

Teacher Perception of Principals' Transformational Leadership and the Self-Efficacy of Teachers in Selected All-Female Schools in Saudi Arabia

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ABSTRACT

A number of studies have addressed the correlations between transformational leadership and its impact on the self-efficacy of teachers. This quantitative, non-experimental study design adds to this growing body of knowledge by examining the transformational leadership qualities of school principals as perceived by female teachers, and its influence on their self-efficacy. For this study, the targeted population was 208 teachers within a single all-female school district in Jeddah, Saudi Arabia. At the time of this study, this school district included eight all-female public schools, which were all similar with respect to physical infrastructure, curricula, number of teachers and students, and the socioeconomic status of the local population. Two validated survey instruments were used for this study: (a) the Principal Leadership Questionnaire (PLQ) for assessing transformational leadership characteristics; and (b) the Teachers' Sense of Efficacy Scale (TSES) to evaluate the teachers' sense of efficacy. The data were formatted using Qualtrics survey software and all data were analyzed in SPSS (V26). In total, data from 85 surveys were analyzed. Descriptive and statistical analyses indicated that the surveyed teachers did perceive that their school leaders' behavior reflected transformational leadership characteristics. Pearson's correlation analysis was utilized to determine the relationship between teachers' perceptions of their principals' transformational leadership and their sense of self-efficacy, revealing a statistically significant positive correlation between the two variables. A bivariate analysis was conducted using Pearson correlation coefficients and a 2-tailed test to investigate the relationship between all dimensions. The correlation indicated that vision, modeling, and goal acceptance were significantly correlated to efficacy for student engagement and instructional strategies. Conversely, results indicated the absence of statistically significant correlations between individualized support and student engagement; similarly, no correlation was found between intellectual stimulation and high expectations with any of the teacher-efficacy factors. Multiple linear regression was used to examine whether the moderating factors of teaching experience and level of education would represent significant predictors for the linkage between principals' transformational leadership and teachers' sense of efficacy. The results showed that neither

variable was a significant predictor for teachers' views of their leaders' transformational behaviors and their level of efficacy. Finally, t-test analysis was used to examine the differences between elementary and secondary teachers' perceptions of their principals' transformational leadership behaviors. A significant difference was found between teachers' perceptions of their principals transformational leadership style and the school level (e.g., elementary, middle, or high school).

The results from this study are consistent with the theoretical framework that transformational leadership theory has a positive impact on teachers self-efficacy, as well as support findings from prior studies in this area of educational research. The findings from this investigation provide useful data to those studying educational leadership, as well as school principals, administrators, and other leaders who play significant roles in changing, facilitating, and improving education. Additional studies are recommended to determine if this relationship exists in all-male schools in Saudi Arabia or in other countries.

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GENERAL AUDIENCE ABSTRACT

A number of scholars have addressed the relationship between transformational leadership style and teacher self-efficacy, indicating that teachers display increased levels of self-efficacy when working under the direction of a principal who practices transformational leadership. This quantitative, non-experimental study design examined the transformational leadership qualities of school principals as perceived by female educators teaching in all-female public schools located within a single school district in Saudi Arabia, as well as how this relationship impacted their sense of self-efficacy. Two survey instruments were used: The Principal Leadership Questionnaire (PLQ), and the Teachers' Sense of Efficacy Scale (TSES). Resulting data analysis indicated that teachers did perceive that their school leaders' behavior reflected transformational leadership characteristics. Moreover, the findings from the study confirmed a significant positive correlation between the principals' transformational leadership and teachers' self-efficacy. This study is expected to contribute to a greater understanding of the effect of leadership practices on the self-efficacy of teachers, with a corollary understanding of how this relationship may enhance educational outcomes for students.

Dedication

This dissertation is dedicated first to my husband, Ahmed, my best friend and life partner. You have been a constant source of encouragement. You have shared my many challenges and sacrifices during the completion of this dissertation. You were always proud of me and loved me unconditionally. I could not have made this journey without you. Thank you for believing in me unreservedly and for bring out strengths in me I never knew I had!

This work is also dedicated to my amazing parents, who have always supported me, and prayed for me.

To my children, Remas, Mayas, Ibrahim, and Wafi: A mother could not have asked for better children. I am proud of each of you every day. This one is for you!

To my lovely brothers and sisters, Turki, Areej, Rawan, and Ahmed. Extraordinary thanks to my sister and best friend, Razan: Thank you for believing in me and being on my side all the time, in my happiness and sadness.

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To the many friends who encouraged me and prayed for me all through this journey:
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Chapter 1

Introduction and Overview

Three main components are involved in formalized education: curriculum development, teaching, and assessment. In the current milieu of standards-based pedagogy, there often seems to be a greater emphasis placed on “teaching to the test.” Although conceived to standardize learning outcomes, this concept includes a number of drawbacks that have the effect of putting the testing cart in front of the education horse, such as (a) external broad-based testing instruments have not been proven to measure motivation, abstract/critical thinking, and creativity; (b) teachers must spend most of their time preparing their students to pass a test rather than educating them; (d) teaching to the test can take the pleasure out of teaching and learning; and (e) this approach can narrow the curriculum to teaching/learning a set of “essential subjects” that tend to be determined externally (Taylor, 2010). In short, teaching to the test can have the effect of relegating teachers to becoming mere vessels for delivering the “desired” results that they had little or no part in determining (Robinson & Aronica, 2015). Interestingly, students are also pushing back against the concept that a single letter grade fully represents either their prior performance and knowledge, or their likely ability to do well in the future (Peters, Kruse, Buckmiller, & Townsley, 2017).

The most effective teachers are well aware that getting the best from their students involves more than simply being a master of specific content and conveying that information to them in ways that can be measured with a letter grade or number score. Instead, teachers understand that fostering high performance can be achieved by motivating and inspiring young minds to excel, connecting with them on a fundamental level, demonstrating both trust and belief in their abilities to succeed, and giving them the tools to thrive (Robinson & Aronica, 2015). Moreover, as prior research indicates, teachers who believe in their power to impact student learning in positive ways, which is known as teacher efficacy, is known to be a powerful predictor of the degree to which a student will do well in the classroom (Mehdinezhad & Mansouri, 2016). Effective teachers are less anxious in their classrooms and are more committed to teaching (Nir & Kranot, 2006). In a similar way, effective school administrators can increase their teachers’ sense of efficacy by practicing transformational leadership style which focuses on motivation and inspiration.

Transformational leaders are more adept at motivating followers in making positive

changes, thereby encouraging them to achieve more than they believed they could; such leaders, therefore, are linked to improved efficacy in the workplace and transforming the organization (Northouse, 2015). Various studies conducted in the U.S. have revealed that school principals who demonstrate a transformational leaders have had statistically significant positive effects upon teacher efficacy (Espinoza, 2013; Lilla, 2013; Maguire, 2016; Mehdinezhad & Mansouri, 2016; Nelson, 2012; Sompongdam, 2016). Thus, while the evidence is persuasive that transformational leadership contributes to the effectiveness of U.S.-based teachers, the scholarly literature is far less conclusive as to whether this style of leadership is viable in other countries— if indeed structural considerations permit it. Accordingly, this quantitative research approach was designed to explore the relationship between the transformational qualities of school principals and the efficacy of female instructors in elementary and secondary schools within one school district in Jeddah, Saudi Arabia. The findings from this investigation provide useful data to researchers who are interested in studying educational leadership, principals, administrators, and other leaders who works on changing and improving school systems.

As Katzenmeyer and Moller (2001) noted, “Within every school there is a sleeping giant of teacher leadership, that can be a strong catalyst for making change to improve student learning” (p. 2). Researchers in the educational field have studied several types of leadership styles and theories in an effort to verify the level to which school leaders can do to enhance a positive climate and culture to enable teachers to achieve optimal self-efficacy and classroom performance. Nicholson (2003) asserted that “The effects of teacher efficacy play an important role in shaping the attitudes and behavior of teachers as they prepare for and engage in their craft, teaching students” (p. 16). Leithwood and his research collaborators (e.g., Leithwood, Jantzi, & Steinbach 1999a, Leithwood & Jantzi, 1999, Leithwood & Jantzi, 2000, Leithwood, Jantzi, & Fernandez, 1994) have conducted studies investigating transformational leadership that feature variables such as school and teacher performance, self-efficacy, and student outcomes. Moreover, various studies have addressed the correlation between transformational leadership and its effect on teachers’ self-efficacy (Bennardo, 2007; Espinoza, 2013; Griffin, 2009; Lilla, 2013; Lussiez, 2009; Maguire, 2016; Mehdinezhad & Mansouri, 2016; Nelson, 2012; Sompongdam, 2016).

Significance

This quantitative research study was designed to study the relationship between female teachers' perceptions of the transformational style of their principals in relation to their self-efficacy in a particular school district in Jeddah, Saudi Arabia. As noted in the introduction, while this correlation has been described based on research conducted in the U.S., there are fewer studies examining this relationship in schools in other countries. Of greater significance is that this study is unique in examining all-female schools (students, teachers, and staff). Additionally, the conceptual framework utilized for this investigation may benefit other researchers who are examining transformational leadership and its relationship to teacher efficacy. This study is also significant in that Saudi school administrators will be informed of findings, which may be useful for promulgating a district-wide culture that values and seeks to implement transformational leadership. Finally, the findings of this investigation may provide school principals with a better awareness of the practical applications of transformational leadership and how it can serve as an effective tool in improving both teacher efficacy and leadership development.

