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Examining Faculty Transformational Leadership Style and University Sophomores' Institutional Commitment

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Walden University

College of Management and Human Potential

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the review committee have been made.

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Walden University
2023

Abstract

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Institutional Commitment

by

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MPhil, Walden University, 2023

MS, University of Benin, 2000

BS, Obafemi Awolowo University, 1994

Dissertation Submitted in Partial Fulfillment
of the Requirements for the Degree of
Doctor of Philosophy
Management

Walden University

February 2024

Abstract

Leadership capability to promote student institutional commitment in universities is critical for ensuring degree completion which is linked to student enrollment and effecting positive social change. The degree to which subcomponents of faculty's transformational leadership styles impact their university sophomores' institutional commitment is not known. Guided by the transformational leadership theory, this quantitative, nonexperimental, correlational study examined the relationship between subcomponents of faculty's transformational leadership styles as independent variables, and university sophomores' institutional commitment as the dependent variable. Primary survey data were collected from 118 faculty and sophomores at a Texas university; participants completed the Multifactor Leadership Questionnaire 5X-Short and the College Persistence Questionnaire. Pearson correlation and multiple regression analysis were used to test the hypotheses. Statistical analysis results showed a significant degree of correlation across all the independent variables with Pearson correlation values less than 0.7 in all cases but one. Furthermore, findings established that these independent variables collectively do not have a statistically significant effect, and do not individually have comparatively different impacts on institutional commitment ($-.09 \geq r \leq .142$; $p > .01$). These findings validate the relevance of transformational leadership in universities and set a baseline for investigating other relationships. An implication for positive social change is the potential to increase awareness of university leaders' need for proactive measures to leverage faculty's transformational leadership styles. This may promote students' institutional commitment for degree completion.

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Dedication

I give thanks and ultimate dedication to my Author and Finisher, the Lord Jesus Christ, for the success of my PhD research. To my lovely wife, Dr. Dupe Kuteyi, I sincerely appreciate your unwavering support and understanding. To our children who are also our motivators, Fikunre, Adesire, and Korede, I say thank you.

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Chapter 1: Introduction to the Study

In this quantitative, nonexperimental, correlational study, I examined the relationship between the subcomponents of faculty's transformational leadership styles and their university sophomores' institutional commitment. Specific subcomponents of transformational leadership styles—namely, attributional idealized influence, behavioral idealized influence, inspirational motivation, intellectual stimulation, and individual consideration (Bass, 1985)—may have comparatively different impacts on university sophomores' institutional commitment. Knowledge of the potential impacts could help university leaders, faculty members, and policy makers to address the social problem of dropout of sophomores in universities, defined as their post-enrollment decision to discontinue studies altogether (Bäulke et al., 2022; Simón & Puerta, 2022). The findings may have broader applicability by being transferable to organizational management.

I begin Chapter 1 by providing background information on the study I conducted to address the study topic. Then, I state the problem and purpose of the study, present the research question and hypotheses, and discuss the theoretical foundation of the study. Chapter 1 also includes an overview of the nature of the study; definitions of key terms; and discussion of the assumptions, scope and delimitations, and limitations of the study. The significance of the study, including its potential contribution to theory, practice, and positive social change, is also addressed. The chapter concludes with a summary and a transition to Chapter 2.

Background of the Study

McGregor's (1960) transformational leadership theory was the theoretical foundation for this quantitative study. Individualized consideration, intellectual stimulation, and charismatic leadership were identified by Bass (1985) through exploratory factor analysis as elements of transformational leadership. Avolio et al. (1991) added inspiration and motivation as elements of transformational leadership. The independent variables for the study came from transformational leadership theory. These variables—attributational idealized influence, behavioral idealized influence, inspirational motivation, intellectual stimulation, and individual consideration—have all been supported by empirical studies (Avolio et al., 1991; Bass, 1985).

Students' institutional commitment is defined by their level of satisfaction with their institution and their consideration to remain enrolled (Wardley et al., 2017). Tinto (1975) noted that dropout occurs when students fail to honor their commitment to their predetermined educational goals established at enrollment. The social problem of decreasing institutional commitment by university sophomores contributes to the declining student enrollment trend in U.S. universities, which, if unaddressed, could ultimately impact the competitive performance of the U.S. economy and potentially create a demographic imbalance in education (Eide, 2018; Pavlov & Katsamakos, 2020). In the United States, there were 4,000,000 million fewer college students enrolled in 2022 than 10 years prior, and the COVID-19 epidemic hastened this fall with a 10% drop in enrollment (World Economic Forum, 2022). One third of students drop out of college, each year, on average, which exacerbates an already existing student loan crisis in the

United States. The National Center for Education Statistics found that between 2012 and 2017, 38%–39% of students who took out student loans did not complete college (National Center for Education Statistics, n.d.; World Economic Forum, 2022). This is a growing concern.

The body of literature on transformational leadership continues to grow, and although researchers continue to study transformational leadership in universities, there is very little or no literature on how the subcomponents of faculty's transformational leadership styles affect their sophomores' institutional commitment as an influencer of dropout decision-making, given the social problem of decline in university enrollment (Howell et al., 2022; McRoberts & Miller, 2015; Pavlov & Katsamakos, 2020). Available research on the impact of transformational leadership is limited in scope, prompting recommendations from researchers for additional studies into sectors like education to improve generalizability (Donkor, 2022; Noureen et al., 2020; Puni et al., 2022; Rawashdeh et al., 2021). Therefore, research into the relationship between faculty's transformational leadership styles and their university sophomores' institutional commitment may generate transferable leadership and management learnings for positive social change (Howell et al., 2022; Massoud & Ayoubi, 2019; Wijesundara & Prabodanie, 2022; Williams, 2018). I initially intended to conduct this study at the University of Houston's College of Engineering and their sophomores' institutional commitment. I ultimately obtained data from another university in the USA state of Texas.

The findings from this study may provide useful information on the effectiveness of leadership styles in higher educational institutions, a topic for which researchers have divergent views (Kasalak et al., 2022; Maheshwari & Kha, 2023). Universities are among the dynamic organizations undergoing transformational development and are in need of leadership capable of managing their challenges and transformations (Alessa, 2021). The appointment of university leaders who possess transformational leadership styles is essential for leadership practice, and credible criteria must be established for choosing candidates with these qualifications. (Alessa, 2021). Simón and Puerta (2022) noted global concern about retention of students in universities, which is related to students' institutional commitment.

Researchers have been developing models to predict early dropout and direct efforts to support students, including sophomores, who are at risk of dropping out because of associated social ramifications (Segura et al., 2022; Simón & Puerta, 2022). Given that transformational leadership has been shown to be essential to higher education's quality, performance, and long-term sustainability and that education is a catalyst for positive social change, this study may be pertinent to various stakeholders in higher education, policy, and management. Specifically, the findings from this study may assist university leadership in helping faculty to adopt specific transformational leadership styles, which may improve their sophomores' institutional commitment. Greater institutional commitment among sophomores may help to sustain enrollments, which may support positive social change.

Problem Statement

The specific research problem was that the degree to which subcomponents of faculty's transformational leadership styles affect their university sophomores' institutional commitment is not known. Researchers have investigated the institutional commitment of sophomores in universities, but there is very little or no literature on how subcomponents of faculty's transformational leadership styles affect their university sophomores' institutional commitment (Howell et al., 2022; Pavlov & Katsamakos, 2020). Globally, leaders of higher education institutions are concerned about students' retention and ultimate academic success. According to García-Ros et al. (2019), just 40.3% of college students in North America historically completed their degrees, whereas 28%–35% leave postsecondary education in their 1st year. Institutional commitment has been identified and validated as a key dimension in university student retention (Davidson et al., 2015). There is a broad research opportunity around potential variables whose relationships could be studied to explain reduction in students' institutional commitment, providing academic and institutional decision-makers with useful data regarding the successes and shortcomings of services and programs aimed at encouraging students' academic involvement and performance while facilitating adjustments to the students' unique needs (García-Ros et al., 2019). Addressing dropout could also have beneficial impacts at the individual level. Guzmán et al. (2021) noted that dropout occasioned by lack of institutional commitment, among other factors, could have long-term psychological repercussions on students.

For financiers of university education, student dropout translates to irrecoverable investments; for the university, there are financial and reputational losses, whereas impact could be financial and social in nature for governments (Alban & Mauricio, 2019; Dewberry & Jackson, 2018). I examined independent variables associated with subcomponents of faculty's transformational leadership style in this study; my focus was the relationship, if any, of the variables to university sophomores' institutional commitment. Research findings may identify causes and mitigation strategies that stakeholders may use to improve leadership practices and support students, including sophomores, who are at risk of dropping out of universities, with associated social ramifications.

Purpose of the Study

The purpose of this quantitative study was to examine the degree to which subcomponents of faculty's transformational leadership styles have a relationship with their university sophomores' institutional commitment. The five independent variables reflected faculty's transformational leadership styles: attributional idealized influence, behavioral idealized influence, inspirational motivation, intellectual stimulation, and individual consideration. (Bass & Riggio, 2006). University sophomores' institutional commitment was the dependent variable. I quantitatively studied relationships between all five subcomponents of faculty's transformational leadership styles and their university sophomores' institutional commitment, including how specific subcomponents of these transformational leadership styles may have comparatively different impacts on institutional commitment.

Research Questions and Hypotheses

The research question, in line with the study purpose, was, What is the relationship between the five subcomponents of transformational leadership style of faculty and their university sophomores' institutional commitment? The associated hypotheses were as follows:

H₀: Attributional idealized influence, behavioral idealized influence, inspirational motivation, intellectual stimulation, and individual consideration of faculty do not have a statistically significant effect on their university sophomores' institutional commitment.

H_a: Attributional idealized influence, behavioral idealized influence, inspirational motivation, intellectual stimulation, and individual consideration of faculty have a statistically significant effect on their university sophomores' institutional commitment.

I used the Multifactor Leadership Questionnaire (MLQ 5X; Avolio & Bass, 2004; Bass & Avolio, 1997) and the College Persistence Questionnaire (CPQ; Davidson & Beck, 2018, 2021) for collecting primary data on the independent and dependent variables, respectively. The repeated application of the CPQ has established its reliability and validity (Reynolds & Cruise, 2020; Simón & Puerta, 2022). I intended to collect data from faculty and sophomores at the University of Houston's College of Engineering using an online survey platform. However, data were collected from faculty and sophomores at a backup partner organization, TSU's COSET. To analyze the collected data, I used IBM's Statistical Package for Social Sciences (SPSS). Descriptive analysis

described the basic characteristics of the respondents relative to survey questions. Means and standard deviations were used to analyze the level of practice of each transformational leadership subcomponents.

Theoretical Foundation

The theory that grounded this study was McGregor's (1960) transformational leadership theory, which describes transformational leadership as occurring when the leader engages with followers to raise their level of performance and motivation. According to McGregor's hypothesis, leaders who subscribe to Theory X assumptions think that individuals need to be pushed into working hard and demonstrating commitment because they are unmotivated, irresponsible, and lazy. Such leadership presumptions result in tight surveillance and control of employees, drain their creativity, and demotivate them. On the other hand, leaders who adhere to Theory Y presumptions encourage workers to participate in joint problem solving, comprehend the demands of team members, and combine individual aspirations with organizational goals. Bass (1985) added to McGregor's work. Bass identified individualized consideration, intellectual stimulation, and charismatic leadership as elements of transformational leadership. Inspiration and motivation were added as elements of transformational leadership by Avolio et al. (1991). Key sub-components of transformational leadership theory are attributional idealized influence, behavioral idealized influence, inspirational motivation, intellectual stimulation, and individual consideration, which have all been supported by empirical studies (Avolio et al., 1991; Bass, 1985). These dimensions were the independent variables for this study.

Although the leader facilitates and initiates the control process in this manner, it is done with the workers' engagement in mind and can inspire and motivate them. Meng (2022) described higher education institutions' leadership styles as diverse and multidimensional at all levels. Pihie et al. (2011) investigated the relationship between transformational leadership and the styles of successful heads of academic departments in Malaysian universities. In their study, idealized influence and inspirational motivation obtained the greatest average ratings, whereas intellectual stimulation and individual consideration received the lowest ratings. The results also imply that contingent rewards, as a component of transactional leadership, have a major influence on leadership performance. These results agree with prior studies that a leader's transformational leadership scale score is highly linked with indicators of that leader's effectiveness.

Transformational leaders inspire their followers to dedicate themselves to the organization's goals and achieve performance results that exceed expectations (Steinmann et al., 2018). Transformational leaders activate their higher order needs as they articulate an inspiring vision and serve as role models in achieving the vision, according to Bass (1985), who noted that the process of motivating and transforming followers is accomplished by (a) raising their awareness of the significance and value of designated goals, (b) encouraging them to put aside personal interests for the good of the organization or team, and (c) activating their higher order needs. In this study, I examined the relationship between the five subcomponents of transformational leadership style of faculty and their university sophomores' institutional commitment. In Chapter 2, I

explain in detail how the theoretical foundation supported the development of the study's research question and associated hypotheses.

Nature of the Study

In this quantitative study, I examined the relationship between subcomponents of faculty's transformational leadership styles and their university sophomores' institutional commitment, as perceived by participants. A quantitative, nonexperimental, correlational approach was suitable for my study because the aim was to examine the relationship between subcomponents of leadership style and institutional commitment. The five independent variables were attributional idealized influence, behavioral idealized influence, inspirational motivation, intellectual stimulation, and individual consideration. University sophomores' institutional commitment was the dependent variable. To address the research question in this quantitative study, I initially planned to collect and evaluate numerical data from faculty and sophomores at the University of Houston's College of Engineering. I planned to use a cross-sectional approach involving the collection of data at one point in time from a representative sample of the population of interest. I ultimately obtained data from faculty and sophomores at TSU's COSET.

I based this quantitative, non-experimental, correlational research on Fisher's (1925, 1935) central theorem for inferential statistical sampling techniques, which involves the measurement of the effect of one or more independent variables on one or more dependent variables (see also Knight, 2010). I used SPSS software to perform multivariate linear regression (see Frankfort-Nachmias et al., 2020). I focused on survey data points related to the independent and dependent variables and used a quantitative

technique to examine the relationships between the independent and dependent variables. I measured all applicable survey items on a Likert-type scale whereby survey participants indicated to what extent they agreed or disagreed with a set of statements. The MLQ 5X-Short (Avolio & Bass, 2004; Bass & Avolio, 1997) was used to evaluate respondents' transformational leadership style. The MLQ 5X-Short is composed of items to measure subcomponents of transformational leadership. The scale has five choices per item: 0 (*not at all*), 1 (*once in a while*), 2 (*sometimes*), 3 (*fairly often*), to 4 (*frequently, if not always*).

Definitions

Idealized influence. The extent to which a leader inspires followers, maintains their respect and faith, inspires powerful emotions in them, and appeals to their hopes and dreams (Avolio & Bass, 1995, 2004; Chebon et al., 2019; Sutanto et al., 2021). These prompt subordinates to be eager to imitate the leader. Idealized influence is measured using a Likert scale and is treated as either an ordinal or as a continuous variable.

Individualized consideration. The extent to which leaders demonstrate concern for others, give tasks to specific people, and pay attention to individuals who seem to be less engaged in the group's activities (Avolio & Bass, 1995, 2004; Sutanto et al., 2021). The leader shows understanding for each follower's situation and background, pays attention to their concerns and needs, and extends help. Individualized consideration is measured using a Likert scale; it can be treated as either an ordinal or a continuous variable.

Inspirational motivation. The extent to which leaders convey a shared vision and make an effort to convey the importance of their subordinates' jobs while encouraging employees to increase their organization's mission awareness. A primary strategy of

inspirational motivation is to match individual needs with organizational needs. (Avolio & Bass, 2004; Chebon et al., 2019). With inspirational motivation, leaders set high expectations for their followers. Inspirational motivation is measured using a Likert scale; it can be treated as either an ordinal or a continuous variable.

Institutional commitment. The level of students' satisfaction with their institution and their anticipation of remaining enrolled (Tinto, 1975; Wardley et al., 2017). Given that students with strong loyalty to their school earn higher grades and are more likely to graduate than those with weaker feelings of loyalty, most colleges, like their workplace counterparts, understand the value of developing institutional commitment (Davidson et al., 2015). These factors place responsibility on higher education faculty and staff to engage students in their college experience. Institutional commitment is measured using a Likert scale; it can be treated as either an ordinal or a continuous variable.

Intellectual stimulation. The extent to which leaders support others' creativity by encouraging "out-of-the-box" thinking, accepting extreme viewpoints, and encouraging people to question their own values and beliefs as well as those of their leaders and organization (Avolio & Bass, 1995, 2004; Sutanto et al., 2021). Inspiration for ideas and imagination and the ability to identify issues and develop creative solutions are all components of intellectual stimulation. Intellectual stimulation is measured using a Likert scale; it can be treated as either an ordinal or a continuous variable.

Leadership. The process of inspiring or influencing others to accomplish organizational goals is known as leadership. It entails nurturing and enhancing employees' motivation and sense of worth so they can accomplish organizational

responsibilities and goals. (Kesting et al., 2016). Leadership is linked to a set of behaviors.

Leadership style. Behavioral strategies managers use to motivate, influence, and guide their teams. A leader's leadership style determines how they handle their team's and stakeholders' demands and expectations while carrying out their plans and strategies to accomplish specific goals. (Gemeda & Lee, 2020). Leadership styles can also be referred to as *leadership approaches*.

Transformational leadership. A leadership style that leaders use to motivate employees to contribute to a vision; leaders do so by establishing relationships with employees, considering their needs, and assisting them in realizing their full potential. It also helps to offer a clear and justifiable business vision and mission. The ability of a leader to inspire employees to perform above and beyond expectations is known as transformational leadership (Khan et al., 2020). It is an approach that facilitates change. Transformational leadership is measured using a Likert scale; it can be treated as either an ordinal or a continuous variable.

