	4.00	4.00	0	3.47	2.61	.86
Treats me as an individual rather than just as a member of a group.	2.67	4.00	1.33	2.80	1.55	1.25
Considers me as having different needs, abilities, and aspirations from others.	4.00	4.00	0	2.44	1.17	1.27
Helps me develop my strengths.	4.00	3.67	.33	3.11	2.28	.83

Table 41

Sample Means by Item for Additional Factors - Effectiveness (Post-test, separated by Treatment and Control)

Item Description	Treat-ment Self-eval. Mean	Treat-ment Rater Mean	Diff. betw. self-eval. And rater (treat-ment)	Control Self-eval. Mean	Control Rater Mean	Diff. betw. Self-eval and rater (cont-rol)
Is effective in meeting my job-related needs.	2.33	2.78	.45	3.50	3.42	.08
Is effective in representing me to higher authority.	3.33	2.44	.89	3.50	3.62	.12
Is effective in meeting organizational requirements.	3.67	2.89	.78	3.50	3.54	.04
Leads a group that is effective.	3.67	2.33	1.34	3.50	3.58	.08

Table 42

Treatment Group Means by Item for Additional Factors - Effectiveness (Pre and Post Comparison)

Item Description	Pre Test Self-eval. Mean	Post Test Self-Eval Mean	Diff. betw. Self-eval. Pre and post	Pre Test Rater Mean	Post-Test Rater Mean	Diff. betw. Rater pre and post
Is effective in meeting my job-related needs.	3.00	2.23	.77	3.52	2.78	.74
Is effective in representing me to higher authority.	3.00	3.33	.33	3.47	2.44	.03
Is effective in meeting organizational requirements.	3.67	3.67	0	3.03	2.89	.14
Leads a group that is effective.	3.67	3.67	0	3.05	2.33	.72

Table 43

Sample Means by Item for Additional Factors - Satisfaction (Post-test, separated by Treatment and Control)

Item Description	Treat-ment Self-eval. Mean	Treat-ment Rater Mean	Diff. betw. self-eval. And rater (treat-ment)	Control Self-eval. Mean	Control Rater Mean	Diff. betw. Self-eval and rater (cont-rol)
Uses methods of leadership that are satisfying.	3.33	2.72	.61	3.25	3.48	.23
Works with me in a satisfactory way.	4.00	3.00	1.00	3.50	3.62	.12

Table 44

Treatment Group Means by Item for Additional Factors - Satisfaction (Pre and Post Comparison)

Item Description	Pre Test Self-eval. Mean	Post Test Self-Eval Mean	Diff. betw. Self-eval. Pre and post	Pre Test Rater Mean	Post-Test Rater Mean	Diff. betw. Rater pre and post
Uses methods of leadership that are satisfying.	4.00	3.33	.67	3.19	2.72	.47
Works with me in a satisfactory way.	4.00	4.00	0	3.39	3.00	.39

Table 45

Sample Means by Item for Additional Factors – Extra Effort (Post-test, separated by Treatment and Control)

Item Description	Treat-ment Self-eval. Mean	Treat-ment Rater Mean	Diff. betw. self-eval. And rater (treat-ment)	Control Self-eval. Mean	Control Rater Mean	Diff. betw. Self-eval and rater (cont-rol)
Gets me to do more than I expected to do.	3.33	2.55	.78	3.50	3.19	.31
Heightens my desire to succeed.	3.33	2.83	.50	3.50	3.29	.21
Increases my willingness to try harder.	4.00	2.72	1.28	3.50	3.35	.15

Table 46

Treatment Group Means by Item for Additional Factors – Extra Effort (Pre and Post Comparison)

Item Description	Pre Test Self-eval. Mean	Post Test Self-Eval Mean	Diff. betw. Self-eval. Pre and post	Pre Test Rater Mean	Post-Test Rater Mean	Diff. betw. Rater pre and post
Gets me to do more than I expected to do.	4.00	3.33	.67	3.11	2.55	.56
Heightens my desire to succeed.	4.00	3.33	.67	3.22	2.83	.39
Increases my willingness to try harder.	4.00	4.00	0	3.22	2.72	.50

Figures

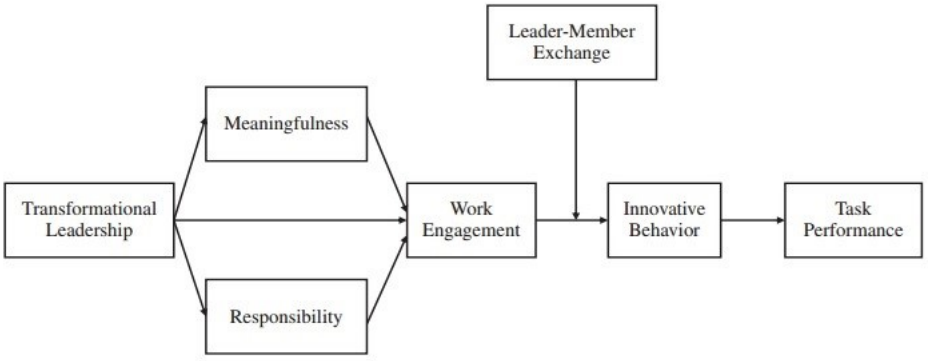

Figure 1. "The Hypothesized Model". Aryee, Walumbwa, Zhou, and Hartnell (2012). P. 3.