Statement of Problem

Educators have long sought to identify the primary components in successful school leadership in order to improve the entire system. Understanding the critical importance of effective scholastic leadership and its underlying theoretical foundations are key to achieving powerful, positive changes in the quality of teaching, student learning, and the educational system as a whole (Robinson & Aronica, 2015). Transformational leadership can have a positive impact on many educational variables, including student achievement, organizational culture, school vision and goals, and in the development of more effective plans and policies (Leithwood & Jantzi, 2005).

As noted in the prior section, numerous reports have already demonstrated that a school principal who practices transformational leadership can be pivotal in enhancing both teacher and student (e.g., Bennardo, 2007; Espinoza, 2013; Griffin, 2009; Leithwood et al., 1999b; Lilla, 2013; Lussiez, 2009; Maguire, 2016; Nelson, 2012; Sompongdam, 2016). For educators, transformational leadership has the potential to offer many advantages towards achieving the best possible scholastic outcomes (Lane, 2016; Leithwood, 2000; Leithwood & Jantzi, 2005;

Maguire, 2016; Ngang, 2011). In general, these U.S.-based studies indicate that transformational leadership in the school setting play a significant role in improving student engagement, student achievement, organizational conditions, school culture, teacher satisfaction, and teacher efficacy.

Educational administrators in Saudi Arabia face many challenges because of the government's recent multi-goal educational mandate, which includes eradicating illiteracy, expanding educational opportunities for all students, and improving the skills and effectiveness of teachers. These and a host of other objectives have emerged from the Saudi government's "2030 Vision," which focuses on significantly improving the nation's educational system. Other specific targets include modernizing the educational curricula, raising Saudi student performance above international averages, and working to ensure that at least five domestic universities will eventually rank amongst the top 200 globally. This process of improvement will be greatly assisted through the creation of a centralized database for tracking student progress from early childhood up to 12th grade and beyond to include tertiary education. Fundamentally, however, achieving that Saudi educational vision will depend heavily upon an excellent system of leadership to achieve its goals (Reale Ambasciata dell'Arabia Saudita a Roma, 2017).

Currently, there is a lack of educational studies in the Saudi Arabian setting that addresses whether adopting transformational leadership practices in Saudi schools can help a principal raise teachers' sense of self-efficacy, which can then positively impact educational outcomes. Therefore, this work responds to this research gap by investigating the relationships between these two constructs: (a) transformational leadership and (b) teachers' self-efficacy as potentially important elements for improving female education in Saudi Arabia.

Thus, this study addressed whether a transformational leadership style as applied in a different education setting would achieve the outcomes documented in the scholarly literature (e.g., Espinoza, 2013; Griffin, 2009; Lilla, 2013; Maguire, 2016; Nelson, 2012; Sompongam, 2016). This study aimed, specifically, to determine if the use of transformational leadership as observed by Saudi Arabian teachers would enhance teacher self-efficacy. In a broader sense, this study also investigated whether transformational leadership is likely to be effective in supporting the Saudi vision of using leadership to inspire teachers to strive for success in improving education outcomes and molding their pupils into good learners and responsible citizens for the nation's future. Results from this study are expected to fill the knowledge gap in terms of how

transformational leadership is practiced in other countries and the degree to which it is related to teacher efficacy.

Research Questions and Null Hypotheses

The following research questions and null hypotheses guided this study:

1. To what extent do teachers in a selected school district in Saudi Arabia perceive that the behavior of their school leader reflects a transformational leadership style?

H1₀: Teachers do not perceive that the behavior of their school leader reflects the transformational leadership style.

H1_A: Teachers do perceive that the behavior of their school leader reflects the transformational leadership style.

2. What is the relationship between Saudi teachers' perceptions of their principals' transformational leadership style and their sense of self-efficacy?

H2₀: There is no significant differences between teachers' perception of their principals' transformational leadership style and their teachers' self- efficacy.

H2_A: There is significant differences between teachers' perception of their principals' transformational leadership style and their teachers' self-efficacy.

3. To what extent are teaching experience and level of education able to predict Saudi teachers' perceptions of transformational leadership and their sense of self-efficacy?

H3₀: There are no significant differences in teachers' perceptions of transformational leadership and teachers' sense of self-efficacy that are dependent upon teaching experience, and level of education.

H3_A: There are significant differences in teachers' perceptions of transformational leadership and teachers' sense of self-efficacy that are dependent upon teaching experience and level of education.

4. What are the differences in teachers' perceptions of principals' transformational leadership style in elementary and secondary schools?

H4₀: There are no differences in teachers' perceptions of principals' transformational leadership style in elementary and secondary schools.

H4_A: There are differences in teachers' perceptions of principals' transformational leadership style in elementary and secondary schools.

Methodology/Research Design

A non-experimental, quantitative, correlational predictive research design was used to investigate the relationship between teachers' perceptions regarding their principal's transformational leadership behaviors and their self-efficacy. Data were obtained from a stratified sampling of female elementary/secondary teachers in the Al Nuzhah district school in Jeddah, Saudi Arabia. The online versions of the Principal Leadership Questionnaire developed by Jantzi and Leithwood (1996) and the Teachers' Sense of Efficacy Scale (TSES) developed by Tschannen-Moran and Hoy (2001), were used as the primary data-capture instruments. The independent or "predictor" variable in this study was transformational leadership, while the dependent variable was teacher efficacy. A nonexperimental research design was used because no experiments were conducted for this study. Instead, a predictive research method was involved because there was a need to assess the relationships between the two variables and determine the strength of the relationships (Field, 2014; Miles & Shevlin, 2001). As detailed in the Methodology section, Qualtrics was utilized to engage the participants for the study.

Definition of Terms

For clarity, the important terms used in this study are defined below:

Principal Leadership Questionnaire (PLQ): The PLQ was designed by Jantzi and Leithwood (1996) and contains 24 questions measuring the six dimensions or factors of transformational leadership: (1) Identifying and articulating a vision, (2) Providing an appropriate model, (3) Fostering the acceptance of group goals, (4) Providing individualized support, (5) Providing intellectual stimulation, and (6) Holding high performance expectations. Like many similar scales, the PLQ uses Likert-type scoring ranging from "strongly disagree" (1) to "strongly agree" (4).

Qualtrics: This platform provides the researcher with various online datasets and assessments including market research, customer satisfaction and loyalty, product and concept testing, employee evaluations and website feedback. This software will be used for data collection during this investigation.

Self-Efficacy (SE): It is essentially a person's "judgment of their capabilities to organize courses of actions required to attain designated types of performances" (Bandura, 1986, p. 391).

Teachers' Sense of Efficacy Scale (TSES): The TSES was developed by Tschannen-

Moran and Hoy (2001) and contains either 24 questions (long-form) or 12 questions (short form) measuring three aspects of a teacher's sense of efficacy: (1) efficacy for student engagement, (2) efficacy for instructional strategies, and (3) efficacy for classroom management. Its Likert-type scoring under the heading of "How Much Can You Do?" ranges from "Nothing" (1) to "A Great Deal" (9). The short-form survey was used in this investigation.

Teacher Self-Efficacy (TSE): Defined by Tschannen-Moran, Hoy, and Hoy (1998) as the "teacher's belief in his or her capability to organize and execute courses of action required to successfully accomplish a specific teaching task in a particular context" (p. 233).

Transformational Leadership (TL): it is a leadership style that "inspires followers to commit to a shared vision and goals for an organization or unit, challenging them to be innovative problem solvers, and developing followers' leadership capacity via coaching, mentoring, and provision of both challenge and support" (Bass & Riggio, 2006, p. 4).

Assumptions

Five assumptions guided this study. The first assumption is the participants would respond voluntarily, honestly, and complete answers based on their own experiences with respect to their opinions about their teaching efficacy, as well as their principal's actions and behaviors in their school. The second assumption associated with this study is that the data-capture instruments—the Teachers' Sense of Efficacy Scale (TSES) developed by Tschannen-Moran and Hoy (2001), and the Principal Leadership Questionnaire developed by Jantzi and Leithwood (1996)—would be effective in collecting data that could be used to answer the research questions, and that respondents fully understood the terms "transformational leadership" and "teachers self-efficacy". The third assumption associated with this research was that the effects of leadership style on teacher efficacy can be considered an objective process and able to be measured quantitatively with the goal of generating reliable and useful knowledge. The fourth assumption associated in this study was that measuring the influence of transformational leaders on teacher efficacy would objectively provide empirical evidence of how this leadership approach could be useful in enhancing the effectiveness of teachers. A final assumption was that transformational leadership represents a viable theoretical assumption; specifically, when followers are appreciated, loyal, trusted, and respected by their leaders, they are more likely to be motivated to do more than what might be expected of them for the sake of the organization.

Limitations

Due to the nature of this investigation, there are numerous limitations that must be noted. First, this study was limited to female teachers working in eight all-female elementary and secondary public schools within a single school district in Jeddah, Saudi Arabia. Accordingly, the findings obtained from this investigation cannot be generalized to all-male schools in Saudi Arabia (or to schools outside Saudi Arabia). In short, the ability to generalize the results beyond the sample is limited (Acharya, Prakash, Saxena, & Nigam, 2013). A second limitation pertains to the use of a survey approach for data collection; even though surveys featuring a number of advantages, they are inherently limited in that they can only capture the views of a selected group of respondents at a particular point in time (Levy, 2013). Third, data-collection was limited to the use of two instruments (the PLQ and the TSES). Finally, self-reporting surveys are fundamentally limited in that respondents may have purposely misreported information (e.g., providing answers that they believed the researcher might want to see), not responded to all the questions truthfully, or unintentionally provided flawed answers due to not remembering the events or having a limited knowledge of the topic of interest (Kormos & Gifford, 2014).