Assumptions

I based this study on several assumptions. I wanted to provide a better understanding of the relationship between the five subcomponents of transformational leadership style of faculty and their university sophomores' institutional commitment. The theoretical foundation on transformational leadership was assumed sufficient as the basis of an entire research strategy, allowing for the generation of valid data consistent with preexisting knowledge. It was assumed that the survey questions sufficiently

addressed pertinent issues, subject to analysis, in terms of scope and accuracy. I assumed that every survey respondent was mentally and intellectually capable of understanding the questions as I intended, that they provided honest responses, that the quantity and quality of participants were sufficient to allow generalization, and that the yield of completed survey questionnaires allowed for generalization.

I used the process outlined by Krejcie and Morgan (1970) to identify an optimum sample size. Specifically, I used the process to determine whether the sample size would be sufficient to detect an effect allowing generalization with a degree of confidence. I assumed that the IBM SPSS quantitative analysis tool produced accurate results, using survey data for the independent and dependent variables, and that the Likert scale used in the survey questionnaires allowed a correct understanding of degrees of differences between indicators.

Scope and Delimitations

To answer the research question and test the hypotheses, I had planned to analyze survey data from faculty and sophomores in the College of Engineering of the University of Houston. However, I obtained data from faculty and sophomores in the COSET of TSU. Data from other departments of the University were excluded. The survey did not accommodate students other than sophomores. My study was also limited to transformational leadership theories and subcomponents. Asrar-ul-Haq and Anwar (2018) noted extensive research on leadership, resulting in many leadership theories and models which can fit in different contexts and affects different outcomes. Leadership theories other than transformational were excluded from the study.

. According to Alvesson and Kärreman (2016), ideological motivations may routinely induce overstating the contributions of transformational leaders and the morality of their activities. Despite these criticisms, Bass's (1985) transformational leadership theory continues to yield new theoretical and practical findings, and there is broad consensus among academics that the current theoretical framework for transformational leadership is credible (Maheshwari & Kha, 2023).

Study limitations are problems in a research design that could affect a study's findings and conclusions, according to Ross and Bibler (2019). They stated that researchers are responsible for fully and truthfully disclosing a study's shortcomings to the academic community. Delimitations are the issues a researcher includes and excludes to make a project manageable and focused on the research subject, in contrast to limitations, which are problems the researcher notes in retrospect after the end of a study (Coker, 2022). The potential issue, its ramifications, potential workarounds, and any mitigation steps should all be covered in a clear discussion of a study's limitations, according to Ross and Bibler. By placing the results in the appropriate context, readers might be prevented from overemphasizing or underplaying research findings. My study discussed limitations and made recommendations for future research.

Limitations

One of the limitations of this study was the inability to secure sufficient representative data across college disciplines that would make the outcome generalizable. The scope of this study was defined to include participants in a specific college discipline. In Chapter 5, I offer research recommendations for expanding future scope.

Another limitation was the nature of the investigated constructs, which required some respondents to respond to questions about their leadership styles. This could raise concerns about common method bias but not at levels high enough to impact the results, given the use of validated and independent survey questionnaires (Kock et al., 2021). The potential for subjectivity on the side of respondents and the cross-sectionality of gathering some data as a one-time snapshot are two additional limitations posed by my data collection methodology. Future researchers might consider gathering such data at multiple points in time for integration into a more thorough statistical analysis.

I used alternative explanations to evaluate threats to internal validity. Burkholder et al. (2020) described the two main approaches for addressing threats to external validity as (a) including thorough literature reviews that build on prior related studies and (b) narrowing the scope of the study and comparing new findings with what is already known in the literature. A validity concern was the potential for the responses by faculty leaders about their leadership styles to differ from their actual behaviors.

Consistency of data and analytical techniques, as well as minimizing any personal or research method biases that can affect the results, were part of the reliability assurance for my study (see Noble & Smith, 2015). The use of validated instruments to measure the variables and the standard for interpretation assured reliability (Taherdoost, 2016). By going through the institutional review board (IRB) process at Walden University and TSU, I adhered to the ethical compliance guidelines and ensured that conflicts of interest did not affect the methodology and results. An independent researcher or the Ethics Committee could be consulted if in doubt, but this was not required for my study.

Significance of the Study

My study is significant in that the results may be useful for academic leaders to understand how faculty's transformational leadership styles relate to how university sophomores' institutional commitment could influence their dropout decision-making.

Significance to Theory

The findings from my study may provide useful information on the effectiveness of leadership styles in educational institutions (Kasalak et al., 2022). Given that the scope of currently available research into the impact of transformational leadership on performance is narrow and industry-focused, this study on the educational sector may improve the generalizability of existing leadership research (Donkor, 2022; Noureen et al., 2020; Puni et al., 2022; Rawashdeh et al., 2021). I sought to expand the meaningfulness of transformational leadership research.

Significance to Practice

Dynamic organizations such as universities are undergoing rapid development and therefore need leadership capable of managing their challenges and transformations (Alessa, 2021). Furthermore, Alessa (2021) noted that for leadership practice, transformational leadership styles and traits are critical for appointing university leaders, and specific measures need to be set for selecting people with transformational leadership credentials. My research may contribute to establishing leadership selection processes.

Significance to Social Change

Simón and Puerta (2022) noted the global concern about the retention of students in universities, which is related to students' institutional commitment. Researchers have

been developing models to predict early dropout and direct efforts to support students, including sophomores, who are at risk of dropping out; this research activity is because of associated social ramifications. Given that transformational leadership has been shown to be essential to higher education's quality, performance, and long-term sustainability and that education is a catalyst for positive social change, my study may provide lessons for stakeholders in higher education, policymakers, and management scholars. Specifically, the findings may assist university leadership in identifying and adopting specific transformational leadership styles for faculty that may improve their sophomores' institutional commitment and improve enrollments, which may contribute to positive social change.

Summary and Transition

In this quantitative, nonexperimental, correlational study, I examined the relationship between the five subcomponents of transformational leadership style of faculty as independent variables and university sophomores' institutional commitment as the dependent variable. The findings of the study may generate positive social change by assisting university leadership in identifying and adopting specific transformational leadership styles for faculty that may improve their sophomores' institutional commitment and improve enrollments. Chapter 1 included the background of the problem; the problem and purpose statements; the theoretical foundation; the research question and hypotheses; definitions of terms; and discussion of the assumptions, scope and delimitations, limitations, and significance of the study. In Chapter 2, I reviewed the literature on transformational leadership and institutional commitment.

Chapter 2: Literature Review

In Chapter 2, I review literature on the transformational leadership styles of faculty and the institutional commitment of university sophomores. Although there is limited knowledge of the leadership styles of leaders in the educational sector (Sarwar et al., 2022), transformational leadership style has been found to have high, positive, and significant relations with institutional readiness for change (Zelege, 2021). It is known that sophomores' institutional commitment is a measure of satisfaction with their institution and their anticipation of remaining enrolled, and the commitment may be impacted by subcomponents of faculty's transformational leadership styles (Bäulke et al., 2022; Simón & Puerta, 2022; Wardley et al., 2021). The purpose of this study was to examine to what degree the subcomponents of faculty's transformational leadership styles have a relationship with their university sophomores' institutional commitment.

Researchers have investigated the relationship between subcomponents of transformational leadership styles in the academic context (Hesar et al., 2019). However, in reviewing the literature, I found no study on how these subcomponents relate to sophomores' institutional commitment. Researchers have also studied the relationship between university leadership and students in different contexts. Cao (2022) observed a strong correlation between lecturers' leadership styles and students' learning satisfaction but did not find evidence of a statistically significant relationship between students' satisfaction and learning outcomes. In Chapter 2, I discuss foundational theories on leadership styles, followed by a review of the institutional commitment of students, with a focus on university sophomores.

Literature Search Strategy

I used the search engine Google Scholar as well as databases that I accessed from Walden University Library to locate scholarly peer-reviewed articles. I searched the databases Dissertations & Theses @ Walden University, ERIC, and SAGE Journals, along with Walden's Thoreau multidatabase search tool. In addition, I searched for literature on the academic social networking site ResearchGate. Researchers conducting a literature review have inherent complexities in creating systematic review search algorithms, choosing the right amount of sensitivity and specificity, and converting search strategies between databases (Bramer et al., 2018). Over 170 peer-reviewed articles, focusing mostly within the 2017–2022 time frame, were downloaded from these databases and the Walden University library website. The keywords searched included *transformational leadership, leadership styles, universities, higher education, colleges, U.S. colleges, student enrollment, enrollment decision, dropout, institutional commitment, and discontinue college education*. Given the limited research on the transformational leadership styles of faculty and institutional commitment of university sophomores, some dissertations and conference proceedings published between 2017 and 2022 were reviewed to extract data and background information relevant to the study.

Theoretical Foundation

The theory that grounded this study was McGregor's (1960) transformational leadership theory, which asserts that every leader has fundamental beliefs about how people behave and that these beliefs affect the type of leadership the leader employs. According to McGregor (1960, 1967), as businesses grow more competitive due to

technological improvements, the success of organizations would depend more on the dynamics of the people within them. According to McGregor, to get the most out of people, a business leader must treat them as unique individuals with their own goals and values. McGregor emphasized that people should not be viewed like machines but rather as living beings who may be motivated to support corporate goals. He underlined how important it is for leaders to be concerned with their attitudes toward others since that may determine how those they lead will respond to them.

On human leadership and management, McGregor (1960) proposed Theory X and Theory Y. Theory X promotes the idea that people despise work by nature and that the only ways to encourage them to perform at work are through coercion and direction. According to Theory X, leadership should be done in an authoritarian manner with a greater emphasis on the job than the people. Conversely, Theory Y's management style focuses more on the individual and values their worth. According to Theory Y, in the perfect work environment, people can reach their full potential and contribute significantly to their organizations.

Some authors view McGregor's work as a foundational theory of motivation, whereas others disagree and believe it to be a philosophy of human nature that makes more sense when discussing leadership than foundational theories of motivation (Montana & Charnov, 2000). However, McGregor's theories on managerial behavior and leadership have had a significant impact on management and leadership theory and practice. Employees may look up to and rely on their bosses in traditional hierarchical leadership, which is quite dominating. Such might waste human talent and potential and

be very disempowering. The ability of leaders to appreciate and understand the strength of the human capacity for growth, collaboration, and development, according to McGregor, may be constrained if they do not question some of their fundamental beliefs about people.

The term *transformational leadership* was thought to have been first used by Downton (1973), but it fully emerged and gained prominence from the study by Burns (1978), where the term *transforming leadership* was first introduced in the context of political leaders adopting the style of transformational leaders. Burns differentiated a transformational leader from a traditional leader and their transactional style of leadership. Bass (1985) identified transactional and laissez-faire as styles of leadership other than transformational and extended Burns's work into a transformational leadership theory. Bass provided the foundation for quantitatively examining the effects of transformational leadership on organizational followers and expanded the applicability beyond political leadership into other fields of leadership.

Using exploratory factor analysis, Bass (1985) highlighted individualized consideration, intellectual stimulation, and charismatic leadership as transformational leadership qualities. Inspiration and motivation were added as other elements of transformational leadership by Avolio et al. (1991). These factors have been supported by empirical research (Avolio et al., 1991; Bass, 1985). I employed Northouse's (2016) transformational leadership model as the theoretical foundation for my study. Researchers such as Bass, Avolio, and Northouse have examined transformational leadership and performance in various contexts over the last few decades. Scholars have

investigated the impact of transformational leadership in relation to the president of higher educational institutions. Other researchers studied middle-level transformational leaders such as department chairs and deans. Basham (2012) examined the qualities and traits of American college presidents regarded as transformational leaders. Basham's research validated the qualities of higher education leaders that have been reported on and how they have changed the environment for learning in their institutions. Basham's study emphasizes the collective and personal characteristics necessary to develop a transformative environment that supports transformational leadership.

Theories of transformational and charismatic leadership place emphasis on emotions and values as opposed to "traditional" leadership theories, which focus on rational processes. They also acknowledge the significance of symbolic behavior and the leader's role in helping followers understand events (Yukl, 1999). The idea of transformational leadership describes how a leader can influence others to make selfless choices, commit to challenging goals, and achieve far more than was initially expected. Yukl (1999) stated that the transformational leadership theory significantly advances understanding of leadership processes by explaining the unique influence some leaders have on followers.

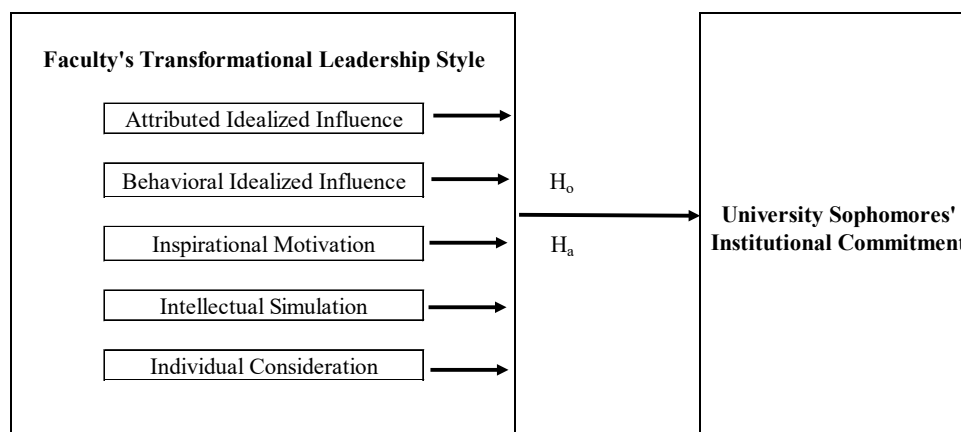
For the foreseeable future, leadership will remain a crucial human resource concern, given the growing concept of congruence between leaders and followers (Asrar-ul-Haq & Anwar, 2018; Lamm et al., 2021). The higher education industry employs a large number of people, yet administration and leadership problems still exist because there is a shortage of people who have the specialized advanced leadership skills and

competencies that educational institutions in the 21st century want and need. The theory and practice of transformational leadership are known for bridging leadership pipeline issues and generating highly qualified future leaders (Lamm et al., 2021). It is a thoroughly studied, multidimensional idea composed of behaviors and attitudes that encourage followers to enhance their levels of dedication and tenacity for the good of the group, leading to improved performance all around. Because educational institutions are considered to be bureaucratic, Lamm et al. (2021) emphasized that transformational leadership is especially important for them as critical institutions.

Transformational leadership primarily has four attributes: idealized influence, inspirational motivation, intellectual stimulation, and individualized consideration. When idealized influence is expanded into the two aspects of attributes and behaviors, the attributes of transformational leadership number five (Bass & Riggio, 2006). The five attributes formed the independent variables for my research.

Conceptual Framework

The concept of transformational leadership has continued to evolve in academic literature and management practice through the works of James MacGregor Burns, Bernard M. Bass, and Bruce J. Avolio. My study examines the relationship between the subcomponents of faculty's transformational leadership styles and their university sophomores' institutional commitment using the following conceptual framework in Figure 1.

Figure 1*Conceptual Model***Development of the Multifactor Leadership Questionnaire**

Bass and co-researchers identified and measured subcomponents of transformational leadership using the MLQ, where trained judges classified 141 statements as either transformational or transactional leadership. The questionnaire was then administered to U.S. Army officers who rated their superior officers on a scale from 0 (not observed) to 4 (behavior observed frequently). Subsequent studies built on this foundation to analyze frequencies of behaviors observed by subordinates across other organizations, leading to the development of the following four components of transformational leadership (Bass, 1998):

- Charismatic leadership, or idealized influence: As role models, transformational leaders are revered and admired by their followers. Leaders are people whom other people identify with, and they want to be like them. Leaders are willing to take risks and have a clear sense of purpose. Le and Le

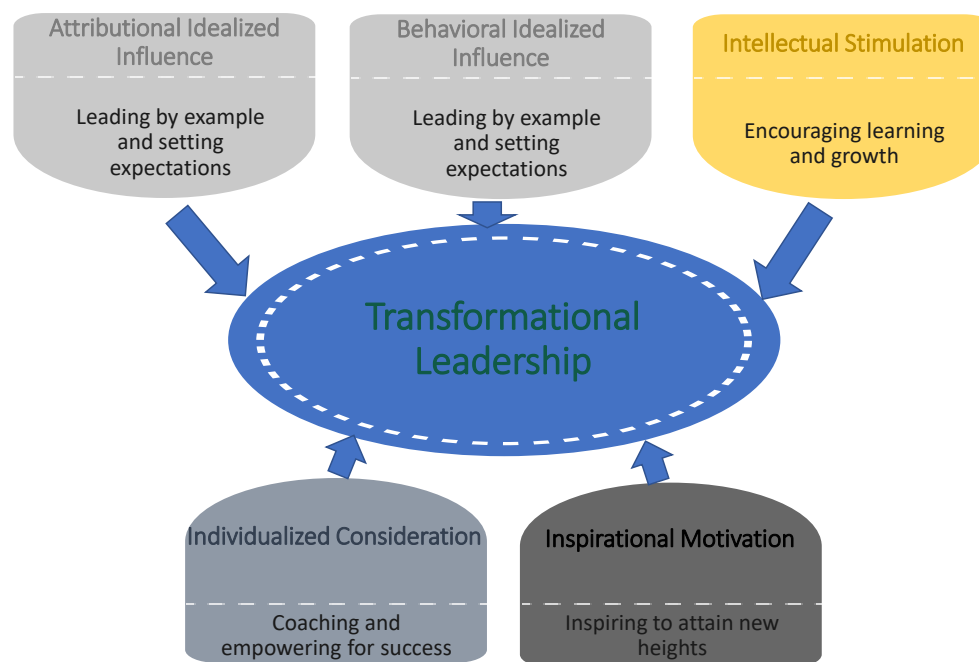
(2021) showed there is a significant effect of transformational leaders' idealized influence on innovation performance. Similarly, Mgqibi and Sines (2020) described a statistically significant relationship between idealized behavior of transformational leaders and the success of change initiatives.