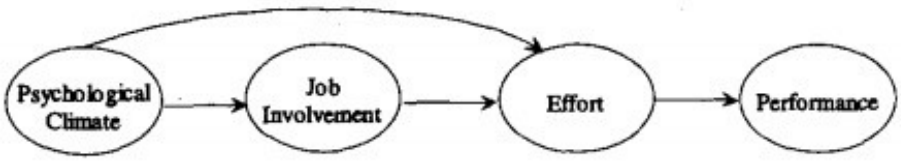

Figure 2. "Hypothesized Model". Brown and Leigh (1996). P. 359.

Inputs	Activities and Participants	Outputs	Short-term Outcomes	Medium-term Outcomes	Long-term Outcomes
Support of university presidents of the program and recommendation of potential participants. Facilitator Learning Management System (LMS) Multifactor Leadership Questionnaire (MLQ)	Activities: Professional development program in transformational leadership. Online Online participation in discussions. Complete reflection exercises at the end of each module. Participants: Faculty supervisors at private universities in Panama.	Reflections about the importance of attributes and behaviors that are aligned with transformational leadership. MLQ Results	Increase the awareness of the influence that different styles of leadership have on faculty engagement, especially transactional leadership versus transformational leadership.	Ability and willingness to modify behavior and style of leadership towards a transformational leadership style.	Improvement in the organizational culture, which facilitates an increase in faculty engagement.

Figure 3. Logic Model

Appendices

Appendix A

University President Individual Interview Questions

1. Roughly how many professors does your university employ?
2. Roughly, what is the distribution of faculty by level of education? How many professors have undergraduate degrees, master's degrees and doctoral degrees?
3. Please explain how the hiring process works for your institution.
4. Are there formal employment statuses and classifications in place for faculty, such as tenure? If so, what are they? If there is no formal structure in place, what informal structures exist when classifying faculty?
5. If faculty are divided into part-time and full-time, roughly, what is the distribution of faculty in each area or classification?
6. From the professors that teach part-time, how many do you estimate also work at other educational institutions?
7. Can you make a distinction between those who are dedicated to tach and those who have their consulting company or work in the public or private institution?
8. Would you say part-time faculty are loyal to your institution?
9. What would you estimate is the annual percentage of rotation of faculty?
10. Is it a concern?
11. How would you describe a professor that is engaged?
12. Following your description, what percentage of your faculty would you say are engaged?
13. Following your description, what differences do you observe in engagement between part-time faculty and full-time faculty?

14. Aside from teaching, in what ways are faculty in your institution engaged?
15. In what ways does the institution promote for faculty to be engaged?
16. Does your institution conduct surveys that measure faculty satisfaction? Can you provide general information regarding the results of these surveys?
17. What are the challenges or the opportunities of improvement that are most visible?
18. What resources or benefits does a professor receive?
19. If you had an excess of resources to improve faculty engagement, what would you do?

Appendix B

Invitation Letter for University Presidents

Panama, February 27, 2018

To whom it may concern:

By means of this letter, we would like your support in inviting faculty supervisors of your institution to be a part of a research study. The study is called: Professional development in transformational leadership to increase knowledge and awareness of leadership and organizational climate in private higher education in Panama. The program consists of a 12-week blended format professional development program in transformational leadership. It is made up of 6 two-week online sessions, and each session will have one group face-to-face meeting. The estimated time that participants are expected to dedicate as part of their participation in this program is 4-5 hours per week. The study is experimental, which means that participants may be randomly assigned to a control group or a treatment group (the group that will receive the professional development program). Delayed treatment may be offered to the control group after the study has been conducted.

The benefits for faculty supervisors to participate in this study are are:

- Compliance with several accreditation indicators in the factors of faculty, administration, and outreach.
- Enhance faculty supervisor knowledge and awareness of leadership and organizational climate theory and practice.
- Increase faculty supervisor self-knowledge of their individual leadership characteristics through a detailed report produced by the Multifactor Leadership Questionnaire.
- Provide an opportunity for faculty supervisors in Panama to share insights on professional best practices.
- Develop a project that will aim to improve the organizational culture or faculty engagement in your institution.