Delimitations

The delimitations of this study are as follows. The scope of this research was limited to six transformational leadership dimensions as defined by the PLQ survey instrument. Additionally, teacher self-efficacy measures were limited by the three factors defined by the TSES (student engagement, instructional strategies, and classroom management). A final delimitation is that the population sample for this study included female full-time public-school teachers only. Thus, corresponding data from private schools, Quranic memorization schools, all male-schools, and international schools were not be factored into the results of this study since this data was collected.

Summary

Chapter 1 introduced the nature of the problem under investigation, the background of the study, the relevance of the study to the field, and the assumptions, limitations, and delimitations of the study. Chapter 2 provides a literature review exploring the field of transformational leadership and its influence on teachers' self-efficacy.

Chapter 2

Literature Review

This chapter presents a review of the literature pertaining to the relationship between transformational leadership and teacher self-efficacy. Transformational leadership is a leadership style that produces a positive, significant changes in followers—and in the educational setting it promotes teacher self-efficacy. For this investigation, teacher self-efficacy described as a teacher’s innate belief in his/her ability to meet classroom challenges and, concurrently, positively impact the academic needs and progress of students (Tschannen-Moran, Hoy, & Hoy, 1998). A review of the foundational studies that guided this investigation can be organized into five main categories: a) leadership as a concept, b) transformational leadership, c) transformational leadership in schools, d) self-efficacy and teacher efficacy, and e) the relationship between the variables. The theoretical framework that underpins this study emerged from a thorough examination of the theoretical basis of transformational leadership and its relation to teacher efficacy.

Leadership as a Concept

Since the beginning of human existence, some form of leadership structure has almost certainly served as a central component of tribal or communal living. Indeed, the concept of leadership has long been of interest to scholars worldwide because, if properly exercised, leadership represents a way to improve the lives of people—personally, socially, and professionally (Northouse, 2018). While the benefits of capable leadership are generally understood, an overarching definition of leadership remains elusive. Indeed, Evans (2010) maintained that “despite thousands of empirical studies yielding more than 850 definitions that defined by Bennis and Nanus (1985) who reviewed over 1000 studies of leadership, there (is) still no consensus about (what it is)” (p. 4).

Scholars define leadership according to their own understanding, knowledge, and personal perspectives of the concept. Nearly 60 years ago, Tannenbaum, Weschler, and Massarik (1961) defined leadership “as an interpersonal influence, exercised in situations and directed, through the communication process, toward the attainment of a specified goal or goals” (p. 24). Some years later, Burns (1978) provided a simple definition of leadership as the act of leaders who are capable of motivating followers to a goal that represents the values, motivations, personal needs,

and aspirations of both leaders and followers. Subsequent researchers have since agreed that leadership is a multi-level process that relies on the personality of the leader to influence certain behaviors, with the intent of achieving one or more organizational goals (Bass & Stogdill, 1990; Rauch & Behling, 1984).

For their part, Antonakis and Day (2017) described leadership as a process that takes place both formally and informally, as well as at the individual and institutional level; moreover, it is very much dependent on the features and behaviors of the leaders and their abilities to inspire the completion of goals. In this perspective, then, leadership is seen more as a process than an attribute, involving inspiration and persuasion, and occurs in groups that often have common goals, and components for conceptualizing leadership qualities.

Most recently, Northouse (2018) defined the components of leadership in this way: (a) leadership exists when a leader is able to influence a group toward achieving a shared goal; (b) leadership involves influence because the leader inspires his or her followers to embrace the leader's ideas; (c) leadership occurs in groups that share a common purpose with the leader impacting the group, either in whole or in part, to accomplish those goals; (d) leadership includes consideration of group goals, which means that leaders direct their efforts to those who are working to reach a specific goal.

Transformational Leadership

Because of its essential role in any organization and the need for developing and understanding the idea of leadership, there are many leadership theories discussed in the literature—notably, “Great Man” theories, trait theories, situational theories, contingency theories, servant leadership theories, transactional leadership or management theories, and transformational leadership theories. While each one of the theories has merit, the one of interest for this investigation is transformational leadership, which is gaining interest among organizational leaders (Northouse, 2015).

Burns (1978) first proposed the concept of TL, which was later extended by Bass (1985), among others. Burns established this leadership style based on his work with political leaders, military officers, and business administrators (Liontos, 1992). This leadership style focuses on the leader's goals and accomplishment and the relationship with the followers. Northouse (2015) described transformational leadership as a leadership style with the potential to change people

since it focuses on motivating them and considering their personal needs and values. Northouse also noted that a transformational leader will seek to treat every employee as a complete human being and wish to assess their motives and, to the extent possible, satisfy their needs. As such, transformational leadership is typically viewed as deeply influential in that a leader using this approach often motivates followers to achieve their significant goals—or, indeed, what followers themselves believe they can accomplish. Burns (1978) also maintained that the transformational approach can contribute to meaningful changes in developing the lives of followers and in organizations. It restructuring the followers' perceptions, expectations, and aspirations regarding their abilities. Burns (2010) also noted that a transformational leader will seek to determine what motivates his followers and to the utmost possible strive to satisfy the needs of followers.

Similarly, Northouse (2015) defined TL as a the connection that raises the motivation and morality of both leaders and followers. Northouse cited Gandhi as an example of an individual who was able to actualize this type of leadership style because he raised the hopes and ambitions of millions of Indians. Researchers in this area stress that TL requires leaders who are capable of motivating followers to such an extent that they exceed even their own expectations (Bass, 2008). Accordingly, TL can be described as a leadership approach that seeks to positively impact not just followers, but also the culture of the organization in which leaders and followers work together toward shared goals.

Since TL focuses chiefly on motivating the follower and developing his or her performance, a transformational leader is likely to adopt the “Four I’s” of TL: idealized influence, inspirational motivation, intellectual stimulation, and individualized consideration. The first of these components, *idealized influence (II)*, refers to a type of charismatic leadership who trusts and respects those who follow—and in turn is both trusted and respected by them (Bass & Avolio, 1994). A transformational leader will serve as a role model for followers, who wish to emulate this leader in terms of capabilities and determination to achieve organizational goals. Having a high sense of idealized influence also indicates that such a leader is willing to deal with new and potentially risky situations in moral and ethical ways and is able to inspire his/her followers to follow suit (Bass & Avolio, 1994). Indeed, trust and respect are key to the leader’s work of achieving the goals that he/she wants to accomplish.

The second factor, *inspirational motivation (IM)*, plays a significant role in developing a clear vision for the organization and the goals the leader wants to achieve. High levels of

participation and alignment with the goal of creating the organization's vision are essential characteristics of the inspirational leader (Bass & Avolio, 1994).

The third factor, *intellectual stimulation (IS)*, occurs in organizations where leaders support followers "to take intellectual risks, question assumptions, use analogies and metaphors, and alter the scale of measurement as needed to solve problems" (Bass & Avolio, 1994, p.134). A leader who implements IS is committed to developing workers who will perform a central position in the process of improving the organization.

The fourth factor is *individualized consideration (IC)*, which calls for the participation of each member in the group to raise individual performance. This factor empowers members to take responsibility for what they do, to improve their contributions to the organization, develop their skills, and ultimately move from an outer-controlled to an inner-directed perspective. While it is the leader's responsibility to pursue overall strategies, it is important to provide feedback to followers to encourage a high level of involvement, trust, and interest (Bass & Avolio, 1994). Indeed, transformational leaders' coach and mentor followers to achieve goals; they pay personal attention to each individual and give voice to their ambitions. Such leaders view an employee as a whole person, creating an environment that fosters learning opportunities and personal growth. They listen to employees and monitor their tasks in ways that make them feel guided and supportive—rather than controlled or overly scrutinized.

Many scholars have discussed the various components of transformational leadership (e.g., Bass, 1985; Bass & Avolio, 1994; Bass & Riggio, 2006; Howell & Avolio, 1993; Jantzi & Leithwood, 1996). For research purposes, those components can be measured with an instrument known as the Multifactor Leadership Questionnaire. This questionnaire quantifies a selection of leadership styles from passive leaders, such as laissez-faire leaders, to transformational leaders who seek to empower their followers. The MLQ was designed to capture the traits of a transformational leader through a series of statements. For example, a sample MLQ item from the individualized influence scale is "The leader emphasizes the importance of having a collective sense of mission." An example of item from the idealized influence recognized factor is "The leader reassures others that obstacles will be overcome" (Bass & Riggio, 2006, p. 6). A sample item from the IC scale is "The leader spends time teaching and coaching" (Bass & Riggio, 2006, p. 7). Transformational leaders focus on making the work meaningful and useful for their followers, work on motivating and inspiring them, and

involve them to the extent possible in the firm's shared vision and common goals. Such factors can be measured by MLQ item for IM as "The leader articulates a compelling vision of the future" (Bass & Riggio, 2006, p. 6). Additionally, the transformational leader will involve employees in addressing old problems and situations that the organization has experienced in order to discover different, new, creative ways by considering the different opinions of the followers. Nothing characterizes "the successful organization so much as its willingness to abandon what has long been successful" (Bass & Avolio, 1994, p. 134). Such "blue-sky thinking" is an essential tool for achieving goals and for continually improving the organization. A sample item from the MLQ that captures such intellectual stimulation is the following item: "The leader gets others to look at problems from many different angles" (Bass & Riggio, 2006, p. 7).