- **Inspirational motivation:** Transformational leaders exhibit behaviors that excite, inspire, and challenge others. These leaders clearly express expectations, and they exhibit a dedication to their objectives and a shared vision. From research, Top et al. (2020) described the positive impacts of inspirational motivation of transformational leaders on employee performance in the Kurdistan region of Iraq.
- **Intellectual stimulation:** Transformational leaders actively seek out unique and innovative ideas. They promote creative self-expression and never publicly chastise or condemn others. The study by Njiinu et al. (2018) found that intellectual stimulation, individualized consideration, and job security positively and significantly correlated to job satisfaction.
- **Individualized consideration:** Developing others and meeting their needs are the main priorities of transformational leadership. These leaders foster a friendly atmosphere where individuals' differences are valued. Leaders are considerate of followers' particular needs and promote communication with them. Individualized consideration is an attribute through which transformational leaders build their people by delegating tasks and supporting their teams (Njiinu et al., 2018). Research by Le and Le (2021) showed a

significant effect of transformational leaders' individualized consideration on innovation performance.

Transformational leadership, emerging from the fields of management and the military, has continued to gain wide acceptance for educational leadership. Leithwood and Jantzi (1999) bridged the work of Burns (1978) and Bass (1985) into the field of educational administration with conceptual models that facilitated empirical studies and investigation that improved the knowledge base for school leadership and improved the understanding of how leadership affects the school environment. One such utilized the Organizational Commitment Questionnaire (OCQ) developed by Mowday et al. (1979) to establish how transformational leadership in educational institutions had direct and indirect effects, including vision building, high-performance expectations, and developing consensus about group goals and intellectual stimulation. Alessa (2021) noted that a transformational leader has influence and can interact directly with followers to change various aspects of an organization through vision, action, and impact.

The conceptualization of transformational leadership style has evolved beyond the traditional dimensions of idealized influence, inspirational motivation, intellectual stimulation, and individual consideration to include other dimensions, such as risk acceptance (Lashari & Rana, 2018). More specifically, idealized influence has been expanded into attributed idealized influence, which is driven by charisma, and behavioral idealized influence, which is driven by role modeling (Brown et al., 2017). These subcomponents are illustrated in Figure 2.

Figure 2*Subcomponents of Transformational Leadership Style*

Note. I created this schematic, using dimensions identified by Bass (1985), to describe and define subcomponents of transformational leadership styles for my study.

The study by Edirisooriya (2020) indicated that idealized influence, inspirational motivation, intellectual stimulation, and individual consideration of supervisors have a strong positive impact on the retention of talented employees in the information communication technology industry in Sri Lanka. Edirisooriya recommended that transformational leadership could be used as a strong retention strategy in the industry and other contexts. In their study, Top et al. (2020) found inspirational motivation as the strongest of the transformational leadership styles on employee performance. This is followed by individual consideration, while idealized influence and intellectual

stimulation showed a weak impact on employee performance in the Kurdistan region of Iraq, where they conducted their study.

Literature Review

Leadership is a key factor in increasing organizational commitment, and leaders whose styles generate positive values directed at organizational success can increase employees' commitment (Wulani et al., 2019). Leadership is the ability to influence a group of people to work more productively and efficiently together. (Alessa, 2021). Leadership styles can be situational, requiring flexibility within organizational context but with key social enterprise characteristics, including concern for human, environmental, and economic well-being (Muralidharan & Pathak, 2018). Leadership can be identified and differentiated through leadership styles.

Leadership Styles

Annisa (2022) defined leadership style as how a person influences others as expressed in everyday behaviors. Every leader in an organization has a particular leadership style, which is essential to creating a positive work environment and organizational culture. Leaders employ their preferred leadership styles depending on the circumstances, and these styles vary widely from one leader to the other (Sarwar et al., 2022). The relative effects of transformational leadership styles on particular organizational conditions and student engagement were examined by Leithwood and Jantzi (1999). Results show that the impacts of transformational leadership on the affective or psychological dimension and the behavioral dimension of student engagement are considerable, if modest. Avolio and Bass (1995) explored four primary

subcomponents or styles of transformational leadership, including idealized influence, inspirational motivation, intellectual stimulation, and individual consideration. Idealized influence focuses on how leaders can motivate their staff to look up to them as role models. At the same time, in the context of achieving organizational and personal goals, inspirational motivation involves the leader's methods for inspiring and motivating their team members. Additionally, Sarwar et al. (2022) described intellectual stimulation as a leader's strategies for inspiring team members to refresh their thinking and think creatively when tackling problems, while individual consideration refers to the traits of the leader as they pay attention to each of their staff members, listen to their difficulties, and offer assistance.

Ucar and Dalgic (2021) identified leadership styles as critical for educational institutions. Ogbonnaya et al. (2020) found a good correlation between transformational leadership and student academic attainment. In the university environment, supportive learning is grounded in faculty's effectiveness, and interactive learning is inclusive of interaction between university students and faculty. However, studies have also found that students' interaction with faculty does not play an important role in students' educational involvement (Nikolaidis et al., 2022). Additionally, research by Cao (2022) demonstrates a strong correlation between lecturers' leadership styles and students' satisfaction with their learning, but no statistically significant relationship was found between students' satisfaction with their learning and learning outcomes.

Transformational Leadership

Transformational leadership is concerned with how leaders encourage transformation and motivate followers to perform at their highest levels. In today's disruptive business environment, organizations place a high value on such leaders (Jackson, 2020). According to Wood (2019), some of the most important responsibilities of transformational leadership include raising followers' awareness of contemporary issues, providing support, encouragement, and learning opportunities, and improving engagement between leaders and followers in terms of motivation and values. This calls for leaders to focus on developing their followers' capacity to develop original solutions to problems and provide them with a vision for the future that will inspire and support them as they face the challenges of change. This will ultimately strengthen their commitment to effectively completing tasks. Ultimately, transformational leaders encourage adjustments in their followers' attitudes and fundamental beliefs to promote alignment with the organizational goal. In an organizational setting, leaders are expected to give people the flexibility and authority to carry out their duties. Pradhan et al. (2017) observed that transformational leadership becomes crucial as an amplifier of organizational culture since psychological empowerment is more likely to be realized when an adequate organizational culture exists in the workplace.

According to Savovic (2017) and Wood (2019), one of the most crucial duties of transformational leadership entails raising followers' motivation and value participation. It also involves further educating followers on current issues and offering support, encouragement, and continuous learning opportunities. This necessitates that leaders

concentrate on fostering followers' capacity for problem-solving creativity, giving them a vision for the future that motivates and supports them as they navigate the hurdles of change, and finally boosting their commitment to effective task implementation. Alessa (2021) further posited that transformational leadership has a number of aspects and traits, some of which are either personal or have to do with other people in an organization or the environment in which it operates. When these traits are present in an organization's leaders, it is a clear sign of how well the group is moving toward its objectives, fostering growth, and addressing both internal and external environmental obstacles. Such transformational leaders are needed in public and private organizations to adjust to shifting surroundings in all dimensions, including social, economic, cultural, political, informational, and technical.

The use of the concept of "influence" to support the theory of transformational leadership's capacity has drawn criticism. This viewpoint contends that clearer identification of the actual processes within transformational leadership empirical investigations would provide the theory greater weight with regard to aspects of impact. Yukl (1999) criticizes the dearth of qualitative and quantitative research on the arousal of motives or emotions, boosted confidence or optimism, altered perceptions of reward contingencies, and boosted task commitment. For followers to exhibit behaviors consistent with the leader's overall aims, Bryman (2004) says there must be a demonstrable connection between charismatic leadership and its influence on them. Otherwise, the paradigm of transformational leadership may be fundamentally incorrect.

According to Kotter (1990), a strong emphasis must be placed on a leader's capacity to motivate, inspire, and build trusting relationships with those under their charge. These abilities are crucial prerequisites for leaders to successfully carry out any organizational vision or strategic objective. These are recognizable and support the fundamental ideas of transformational leadership theory. As the core of transformational leadership, Kotter emphasized the importance of emotionally connected determinants as the necessary components of effective leadership. Similarly, Zaleznik (1977) emphasized the significance of a leader's capacity for intuitive and sympathetic communication.

Tepper et al. (2018), recognizing the limitation of explaining how follower experience within-leader fluctuations in transformational leadership behavior, developed a dynamic theory of transformational leadership by conceptualizing leadership as an environmental supply that followers use to satisfy psychological needs. Tepper et al. noted that low positive affect would be displayed when transformational leadership falls short of the supplies required to meet followers' desires. Followers may perceive deficient levels of momentary transformational leadership as their leader fails to articulate a compelling vision, provide intellectual stimulation, or supply the necessary support at the time or under the circumstances. These followers can believe that the leader is depriving them of the chance to have a significant impact on an exciting and reachable future by refusing to practice transformational leadership.

Importance and Necessity of Transformational Leadership

The study by Bakker et al. (2022) added to the body of knowledge on transformational leadership by suggesting that when leaders are transformational, they

can affect key agentic behaviors, such as the use of strengths and personal initiative, in their followers. These findings directly support the central proposition of transformational leadership theory, that leaders empower followers to lead themselves. Subcomponents of transformational leadership can give firms a competitive edge when they work well together. Properly utilizing this competitive advantage can significantly aid strategic competitiveness, which will also result in better short- and long-term benefits. In effect, a company's ability to address the challenges of the global economy and produce excellent and competitive performance is less likely to occur in the absence of great transformational leadership (Eskandari, 2014). Steinmann et al. (2018) studied the impact of goal qualities on followers' job satisfaction, organizational commitment, and proactive behavior. According to their findings, transformational leaders impact how much followers value organizational goals and consider them feasible, which is a measure of organizational commitment.

The impact of transformational leadership on followers' work attitudes and proactive behavior is communicated by these goal qualities. This is in line with research by Lai et al. (2020), who found that workers who are motivated by transformational leadership are more likely to become fully engaged in their work, which is likely to lead to higher task performance and helpful behaviors. By engaging in four actions, transformational leaders may change the habits of their followers and inspire them to go above and beyond expectations: idealized influence, inspirational motivation, intellectual stimulation, and individualized consideration (Bass, 1985). These beneficial outcomes of transformational leadership in organizations deserve further study in the academic

environment as intended by my research, which examines the relationship between the subcomponents of faculty's transformational leadership styles and their university sophomores' institutional commitment.

Transformational Leadership and Psychological Empowerment

The subcomponents of transformational leadership, which are related to psychological empowerment, comprise attributed idealized influence, behavioral idealized influence, inspirational motivation, intellectual stimulation, and individualized consideration (Bass & Riggio, 2006). Extant literature shows that psychological empowerment, which derives from transformational leadership, is composed of four dimensions: meaning, competence, self-determination, and impact (AlKindy & Magd, 2021; Minai et al., 2020; Saira et al., 2021). In addition to confirming a strong relationship between transformational leadership and psychological empowerment, Saira et al. (2021) also established that psychological empowerment partially mediated the relationship between transformational leadership and organizational citizenship behavior and turnover intention.

However, Samuel and Engelbrecht (2021) found a negatively significant relationship between transformational leadership and employees' intention to quit an organization, with psychological empowerment as one of the mediating variables. The study by Owan et al. (2020) established that psychological empowerment had a significant impact on all three categories of commitment by using psychological empowerment as a mediator between employees' work-life policies and job commitment. The results of the study by Aydogmus et al. (2018) support the mediating role of

psychological empowerment on job satisfaction, whereby employees feel more psychologically empowered when they perceive their leader as transformational, which in turn raises their job satisfaction levels.

The theoretical goal of the subcomponents of transformational leadership styles is to achieve distinct roles in the organizational outcomes that follow, such as employee retention, organizational commitment, self-efficacy, innovation and creativity, and performance (Kariuki, 2021). Eva et al. (2019) challenged the discourse on transformational leadership for the perceived ulterior motive of leaders empowering their followers for the sole purpose of using the followers to achieve organizational goals. This could mean that transformational leaders use followers as a means to an end, contrary to the objectives of transformational leadership. Consequently, transformational leadership style and the subcomponents could be considered a double-sided construct with both positives and downsides. However, the study by Parveen and Adeinat (2019) did not identify any significant downsides impacting organizations negatively.

Psychological empowerment is also a predictor of employee retention (Ambad et al., 2021; Safari et al., 2020) and Turnipseed and VandeWaa (2020) suggested combining all four cognitions of psychological empowerment for the overall effectiveness of psychological empowerment in the institutions where they are deployed. The meaning element describes how meaningful the staff find their job roles to be from their values and standards perspective (Bharadwaja & Tripathi, 2021). Competence is the belief a staff member has in their ability to complete a task and is consequently viewed as their self-efficacy (Bharadwaja & Tripathi, 2021; Shah et al., 2019). In contrast, self-

determination is the staff member's sense of autonomy in commencing and continuing work. (AlKindy & Magd, 2021). Panda and Sahoo (2021) noted that the impact is the staff members' belief in their capacity to affect how their institutions operate.

Mentorship is an embedded transformational leadership style from the perspective of the individualized consideration subcomponent (Bass & Riggio, 2006; Edirisooriya, 2020). Role modeling from the idealized influence subcomponent strengthens mentorship, given that followers trust and respect the leaders they view as their role models.

Subcomponents of Transformational Leadership

The transformational leadership style includes four components:

- **Inspirational motivation:** The followers of a leader develop trust and confidence in their leader when they receive a purposeful task and the right direction. The transformational leader inspires and encourages the followers through inspirational motivation toward new ideas or goals that the organization confronts due to shifting business requirements (Avolio & Bass, 1995).
- **Idealized influence:** The leader acts as an ideal role model for the followers by exerting idealized influence (Bass, 1985). This is accomplished by outlining a clear vision for the future and showing followers how to get there.
- **Individual consideration:** The personal and professional issues of their followers are addressed by transformational leaders within the context of individual consideration by actively listening to them, providing required

feedback, and mentoring them (Bass, 1985; Podsakoff et al., 1990).

Additionally, connectedness is a quality of transformational leaders that motivates their team members to go above and beyond the call of duty to achieve outstanding organizational goals.

- Intellectual stimulation: A transformational leader uses intellectual stimulation to encourage self-reflective change in the values and beliefs of their followers.

The MLQ, an instrument that forms the foundation of the entire philosophical framework of the theory, is arguably the most serious criticism of transformational leadership theory. From the perspectives of Northouse (2007), the Four Is, or idealized influence, inspirational motivation, intellectual stimulation, and individualized consideration, as they are otherwise known, are said to be insufficiently distinct to allow for a meaningful distinction between transformational leadership theory's theoretical arguments and those of other leadership theories.

Jaroliya and Gyanchandani (2022) examined the effect of transformational leadership style on team performance by taking 20 items of transformational leadership from the MLQ long form (Bass & Avolio, 2000). The scale consists of 20 items, with four items for each factor. Transformational leadership style consisted of 20 items measured across idealized influence (attributed – 4 items), idealized influence (behavior – 4 items), inspirational motivation (4 items), intellectual stimulation (4 items), and individualized consideration (4 items). The items of transformational leadership style were rated on a five-point Likert scale (1 = Strongly Disagree, 2 = Disagree, 3 = Neutral,

4 = Agree, and 5 = Strongly Agree). All the five subcomponents of transformational leadership style were found to positively correlate with team performance.

Samsudin et al. (2017) examined transformational leadership practices among academic administrators of a faculty at one of the public universities in Malaysia. Their study revealed that the most practiced leadership style was inspirational motivation, followed by idealized influence (behavior) and idealized influence (attributed). The least frequent types of leadership styles were individual consideration and intellectual stimulation.

Transformational Leadership in Universities

Higher education researchers have been studying leaders' demands, responsibilities, and criticality. Research shows that leadership styles at all levels of higher education institutions are complex and multidimensional (Meng, 2022). These studies, in general, indicate that transformational leadership positively impacts the achievement of institutional objectives. Based on the notion of transformational leadership, which was widely used in the Malaysian school leadership system, Tengi et al. (2017) conducted a study on Malaysian school leaders and found that transformational leadership boosts organizational productivity, making the leader an influential figure who can communicate openly with followers. The study found that adopting a transformational leadership style significantly improves the performance of school leaders' staff members. This style focuses on a leader's attitude and behavior and how it motivates followers to collaborate effectively and efficiently for productivity.

According to Meng (2022), different leadership styles influence the decision-making and behavior of the innovation process, as well as the outcome of the innovation. Based on the deep learning theory and other relevant studies, Meng developed a theoretical model of how transformational leaders in colleges and universities influence educational management innovation through the climate of school organizational innovation. The findings of the study demonstrate that college principals' transformational leadership style has a favorable effect on teachers' teaching creativity. There is a favorable relationship between teachers' administration of their classrooms and their charismatic influence, as well as between their management of their classrooms and their intellectual stimulation.

In order to boost university performance through creativity, knowledge, and innovation, Militaru (2014) studied a variety of potential performance implications of transformational leadership. Using the hierarchical OLS regression technique, Militaru examined the connections between innovation orientation, transformational leadership, organizational learning, and university performance. While investigating how leader behaviors affect university performance, Militaru discovered that transformational leadership influences the relationship between leaders' performance (rectors, deans, and managers) and university outcomes (teaching, research, and service). The findings show that inspirational motivation, intellectual stimulation, idealized influence, and individualized consideration may encourage academic staff to work more, exert more effort, and engage in greater levels of job performance. The study demonstrated that transformational leadership might allow better levels of creativity and innovation by

emphasizing knowledge integration mechanisms inside universities. Given the relatively positive connections between transformational leadership and academic success, universities could prioritize selecting and developing people with these qualities for upper-level managerial jobs.