It is important to highlight that faculty supervisors must decide individually and without coercion from the institution to participate in the study. Participants may be excluded from the study if coercion is detected.

We would appreciate it if you can forward this information to the faculty supervisors of your institution, or provide a list with the contact information of faculty supervisors for us to invite to be a part of the study. If you have additional questions, please contact the Student Researcher for the project, Mariana León, at mleon2@jhu.edu, or (507) 6090-8320.

Best regards,

Mariana León

Student Researcher

Appendix C

Invitation Letter for Faculty Supervisors

Panama, February 4, 2018

To whom it may concern:

You are receiving this letter as an invitation to participate in a research study called: "Professional development in transformational leadership to increase knowledge and awareness of leadership and organizational climate in private higher education in Panama." The program consists of a 12-week blended format professional development program in transformational leadership. It is made up of 6 two-week online sessions, and each session will have one group face-to-face meeting. The estimated time that participants are expected to dedicate as part of their participation in this program is 4-5 hours per week.

The benefits of participating in this program are:

- Enhancing your knowledge and awareness of leadership and organizational climate theory and practice.
- Increase knowledge of your individual leadership characteristics through a detailed report produced by the Multifactor Leadership Questionnaire.
- Meet peers affiliated to other higher educational institutions and share insights on professional best practices.
- Develop a project that will aim to improve the organizational culture or faculty engagement in your institution.
- Earn a certificate of completion of the program.
- Help your institution comply with several accreditation indicators in the factors of faculty, administration, and outreach.

If you are interested in participating in this program, or if you have additional questions, please contact the Student Investigator for the project, Mariana León, at mleon2@jhu.edu, or (507) 6090-8320.

Best regards,

Mariana León
Student Investigator

Curriculum Vitae: Mariana Leon
Panama City, Republic of Panama
mleon2@jhu.edu / mariana.leon@qlu.pa

EDUCATION

Aug. 2015 – May 2019 — **Doctor of Education, Candidate**
Specialization in Entrepreneurial Leadership in Education
Johns Hopkins University
SENACYT Scholar
GPA: 3.79

May 2008 - Mar. 2010 — **Master of Business Administration**
Florida International University
42 credit hours, GPA 3.6
Class Representative

Jan. 2005 – Dec. 2007 — **B.A. in Political Sciences, Minor in Economics**
University of Louisville
GPA: 3.62
Cum Laude
University Honors Program
Golden Key International
National Society for Collegiate Scholars

PROFESSIONAL EXPERIENCE

April 2012 – Present — **Academic Vice President**
Quality Leadership University
Panama City, Panama

May 2010 – April 2012 — **Academic Dean**
Quality Leadership University
Panama City, Panama

January 2008 – May 2010 — **Assistant Director – Undergraduate Program**
Quality Leadership University
Panama City, Panama

BOARDS

January 2010 - Present — **Vice President, Board of Directors**
Quality Leadership University
Panama City, Panama

PROFESSIONAL MEMBERSHIPS

December 2014 – Present **Member**
Asociación Panameña de Ejecutivos de Empresa
(Panamanian Association of Business Executives)
President of the Free Enterprise Commission (2018-2019)
Vice-President of Youth Commission (2017-2018)
Panama City, Panama

March 2016 – Present **Member**
Global Shapers, Panama City Hub
World Economic Forum (WEF)
Panama City, Panama

GRANTS

"Environmental Education through the transformation of schools into sites that are eco-sustainable and environmentally friendly", $27,850, National Secretariat of Science and Technology (SENACYT), August 2018 – Present, Principal Investigator.

"Latin American University Research and Doctoral Support Programme", $99,000, Erasmus + Programme, European Union, October 2018 – October 2018, Co-Collaborator.

PRESENTATIONS

"An intervention in transformational leadership to improve the leadership attributes and behaviors in faculty supervisors in private universities in Panama". Presented in National Congress for Science and Technology. Panama City, Panama. October 2018.

"The role of faculty engagement in an engaged university". Presented in Higher Education Reform Conference, Baltimore, Maryland, USA. September 2018.

"Part-time faculty engagement in private universities in Panama". Presented in Expo-Research. Panama City, Panama. October, 2016.

"Perspective of Panamanian university presidents about faculty engagement." Presented in Congress of Anthropology and History. Panama City, Panama. September 2016.

PUBLICATIONS

Leon, M. and De Gracia, G. (2019) "Identity perceptions of youth in middle and high-school: Beyond being mestizo" in Hurd, E. (Ed.), *The reflexivity of pain and priviledge: Auto-ethnographic collections of mixed identity.* Boston, MA: Brill Sense.