As reported by Northouse (2015), Bennis and Nannus (1985) asked 90 leaders several questions, among which were: "What are your strength and weaknesses?" "What past events influenced your leadership approach?" and "What were the critical points in your career?" By collating and analyzing their answers, the authors named four common approaches intensively used by transformational leaders. According to Northouse, first, transformational leaders have a positive, realistic, and plausible vision of the future that satisfies the interests and needs of those in the organization. As long as the role of leader is defined and understood, the vision should be shared by both leader and followers. Second, the transforming leader works as a social architect for the organization by creating a project with which followers can identify, which could also involve crafting a new organizational philosophy. Third, the transforming leader creates trust by making the goals of the organization clear to its members and commits to achieving them, which gives the organization a quality of clarity and integrity. Fourth, through positive self-regard, transforming leaders develop themselves by knowing their strengths and weaknesses and by playing to the former. They also have a positive regard for others, creating reciprocal feelings of confidence, optimism, and high expectations in subordinates. To create a harmonious organization that values corporate and personal accomplishments, such leaders are willing to learn and relearn, and value skill development and education for all.

Transformational Leadership in Schools

Many contemporary researchers believe that TL can be highly empowering in today's schools (Anderson, 2017)—largely due to the organizational structure of educational institutions. Murphy and Seashore Louis (1999) noted that most organizations are composed of three fundamental levels: technical, managerial, and institutional. In the field of education, the technical level is evidenced through the learning and teaching process, while the managerial level involves a college or university's leadership and administration. The institutional level refers to the connection between a school and its external stakeholders and constituencies, such as parents, donors, alumni, and the local community. Successful schools need to understand the dynamics within each of these levels and address problems and build upon successes as appropriate (Murphy & Seashore Louis, 1999). Anderson (2017), in reviewing a number of articles published between 1990 and 2015 on transformational leadership in education, indicated that in order to advance a school's mission and success, teachers should involve more in leadership positions—that developing teachers to do so will have a direct and positive impact on the school in general and in student learning.

Day, Gu, and Sammons (2016) differentiated between “transformational” and “instructional” and leadership models in a pedagogical setting. In their view, a transformational leader focuses on creating and promulgating a shared vision of success, while at the same time creating a structure and a culture that will positively impact both teaching and learning qualities. As a more pragmatic form of leadership, instructional leadership emphasizes the importance of creating achievable educational goals, developing clear lesson plans, and the use of teaching evaluations. For example, this approach would view a school principal as being in charge of developing better measurable outcomes for students and ensuring that teachers have the necessary tools at their disposal to maximize learning.

Important for this investigation is the Principal Leadership Questionnaire (PLQ), was developed by Jantzi and Leithwood (1996) to assess transformational leaders in the school setting. The questionnaire involves 24 items, measures six dimensions: (1) identifying and articulating a vision for teachers, (2) modeling behavior in order to help achieve common goals, (3) fostering commitment among all stakeholders, (4) providing individualized support by respecting teachers and addressing their personal needs and expectations, (5) providing intellectual stimulation, and (6) holding high performance standards. Jantzi and Leithwood

(1996) examined transformational leadership style from a theoretical perspective with respect to how teachers' perceptions about transformational school leadership are developed and can be measured. The perceptions of teachers were found to be highly dependent on two somewhat fixed factors: school environment and the leadership behaviors of principals. The PLQ was found to have a strong reliability coefficient of .91, with a range of .73 to .88 for the six transformational leadership behaviors. The researchers tested the surveys by “combining teachers’ responses to two surveys that were part of a five-year longitudinal study, conducted for other purposes, with a total of 423 teachers in both elementary and secondary schools” (pp. 530-531). The results indicated that most of the variation in teachers' perceptions about their transformational leaders was largely related to unalterable school conditions. Since its development more than two decades ago, the PLQ has been used by many scholars to test transformational leadership in schools (e.g., Lane, 2016; Lilla, 2013, Nelson, 2012; Ngang, 2011).

There is empirical evidence that demonstrates the beneficial effects on the school community and student outcomes when school principals’ practice transformational leadership (Leithwood, 2000). For example, when principals provide opportunities for teachers to assist in formulating and contributing to a school-wide vision, broader objectives, and specific goals, teachers tend to demonstrate a higher commitment to their job (Leithwood & Jantzi, 1999). In addition, Leithwood (2000) emphasized that a transformational leader can play a significant role in enhancing teaching capacity, which increases a teacher’s commitment to the school’s vision and is likely to produce payoffs in terms of increased effort and productivity. Indeed, researchers have cited significant evidence supporting the fact that transformational leaders participate in the capacity development and commitment (e.g., Leithwood, 2000; Yammarino et al., 1998). According to Anderson (2017), such a leadership style is a practicable option for educational leaders who work on transforming schools. Scholars have suggested many guidelines and accountability factors that support the concept of transformational leadership in school, such as focusing on the school system as a whole and creating a culture of positive opportunities to grow and try out new roles. The school principal as an intellectual leader can encourage teachers to participate and discuss best practices and educational strategies to achieve a school’s vision. Principals and administrators always need to be prepared to implement new approaches to serve the changing needs and abilities of students. Furthermore, school leaders need to evaluate their

school realistically to create a balance between vision and decision-making (Murphy & Seashore Louis, 1999)

Transformational administrators have the potential to be highly influential. Indeed, the positive effects of this leadership style extend beyond the confines of the institution. Leithwood and Jantzi (2005) argued that such a leader have a positive effect on many mediating variables, including student achievement, the educational culture of the student's family, organizational culture, shared school goals, and in the development of more effective plans and policies. Additionally, Leithwood (2000) examined the effects of transformational practices undertaken by teachers who also serve in an administrative capacity. Specifically, the study sought to find evidence of teacher leadership outcomes in terms of student achievement and levels of engagement via data collected through two instruments in a single large school district located in eastern Canada comprising 1,762 teachers and 9,941 students. The findings confirm significantly positive outcomes of transformation style via the development of teacher-leaders with respect to higher student engagement, the enhanced educational culture of families, and improved organizational conditions.

Self-Efficacy

Prior to understanding how self-efficacy plays a role in the classroom, the concept in a general sense must be addressed. The concept of self-efficacy is closely tied to Bandura's social cognitive theory, which is based on the concepts of social development, adaptation, and change (Bandura, 2013). Bandura (1997) defined self-efficacy as "...beliefs in one's capabilities to organize and execute courses of action required in managing prospective situations. Efficacy beliefs influence how people think, feel, motivate themselves, and act" (p. 2). Similarly, Peagler (2003) described self-efficacy as it relates to an individual's intrinsic belief in his/her level of capability to manage a certain situation, which manifests itself in the ways people seek to manage and cope with different situations in lives. Furthermore, individuals with a high sense of self-efficacy believe in their skills to positively accomplish tasks, which impact their psychologically, and behaviorally (Bandura, 1994).

Based on these definitions, three concepts become foundational. First, self-efficacy encompasses the entire scope of a person's judgments or perspectives about their ability to act in a specific situation. In an organizational context, many elements contribute to one's

comprehensive assessment of ability, such as the information the individual receives, the nature of the task, and the work environment. Second, self-efficacy is dynamic, because continued experience and knowledge will inevitably impact one's perception of self-efficacy over time. Third, efficacy beliefs involve a motivational element since such beliefs will change based on circumstances. In short, the development of efficacy beliefs is a complex process that results in the construction of adaptive performance parameters that fit different situations, which is why people act differently even if they have developed the same abilities or skills in a particular context (Gist & Mitchell, 1992).

Bandura (1997) made a point of differentiating between the concepts of self-esteem and self-efficacy. While self-efficacy refers to an person's beliefs about his or her skills, self-esteem is the way individuals evaluate their sense of self-worth:

There is no fixed relationship between beliefs about one's capabilities and whether one likes or dislikes oneself. Individuals may judge themselves hopelessly ineffectual in a given activity without suffering any loss of self-esteem whatsoever, because they do not invest their self-worth in that activity. (p. 11)

Self-efficacy is not directly related to the skills that one has, but rather to the beliefs, judgments, and perspective of one's inherent abilities based on those skills (Bandura, 1986). Bandura (1998) claimed that people inevitably hold certain beliefs about their own capabilities, which can either be empowering or dampening depending on where those beliefs reside on the self-efficacy spectrum. And, importantly, regardless of the actual technical capabilities and knowledge a teacher may possess, self-doubts can easily overcome the best of skills.

Self-efficacy is formed by four factors: mastery experiences, social models, social persuasion, and psychological reactions (Bandura, 1993). The first, mastery experiences, refers to being able to overcome obstacles and learn to overcome failures (Bandura, 1993). Leithwood and Jantzi (2008) claimed that, "One may hold efficacy beliefs weakly or strongly, weakly held beliefs being easily extinguished in the face of difficulty" (p. 501).

The second way of developing self-efficacy is by social modeling, which can be achieved by engaging with like-minded/skilled people. Indeed, witnessing the success of people with whom one identifies can increase one's efforts, ambition, and beliefs in one's capabilities (Bandura, 1993). The third element is social persuasion: The leader persuades followers to believe in themselves, encourage them to overcome any difficulties they face, and motivate them

to work on their own success rather than watching others' success (Bandura, 1993). Yost (2002) referred to this factor when he lauded the potential of having experienced teachers model desirable and effective behaviors for novice instructors to emulate. Finally, the fourth mode of influence, psychological reactions, has to do with one's physical and emotional state, which will inevitably impact one's level of self-efficacy. For example, reducing anxiety and depression tends to increase a person's efficacy beliefs, which can be achieved, in part, by focusing on building one's abilities and the capacity to face difficulties and promote positive physical and emotional states (Bandura, 1993).