Mattar (2016) examined the similarities and differences between transformational leaders' traits and leadership philosophies and those of effective university leaders in Lebanon. The findings indicate that an effective leader mainly accounts for most of the characteristics and attitudes that distinguish transformational leaders. A transformational leader cultivates the spirit of coworkers, fosters a welcoming work atmosphere, and values teamwork in order to inspire and motivate all campus employees, including faculty and staff. Research was conducted in various cultural contexts on middle manager leadership styles and how they relate to a leader's effectiveness. Similar findings were made by Jones and Rudd (2008), who discovered that the most successful and effective leaders tended to practice transformational leadership behaviors more frequently, followed by transactional leadership and less laissez-faire leadership.

There is evidence about the effectiveness of transformational leadership. Transformational leadership is positively correlated with measures of leadership effectiveness, including subordinate satisfaction, motivation, and performance, according to the majority of survey studies employing the MLQ and comparable questionnaires (Bass, 1998). Lowe et al. (1996) revealed that important aspects of transformational leadership positively correlated with subordinate satisfaction and performance in a meta-analytical evaluation of 39 research employing the MLQ. Although the correlation was

weaker and the findings were less consistent, contingent rewarding (a transactional activity) was similarly positively connected with the criteria. Yukl (1999) noted that the effectiveness of transformational leadership is also evident in descriptive studies based on observation and interviews.

Institutional Commitment

According to Davidson and Beck (2019), commitment to a path of action in higher education entails pursuing a degree, while commitment to an entity entails developing an attachment to the institution. While the two forms of commitment can predict essential student outcomes, it is unclear why some students at a given school acquire these traits while others do not. Individual student differences that affect students' capacity to make commitments may serve as precursors to the development of commitment. In today's causal models of retention, institutional and degree (or goal) commitment factors are critical, and they appear to have a direct impact on students' decisions to persist in their studies at a wide range of universities (Braxton et al., 1997). The level of institutional commitment indicates how sure and content students are with their decision to attend a specific college or university.

According to Mwesigwa et al. (2020), as higher education evolves, competent leadership and dedicated staff are required to support universities' efforts in producing skilled graduates. They pointed out that organizational commitment in public universities is enhanced by the leadership style and standards university administrators use to increase employee satisfaction. Alessa (2021) identified several organizational outcomes that were correlated with transformational leadership, including organizational commitment,

knowledge management practices, morale, employee empowerment, job satisfaction, administrative creativity, organizational citizenship behavior, and the degree of transformation towards quality and job enrichment.

According to Tinto's (1975) interactionist theory of student departure, the likelihood of a student's commitment to their institution and the likelihood of academic persistence are both higher the more connected and integrated they feel with their institution on a social and intellectual level (Steele & Douglas, 2021; Tinto, 1987).

According to Perry et al. (2020), higher retention and graduation rates can help universities in the United States with their financial challenges. According to Browning et al. (2018), student character characteristics are crucial for comprehending academic integration and perseverance because they are consistent with higher education models that emphasize academic integration as a prerequisite to institutional commitment.

According to Tinto and Pusser (2006), increased student success rates depend on institutional commitment over time. Institutional leadership's readiness to commit resources to parts of institutional operation that impact students' success, directly and indirectly, is reflected in the leadership's institutional commitment. A critical component of commitment is the ability of the service provider to deliver high-quality performance as promised, as well as the customer's appreciation of the service (Yousaf et al., 2020). Tinto noted that interaction with faculty is a component of student integration and commitment. Salgado and Vela (2019) viewed commitment from the context of brand loyalty synonymous with repeat purchases and preference.

Schnettler et al. (2020) noted the explicit focus of recent studies on student dropout intention as a cognitive representation of decision-making. However, they acknowledged that early investigation of the formation of dropout intention enables practitioners to design tailor-made counseling services right at the beginning of the decision-making process, particularly for university students like sophomores. College retention models show that commitment to the goal of completing college is a significant predictor of students' intention to persist and, subsequently, their actual persistence (Baker, 2019). Schnettler et al. identified student commitments toward the academic goal and the institution as key factors for dropout intentions.

Wardley et al. (2021) reviewed antecedents of institutional commitment as indicators for student retention and found autonomy and task significance to have an important relationship with commitment for general university students. From a customer model, Guilbault (2018) identified students as customers of education for whom services are provided by faculty and thereby need to be engaged if the desired outcome by their academic institutions is to be achieved. Student satisfaction generates a more positive attitude toward the institution, primarily the student's commitment to the institution (Santini et al., 2017). In contrast, Guilbault (2016) noted that faculty often fail to see the value of attaining student satisfaction for fear that this goal places academic integrity at risk.

Faculty leadership style could impact students' institutional commitment through how students become engaged through classroom experiences (Dollinger et al., 2018). The study by Wardley et al. (2021) examined the pattern of relationships among

predictors of institutional commitment. Many of these predictors could potentially be related to faculty leadership styles, given that faculty are service providers to university students. Skill variety and autonomy were determined to have direct relationships with institutional commitment, and customer service strongly influenced autonomy. Wardley et al. noted that students are consumers of university services, thereby qualifying them as customers.

Tinto (1975, 1987) noted that students' institutional commitments to their respective institutions play a major role in shaping their intentions to persist and dropout decision-making, whereas research has provided mixed results when testing the impact of this construct in quantitative models (Nora & Cabrera, 1993). The mixed results were driven by factors that ranged from the nature of the institutions to the nature of the student populations. There is no research on what role the transformational leadership styles of faculty may have on institutional commitment. Nora and Cabrera (1993) investigated the institutional commitment variable's underlying structure by assessing the convergence, or lack thereof, of various construct indicators. Confirmatory factor analyses showed that institutional commitment could be divided into two different indicators of the same latent construct: a general factor representing items relating to institutional quality, practical value of an education, utility of an education, fit between students and the institution, and loyalty to the institution; and another factor represented by items indicating similarity of values (affinity of values). Their study established each subcomponent's predictive validity for various outcomes relating to student persistence. Affinity of values was not as predictive of measures of student retention as Institutional

Commitment, which was found to have a strong direct impact on both students' intentions to persist and actual persistence behavior.

University Sophomore Year Experience

University sophomore year is a year of adjustment. Students sometimes begin the year without a distinct academic concentration, but by the conclusion of the year, the majority must choose a major. Han and Rideout (2022) looked into elements contributing to university students' success. From freshman to senior year, sense of belonging and perceived task value increased across all survey categories. Academic success was continuously linked to a sense of belonging, whereas task value was only linked to academic success in the 1st year. The 1st year of college is also a period for discovering one's identity (Hunter et al., 2010; Provencher & Kassel, 2019). In this context, Browning et al. (2018) noted that more than half of all student attrition takes place in the 1st year of college.

Scholars in higher education have long acknowledged the difficulties that come with the adjustment to college and observed that the 1st year is particularly important for later experiences and results (Mayhew et al., 2016; Roksa et al., 2021). Kosonen et al. (2022) explored university students' approaches to making the most of their study time and found students defining their studies in practical and instrumental terms, predominantly in terms of needing to graduate, transition to working life, and find good employment. This perception could have implications for institutional commitment. According to Hyytinen et al. (2022), the 1st year of university and the transition to university courses are critical to students' academic success.

Students' motivations are influenced by both internal and external factors while weighing their potential courses of study and future careers, despite the fact that 1st-year students differ in their motivations and readiness to pursue university studies. These goals affect students' engagement in university and subsequent academic success. In order to assess the likelihood that 1st-year students at the University of Granada would drop out, Simón and Puerta (2022) administered the CPQ v2, and they discovered that institutional commitment was one of the dimensions for which the scores of students who continued were higher than those of students who dropped out. They concluded that the decision to continue studying till graduation is significantly influenced by the student's commitment to the institution and the degree.

DeClercq et al. (2021) characterized achievement among 1st-year university students as a complex process including several interrelated factors. The study of the process leading to achievement during the 1st year of college can be viewed as an intriguing perspective on students' transition because achievement can be considered an indicator of a successful transition. According to DeClercq et al., achievement involves three stages: psychological elements, learning environment experience, and background influences. More specifically, it is anticipated that psychological elements would have the closest effects on academic attainment. The background components are anticipated to be the most distal category of variables, with the learning environment's experience having a remote impact.

While universities concentrate retention efforts on the 1st year of college, just as many students drop out between the 2nd and 3rd years. This has caused research focus to

shift, given that sophomores are prone to high levels of attrition and general disengagement from their universities (Perez, 2020). In order to support the deliberate integration of these practices into the academic curriculum, Provencher and Kassel (2019) increased the body of research on university retention by establishing a link between high-impact practice involvement and retention after the sophomore year. According to findings, strategically implementing such practices in the 2nd year may increase retention outcomes.

Research Focus on University Engineering Discipline

The target population for my study was initially faculty and sophomores at the University of Houston's College of Engineering. I ultimately collected data from TSU's COSET. Villanueva (2022) carried out research from the ethical mentoring perspective to ascertain what procedures could enhance the power, awareness, and communication dynamics between academic faculty and student interactions. An engineering-specific theoretical framework for ethical mentorship was employed, building on prior research to provide guidance and tools for power dynamics, awareness, and communication in faculty-student academic relationships in engineering. The findings suggest potential impact on engineering students' institutional commitment and implications for general engineering practice.

However, it is less obvious how these interactions should be quantified and conceived, according to Tormey (2021), who emphasized that student-teacher relationships are crucial to teachers' and students' experiences in higher education. Measurements of the student-teacher interaction must be understood in the broader

context of a study of how university life is organized socially and culturally. Tormey (2021) created a theoretical framework for the affective interactions between students and teachers in higher education based on three dimensions: warmth/affection, safety/attachment, and assertiveness/power. Most of the study participants were 1st-year students majoring in the natural sciences or engineering.

In order to better understand engineering students' descriptions of the roles of education in their felt emotions, Hartikainen et al. (2022) conducted a qualitative thematic analysis. The findings demonstrate that students' impressions of (a) a faculty-created classroom environment, such as interest, enthusiasm, and encouragement from faculty, and (b) instructional strategies, such as course design, lectures, public performances, and active learning, affect their emotions. The results highlight the importance of paying closer attention to the subtleties of student-faculty interactions in engineering classes since these interactions can impact how students perceive instructional strategies. These findings can assist engineering lecturers in better understanding how students feel while being taught and in selecting instructional strategies that will encourage positive, learning-oriented emotions in their students.

Hagenauer and Volet (2014) previously examined literature on the interaction between students and teachers in higher education in three key areas: the nature of the relationship, its effects, and its causes. They concentrated on the context of higher education or universities and one crucial connection in that environment: the teacher-student relationship (TSR). The need to belong also impacts university teachers, according to Hagenauer and Volet (2014), who argued that the analysis of TSR should be

expanded. Secondly, many universities worldwide have high student drop-out rates, which have significant human and financial implications. As a result, it stands to reason that a supportive relational classroom atmosphere, which includes pleasant interactions and relationships, may also benefit the teachers themselves. Lastly, given the growing weight placed on excellence in university teaching, a thorough investigation of TSR is necessary.

According to McGowan and Bell (2020), engineering needs to be promoted to increase the number of students pursuing careers in STEM fields. They noted that engineering allows students to expand their understanding of science by involving them in practices for solving problems relevant to their communities. They pointed out that previous attempts to include engineering in conventional university disciplinary systems resulted in splits between technical and disciplinary career tracks. The requirement for empirical and observational research that locates engineering practices and epistemologies across various learning environments, including formal and informal settings, was further discussed by McGowan and Bell. These viewpoints suggest that it is worthwhile to concentrate transformational leadership research on university engineering stakeholders.

Summary and Conclusions

The relationship between the transformational leadership styles of faculty and their university students constitutes an important research area for academic leadership and management practitioners. The literature review provided an in-depth discussion of issues relating to transformational leadership, its subcomponents, and how these may

relate to the institutional commitment of university students in general and sophomores in particular. My study's findings are expected to provide the foundation for additional research focused on academic leadership styles and their impact on students in universities and other higher educational institutions.

Chapter 3: Research Method

In this quantitative, nonexperimental, correlational study, I examined the relationship between the subcomponents of faculty's transformational leadership styles and their university sophomores' institutional commitment. Specific subcomponents of transformational leadership styles—namely, attributional idealized influence, behavioral idealized influence, inspirational motivation, intellectual stimulation, and individual consideration (Bass, 1985)—may have comparatively different impacts on university sophomores' institutional commitment. This knowledge could reveal strategies that stakeholders could potentially use to address the social problem of dropout of sophomores in universities.

Chapter 3 includes a summary of the steps I took to address the research question and associated hypotheses by highlighting the rationale for the research methodology and design. Additionally, a discussion of my target survey population, sampling procedures, data collection instruments, data analysis plan, validity, and ethical considerations are included in this chapter. For the independent variables, I obtained faculty's self-rated perceptions of their transformational leadership styles across the five identified subcomponents using the Bass and Avolio's MLQ 5X. Similarly, the CPQ was used to survey the institutional commitment of sophomores at TSU's COSET using an online survey platform. Prior to obtaining any information from survey participants, I completed the Walden University IRB application and obtained approval to conduct the study.

Research Design and Rationale

I obtained the five independent variables for this study, which concerned the relationship between faculty's transformational leadership style and university sophomores' institutional commitment, Bass's (1985) transformational leadership styles (Bass, 1985). The variables were attributional idealized influence, behavioral idealized influence, inspirational motivation, intellectual stimulation, and individual consideration. University sophomores' institutional commitment was the dependent variable. The study framework proposed that whereas the five subcomponents of faculty's transformational leadership styles may affect university sophomores' institutional commitment, specific subcomponents of faculty's transformational leadership styles may have comparatively different impacts.

The intention was to answer the research question on the relationship between the five subcomponents of transformational leadership style of faculty and their university sophomores' institutional commitment. My specific research design involved gathering and analyzing numerical data to evaluate hypotheses related to the research question. As part of the quantitative, nonexperimental, correlational study design, I measured the impact of the independent variables on the dependent variable. I used Fisher's (1925, 1935) central theorem for inferential statistical sampling procedures for quantitative research.

I explored various quantitative research designs, including the selected correlational design, which is a non-experimental method for determining whether two variables have a statistically significant relationship (Burkholder et al.,

2020). In a randomized experimental design, which I considered unsuitable for this study, Burkholder et al. (2020) noted that comparisons between one or more groups or conditions are made to ascertain whether the independent and dependent variables are causally related. A quasi-experimental design was also considered unsuitable for this study. The quasi-experimental method allows for the modification of the dependent variable in an effort to determine whether there is a cause-and-effect link between the dependent and independent variables. Although there are some similarities between quasi-experimental and experimental designs, such as the comparison of groups based on a dependent variable, the main distinction is that participants are not randomly assigned to groups in the former.

Using the selected correlational design, I examined a link between or among relevant variables by measuring two or more of them in the same sample (see Lillykuty & Samson, 2018). Correlational design denotes a single subject group with two or more variables. The correlational analysis identifies the distribution of scores among the variables and the strength of their relationships. This indicates if an increase or drop in one variable causes an equivalent rise or fall in the other. A limitation is that although correlational research implies a connection between variables, it cannot establish that one variable changes another.

The objective of this study was to examine the relationship, if any, between the five subcomponents of transformational leadership style of faculty and their university sophomores' institutional commitment. Knowledge of this relationship could help academic leaders to understand how faculty's transformational leadership styles relate to

university sophomores' institutional commitment as a factor in dropout decision-making. Simón and Puerta (2022) noted the concern about student retention in higher education, which is connected to students' institutional commitment. In order to provide help for students, including sophomores, who are at risk of dropping out due to associated social implications, research such as this may identify where to concentrate efforts and resources.

Methodology

I used quantitative research methodology to address the research question on the relationship between the five subcomponents of transformational leadership style of faculty being the independent or predictor variables and university sophomores' institutional commitment as the dependent or criterion variable. A null hypothesis and an alternative hypothesis were generated to investigate the relationship between faculty's transformational leadership styles and their university sophomores' institutional commitment. The null hypothesis stated that attributional idealized influence, behavioral idealized influence, inspirational motivation, intellectual stimulation, and individual consideration of faculty do not have a significant effect on their university sophomores' institutional commitment. The alternative hypothesis stated that attributional idealized influence, behavioral idealized influence, inspirational motivation, intellectual stimulation, and individual consideration of faculty have a significant effect on their university sophomores' institutional commitment.

I adopted a positivist paradigm for this study. Park et al. (2020) noted that researchers who adhere to positivism typically use quantitative methods to establish

explanatory correlations or causal relationships, favoring empirically based conclusions from large sample sizes. Additionally, a quantitative approach is the preeminent research methodology in the social sciences (Ahmad et al., 2019). The goal of quantitative research is to further knowledge and improve understanding of the social world by using scientific inquiry through observed or measured data to address questions about a sample population. A group of techniques, strategies, and presumptions collectively known as quantitative methodology are employed to research numerical patterns to study psychological, social, and economic phenomena. Many numerical data are obtained during the process, allowing researchers to carry out simple to complex statistical studies that aggregate such data. According to Bloomfield and Fisher (2019), quantitative research is a formal, objective, systematic procedure used to describe variables, assess links between them, and look at cause-and-effect associations between variables.

Babbie (2017) noted that not all research initiatives are explicitly structured around the development or evaluation of theories and hypotheses. It may be necessary to convert the related ideas and variables that impact the research objectives into variables that can be numerically quantified using a tool that can accurately test the quantified data. When a research topic involves phenomena that cannot be directly measured or do not exist in a physical sense, such a research issue is deemed susceptible to, or suitable for, scientific inquiry using a quantitative technique involving the development of or testing hypotheses and theories (Burkholder et al., 2020).