Teacher's Self -Efficacy

A primary goal of schools around the world is to provide students with the best education possible, with teachers representing the linchpin for achieving that objective. Employing teachers who have high sense of beliefs in their abilities to improve their students' educational outcomes represents a critical component for advancing that goal. Thus, based on a general definition that self-efficacy refers to the belief an individual has in her/his ability to organize and execute tasks in specific situations, one could define teacher efficacy as the belief an instructor has in her/his ability to positively impact the academic performance of students by motivating them to achieve their own academic goals (Ashton, 1985; McLaughlin & Marsh, 1978). Similarly, Tschannen-Moran, Hoy, and Woodfolk Hoy (1998) defined teacher efficacy as "the teacher's belief in his or her capability to organize and execute courses of action required to successfully accomplish a specific teaching task in a particular context" (p. 233). Teachers' efficacy beliefs relate powerfully to their behavior in the classroom, higher levels of planning and organization, their effort in teaching, setting their goals, and their ambition (Tschannen-Moran & Woolfolk Hoy, 2001). Klassen and Tze (2014) noted that self-efficacy beliefs have an impact on both pupil and teacher behaviors positively because of teachers' beliefs in their ability to implement work that serves their and their students' goals.

More than 40 years ago, scholars at the RAND Corporation were among the first to investigate the role of teacher efficacy as it relates to student outcomes. After analyzing the factors that contributed to higher scores of reading in selected Los Angeles (CA) minority schools, the RAND result showed that a teacher's efficacy as being a factor in influencing student success and achievement (Armor et al., 1976). Additional studies continue to examine

dimensions of self-efficacy in the classroom and how it impacts educational outcomes (Sompongdam, 2016).

Gibson and Dembo (1984) identified two factors of teacher efficacy: personal teaching efficacy (PTE) and general teaching efficacy (GTE). Personal efficacy refers to teachers' views of their skills and capabilities to improve learning for all students, while general teaching efficacy refers to what teachers believe about the relationship between their teaching style, student learning, and its effect on outcomes. The Gibson and Dembo (1984) scale was used to measure teaching efficacy. Soodak and Podell (1996) utilized the responses of over 300 teachers to explore the multidimensionality of teacher efficacy. The researchers identified three salient factors that have implications for both practice and theory: (1) personal efficacy, which is equivalent to self-efficacy in the classroom; (2) outcome efficacy, which is the notion that student outcomes could be directly related to their input; and (3) teaching efficacy, which has to do with an educator's beliefs regarding the influence of many uncontrolled characteristics, for instance, students' home environment, genes, and watching violence on television. The authors concluded that strategies to increase teacher efficacy must focus on "whether low teacher efficacy is due to teachers' lack of confidence in their skills or a sense of futility regarding the impact of their work" (p. 410).

Tschannen-Moran and Woolfolk Hoy (2001) established the Teachers' Sense of Efficacy Scale in order to assess the three dimensions of teacher self-efficacy. This 12- or 24-item scale was developed to help teachers learn more about their inherent beliefs in their capabilities to positively impact student learning—both for those who want to learn as well as for those who are difficult or unmotivated. The first dimension, efficacy for student engagement, relates to motivating students, making them believe in themselves and value education, and engaging families in the learning process of their children; on the long form, this factor is assessed via four questions such as "How much can you do to help your student value learning?" The second dimension, efficacy for instructional strategies, pertains to the teacher's ability to form teaching strategies that are effective and can be assessed; on the long form, this factor is assessed via four questions such as "To what extent can you provide an alternative explanation or example when students are confused?" The third dimension, efficacy for classroom management, pertains to a teacher's ability to establish good classroom management, control disruptive behaviors when they occur, and ensure that students follow classroom rules; on the long form, this factor is

measured by four questions such as “How much can you do to get children to follow classroom rules?” Researchers continue to investigate teaching efficacy because of its known relationship with school improvement and teachers’ readiness to implement innovative teaching approaches (Ross & Gray, 2006).

While many studies have investigated teacher motivations and self-efficacy, fewer have studied teacher beliefs, adherence, engagement, and other constructs related to job effectiveness (Klassen & Tze, 2014). For example, it is known that teachers with a strong sense of efficacy are more likely to experiment with different ways of meeting the scholastic needs of their students (Guskey, 1988; Stein & Wang, 1988). Self-efficacy can also exert a positive effect on the personality of teacher and her/his level of commitment. For instance, Nir and Kranot (2006) indicated that teachers who have a high self-efficacy are less anxious in their classrooms and are more committed to teaching. Further, Guskey (1988) indicated that teachers with higher efficacy seem to demonstrate the greatest passion for teaching.

Nelson (2012) purported that highly efficacious teachers evidence a sense of control and are more adept at dealing in a positive way with students, their families, their professional colleagues, and any external influences that may feel like roadblocks in their quest to provide exemplary education (e.g., “teaching to the test” or budgetary issues). Similarly, Tschannen-Moran and coworkers (1998) showed that teachers who feel personally empowered in their ability to instruct difficult or unmotivated students will be less likely to be impacted by challenges that are external to their inherent abilities. Indeed, the researchers cautioned “Teachers who agreed that the influence of the environment overwhelms a teacher’s skill to have an impact on a student’s learning exhibit a belief that reinforcement of their teaching efforts lies outside their control or is external to them” (Tschannen-Moran, 1998, p. 204). In contrast, highly efficacious educators believe in their ability to teach all pupils—whatever challenges they may face—and are proud of their ability to provide an educational environment in which students can learn (Nelson, 2012).

It should also be stressed that teachers with high self-efficacy tend to be more open to trying new approaches and using different methods and experiments that fit the needs of students and betted support educational goals (Tschannen-Moran & Woolfolk Hoy, 2001). In fact, many studies have proven that there is a positive relationship between teacher self-efficacy and higher student achievement outcomes. In short, confident teachers with high expectations of their

students are more likely to enhance their students' achievement (Ashton & Webb, 1986; Ross, 1992). In his doctoral investigation of classroom management and high vs. low -efficacy teachers, Nelson (2012) concluded that instructors with an enhanced teachers' efficacy tended to focus more on instructional activities and offered praise and support to students; in contrast, those with a low sense of self efficacy tended to feel helpless when confronted with unmotivated students. Indeed, Achurra and Villardón (2013) asserted that teacher beliefs about self-efficacy can influence their teaching practices and attitudes toward the educational process with positive downstream effects for student learning. To summarize, as Bandura (1997) claimed, teachers who internalize high teaching efficacy believe that they have an opportunity to teach all students effectively; in contrast, teachers with low teaching self-efficacy be likely to have negative perceptions of educational operation.

Relationship Between TL and TSE

According to Nelson (2012), the most important roles of a principal are monitoring educational tasks and the curriculum, assessing and analyzing the academic development of students, and increasing their performance outcomes. Even if principals have no direct responsibility for teaching students and enhancing their academic performance in that way, they do have a direct link to the teachers; accordingly, their leadership and engagement efforts with teachers will have an influence on student performance (Hallinger & Heck, 1996; Leithwood & Jantzi, 2008). Thus, transformational leadership can contribute indirectly to student achievement by increasing commitment of teacher to the school mission and educational community (Ross & Gray, 2006). A great many studies have substantiated this linkage between teacher efficacy and student performance—and therefore academic achievement (Gibson & Dembo, 1984; Griffin, 2009; Guskey, 1988; Leithwood & Jantzi, 2008; Stein & Wang, 1988; Tschannen-Moran et al., 1998).

Several investigations have been designed to uncover the association between teacher efficacy and the leadership efforts of school principals. Sompongdam (2016) conducted a recent study using a mixed method approach to study principals' transformational behaviors on teacher efficacy in Thailand. The sample included responses from 385 teachers who were surveyed using Tschannen-Moran, Hoy Woolfolk, and Hoy's (2001) Teachers' Sense of Efficacy Scale (TSES) and Jantzi and Leithwood's (1995) Nature of School Leadership Survey. Their responses

were then augmented with detailed interview data from four teachers (replying to 17 questions) and four principals (replying to 14 questions). In addition to 385 teachers responded to the surveys. Their findings showed that leaders' behaviors had a statistically significant positive effect on levels of teacher self-efficacy.

Maguire (2016) employed a quantitative approach to compare principals with transformational and transactional leadership qualities and their influence on school climate, teacher self-efficacy, and student academic achievement. The sample included 4 principals, 89 teachers, and 2930 students across four high schools in Northern Virginia. Results showed that perceived transformational leadership style was a statistically significant predictor of teacher efficacy; additionally, the data indicated that teachers were more satisfied when the leader was transformational, and vice-versa.

Mehdinezhad & Mansouri (2016) examined the correlation between school principals' leadership practices and teachers' efficacy by using descriptive and correlational research method on a random sample size of 254 teachers at Sabzevar City in Iran. The researchers used two questioners to collect the data: The (TSES) of Tschannen-Moran and Woolfolk Hoy (2001) and the (MLQ) of Bass and Avolio (1992) to collect the data. Findings suggested a significant relationship between the two variables. The results also showed highest correlation coefficient was found between the dimensions was idealized influence and efficacy for student engagement.

Utilizing the responses from 112 teachers from six high schools on Long Island, New York. Lilla (2013) examined the relationship between the transformational leadership behaviors of principals, the level of perceived efficacy of teachers, and student graduation rates. While her results showed that teachers held positive attitudes about their principal's transformational leadership practices, she was unable to show any significant differences between high and low graduation rates in teacher reports of their sense of collective teaching efficacy or personal teaching efficacy. However, she did identify a strong positive relationship between teaching efficacy and transformational leaders.

Espinoza (2013) used a quantitative assessment of 283 teachers from elementary and secondary school in a South Texas school district, all of whom responded to Leithwood's (1994) Transformational Leadership Model survey and Hoy and Woolfolk's (1993) TSES, to determine whether there were any differences between their perceptions of the effects of the transformational leadership of principals on teacher leadership development and self-efficacy

levels. The results indicated that principals' transformational leadership style had a statistically significant positive effect on teacher development and teachers efficacy at both schools levels.