Population

The target populations for my study, which examines the relationship between faculty's transformational leadership style and university sophomores' institutional commitment, were initially faculty and sophomores at the College of Engineering at the University of Houston, Texas. There are 146 faculty members and 3,209 undergraduates (University of Houston Cullen College of Engineering, n.d.). The breakdown into the number of sophomores is not available, but 569 undergraduate degrees were awarded by the College of Engineering in 2022. This gives an indication that the number of sophomores will likely not be less than 500. Researchers from the University of Houston and other institutions are allowed to seek college students and faculty to participate in studies (University of Houston, n.d.1, n.d.2), subject to IRB approval. My research was conducted at TSU's COSET, whose retention rate for full-time undergraduates in 2021 was 68%.

According to Andrade (2020), it is impractical to investigate the entire population, hence studies are conducted based on samples. On the basis of some assumptions, the required sample size can be determined manually or with the aid of statistical tools. Results generated from samples are meant to be extrapolated to the entire population and occasionally even to the future. Thus, the sample is statistically representative of the population when the tenets of the central theorem test positive. Using the proper sample procedures is the simplest way to accomplish this. Typically, this is calculated mathematically as the sample size required in hypothesis testing research, with P for statistical significance set at 0.05, to be 80% confident of achieving a statistically

significant result should the hypothesis be true for the population. The G*Power software (Kang, 2021) was used to determine the optimum sample size for my study.

Sampling and Sampling Procedures

According to Rahman et al. (2022), sampling serves as the basis for almost all research and is defined as the act of choosing a representative sample of a population in order to observe and examine the traits of the total population. In other words, sampling is the process of choosing a random sample from a population using specialized processes. A sample is a subset of the total amount of data acquired through surveys or in-depth observations in quantitative data analysis. It can be envisioned as a more compact unit of measurement for actual data. Berndt (2020) noted that sampling techniques could be classified as probability or non-probability. Elfil and Negida (2017) noted that probability sampling methods incorporate a component of random selection, ensuring that each case in the population has an equal likelihood of being selected. In contrast, non-probability sampling methods use an approach in which the sample is chosen based on the researcher's subjective judgement rather than using random selection.

I adopted convenience sampling as the nonprobability sampling technique for my study is convenience sampling. A convenience sample is drawn from a source that is conveniently accessible to the researcher. The purposive sample, whose characteristics are defined for a purpose relevant to the investigation, is an alternative. The results of a study using convenience and purposive sampling cannot be extrapolated to the entire population; rather, they can only be applied to the subpopulation from which the sample

was taken (Andrade, 2021). The advantages of non-probability samples include faster data collection, lower survey costs, and more straightforward access for possible respondents (Kim, 2022). Adopting probability sampling would have required randomly selecting the participants after they met the defined criteria for enrollment into the study. I conducted a power analysis to determine the appropriate sample size.

Procedures for Recruitment, Participation, and Data Collection

For primary data collection in my study that examines the relationship between faculty's transformational leadership style and university sophomores' institutional commitment, I used the MLQ 5X-Short (Avolio & Bass, 2004; Bass & Avolio, 1997) as an instrument for transformational leadership style self-evaluation by faculty. The data was initially intended to be collected at the University of Houston College of Engineering, but it was collected at TSU's COSET. The MLQ 5X-Short instrument is composed of 45 items in total to measure five subcomponents of transformational leadership, and the scale uses five choices per item ranging from 0 (not at all), 1 (once in a while), 2 (sometimes), 3 (fairly often), to 4 (frequently, if not always). Faculty participants at the University of Houston College of Engineering were intended to be across all engineering disciplines at the College, comprising Biomedical Engineering, Chemical Engineering, Civil Engineering, Computer Engineering, Electrical Engineering, Industrial Engineering, Mechanical Engineering, and Petroleum Engineering. The participants for my study were ultimately from the departments at TSU's COSET, comprising the departments of Biology, Chemistry, Environmental and Interdisciplinary Sciences, Physics, Computer Science, Engineering, Mathematical Sciences, and

Transportation. The department of Engineering comprises Electrical and Computer Engineering, Civil Engineering, Electronics Engineering, Computer Engineering Technology, and Civil Engineering. Sophomores across these science, engineering, and technology disciplines were surveyed using the CPQ.

Surveys, which can be done manually or electronically, are the most popular primary data collection techniques (Nayak & Narayan, 2019). The advantages of surveys, especially when they are conducted electronically, as is now standard practice, center primarily on the simplicity of creating questionnaires, data collection, storage, and visualization, work collaboration, cost-effectiveness, schedule effectiveness, and flexibility of starting, pausing, and restarting the survey without experiencing significant consequences (Nayak & Narayan, 2019). Survey replies are frequently organized in advance to facilitate data consolidation, sorting, and ultimately, statistical analysis. Survey limitations include the inability to assure the necessary response rates and sampling, as well as non-respondent characteristics, confidentiality upkeep, and ethical concerns (Nayak & Narayan, 2019). Queirós et al. (2017) also noted a number of limitations with the survey methodology, including the fact that the reliability of data is highly dependent on the quality of answers and on the rigid survey structure, as well as the survey methodology's inability to capture respondents' emotions, behavior, and changes in emotions.

Instrumentation and Operationalization of Constructs

Bass (1985) devised an instrument to measure both transactional and transformational leadership behaviors and to study the nature of the relationship between

these leader types and work unit effectiveness and satisfaction. The finished product, the MLQ, was conceptually created and scientifically validated to reflect the complementary dimensions of transformational and transactional leadership with sub-scales to differentiate leader behavior further. The original 142-item pool for the MLQ was developed using a review of the literature together with an open-ended survey asking 70 executives to characterize the traits of transformational and transactional leaders. By using factor analysis, five scales with sufficient reliabilities were established. In a subsequent study by Hater and Bass (1988), the remaining 73 items underwent more factor analysis with identical results.

Since then, research has established the MLQ as the main quantitative tool for assessing the concept of transformational leadership. Many research projects that have appeared in journals, dissertations, book chapters, conference papers, and technical reports have looked at the MLQ. The tool has been used to research leaders across a range of organizational contexts, including manufacturing, the military, educational, and religious institutions, as well as at different organizational levels, including first-line supervisors, middle managers, and senior managers. The MLQ was used by Lowe et al. (1996) to conduct a meta-analysis of the transformational leadership literature, and it was discovered that the scales measuring transformational leadership were reliable predictors of work unit effectiveness across the collection of studies that were examined. The MLQ 5X-Short version of the instrument was developed by Avolio and Bass (2004). For my study, permission was sought from Mind Garden, the custodians of the MLQ tool, via

their website to use the MLQ 5X-Short version. I secured authorized and paid use of the MLQ from the Mind Garden website (see Appendix A).

The CPQ comprises three components: the student information form, the student experiences form, and the institution-specific form. The student experiences form assesses students' reaction to their university's academic and social environments. The form consists of 69 questions, partitioned into ten psychometrically validated scales. All of the questions are answered on a five-point Likert scale. The response choices vary for different items depending on the wording of the question. My study utilized only the institutional commitment scale, which has the following questions: (a) how confident are you that this is the right college or university for you? (b) how much thought have you given to stopping your education here (perhaps transferring to another college, going to work, or leaving for other reasons)?

The repeated application of the CPQ has established its reliability and validity (Reynolds & Cruise, 2020; Simón & Puerta, 2022). The CPQ is currently a basic reference in the research on retention and persistence in university (García-Ros et al., 2019). Reliability coefficients range from .68 to .72 on the CPQ-V3 (Davidson et al., 2015). In the study sample of participants for the study conducted by Davidson and Beck (2019) using CPQ-V2, two measures reported acceptable internal reliability coefficients: degree commitment ($\alpha = .77$) and institutional commitment ($\alpha = .79$). A request was sent to the copyright owners of the CPQ, notably Professor Davidson and Professor Beck (Davidson & Beck, 2018, 2021), for permission to use the CPQ in my study. As provided in Appendix B, Professor Beck approved my use of their validated set of five predictor

survey items from research with $p < .001$ and Nagelkerke $R^2 = .20$ (Davidson & Beck, 2021). The five items were: “How likely is it you will earn a degree from here?”; “How likely is it that you will re-enroll here next semester?”; “How much thought have you given to stopping your education here (perhaps transferring to another college, going to work, or leaving for other reasons)?”; “How often do you turn in assignments past the due date?”; and “How much have your interactions with other students had an impact on your intellectual growth and interest in ideas?”. The first three items were derived from the CPQ’s *Institutional Commitment scale*; the fourth was from the *Academic Conscientious scale*, and the fifth was part of the *Social Integration scale* (Davidson & Beck, 2021).

Data Analysis Plan

Survey data for my study, which examines the relationship between faculty’s transformational leadership style and university sophomores’ institutional commitment, were analyzed using the SPSS software. Both descriptive and inferential statistics were run. Descriptive statistics such as frequency, percentage, mean, and standard deviation provided an indication of how participants responded to key survey questions. Prior to hypothesis testing, the assumptions of independence of residuals, linear relationships, homogeneity, and multicollinearity were evaluated.

A Pearson correlation (r) analysis provided an indication of the relationship among the variables. A multiple regression analysis explained how the dependent variable of sophomores’ institutional commitment relates to the faculty's five transformational leadership styles, which are the independent variables comprising

attributional idealized influence, behavioral idealized influence, inspirational motivation, intellectual stimulation, and intellectual stimulation individual consideration.

Threats to Validity

The results of my study, which examines the relationship between faculty's transformational leadership style and university sophomores' institutional commitment, were unaffected by construct, internal, or external validity, allowing them to be generalizable outside the study's immediate setting and context.

External Validity

According to Findley et al. (2021), external validity measures how much a study's sample can be used to derive conclusions about a larger population or other target populations. Findley et al. also noted that by current epistemological and methodological standards, external validity is fundamental, not incidental, in social science. According to Burkholder et al. (2020), one of the threats to external validity is treatment variance, in which case the application of a study's findings to other contexts may be constrained by inconsistency with either the independent or dependent variables or other study circumstances.

Burkholder et al. (2020) also outlined two major approaches for dealing with risks to external validity, including thorough literature reviews, building on prior related studies, and narrowing study emphasis while comparing new findings with what is already known in the field. I adopted these approaches for my study to examine the relationship between faculty's transformational leadership style and university sophomores' institutional commitment.

Internal Validity

In quantitative research, internal validity verifies that the data collected matches the research question (Burkholder et al., 2020). For my study, which examines the relationship between faculty's transformational leadership style and university sophomores' institutional commitment, I used a quantitative research design leveraging existing reliable and validated scales to measure all the variables under investigation. The risks to internal validity were therefore minimal because of the use of validated measures.

Transformational leadership is measured with the Bass and Avolio's MLQ instrument (Bass & Avolio, 1997). The CPQ is intended as an instrument to measure university sophomores' institutional commitment by adapting select items from the institutional commitment scale of the CPQ (Davidson & Beck, 2018, 2021). The repeated application of the CPQ (Reynolds & Cruise, 2020; Simón & Puerta, 2022) has established its reliability and validity.

Construct Validity

Construct validity is a measure of how well underlying concepts are conceived and operationalized in a study. It refers to whether a survey instrument measures the issue it was intended to measure, often in relation to a particular theory (Burkholder et al., 2020). Given that the repeated application of the two instruments intended for use in my study has established their validity in literature, construct validity was not a concern for my study.

Ethical Procedures

Understanding that every action involving quantitative research involves ethical considerations that would lead to better design choices (Cortina, 2020), quantitative research is regularly scrutinized, and bias is one potential ethical concern in this type of research (Edwards, 2020). Researchers need to be cautious when making decisions that could lead to ethical problems, especially if such choices could be viewed as working towards a preconceived end, as Babbie (2017) explained how research paradigms and theories could ultimately influence outcomes out of bias.

The focus on social change by researchers would be an exception, encouraging them to select a theoretical orientation or study methodology that is adequately in line with the goal of social change. So, depending on the situation, bias may have a beneficial or detrimental impact on research design selections. Babbie (2017) pointed out that peer reviews would help identify biases in order to address the risk of ethical issues, including bias. Additionally, Babbie (2017) noted that the fact that a reasonable population of researchers is concurrently studying the same or similar phenomenon using different paradigms, theories, and methods would also help reduce the ethical risk of bias.

There are five categories of ethical concerns in research: (a) communication with participants and the community; (b) data collecting and usage; (c) external influences on research; (d) risks and benefits of the research; and (e) selection and application of research theories and methodologies (Drolet et al., 2022). Some of these issues are connected to breaches of rules governing research ethics, bad behavior, or research misconduct. I adhered to the research ethics policies and procedures of Walden

University to ensure the ethical treatment of participants. Ethics was taken into account because my study used human subjects. A variety of ethical dilemmas are raised in academic research (Drolet et al., 2022), which are influenced by the many roles these institutions' members play. Before collecting data, I also completed the human subjects training provided by the Collaborative Institutional Training Initiative (see Appendix C).

On ethical matters, I secured IRB approval from Walden University. The University IRB assessed the study, determined whether it met high ethical standards, and approved it. SurveyMonkey was used in my study to get participant feedback. I engaged SurveyMonkey to discuss secure subscription options for using their tool for my survey. Because I had less control over SurveyMonkey than with a paper-based survey, my assigned contact at the TSU followed up with email reminders to participants to increase response rates. Giving participants in-depth research information or asking for their verbal agreement is not possible with SurveyMonkey. This necessitates that the researcher includes all pertinent data on the survey's initial page. The details on the first page seem crucial for handling privacy issues in online surveys (Saleh & Bista, 2017). I offered a synopsis of the study and the protocol on the SurveyMonkey main page so that participants may understand the nature of the study in accordance with the ethical guidelines of Walden University and TSU, where survey data were collected. I obtained their permission by making it necessary for participants to check the consent icon before beginning the survey.

The difficulty of knowing whether participants have internet access or the type of access needed to conduct the survey is a major challenge with online survey

methodologies (Saleh & Bista, 2017). Given that the target participants are academics and need constant internet connectivity for their daily routine, internet access was not a problem. I ensured that every participant was aware of their right to voluntarily participate and withdraw at any moment. The participants did not receive any financial rewards. The study's findings have not been presented in a manner that includes participant opinions. Any information gathered from the participants will only be accessible to the researcher and the university IRB. I have stored the data after analysis in a password-protected electronic format. Data analysis findings will be retained for 5 years to prevent any distortion. There was no prejudice in the selection of participants based on gender, age, or ethnicity. All cited literature have been duly acknowledged.

Summary

In Chapter 3, I described the study design and rationale for examining the relationship between faculty's transformational leadership style and university sophomores' institutional commitment. I also described the research methodology, population, sampling and sampling procedures for recruitment, participation and data collection, instrumentation and operationalization of constructs, data analysis plan, threats to validity, and ethical procedures. In Chapter 4, I have analyzed my study results. Chapter 5 discussed the summary of findings, discussion of results, conclusion, recommendations, and implications of my study.

Chapter 4: Results

The purpose of this quantitative study was to examine the degree to which subcomponents of faculty's transformational leadership styles have a relationship with their university sophomores' institutional commitment. I investigated the relationship between five independent variables from faculty's transformational leadership styles, namely attributional idealized influence, behavioral idealized influence, inspirational motivation, intellectual stimulation, and individual consideration, and university sophomores' institutional commitment as the dependent variable. My study had one research question and two hypotheses. The research question concerned the relationship between the five subcomponents of transformational leadership style of faculty and their university sophomores' institutional commitment.

This chapter contains an overall analysis of the data collected from participants who were faculty and sophomores at TSU. The following information is included: (a) power analysis; (b) data collection, survey administration, and response rates; (c) participants' demographics; (d) descriptive statistics for responses to scale items; (e) tests of assumptions; (f) discussion of statistical test results using Pearson correlation and multiple regression analysis; and (g) a summary of statistical results. A gap in knowledge of the degree to which subcomponents of faculty's transformational leadership styles impact their university sophomores' institutional commitment formed the basis of the specific problem of this study, which led to the research question: What is the relationship between the five subcomponents of transformational leadership style of

faculty and their university sophomores' institutional commitment? The associated hypotheses were as follows:

H₀: Attributional idealized influence, behavioral idealized influence, inspirational motivation, intellectual stimulation, and individual consideration of faculty do not have a statistically significant effect on their university sophomores' institutional commitment.

H_a: Attributional idealized influence, behavioral idealized influence, inspirational motivation, intellectual stimulation, and individual consideration of faculty have a statistically significant effect on their university sophomores' institutional commitment.

Data Collection

To address the research question in this quantitative study, I collected and evaluated numerical data from faculty and sophomores at the TSU COSET. I used a cross-sectional approach involving the collection of data at one point in time from a representative sample of the population of interest. This quantitative, nonexperimental, correlational research was based on Fisher's (1925, 1935) central theorem for inferential statistical sampling techniques and involved the measurement of the effect of one or more independent variables on one or more dependent variables (see also Knight, 2010).

Based on initial indications received from stakeholders at the University of Houston during my prospectus phase, I had proceeded with the optimism that I would ultimately secure their IRB approval upon receipt of the Walden University conditional IRB approval. My proposal was written and approved with the expectation that it would

be conducted at the University of Houston. However, during my proposal defense, Dr. Anastasia, the second committee member, recommended having a backup partner organization, given her experience securing IRB approvals from non-Walden educational organizations. I therefore contacted TSU to serve as my backup or complementary partner organization. This led to revising my Walden IRB application to reflect both the University of Houston and TSU. The literature review that established the foundation for my study identified the need to focus my transformational leadership research on university science, engineering, and technology stakeholders. TSU is one of the few institutions in Texas with a college that has integrated all three disciplines (science, engineering, and technology).

Officials at the University of Houston responded during their summer session in July 2023 that they had completed a preliminary review of the materials that I had provided and would not be able to support my request to disseminate my survey to their community at this time. TSU officials, however, responded that their IRB had approved my protocol, but they still needed the signature of their senior associate vice president for research and innovation.

The senior associate vice president for research and innovation at TSU approved my research protocol, which had previously been approved by the TSU IRB (see Appendix D). This enabled the Walden University IRB to update their initial provisional approval to full approval for me to collect data. An assigned faculty member sent an invitation to participate in an online survey for research purposes to faculty and sophomores at TSU's COSET for response over a period of 6 weeks. The email

contained a confidential SurveyMonkey link to the online survey. The informed consent, privacy, and IRB approval information were provided on the first page of the survey. The purpose, procedures, risks, and benefits of the study were also described.

I conducted an anonymous online survey using the SurveyMonkey platform. The email invitation to participants remained internal to TSU in line with the protocols approved by the IRBs. I therefore had no visibility to TSU's internally circulated email requests for participation. The TSU sender of the email requests to participate in the survey also had no means of identifying survey participants because the request, along with reminders, were issued to a large number of participants, and the sender had no visibility or access to my SurveyMonkey platform. The responses from participants remained confidential on SurveyMonkey.

This anonymous online survey using the SurveyMonkey platform did not require respondents to provide names or any form of identification; hence, neither SurveyMonkey nor I had a way to identify respondents. Internet protocol address tracking was switched off in the survey platform, ensuring truly anonymous settings, thereby allowing no respondent tracking or follow-ups. Respondents also had the option of clicking on the survey link from their computers or mobile phones to answer the survey questions, and no one could identify, trace, or follow up with any respondent.

Sophomores in the study were required to answer one consent question, two preamble questions, and five survey questions by selecting the answers they considered most appropriate for each question. On average, it took approximately 45 s for each

sophomore to complete the survey. The five questions represent the research-validated and licensed CPQ developed by Davidson and Beck (2018, 2021).

Faculty in the study were required to answer one consent question, two preamble questions, and 20 survey questions by selecting the answers they considered most appropriate for each question. On average, it took about 2 min 11 s for each faculty to complete their survey. The 20 questions represented a short version of the research-validated and licensed MLQ developed by Avolio and Bass (2004) and Bass and Avolio (1997).

The simplicity of the survey enabled participation to exceed the minimum number of respondents required from a busy university population. I collected information on participants' gender to provide additional insights. Descriptive statistics, including frequency, percentage, minimum and maximum value, mean, and standard deviation, were used to analyze the data obtained through SurveyMonkey. Pearson correlation and multiple regression analysis were used to test the hypotheses.

I conducted this study between September and November 2023. I do not believe that it would have been possible to gather more responses from participants if the survey period was extended, given that respondents, comprising faculty and sophomores at TSU, got busier with academic activities as they approached the end of the school semester in November and progressed towards graduation and commencement activities in December. As a result, I ended primary data collection in November.

Sample Size

Sample size calculation is a crucial aspect of study design, not only for financial and human resource reasons but also for methodological and ethical considerations (Dhiman et al., 2023; Faber & Fonseca, 2014). Sample sizes for hypothesis testing studies are typically determined mathematically as the number of samples required to identify a statistically significant outcome with 80% confidence in the event that the hypothesis is true for the population, with a significance level of 0.05 for P values (Andrade, 2020). The design of the study, the primary outcome, the sampling strategy used, the dropout rate, the effect size, the power, the level of significance, and the standard deviation are some of the numerous factors that affect the sample size (Gumpili & Das, 2022).

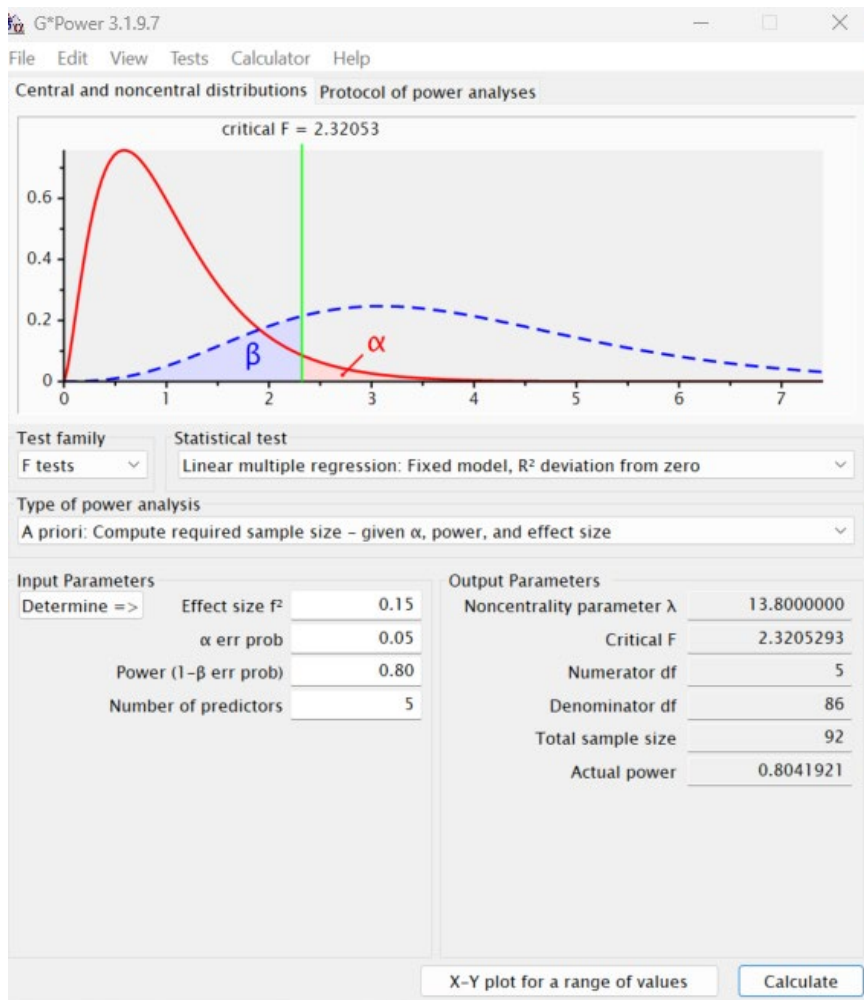
The G*Power software (Kang, 2021) has been used to determine the optimum sample size for my study to ensure that the sample is statistically representative of the population. The software was used to determine the sample size required in hypothesis testing research, with P for statistical significance set at 0.05, to be 80% confident of achieving a statistically significant result should the hypothesis be true for the population.

The G*Power 3.1.9.7 software (Kang, 2021) generated a minimum sample size of 92 for this study, as shown in Figure 3, by setting the effect size at 0.15, selecting F test family, and also selecting the linear multiple regression: fixed model, single regression coefficient as the statistical test. The power in the model was set at 0.8. The number of predictors was set at five, representing the five independent variables of attributional idealized influence, behavioral idealized influence, inspirational motivation, intellectual

stimulation, and individual consideration. The only dependent variable for this study is university sophomores' institutional commitment. Primary data were collected at the ratio of one faculty to two students, translating to a target of 31 faculty and 62 sophomores. I collected data from 41 faculty and 77 sophomores, totaling 118, which exceeded the minimum sample size requirement of 92. Of the total 118 respondents, 105 confirmed, nearly in the desired ratio of 1 to 2, that they were either faculty or sophomores of the COSET of the TSU.

Figure 3

Sample Size Determination



Survey Administration

Study participants were faculty and sophomores at the TSU’s COSET. They responded to the online survey questionnaires deployed via SurveyMonkey over a 6-week period. TSU approved a faculty member as my contact, who coordinated sending IRB-approved emails to respondents, inviting them to participate in the online survey. Sophomores answered five questions from a licensed CPQ developed by Davidson and

Beck (2018, 2021), while faculty answered 20 research questions from a licensed MLQ developed by Avolio and Bass (2004) and Bass and Avolio (1997).

Response Rates

A total of 118 respondents participated in the survey. Table 1 provides a summary of the usable responses relative to the total number of responses.

Table 1

Questionnaire Administration and Response Rate

Sample	<i>f</i>	%
Total participants who responded to the survey	118	N/A
Faculty who responded	41	34.7
Sophomores who responded	77	65.3
Faculty who confirmed belonging to target group	34	82.9
Sophomores who confirmed belonging to target group	71	92.2
Total usable responses	105	89.0

Data Cleaning

Missing data is a common feature in almost all research, regardless of how the study is designed or controlled (Kang, 2013; Nugroho et al., 2021). Outliers and missing values are common during data collection, and how these are handled could have a significant impact on data analysis, given that the statistical power of the study and, ultimately, the dependability of its conclusions could be compromised when missing values exist since they decrease the amount of data that can be analyzed, reduce the effectiveness of the data and introduce a large bias into the outcomes (Kwak & Kim, 2017). Missing values can be handled by complete case analysis, available case analysis, or imputation analysis (Kwak & Kim, 2017). For my study, the complete case analysis method was intended by removing missing values and using only the available data. This

is the most common approach to missing data (Kang, 2013). I imported survey data from SPSS into Excel, which enabled the removal of data where respondents indicated that they were not current faculty or sophomores at TSU's COSET.

Outliers can be representative, being those true yet unusual values of the population, or non-representative, being mere measurement errors (Templ, 2023). In general, there are three approaches to handling outliers in a dataset, including eliminating outliers, swapping outlier data or adjusting outlier weights to lessen the impact of outliers, or using robust techniques to estimate the values of outliers (Kwak & Kim, 2017). There was no outlier considered as a natural variation in my dataset; hence, the intended outlier elimination option was unnecessary. The cook's distance generated during multiple regression analysis ranged from a minimum of .000 to a maximum of .158, which, as desired, is less than 1.000, indicating the absence of any significant outlier data.

Demographics

Demographic information from the survey included only participants' gender, as shown in Table 2.

Table 2

Descriptive Statistics for Gender of Respondents

Respondent gender	<i>f</i>	%
Faculty		
Male	34	82.9
Female	7	17.1
Sophomore		
Male	58	75.3
Female	19	24.7

Responses to Scale Items

The independent variables for this study, comprising faculty's transformational leadership styles, were attributional idealized influence, behavioral idealized influence, inspirational motivation, intellectual stimulation, and individual consideration, which were measured using a scaled instrument. Table 3 provides descriptive statistics for the minimum (Min), the maximum (Max), the mean, and the standard deviation of the data. The mean describes the central tendency, while the standard deviation provides information on the variability of the data.

Table 3*Descriptive Statistics for Responses to Scale Items on Transformational Leadership*

Transformational leadership dimension (response option)	Min	Max	<i>M</i>	<i>SD</i>
Attributional idealized influence				
I instill pride in others for being associated with me.	1	4	3.26	.751
I go beyond self-interest for the good of the group.	3	4	3.59	.500
I act in ways that build others' respect for me.	3	4	3.91	.288
I display a sense of power and confidence.	2	4	3.68	.638
Behavioral idealized influence				
I talk about my most important values and beliefs.	1	4	2.85	.857
I specify the importance of having a strong sense of purpose.	2	4	3.71	.629
I consider the moral and ethical consequences of decisions.	3	4	3.85	.359
I emphasize the importance of having a collective sense of mission.	2	4	3.68	.589
Inspirational motivation				
I talk optimistically about the future.	2	4	3.76	.554
I talk enthusiastically about what needs to be accomplished.	2	4	3.76	.554
I articulate a compelling vision of the future.	2	4	3.76	.496
I express confidence that goals will be achieved.	2	4	3.76	.554
Intellectual stimulation				
I re-examine critical assumptions to question whether they are appropriate.	3	4	3.79	.410
I seek differing perspectives when solving problems.	2	4	3.85	.436
I get others to look at problems from many different angles.	2	4	3.50	.663
I suggest new ways of looking at how to complete assignments.	2	4	3.71	.629
Individual consideration				
I spend time teaching and coaching.	1	4	3.53	.748
I treat others as individuals rather than just as a member of a group.	2	4	3.26	.666
I consider an individual as having different needs, abilities, and aspirations from others.	2	4	3.82	.459
I help others to develop their strengths.	1	4	3.79	.592

As shown in Table 3, a total of 20 items were used from MLQ to produce five continuous variables for transformational leadership consisting of attributional idealized influence, behavioral idealized influence, inspirational motivation, intellectual stimulation, and individual consideration. The range of the scores for attributional idealized influence was 1 to 4, with the mean ranging from 3.26 to 3.91 and the standard deviation ranging from .288 to .751. For behavioral idealized influence, scores ranged from 1 to 4, with the mean ranging from 2.85 to 3.85, and the standard deviation ranging from .359 to .857. For inspirational motivation, scores ranged from 2 to 4; the mean stayed steady at 3.76, and the standard deviation ranged from .496 to .554. For intellectual stimulation, scores ranged from 2 to 4, with the mean ranging from 3.50 to 3.85, and the standard deviation ranging from .410 to .663. For individual consideration, scores ranged from 1 to 4, with the mean ranging from 3.26 to 3.82, and the standard deviation ranging from .459 to .748. Table 4 includes descriptive statistics for the institutional commitment items.

Table 4

Descriptive Statistics for Responses to Scale Items on Institutional Commitment

Item	Min	Max	<i>M</i>	<i>SD</i>
How likely is it you will earn a degree from here?	1	6	1.10	.613
How likely is it that you will reenroll here next semester?	1	6	1.21	.893
How much thought have you given to stopping your education here (perhaps transferring to another college, going to work, or leaving for other reasons)?	1	6	4.66	1.183
How often do you turn in assignments past the due date?	1	6	5.27	1.108
How much have your interactions with other students had an impact on your intellectual growth and interest in ideas?	1	5	1.87	1.027

As shown in Table 4, a total of five items were used from CPQ to produce one continuous variable for institutional commitment as this study's dependent variable. The scale used for the CPQ instrument was not consistent; hence, while the range of scores was from 1 to 6, the mean scores reflected the trend toward positive feedback on each question.

Study Results

For my analysis, I combined and correlated findings from two independent sets of respondents at a ratio of 1:2, the sophomore population being double the faculty population. This included self-assessments by faculty. My recommendations in Chapter 5 include the opportunity for future researchers to sample sets of student population who will provide data on their institutional commitment and assess faculty's transformational leadership styles. Data from my Likert scale questionnaire were measured in the ordinal format following the download from SurveyMonkey. These variables were transformed into mean values to generate corresponding scale data suitable for analysis.

Test of Assumptions

To answer research questions, quantitative researchers choose a statistical analysis strategy based on a number of study parameters, including the type of data gathered and their study design (Patino & Ferreira, 2018). It is expected that quantitative researchers would analyze to confirm that the dataset used for the study satisfies the a priori assumptions of the statistical test they chose. Patino and Ferreira (2018) pointed out that certain underlying assumptions must be satisfied for a statistical test to yield reliable results with respect to the parameter it is attempting to calculate. I tested the assumptions

of regression prior to conducting Pearson correlation and multiple regression analysis. Flatt and Jacobs (2019) noted the importance of testing regression analysis assumptions as a process in a systems framework, given that violations of underlying assumptions can result in biased and misleading forecasts, confidence intervals, and scientific insights. While a true causal relationship can rarely be statistically achieved, the objective of quantitative research is to come as close as possible to infer causality, and violations of the underlying assumptions can result in incorrect conclusions and false claims of causality (Flatt & Jacobs, 2019).

Linear Relationships

This requires a straight-line relationship between two variables (Flatt & Jacobs, 2019). The conditional mean of the errors is assumed to be zero for any given combination of values of the predictor variables. This implies that, for standard multiple regression models, the relationship between every independent variable X_i and the population mean of the dependent variable Y , denoted by μ_Y , is assumed to be linear when the other variables are held constant (Ernst & Albers, 2017). To evaluate the linear relationship between the independent variables, also known as predictor or explanatory variables, and the dependent variable, also known as the outcome or response variable. I generated Figure 3 below on SPSS describing the type of linear relationship that exists between Transformational Leadership (TL) and Institutional Commitment (InsCT).

Figure 4

Test for Linearity Between Dependent and Independent Variables

Figure 4 shows good data convergence on the scatter plot, which indicates linearity in the relationship between the dependent and the independent variables. Additionally, a test for linearity through the comparison of means on SPSS generated an output p-value of .200 for deviation from linearity. Given that this value is $>.05$, the deviation from linearity is viewed as insignificant.

Normality of Distributed Errors

Error terms are required to be normally distributed for the p-values of the t-tests to be valid, given that a violation of normality can distort confidence intervals for forecasts and cause difficulties in determining the significance of model coefficients (Flatt & Jacobs, 2019). A violation of normally distributed error terms can signal the existence of unusual data points or that the model can be improved. The assumption is that all errors are normally distributed around zero (Ernst & Albers, 2017). For the dependent variable

of institutional commitment (IC), a normality test was conducted using SPSS, and the result is displayed in Figures 5 and 6.