Similarly, Nelson (2012) utilized study using quantitative data to investigate the linkages between middle school perceptions of teachers about transformational practices of their principals and their self-efficacy and student achievement. The sample included 256 teacher surveys collected from 17 middle schools. The results indicated that the transformational leadership dimension of "individualized support" turned out to be the best predictor of efficacy for classroom management. Nelson (2012) also determined that there was a statistically significant relationship between principals' transformational leadership practices and teacher self-efficacy. Utilizing the responses of 435 teachers at four schools in the southeast, Griffin (2009) investigated the relationship between teacher self-efficacy and their perceptions of their school principals' leadership style. In assessing the data, Griffin (2009) noted a positive relationship between the self-efficacy levels of teachers who perceived their principals as transformational versus those who viewed them as somewhat *laissez-faire*.

According to research, a teacher's perceptions of self-efficacy can be impacted by a number of factors, including the leadership style of the school principal. Other important contributors to self-efficacy include one's personal point of view, educational background, years of experience, level of professional expertise, the encouragement of colleagues, and other inputs (Bandura, 1977; Griffin 2005). Importantly, however, when considering classroom management abilities, teachers tend to be more effective when guided by a principal who employs a hands-on approach (transformational leadership), and less effective when his or her principal displays a more hands-off, *laissez-faire* approach (Griffin, 2009).

Lussiez (2009) examined the connections among empathy, transformational leadership, and teacher self-efficacy in a sample of 25 school administrators and principals and 363 teachers, in a northern New Mexico. The teaching staff rated their principals, confirming a highly positive relationship between empathy principles and transformational leadership behaviors. Moreover, transformational leadership has statistically significant weak relationships with teachers efficacy. Further, there was a statistically significant association with teachers' willingness to exert more effort in the classroom and the transformational leadership style of their school principals, and teachers were more satisfied with principals who were more empathic. The study indicates that teachers respond positively to their principals' empathy with respect to the care and

individualized concern they show, which was related in part to their view that their principals demonstrated a transformational leadership style.

In another study, Bennardo (2007) examined the transformational leadership qualities of principals as a predictor of teacher self-efficacy in high schools. The study sampled 518 teachers from 15 Long Island public schools, demonstrating a positive relationship between teacher self-efficacy and the various components of transformational leadership—notably inspirational motivation and intellectual stimulation. In contrast, the TL components of idealized influence, individual consideration, and idealized influence behavior demonstrated a positive correlation between transformational leadership and both personal and general teaching efficacy.

Summary

This chapter presented a review of the literature in four areas that support the impetus and design for this research study: (a) leadership as a concept, (b) transformational leadership, (c) transformational leadership in schools, and (d) self-efficacy and teacher efficacy. In addition to the theoretical framework that guided this investigation of the correlation between the variables in this study.

Chapter 3

Methodology

Introduction

This chapter explains the methodology that was used in this investigation to examine the transformational leadership behaviors of school principals and teachers self-efficacy, as perceived by female teachers within a single school district in Jeddah, Saudi Arabia. This quantitative, non-experimental correlational research design utilized the (PLQ), designed by Jantzi and Leithwood (1996) (see Appendix F), which is a validated survey instrument that identifies six dimensions of transformational leadership. Results from this investigation are also based on data collected from use of the (TSES) (Tschannen-Moran & Hoy, 2001). This questionnaire measures the three dimensions of teacher self-efficacy (see Appendix G).

Research Design

Creswell (2012) described quantitative research as "...an inquiry approach useful for describing trends and explaining the relationship among variables found in the literature" (p. 626). Correlational research, which is a type of nonexperimental research design whereby the researcher measures two or more variables with the goal of determining the statistical relationship (i.e., the correlation) between them (Leedy & Ormrod, 2010), was also important for this study. In this study data were obtained through the implementation of two survey instruments: The Principal Leadership Questionnaire (PLQ) (Arabic version; see Appendix F) and the Teachers' Sense of Efficacy Scale (TSES) (Arabic version; see Appendix G). The independent or predictor variable in this study was transformational leadership, while the dependent variable was teachers' perceptions of self-efficacy. Thus, the study analyzed the relationship between the perceptions of teachers regarding the transformational leadership practices of their principals and their personal sense of self-efficacy. Participants for this study were female teachers in all-female elementary and secondary schools in the Al Nuzhah district school in Jeddah, Saudi Arabia. Each teacher was asked to complete both surveys.

Using Likert-type scoring ranging from "strongly disagree" (1) to "strongly agree" (4), the PLQ (Jantzi & Leithwood, 1996) was arranged in order to quantify the six dimensions of leadership behavior that are synonymous with transformational school leadership: vision, goals acceptance, modeling, individualized support, intellectual stimulation, and expecting high

performance. Jantzi and Leithwood (1996) created these dimensions based upon the transformational leadership model proposed by Leithwood (1994) to specifically conduct research in schools. Also relying on Likert-type responses, the TSES (Tschannen-Moran & Woolfolk Hoy, 2001) features both short- and long-form versions. For this study, the short-form version was administered; it contains 12 items that measure the three dimensions of teachers' sense of efficacy: efficacy for student engagement, efficacy for instructional strategies, and efficacy for classroom management. It was expected, therefore, that the combination of data from these two surveys would reveal the connections between teachers' perceptions of their school principals' transformational leadership style and their personal sense of self-efficacy.

Research Questions and Null Hypotheses

The following research questions and null hypotheses guided this study, and all the hypotheses tested in the current study were based on a 95% confidence level.

1. To what extent do teachers in a selected school district in Saudi Arabia perceive that the behavior of their school leader reflects a transformational leadership style?

H1₀: Teachers do not perceive that the behavior of their school leader reflects the transformational leadership style.

H1_A: Teachers do perceive that the behavior of their school leader reflects the transformational leadership style.

2. What is the relationship between Saudi teachers' perceptions of their principals' transformational leadership style and their sense of self-efficacy?

H2₀: There is no significant differences between teachers' perception of their principals' transformational leadership style and their teachers' self- efficacy.

H2_A: There is significant differences between teachers' perception of their principals' transformational leadership style and their teachers' self-efficacy.

3. To what extent are teaching experience and level of education able to predict Saudi teachers' perceptions of transformational leadership and their sense of self-efficacy?

H3₀: There are no significant differences in teachers' perceptions of transformational leadership and teachers' sense of self- efficacy that are dependent upon teaching experience, and level of education.

H3_A: There are significant differences in teachers' perceptions of transformational

leadership and teachers' sense of self-efficacy that are dependent upon teaching experience and level of education.

4. What are the differences in teachers' perceptions of principals' transformational leadership style in elementary and secondary schools?

H4₀: There are no differences in teachers' perceptions of principals' transformational leadership style in elementary and secondary schools.

H4_A: There are differences in teachers' perceptions of principals' transformational leadership style in elementary and secondary schools.

Study Population

Creswell (2012) defined a population as a group of individuals who share certain characteristics, which in the Saudi setting is highly applicable. Saudi Arabia's education system is strictly divided by gender, with schools populated exclusively by either males or females—whether they be students, faculty members, administrators, or support staff. Despite this gender divide, however, every school is treated equally regarding its funding, buildings, curricula, teacher salaries, etc. The population for this study consisted exclusively of teachers working in all-female elementary schools (grades 1-6), middle schools (grades 7-9), and high schools (grades 10-12) within the Al Nuzhah district of Jeddah, Saudi Arabia. At the time of this investigation, this district included four elementary schools, two middle schools, and two high schools. All the schools within this district share many strong similarities, such as the number of teachers and students, their socioeconomic status (middle income), curricula, activities, and school facilities. As an indication of Al Nuzhah's size, the Department of Education websites indicates that it served approximately 3,850 female students in the three school levels during the 2016-2017 school year, while employing 208 teachers in the eight schools, as shown in Table 1.

Table 1

The Schools' Level and Number of Teachers in the Al Nuzhah District

Name of School	Number of Teachers (totaling 208)
Elementary Schools	94
Middle Schools	51
High Schools	63

Thus, all 208 teachers received the two survey instruments (which together were expected to take no more than 15 minutes to complete) at the beginning of November 2019, with the request that it be filled out and returned within a two-week window. After that period, a reminder was sent to any potential respondent who had not yet completed the survey; a second reminder was sent approximately two weeks after the first reminder. Thus, the number of completed surveys returned to the researcher by December 2019 made up of the study sample. The expected response rate was 60%, with an absolute minimum target set at a 20% response rate.

Instrumentation

The terms *instrument* and *survey* are used interchangeably in this study. As noted earlier, two instruments were utilized to collect data: The Principal Leadership Questionnaire (PLQ), designed by Jantzi and Leithwood (1996) (see Appendix F), and the short form of the Teacher Self Efficacy Scale (TSES) (Tschannen-Moran & Hoy, 2001). As Bugenhagen (2006) reported, study participants may be confused when asked to complete two separate online surveys; thus, the PLQ and TSES were incorporated in one survey and administered using Qualtrics software.

The PLQ: The 24-item PLQ (Jantzi & Leithwood, 1996) was administered to assess teacher perceptions regarding whether they viewed their school principal as practicing transformational leadership by assessing six foundational dimensions of transformational leadership, explained in greater depth as follows:

1. **Identifying and Articulating a Vision:** This component indicates a school principal's actions in terms of identifying new opportunities for their leadership team and developing, articulating, and inspiring others with their vision for the future. This dimension was measured by Items 1, 2, 3, 4, 5.
2. **Providing an Appropriate Model:** This component gauges the degree to which a school principal's sets an effective example for their leadership team to follow through consistent, positive behaviors. This dimension was measured by Items 6, 7, 8
3. **Fostering the Acceptance of Group Goals:** This component assesses the degree to which a school principal's actions will promote cooperation between school leadership team members towards attaining common goals. This dimension was measured by Items 9, 10, 11, 12.
4. **Providing Individualized Support:** This component refers to the degree to which a school principal demonstrates respect for their leadership team and concern for each

- member's feelings and needs. This dimension was measured by Items 14, 15, 16, 17, 18.
5. **Providing Intellectual Stimulation:** This component indicates whether a school principal engages in practices that challenge their leadership team to self-reflect and re-examine prior assumptions about how best to accomplish their work. This dimension was measured by Items 19, 20, 21.
 6. **Holding High-Performance Expectations:** This component refers to practices that demonstrate the school leaders' expectations for best quality of work, and better performance of their leadership team. This dimension was measured by Items 22, 23, 24.

According to Jantzi and Leithwood (1996), they created the PLQ in order to “to develop and partly test a theoretical account of how teachers’ perceptions of transformational school leadership are formed” (p. 530). Indeed, a range of prior studies have already used the PLQ to examine transformational leadership in schools (e.g., Lane, 2016; Lilla, 2013, Nelson, 2012; Ngang, 2011). As such, the PLQ has good face and construct validity, and it is rated on a four-point Likert scale (“strongly disagree” to “strongly agree”). The instrument’s reliability (Cronbach’s alpha) indicated by the author was 0.91 (see Table 2). Note that Kenneth Leithwood granted permission to the researcher to use and translate this instrument in this investigation (see Appendix A).

Table 2

PLQ Items Reliability Coefficient (Jantzi & Leithwood, 1996)

Transformational Leadership Factors	Items	Cronbach’s alpha
Vision	1, 2, 3, 4, 5	.88
Modeling	6, 7, 8	.86
Goal Acceptance	9, 10, 11, 12,13	.80
Individualized Support	14, 15, 16, 17, 18	.82
Intellectual Stimulation	19, 20, 21	.77
High Performance	22, 23, 24	.86
PLQ Scale	24 items	.91

The TSES: The Teachers’ Sense of Efficacy Scale (Tschannen-Moran & Hoy, 2001) uses a nine-point Likert scale with answers that respond to the question: “How much can you do?” As shown in (see Appendix G), the responses range from “Nothing” (with a value of 1) to

“A great deal” (with a value of 9). The TSES was first developed at The Ohio State University; thus, it is offered referred to as the Ohio State Teacher Efficacy Scale (OSTES). The TSES short form with 12 items examines the reliability (alpha .90) and validity as shown in Table 3. To then evaluate the TSES/OSTES, Tschannen-Moran and Woolfolk (2001) used factor analysis to identify subscale scores for the three afore-mentioned dimensions of teacher efficacy. As such, Tschannen-Moran and Woolfolk (2001) concluded:

The results of these analyses indicate that the OSTES could be considered reasonably valid and reliable. With either 24 or 12 items, it is of reasonable length and should prove to be a useful tool for researchers interested in exploring the construct of teacher efficacy (p. 801).

Furthermore, they claimed that “The OSTES is a promising tool for capturing this powerful construct and putting it to constructive use” (p. 803). Accordingly, a number of studies have used the TSES to measure a teacher’s sense of efficacy (e.g., Chang & Engelhard, 2016; Nelson, 2012; Page, Pendergraft & Wilson, 2014; Sompongdam, 2016). The scale items and instrument reliability Cronbach’s alpha are listed in Table 3. Permission to use and translate the TSES was granted by Anita Woolfolk Hoy (see Appendix A).

Table 3

TSES Items Reliability Coefficient (Tschannen-Moran & Hoy, 2001)

Teacher Efficacy Factor	Short Form Item #	Short Form Cronbach’s alpha
<i>Efficacy for Classroom Management</i>	1, 6, 7, 8	0.86
<i>Efficacy for Student Engagement</i>	2, 3, 4, 11	0.86
<i>Efficacy for Instructional Strategies</i>	5, 9, 10, 12	0.81
Teachers’ Sense of Efficacy Scale	12 items	0.90

Translation/Back-Translation

This study was conducted in Saudi Arabia where Arabic is the official language of record. Therefore, the survey instrument needed to be translated into Arabic for its proper application, which is a task that clearly demands high accuracy in translation (Geisinger, 2003). Thus, translation/back-translation was used to ensure the correctness of the wording of the survey instruments in Arabic. As defined by Behr (2017), “Back translation involves the

translation of a questionnaire back into the original language and the subsequent comparison of the two original-language versions” (p. 573). For this study, this process of translation/back-translation was initiated by sending the English version of both surveys to four independent translators; all held doctorates in the field of education. Each was asked independently to translate the survey into Arabic and then translate the Arabic version back into English to ensure that their Arabic-to-English survey matched the meaning of the original English wording. After receiving the back-translations, the researcher and one of the translators worked together to compare the four iterations and finalize the final Arabic version that would be administered to participants. Finally, a Virginia Tech professor, who is fluent in both Arabic and English voluntarily reviewed the accuracy of the translation/back translation. Several tweaks were then implemented; for example, the word "variety " was back translated to "different kinds" which reflects the same meaning. Another example was the phrase " how much can you do" was back-translated to “how much effort you do,” which also refers to the level of effort teachers put into their teaching. Similarly, the term “school’s faculty” was back-translated to “school’s teachers” or “faculty members in the school.” This translation/back-translation process resulted in a high level of confidence in the wording of the surveys.

Data Collection Procedures

As indicated in Appendix H, the researcher requested and was granted permission by the Jeddah Department of Education (aosp.jedu.gov.sa) to conduct this study within the Al-Nuzhah district. Once IRB approval was secured (see Appendix I), the principals of the eight schools were contacted by phone through WhatsApp to ask permission to conduct this study in their schools (see Appendix C, Arabic version). The study was explained to all principals and they were asked forward the invitation letter (see Appendix D, Arabic version) and Qualtrics surveys to their schools’ teacher groups, requesting that each teacher complete the surveys. Once the teachers completed the informed consent (see Appendix B, Arabic version), they were given a demographic form (see Appendix E, Arabic version) and the two questionnaires (which were made available via a single link), which were designed to examine the relationship between principals’ transformational practices and teachers’ sense of self-efficacy in the selected schools. The data collected from the administration of the PLQ (see Appendix F) and TSES (see Appendix G), as well as basic demographic information (school level/name, highest degree

achieved, number of years as a teacher, and number of years teaching at current school) (see Appendix E), were formatted using Qualtrics survey software. As noted in the prior section, the documents were written in Arabic to fit the participants' first language. Data were collected between November and December 2019. Any questionnaire that was missing information or incomplete were rendered unusable and removed from the dataset. All personal information and data collected for this study will be protected and located on a bit-locked flash drive only accessible by password. The bit-locked flash drive will be saved for five years. The data collected by Qualtrics will also be retained five years for research purposes.

Informed Consent

To ensure that participant rights were protected, each teacher who initially agreed to take part in this study was required to read and sign the informed consent form statement that explains their rights, the privacy of their responses, and the purpose behind the study before they were able to access the surveys (see Appendix B). By selecting "Yes," they indicated that they understood and accepted the informed consent statement, agreed to complete both instruments, and gave permission to the researcher to use their data. However, if a prospective participant decided to answer "No" (i.e., they declined to agree to the informed consent statement), then they were politely thanked for their time; after which the software exited them from the survey. Accordingly, those who agreed to take part in this study received the Qualtrics link that has the informed consent statement, the demographic questions, and the two instruments. The demographic questionnaire included five questions: (1) their school level, (2) the name of the school, (3) their highest level of education completed, (4) the number of years they served as a teacher, and (5) the number of years teaching at their present school. They were then were asked to complete both the PLQ and TSES questionnaires. Participants who did not fully complete the two surveys were removed from data analysis as an invalid response.

Data Management

Following completion of data acquisition by late December 2019, statistical analysis began. After obtaining sufficient participant responses (N=85), the data were exported directly from Qualtrics into SPSS Statistics (version 26) for analysis. Moreover, to increase the probability that participants answered all questions accurately and honestly, any participant who did not responded to at least 75% of the total number of items from both instruments was

considered to be an invalid respondent and her data were not included in the analysis. In total, 15 surveys were excluded due to missing data. Specifically, nine respondents were removed due to completing only one survey. Six other surveys were eliminated due to having responded to less than 75% of instruments' questions. In total, 85 surveys were used in the data analysis. The collected data were maintained on the researcher's personal laptop and will not be shared with anyone unrelated to this dissertation research. After the successful completion of the project, any data associated with this investigation (either printed or stored on the researcher's computer) will be destroyed.

Data Analysis

Analyzing the data required several steps. First, descriptive statistics of transformational leadership questionnaire such as mean score, standard deviations and level of agreement were used to answer Question 1 (*To what extent do teachers in a selected school district in Saudi Arabia perceive that the behavior of their school leader reflects a transformational leadership style?*). In order to show the reliability of the (PLQ) and (TSES) scales in the study, SPSS used to calculate the Cronbach alpha score for each dimensions of both surveys.

Answering Question 2 (*What is the relationship between Saudi teachers' perceptions of their principals' transformational leadership style and their sense of self-efficacy?*) required the following approaches: developing a scatter plot that can be fit between TL and TSE. Pearson's correlation analysis was used to assess the relationship between transformational leadership and teachers' efficacy. In addition, A bivariate analysis was conducted using Pearson correlation coefficients and a 2-tailed test to examine the correlation between the six transformational leadership dimensions and each of the three sense-of-self-efficacy factors.