Figure 5

Histogram Test for Normality Assumption for the Dependent Variable (Institutional Commitment – InsCT)

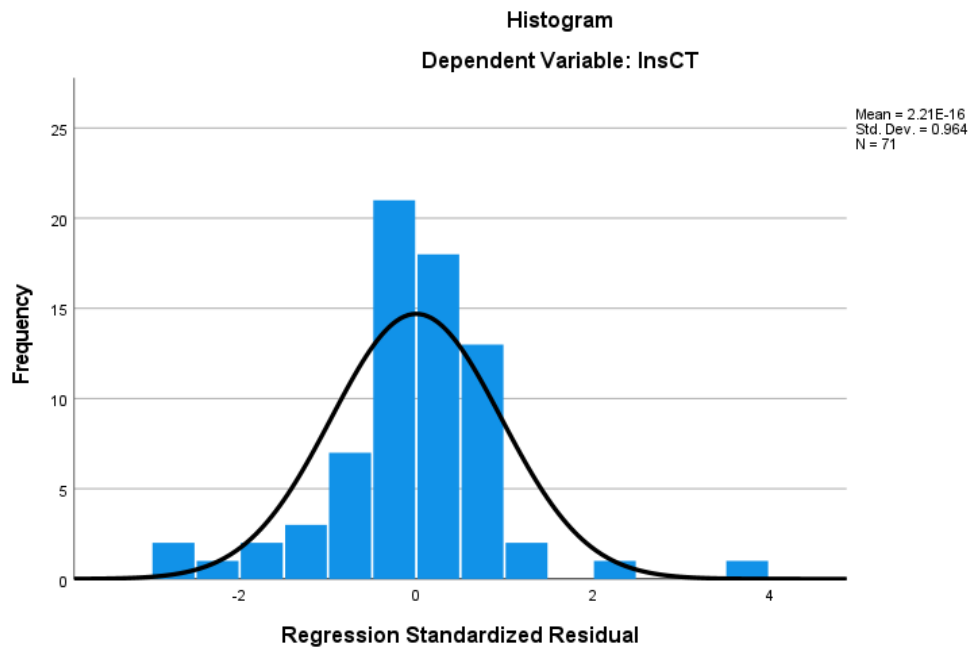
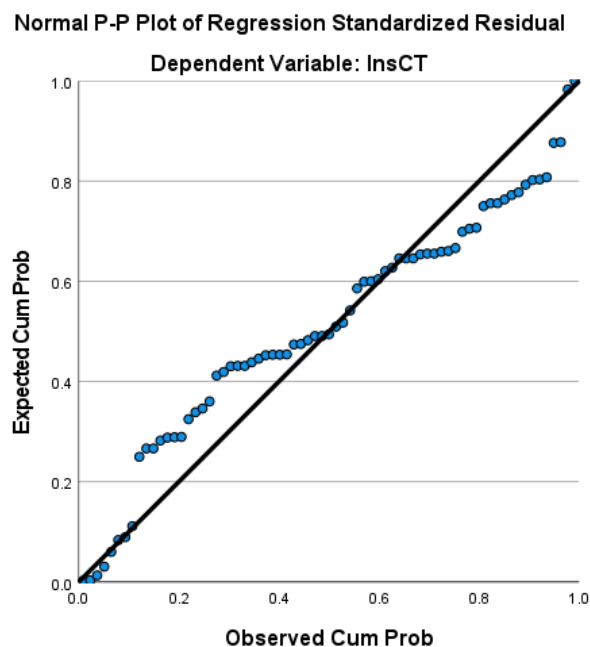


Figure 6

Normal P-P Plot Test for Normality Assumption for the Dependent Variable

(Institutional Commitment – InsCT)



The test of the normality assumption from the histogram in Figure 5 shows errors are normally distributed around zero, while Figure 5 shows data aggregating mostly around a straight-line plot without significant outliers.

Multicollinearity

When two or more predictors are correlated, a phenomenon called multicollinearity occurs, which increases the standard error of the coefficients, thereby making some variables statistically insignificant when they should be significant (Daoud, 2017; Shrestha, 2020). Regression analyses with multicollinearity yield inaccurate results because they indicate a high linear intercorrelation level between the explanatory

variables in a multiple regression model (Kim, 2019). I evaluated multicollinearity on SPSS using the output of the correlation among the independent variables, as presented in Table 5. If the correlations are greater than .7, then the variables are considered multicollinear.

Table 5

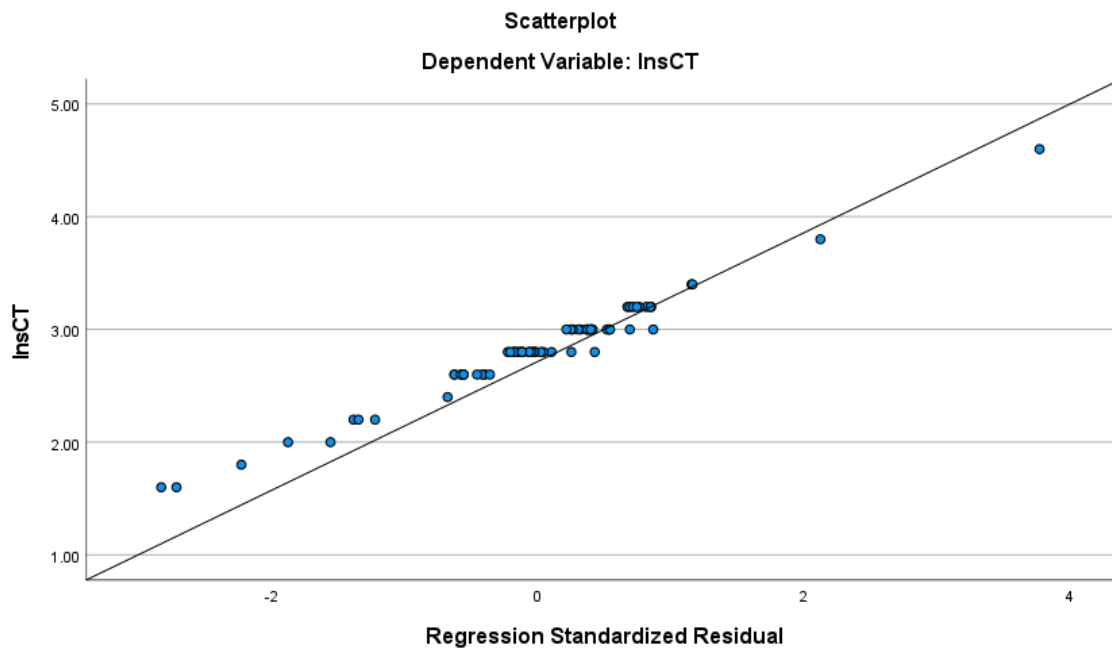
Multicollinearity Test Using Pearson Correlations

Variable	1	2	3	4	5
1. Attributional idealized influence	1.000	.641	.580	.352	.396
2. Behavioral idealized influence	.641	1.000	.850	.600	.372
3. Inspirational motivation	.580	.850	1.000	.435	.420
4. Intellectual stimulation	.352	.600	.435	1.000	.416
5. Individual consideration	.396	.372	.420	.416	1.000

Table 5 shows correlation values among the independent or predictor variables that are mostly below .70, indicating that none of the predictors are multicollinear, and the multicollinearity assumption is satisfied.

Homoscedasticity

Homoscedasticity describes that error terms have constant variance, whereby the residuals and the variance of the residuals are the same for all predicted values (Flatt & Jacobs, 2019). The variance of the errors is the same for any combination of values of the independent variables (Ernst & Albers, 2017). I tested the homoscedasticity assumption on SPSS via the scatterplot in Figure 7.

Figure 7*Test for Homoscedasticity*

The deviation of the scatter data from the fit line in Figure 6 stayed mostly consistent in the plot, which confirms that the homoscedasticity assumption is satisfied.

Correlation Analysis

A multivariate correlation was conducted to evaluate whether significant relationships were evident among the five transformational leadership styles and sophomores' institutional commitment. Frankfort-Nachmias et al. (2020) described correlation as a measure of association used to determine the existence and strength of the relationship between interval-ratio variables. In correlation analysis, the p-value indicates the degree and direction of relationship between the variable(s) under investigation.

The result of the multivariate analysis is summarized in Table 6 for the five independent variables in this study, namely attributional idealized influence (AII), behavioral idealized influence (BII), inspirational motivation (II), intellectual stimulation (IS), and individual consideration (IC).

Table 6

Pearson Correlation Among Independent Variables

Variable	1	2	3	4	5
1. Attributional idealized influence	1	.641**	.580**	.352**	.396**
2. Behavioral idealized influence	.641**	1	.850**	.600**	.372**
3. Inspirational motivation	.580**	.850**	1	.435**	.420**
4. Intellectual stimulation	.352**	.600**	.435**	1	.416**
5. Individual consideration	.396**	.372**	.420**	.416**	1

** Correlation is significant at the 0.01 level (2-tailed).

As indicated in Table 6, the degree of correlation is significant across all the independent variables in all cases. The Pearson correlation value between attributional idealized influence (1) and each of behavioral idealized influence (2), inspirational motivation (3), intellectual stimulation (4), and individual consideration (5) are respectively .641, .580, .352, and .396 respectively, which are all moderately strong relationships. Values above 0.7 are considered strong relationships, while values above 0.9 are considered very strong relationships. The Pearson correlation value between behavioral idealized influence (2) and each of attributional idealized influence (1), inspirational motivation (3), intellectual stimulation (4), and individual consideration (5)

are respectively .641, .850, .600, and .372 respectively, which are all moderately strong relationships, except for the relationship between behavioral idealized influence (2) and inspirational motivation (3), whose Pearson correlation value of .850 indicates a strong relationship.

The Pearson correlation value between inspirational motivation (3) and each of attributional idealized influence (1), behavioral idealized influence (2), intellectual stimulation (4), and individual consideration (5) are respectively .580, .850, .435, and .420 respectively, which are all moderately strong relationships, except for the relationship between inspirational motivation (3) and behavioral idealized influence (2), whose Pearson correlation value of .850 indicates a strong relationship. The Pearson correlation value between intellectual stimulation (4) and each of attributional idealized influence (1), behavioral idealized influence (2), inspirational motivation (3), and individual consideration (5) are respectively .352, .600, .435, and .416 respectively, which are all moderately strong relationships. The Pearson correlation value between individual consideration (5) and each of attributional idealized influence (1), behavioral idealized influence (2), inspirational motivation (3), and intellectual stimulation (4) are respectively .396, .372, .420, and .416 which are all moderately strong relationships.

Table 7 provides the corresponding sig. (2-tailed) values.

Table 7

Sig. (2-tailed) Correlation among Independent Variables

	AII	BII	IM	IS	IC
AII		<.001	<.001	.003	<.001

BII	<.001		<.001	<.001	.006
IM	<.001	<.001		<.001	<.001
IS	.002	<.001	<.001		<.001
IC	<.001	.006	<.001	<.001	

Table 7 describes correlation among the independent variables using the Sig (2-tailed) output values, an indication of p values mostly <.001, enabling a rejection of the null hypothesis that there is zero correlation among the independent variables.

Multiple Regression Analysis

The two hypotheses for this study were tested using multiple regression analysis. IBM's SPSS was the software deployed for this purpose.

Research Question and Hypotheses

The research question for this study was, What is the relationship between the five subcomponents of transformational leadership style of faculty and their university sophomores' institutional commitment? The associated hypotheses were as follows:

H_0 : Attributional idealized influence, behavioral idealized influence, inspirational motivation, intellectual stimulation, and individual consideration of faculty do not have a statistically significant effect on their university sophomores' institutional commitment.

H_a : Attributional idealized influence, behavioral idealized influence, inspirational motivation, intellectual stimulation, and individual consideration of faculty have a statistically significant effect on their university sophomores' institutional commitment.

Table 8 describes the relationship between the five transformational leadership styles and sophomores' institutional commitment.

Table 8

Relationships between Subcomponent of Faculty's Transformational Leadership Styles and Sophomores' Institutional Commitment

Variable	Beta	P-Value	Part
Attributional idealized influence (AII)	.142	.392	.106
Behavioral idealized influence (BII)	-.021	.941	-.009
Inspirational motivation (IM)	.054	.828	-.027
Intellectual stimulation (IS)	.079	.634	.059
Individual consideration (IC)	-.009	.951	-.008

The relationships between the five subcomponents of faculty's transformational leadership styles and their sophomores' institutional commitment are illustrated in Table 8 as follows: attributional idealized influence and institutional commitment ($r=.142$, $p>0.01$), behavioral idealized influence and institutional commitment ($r=-.021$, $p>0.01$), inspirational motivation and institutional commitment ($r=.054$, $p>0.01$), intellectual stimulation and institutional commitment ($r=.079$, $p>0.01$), and individual consideration and institutional commitment ($r=-.009$, $p>0.01$). From this result, all five subcomponents of transformational leadership styles exhibit low and insignificant relationships with institutional commitment. The analysis confirms the null hypothesis that attributional idealized influence, behavioral idealized influence, inspirational motivation, intellectual stimulation, and individual consideration of faculty do not have a statistically significant effect on their university sophomores' institutional commitment. Additionally, individual

subcomponents of these transformational leadership styles do not have comparatively different impacts on institutional commitment. Semi-partial correlation is indicated in Table 8 as the Part figures, which explain the unique contributions of each predictor or independent variable. The greatest unique contribution based on the highest figure of .106 is from attributional idealized influence (AII). When all five subcomponents of transformational leadership are combined into a set of mean values, Table 9 describes the measures of association between faculty's transformational leadership (TL) and sophomores' institutional commitment (InsCT) based on the data obtained for this study.

Table 9

Measures of Association between Faculty's Transformational Leadership Styles and Sophomores' Institutional Commitment

	R	R Squared	Eta	Eta Squared
InsCT*TL	.092	.008	.482	.232

Table 9 shows Eta values ranging from zero (no association) to one (perfect association). Richardson (2011) described Eta measurements in relation to variances in a dependent variable as they relate to groups defined by independent variables. The value of .482 describes a moderate association. Eta squared describes how much variation is explained in the dependent variable by variation in the independent variable. It is a measure of effect size where .02 is small effect, .13 is medium effect, and .26 is large effect. Values of R greater than zero indicate positive association, while R Squared describes the amount of variance in the dependent variable that is accounted for or explained by the independent variables. At a value of .008, Table 9 shows that only .8% of variance in sophomores' institutional commitment can be explained by the

subcomponents of faculty's transformational leadership styles. This association can be considered insignificant.

Summary

The purpose of my quantitative study was to examine the degree to which subcomponents of faculty's transformational leadership styles have a relationship with their university sophomores' institutional commitment. The five independent variables from faculty's transformational leadership styles were attributional idealized influence, behavioral idealized influence, inspirational motivation, intellectual stimulation, and individual consideration. The dependent variable was university sophomores' institutional commitment. The outcome of hypotheses testing in this study is summarized in Table 10.

Table 10

Summary of Hypotheses Testing

Hypotheses	Significance Level	Decision
Attributional idealized influence, behavioral idealized influence, inspirational motivation, intellectual stimulation, and individual consideration of faculty do not have a statistically significant effect on their university sophomores' institutional commitment	.929	Supported
Attributional idealized influence, behavioral idealized influence, inspirational motivation, intellectual stimulation, and individual consideration of faculty have a statistically significant effect on their university sophomores' institutional commitment	.929	Not supported

At a significance level of .929, Table 10 shows that the null hypothesis that attributional idealized influence, behavioral idealized influence, inspirational motivation,

intellectual stimulation, and individual consideration of faculty do not have a statistically significant effect on their university sophomores' institutional commitment was supported by the findings from this study, while the alternative hypothesis that attributional idealized influence, behavioral idealized influence, inspirational motivation, intellectual stimulation, and individual consideration of faculty have a statistically significant effect on their university sophomores' institutional commitment, was not supported by the findings from this study.

Chapter 4 provided details of data collection, analysis, and research findings. Descriptive statistics using mean and standard deviation were used to evaluate scale item responses. Prior to Pearson (r) correlation and multiple regression analysis, an assessment of assumptions for the statistical test was conducted. While multiple regression analysis was used to assess the predictive relationship between the independent and dependent variables, Pearson correlation analysis was used to assess the strength and type of relationship between the independent and dependent variables.

The research topic, hypotheses, interpretations of the results, conclusion, and study implications are covered in Chapter 5. The chapter closes with recommendations for additional research and a list of the study's limitations.

Chapter 5: Discussion, Conclusions, and Recommendations

The purpose of this quantitative study was to examine the degree to which subcomponents of faculty's transformational leadership styles have a relationship with their university sophomores' institutional commitment. I found that although the degree of correlation is significant among subcomponents of faculty's transformational leadership styles, these subcomponents do not have a statistically significant effect on their university sophomores' institutional commitment. Additionally, individual subcomponents of these transformational leadership styles do not have comparatively different impacts on institutional commitment. These findings may help leaders of higher educational institutions to prioritize transformational leadership efforts around where such would be most impactful to positively influence students' dropout decision-making. Simón and Puerta (2022) noted the concern about student retention in higher education, which is connected to students' institutional commitment. Evaluating university efficiency necessitates identifying and measuring inputs and outputs, with graduation rates and student enrollment serving as crucial indicators (Wijesundara & Prabodanie, 2022). Findings from this study may identify where to concentrate leadership efforts and resources, which could also improve sustained enrollments and effect positive social change through increased college persistence and degree attainment, both of which are linked to higher employment for skilled positions (Neugebauer & Daniel, 2022). In this chapter, I discuss and interpret findings from the study. I also discuss the limitations of the study, offer recommendations for future research, consider the study's implications for research and positive social change, and provide a conclusion to the study.

Interpretation of Findings

The specific objective of this study was to examine the relationship between the five subcomponents of transformational leadership style of faculty and their university sophomores' institutional commitment. The predictor variables for this study were the transformational leadership theory variables, comprising attributional idealized influence, behavioral idealized influence, inspirational motivation, intellectual stimulation, and individual consideration. The criterion variable was university student institutional commitment. Participants were faculty and sophomores at the TSU.

To collect data for the study, I used the CPQ developed by Davidson and Beck (2018, 2021) and MLQ developed by Avolio and Bass (2004) and Bass and Avolio (1997). I obtained permission to use both instruments (see Appendices A and B). As noted in Chapter 1 of this study, the scope of currently available research into the impact of transformational leadership on performance, commitment, and retention is narrow and industry-focused (Donkor, 2022; Noureen et al., 2020; Puni et al., 2022; Rawashdeh et al., 2021). This gap in the literature prompted me to focus on the educational sector to improve the generalizability of existing leadership research

For this study, I used one research question and two hypotheses to determine the relationship between the five subcomponents of transformational leadership style of faculty and their university sophomores' institutional commitment. The Pearson (r) correlation and multiple regression analysis were used to address the research question. I found that the degree of correlation was significant across all the subcomponents of transformational leadership style of faculty. This suggests that transformational

leadership is relevant in higher educational systems. The null hypothesis that attributional idealized influence, behavioral idealized influence, inspirational motivation, intellectual stimulation, and individual consideration of faculty do not have a statistically significant effect on their university sophomores' institutional commitment was supported by the findings from this study. The alternative hypothesis that attributional idealized influence, behavioral idealized influence, inspirational motivation, intellectual stimulation, and individual consideration of faculty have a statistically significant effect on their university sophomores' institutional commitment was not supported by the findings from this study. Individual subcomponents of these transformational leadership styles of faculty also do not have comparatively different impacts on their sophomores' institutional commitment.

Sophomores were intentionally targeted for this study, setting a baseline for where faculty's transformational leadership styles might begin to have significant relationships with university students. Hassel and Ridout (2018) found that 1st-year students had largely unrealistic expectations of university; they concluded that faculty needed to adapt their teaching approach according to year of study. Having already spent a year to better understand university life, sophomores, therefore represent a potentially more reliable set of early students for research into transformational leadership relationships. The findings from my study have helped to narrow the research field such that future research into the relationships between faculty's transformational leadership styles and their university students' institutional commitment could target juniors and seniors. Alessa (2021) described the results of 22 studies whose authors investigated transformational leadership

practices in Saudi Arabian public universities across four dimensions and noted that organizational commitment had the highest leverage, representing about 40% of the studies, although mostly investigated among faculty and not students. The relationship between transformational leadership and student institutional commitment in universities is therefore underresearched in literature, and the findings from this study represent a unique contribution to knowledge that could be built upon by future researchers and management scholars.

I conducted this study in a university environment. I found the degree of correlation to be significant across all the independent variables. These were the subcomponents of the transformational leadership style of faculty, comprising attributional idealized influence, behavioral idealized influence, inspirational motivation, intellectual stimulation, and individual consideration. My findings indicated moderately strong relationships among these subcomponents. One of the first psychological and methodological theories for comprehending and analyzing leadership was transformational leadership theory. According to Burns (1978), transformational leadership is a process founded upon internal relationships and values enabling a leader to influence others' behaviors to address challenges. Because the components of transformational leadership are built on values, it is essential that they have strong relationships and that it be difficult to separate one from the other.

A key finding in this respect from my study was that the degree of correlation was found to be significant across all the subcomponents of transformational leadership style of faculty. In this study, all five subcomponents of transformational leadership styles

exhibited low and insignificant relationships with institutional commitment. Additionally, individual subcomponents of these transformational leadership styles did not have comparatively different impacts on institutional commitment. Findings by Ausat et al. (2022) revealed that organizational commitment could be increased by using a transformational leadership style that inspires employees to put their personal interests aside to focus on achieving organizational goals but with little impact. Ausat et al.'s finding validates those of the present study that there are cases where transformational leadership could have little or no significant relationship with organizational commitment. Ausat et al. postulated that this could be due to the fact that leaders are not yet aware of what employees' main desires are hidden in their hearts. Although these findings are from a business setting, which is different from an educational institution setting, the similarity of the findings with the outcome of my study is noteworthy.

Limitations of the Study

Researchers are expected to describe the limitations of their studies, particularly given how high the challenge of insufficient reporting of study limitations ranks on the list of detrimental research practices (Keserlioglu et al., 2019). My study's key limitation is its scope and generalizability, given that participants were from a specific college within one university in Houston, Texas. My findings from this population are based on the opinions of sophomores on the questions posed by the research-validated and licensed CPQ developed by Davidson and Beck (2018, 2021) and on the opinions of faculty on the questions derived from a short version of the research-validated and licensed MLQ developed by Avolio and Bass (2004) and Bass and Avolio (1997). Additionally, this

study correlated self-assessments of transformational leadership styles by faculty with independent feedback by their sophomores on institutional commitment. Future research could have the same student population assess their faculty's transformational leadership styles.

This study is also limited by the design as a cross-sectional study, which implies that no conclusion concerning causality can be made. Cross-sectional studies examine data from a population at one particular point in time through observational methods, do not follow participants up over time, and are useful for establishing preliminary evidence in planning a future advanced study (Wang & Cheng, 2020).

The self-reporting nature of the survey of faculty members in this study poses another limitation. In addition to reference bias, two critical factors to examine when assessing the validity of self-report data are cognitive and situational issues (Hansen et al., 2022; Lira et al., 2022). Cognitive factors relate to respondents' comprehension of the question and their recall or understanding of the proper response, while situational factors include the impact of the survey's location (at home, at school, etc.).

While the minimum sample size requirements were met for this study, the aspirational target was for a larger size, which would have been more representative of the population. This is considered another limitation for the study. Small sample sizes compromise a study's external and internal validity, while on the other hand, very large samples tend to transform small differences into statistically significant differences even when they are otherwise insignificant (Faber & Fonseca, 2014). An optimal sample size

must be used to identify statistically significant differences, if they exist, and obtain scientifically valid results (Gumpili & Das, 2022).

The scope of my study was limited to the variables used to determine relationships between the subcomponents of faculty's transformational leadership styles and university sophomores' institutional commitment. This study did not investigate other factors that may influence the institutional commitment of university students in general or non-sophomores in particular. Future research could conduct hierarchical regression to further investigate the relationship and prediction of the independent variable on the dependent variable.

Recommendations

This study supports the null hypothesis that attributional idealized influence, behavioral idealized influence, inspirational motivation, intellectual stimulation, and individual consideration of faculty do not have a statistically significant effect on their university sophomores' institutional commitment. This will be of interest to leadership practitioners and administrators in the field of University education. A summary of the findings from my study can be appropriately tailored to the desired audience through conference presentations and journal publications. An executive summary would be appropriate for stakeholders in University leadership for their consideration.

Although the outcomes of this study have unveiled interesting findings, it is imperative to exercise prudence when attempting to extrapolate the findings or establish causal relationships based on the data. It should be noted that data collection assumed that respondents sufficiently understood every question on the survey instruments, and all

responded sincerely and objectively. Other factors impact the institutional commitment of sophomores beyond the transformational leadership styles of faculty, which were the independent variables for my study. Future researchers may therefore extend the scope of this study for more generalizability by incorporating other variables that could impact the institutional commitment of university sophomores. These may be expanded to cover 1st-year students, juniors, and seniors.

Future longitudinal studies are recommended that may accommodate intervening variables. Future research could also aim to expand this study's scope by encompassing a wider range of universities across the United States. Furthermore, efforts should be made to acquire a larger sample size in order to provide supplementary findings that would enhance the generalizability of the study. Given that my study focused on the science discipline, there is an opportunity for future research to explore other disciplines in the university to improve generalizability.

The data for this study was collected via an online SurveyMonkey platform, which may have been responsible for the small sample size. While the minimum sample requirements were exceeded, which enabled the desired empirical analysis, obtaining more robust results from a larger sample size may be possible. Future research could leverage the survey mechanisms and resources within university establishments, potentially facilitating larger sample sizes.

While quantitative research provides valuable statistical insights into the phenomena being studied, it is important to recognize the significant value that qualitative research approaches offer. Hence, it is recommended that future research

could employ qualitative research methodologies within an interpretivist paradigm, such as conducting interviews or focus group studies. This approach has the potential to facilitate the exploration of the interrelationships between variables from several viewpoints, thereby yielding insights that are both comprehensive and illuminating.

Implications

This study examined the relationship between the five subcomponents of transformational leadership style of faculty and their university sophomores' institutional commitment to generate transferable leadership and management learnings for positive social change (Howell et al., 2022; Massoud & Ayoubi, 2019; Wijesundara & Prabodanie, 2022; Williams, 2018). I conducted my research at TSU's COSET and obtained primary data from faculty and sophomores.

The social problem of decreasing institutional commitment by university sophomores contributes to the declining student enrollment trend in U.S. universities, which, if unaddressed, could ultimately impact the competitive performance of the U.S. economy and potentially create a demographic imbalance in education (Eide, 2018; Pavlov & Katsamakos, 2020). In the United States, there were 4,000,000 fewer college students enrolled in 2022 than 10 years prior, and the COVID-19 epidemic hastened this fall with a 10% drop in enrollment. (World Economic Forum, 2022). One third of students are dropping out of college, which exacerbates an already existing student loan crisis in the United States, and the National Center for Education Statistics found that between 2012 and 2017, 38%–39% of students who took out student loans did not complete college (World Economic Forum, 2022). This is a growing concern.

The body of literature on transformational leadership continues to grow, and while researchers continue to study transformational leadership in universities, there is very little or no literature on how the subcomponents of faculty's transformational leadership styles impact their sophomores' institutional commitment as an influencer of dropout decision-making, given the social problem of decline in university enrollment (Howell et al., 2022; McRoberts & Miller, 2015; Pavlov & Katsamakos, 2020). Available research on the impact of transformational leadership is limited in scope, prompting recommendations from researchers for additional studies into sectors like education to improve generalizability (Donkor, 2022; Noureen et al., 2020; Puni et al., 2022; Rawashdeh et al., 2021). Therefore, my research into the relationship between faculty's transformational leadership styles and their university sophomores' institutional commitment may generate transferable leadership and management learnings for positive social change (Howell et al., 2022; Massoud & Ayoubi, 2019; Wijesundara & Prabodanie, 2022; Williams, 2018).

The findings from my study may provide useful information for researchers' divergent opinions on the effectiveness of leadership styles in higher educational institutions (Kasalak et al., 2022). Universities are among dynamic organizations undergoing transformational development and are in need of leadership capable of managing their challenges and transformations (Alessa, 2021). The appointment of university leaders who possess transformational leadership styles is essential for leadership practice, and credible criteria must be established for choosing candidates with these qualifications. (2021, Alessa). Simón and Puerta (2022) noted global concern about

retention of students in universities, which is related to students' institutional commitment.

Researchers have been developing models to predict early dropout and direct efforts to support students, including sophomores, who are at risk of dropping out because of associated social ramifications (Segura et al., 2022; Simón & Puerta, 2022). Given that transformational leadership has been shown to be essential to higher education's quality, performance, and long-term sustainability and that education is a catalyst for positive social change, my study may provide lessons for stakeholders in higher education, policy makers, and management scholars. Findings from my study may specifically assist university leadership to identify and recommend specific transformational leadership styles for faculty that may improve their sophomores' institutional commitment and improve sustained enrollments into universities toward positive social change from education.

Developing a theoretical model was not part of the objectives of this study. Notwithstanding, there is an opportunity to further develop the documented empirical connections between the variables into a leadership framework for universities towards improving the institutional commitment and retention of sophomores in particular and students in general. Through an evaluation of the established relationships between the variables in this study, the leadership of universities and other educational institutions may be able to promote positive social change by helping their faculty to embrace transformational leadership practices that are critical for improved institutional commitment by students. Rawashdeh et al. (2021) noted that transformational leadership

style is best suited for organizations seeking change to maintain their positions and stay competitive in the market. This would apply to higher educational institutions like universities in both the private and public spaces.

While numerous variables affect college students' achievement, interaction with faculty has been found to be crucial (Micari & Pazos, 2012). Chhetri and Baniya (2022) noted that interaction between students and faculty could be essential for involving students in their education and improving assessments of career self-efficacy, perceived employability, and satisfaction with educational institutions. Findings from the study conducted by Ferguson (2021) indicate that more research is needed on roles of Faculty in Universities, including how to better support students. This is a broad space of research needs, but my study has succeeded in narrowing that space by investigating what relationship might exist between the subcomponent of faculty's transformational leadership styles and their sophomores' institutional commitment. Research opportunities exist in the type of relationships that may exist with university juniors and seniors.

Conclusions

In this correlational quantitative study, I presented and analyzed data collected through a survey to answer a research question and test the associated hypotheses. The findings in my study have expanded the meaningfulness of transformational leadership research, particularly through its extension into the currently under-researched educational institutions space.

My study was premised upon the importance of transformational leadership in educational institutions as a possible mitigation for observed student enrollment and

retention challenges, given the social problem of student retention in universities as they relate to students' institutional commitment. My study found that the degree of correlation was significant across all the subcomponents of transformational leadership style of faculty, comprising attributional idealized influence, behavioral idealized influence, inspirational motivation, intellectual stimulation, and individual consideration, indicating moderately strong relationships. This suggests that transformational leadership is relevant in higher educational systems.

From this study, all five subcomponents of transformational leadership styles of faculty exhibited low and insignificant relationships with their sophomores' institutional commitment. Additionally, individual subcomponents of these transformational leadership styles do not have comparatively different impacts on institutional commitment. This suggests that sophomore experience with faculty in universities could be too little or too premature for sophomores' institutional commitment to be significantly influenced by the subcomponents of their faculty's transformational leadership styles. I have provided recommendations on additional research opportunities and designs that could further enrich the knowledge of organizational leadership practitioners and thereby contribute to management literature.

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Appendix A: Copyright Approval to Use the Multifactor Leadership Questionnaire

For use by Olusegun Kuteyi only. Received from Mind Garden, Inc. on May 23, 2023
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Multifactor Leadership Questionnaire™
Form 5X-Short Instrument
Leader Form, Rater Form, & Scoring Guide

License to Administer

by Bruce Avolio and Bernard Bass

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Appendix B: Copyright Approval to Use the College Persistence Questionnaire

4/8/23, 7:51 AM Mail - Olusegun Kuteyi - Outlook

Re: [External] Re:
 Hall Beck [REDACTED]
 Wed 4/5/2023 6:46 PM
 To: Olusegun Kuteyi <olusegun.kuteyi@waldenu.edu>
 Glad to help!

On Wed, Apr 5, 2023, 4:31 PM Olusegun Kuteyi <olusegun.kuteyi@waldenu.edu> wrote:
 Dear Professor Beck,

Thanks again for your feedback and approval for me to use the items in Davidson and Beck (2021). This will meet my research objectives. Much appreciated, and do have a happy day too!

Regards,
 Olusegun Kuteyi

From: Hall Beck [REDACTED]
 Sent: Wednesday, April 5, 2023 1:04 PM
 To: Olusegun Kuteyi <olusegun.kuteyi@waldenu.edu>
 Subject: Re: [External] Re:

Dear Mr. Kuteyi,
 You are not authorized to use the Institutional Commitment or any other of the CPQ scales. You may, however, use the items in the Davidson and Beck (2021) but only those items.

Have a happy day,
 Hall Beck

On Wed, Apr 5, 2023 at 9:48AM Olusegun Kuteyi <olusegun.kuteyi@waldenu.edu> wrote:
 Dear Professor Beck,

Thank you so much for your reply. I will review your 2021 publication further and select from the set of options that you provided for using the CPQ. My objective is not necessarily to determine the precipitating factors affecting retention but to have my survey participants (students) answer CPQ questions related to their institutional commitment so that I can quantitatively examine what type of relationship[s] these might have with their faculty's transformational leadership styles (measured using the multifactor leadership questionnaire). Much appreciated.

Regards,
 Olusegun Kuteyi

From: Hall Beck [REDACTED]
 Sent: Wednesday, April 5, 2023 6:35 AM
 To: Olusegun Kuteyi <olusegun.kuteyi@waldenu.edu>
 Subject:

Mr. Kuteyi,

<https://outlook.office.com/mail/deeplink?popup=2&version=2023024008.14&view=print> 1/2

4/8/23, 7:51 AM Mail - Olusegun Kuteyi - Outlook



It was kind of you to consider using the CPQ for your dissertation. I apologize for not getting back with you sooner. I have been attending several conferences and I am afraid that I am behind on my correspondence.

There are three options for using the CPQ. There is a cost for using the multi-scale version (see attachment). I would recommend taking one of these two options if your objective is to determine the precipitating factors affecting retention. However, there is a third option for which there is no charge if your sole objective is to identify at-risk students. You might find this publication helpful.






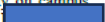


Davidson, W. B., & Beck, H. P. (2021). A two-minute test to identify undergraduates likely to drop out. *College Student Journal*, 55(1), 56–66.

Good luck in your research adventure,
 Hall 'Skip' Beck

Appendix C: Collaborative Institutional Training Initiative Certificate of Completion

		<p>Completion Date 15-Apr-2023 Expiration Date N/A Record ID 55393267</p>
<p>This is to certify that:</p>		
<p>Olusegun Kuteyi</p>		
<p>Has completed the following CITI Program course:</p>		
<p>Not valid for renewal of certification through CME.</p>		
<p style="text-align: center;">Student's (Curriculum Group) Doctoral Student Researchers (Course Learner Group) 1 - Basic Course (Stage)</p>		
<p>Under requirements set by:</p>		
<p>Walden University</p>		
<p style="text-align: center;">CITI Collaborative Institutional Training Initiative 101 NE 3rd Avenue, Suite 320 Fort Lauderdale, FL 33301 US www.citiprogram.org</p>		
<p>Verify at www.citiprogram.org/verify/?w3d86b268-8d75-4ca2-86e0-9c8a10bbaf22-55393267</p>		

Appendix D: Partner Organization Approval for Data Collection

 OFFICE OF RESEARCH	
<hr/>	
TO:	
FROM:	
DATE:	September 14, 2023
SUBJECT:	External Protocol Approval Recommended and Requested Olusegun Kuteyi, Walden University
<hr/>	
<p>Protocol  entitled, "Examining Faculty Transformational Leadership Style and University Sophomores' Institutional Commitment", by principal investigator Olusegun Kuteyi (Walden University) was brought before the Institutional Review Board (IRB). After reviewing the protocol and supporting documents, the IRB has approved the protocol, and is therefore requesting your approval on behalf of Olusegun Kuteyi to conduct this study on campus. Supporting documentation is attached to this memorandum. If you have any questions, please contact  . Thank you.</p>	
<p>Permission to conduct the study is:</p>	
<p><input checked="" type="checkbox"/> Approved <input type="checkbox"/> Denied</p>	
<p>Comments:</p> <hr/> <hr/>	
	<p>09/15/2023 Date</p>