To answer Question 3 (*To what extent are teaching experience and level of education able to predict Saudi teachers' perceptions of transformational leadership and their sense of self-efficacy?*), multiple linear regression was used to investigate whether the teaching experience and level of education could predict teachers' perception of the school principals' transformational leadership and teacher self-efficacy separately. Specifically, two multiple regressions were conducted. The first one used teaching experience and level of education to predict TL, where independent variables were teaching experience and level of education, and the dependent variable was TL. Similarly, the second one used teaching experience and level of

education to predict TSE, where the independent variables were teaching experience and level of education, and the dependent variable was TSE.

To answer Question 4 (What are the differences in teachers' perceptions of principals' *transformational leadership style in elementary and secondary schools?*) T-test analysis was used to examine the differences between elementary and secondary teachers' perceptions of their principals' transformational leadership behaviors. All the hypotheses tested for the current study were made based on a 95% confidence level.

Summary

This chapter presents an explanation of the research design, its methodology, the sample population, the survey instrument, translation/back-translation, and the methods were used for data collection and its analysis.

Chapter 4

Results

Introduction

This non-experimental, quantitative, correlational research study was designed to investigate the correlation between teachers' perceptions regarding their principal's transformational leadership behaviors and their self-efficacy; respondents for this study were female teachers in all-female schools within the Al-Nuzhah district in Jeddah, Saudi Arabia. In total, 208 individuals took part in this investigation. 40% (85 surveys) of the total number of surveys were used. The independent variable was teachers' perceptions of the transformational leaders' characteristics, and the dependent variable was teacher perceptions of their sense of self-efficacy. The following four research questions directed this study: RQ1. To what extent do teachers in a selected school district in Saudi Arabia perceive that the behavior of their school leader reflects a transformational leadership style?

RQ2. What is the relationship between Saudi teachers' perceptions of their principals' transformational leadership style and their sense of self-efficacy?

RQ3. To what extent are teaching experience and level of education able to predict Saudi teachers' perceptions of transformational leadership and their sense of self-efficacy?

RQ4. What are the differences in teachers' perceptions of principals' transformational leadership style in elementary and secondary schools?

The survey data were collected through the use of two research instruments: The (PLQ) (Arabic version; see Appendix F), and the short form of (TSES; Arabic version; see Appendix G). Data were analyzed using quantitative statistical procedures. The data-collection process began with the researcher contacting the Department of Education in Jeddah to request permission to conduct a survey of teachers in the Al-Nuzhah district (see Appendix H). After permission was obtained from the Department of Education in Jeddah, and IRB approval was granted from Virginia Tech, the researcher contacted the principals of each school by phone through WhatsApp to describe the study and secure permission to engage their teachers in the online data collection. All eight principals agreed to forward the surveys, which were expected to take no longer than about 15 minutes to complete, via the Qualtrics link to their schools' teachers. A follow-up reminder was sent after two weeks requesting that those who had not yet

responded to the surveys to do so; a second and final reminder was sent approximately two weeks later. It should be noted that according to Department of Education in Jeddah, each of the eight principals had been working in their current schools for more than 5 years.

Participant Demographics

This study’s results are based on data from 85 participants. Table 4 provides a breakdown of respondents by school type: 49 respondents (57.6%) taught in elementary schools, 16 respondents (18.8 %) indicated that they taught at the middle-school level, and 19 (22.4 %) of respondents taught in high schools. Note that one participant did not indicate her school level (1.2%).

Table 4

Participant Breakdown by School Type

	Type of School		%
Valid	Elementary school	49	57.6
	Middle school	16	18.8
	High School	19	22.4
	Total	84	98.8
Missing	System	1	1.2
Total		85	100.0

With respect to level of education, data indicated that 75 teachers (88.2%) held a bachelor’s degree, and five teachers (5.9 %) had a master’s degree. No respondents in this study had attained their doctorate (0%), and five participants did not provide their educational background (5.9%).

Table 5***Educational Level of Respondents***

	Highest Educational Attainment	Frequency	Percent
Valid	Bachelor's	75	88.2
	Master's	5	5.9
	Doctoral	0	0
	Total	80	94.1
Missing	System	5	5.9
Total		85	100.0

Teachers were categorized into four teaching-experience groups. Table 6 lists the number of years they had taught. Only two individuals had taught for fewer than five school years (2.4%). A total of 19 respondents (22.4%) had taught for more than five years but less than 10 years. Ten teachers (11.8 %) had been educators for between 11 and 15 years; the largest share of respondents, 54 (63.5 %), indicated that they had taught for 15 years and more.

Table 6***Number of Years of Teaching Experience***

Years Teaching	N	Percentage
(< -5)	2	2.4
(6-10)	19	22.4
(11-15)	10	11.8
(15+)	54	63.5
Total	85	100.0

Table 7 provides the distribution of respondents by number of years they had taught at their current school. The largest group of 43 respondents (50.6%) had worked in their current school for fewer than five years; 24 (28.2 %) had worked between six to ten years in their current school, while six had worked between 11 and 15 years (7.1%). Twelve respondents (14.1%) indicated that they had worked for more than 15 years in their current school.

Table 7***Percentage of Respondents by Number of Years at Current School***

Years at Current School	N	Percentage
(< -5)	43	50.6
(6-10)	24	28.2
(11-15)	6	7.1
(15+)	12	14.1
Total	85	100.0

Table 8 provides information about the distribution of teacher responses by school level according to whether the teacher taught at the elementary or secondary (middle and high school combined). In total, 49 teachers (57.6%) taught grades one through six, and 35 (41.2%) taught in grades 7 through 12.

Table 8***Respondents of Teachers by Schools' Level Elementary and Secondary***

School Level	N	Percentage
Elementary	49	57.6
Secondary	35	41.2
Missing	1	1.2
Total	85	100.0

The Principal Leadership Questionnaire (PLQ)

Teachers who participated in the study completed the Principal Leadership Questionnaire, designed by Jantzi and Leithwood (1996). This instrument was used to gather data on the teachers' perceptions of their leaders' transformational leadership practices in six identified dimensions: (a) identifying and articulating a vision (b) providing an appropriate model, (c) fostering the acceptance of group goals, (d) providing individualized support, (e), providing intellectual stimulation, and (f) holding high performance expectations. The PLQ features a 4-point Likert scale that includes values ranging from 1 to 4: "strongly disagree," "disagree," "agree," and "strongly agree." Descriptive data showing the teachers' perceptions of

their principals' transformational leadership and the internal consistency reliabilities given as Cronbach's alpha of each dimension in Table 9. The highest mean reported was related to *vision* ($M=16.67$, $SD = 4.001$), followed by *Fostering the Acceptance of Group Goals* ($M= 16.66$, $SD=4.467$), *Individualized Support* ($M=15.94$, $SD=4.392$), *Modeling* ($M=10.16$, $SD=2.521$), and *High Performance Expectations* ($M=10.07$, $SD=2.622$). The lowest mean reported was related to *Intellectual Stimulation* ($M= 9.51$, $SD = 7.072$).

Table 9

Description of Each Dimension in Principal Leadership Questionnaire (PLQ)

PLQ Dimension	Mean	Variance	Std. Deviation	N of Items	Cronbach's Alpha
Vision	16.67	16.009	4.001	5	.93
Modeling	10.16	6.353	2.521	3	.92
Goals Acceptance	16.66	19.958	4.467	5	.96
Individualized Support	15.94	19.293	4.392	5	.94
Intellectual Stimulation	9.51	7.072	2.659	3	.94
High Performance Expectations	10.07	6.876	2.622	3	.94
PLQ Scale	79.28	389.971	19.748	24	.98

The Teacher Sense of Efficacy Scale (TSES)

In addition to completing PLQ survey, participants in this study also completed the short form of (TSES), that developed by Tschannen-Moran and Woolfolk (2001). This instrument is used to collect data on a teacher's perceptions of their own sense of efficacy in three dimensions: instructional strategies, student engagement, and classroom management. The TSES 12-item short form uses a nine-point Likert scale to rate perceptions of self-efficacy in these areas; responses range from 1 (nothing) to 9 (a great deal). Resulting data for teacher responses are presented in Table 10. The highest mean scores for each factor are reported as follows: (a) *Efficacy for Classroom Management*, Question 6: "How much can you do to get children to follow classroom rules?" ($M= 7.17$, $SD = 2.419$); (b) *Efficacy for Student Engagement*, Question 4: "How much can you do to help your students value learning?" ($M=7.48$, $SD =2.050$); and (c) *Efficacy for Instructional Strategies*, Question 10: "To what extent can you provide an alternative explanation or example when students are confused?" ($M=7.45$, $SD =1.823$).

Table 10***Descriptive Statistics for Items in TSES***

Item	N	Min	Max	Mean	Std. Deviation
1. How much can you do to control disruptive behavior in the classroom?	85	1	9	6.45	2.598
2. How much can you do to motivate students who show low interest in schoolwork?	83	1	9	7.14	2.113
3. How much can you do to get students to believe they can do well in schoolwork?	85	1	9	7.07	2.359
4. How much can you do to help your students value learning?	83	1	9	7.48	2.050
5. To what extent can you craft good questions for your students?	83	1	9	7.14	2.108
6. How much can you do to get children to follow classroom rules?	83	1	9	7.17	2.419
7. How much can you do to calm a student who is disruptive or noisy?	85	1	9	6.82	2.765
8. How well can you establish a classroom management system with each group of students?	83	1	9	7.01	2.314
9. How much can you use a variety of assessment strategies?	85	1	9	7.00	2.024
10. To what extent can you provide an alternative explanation or example when students are confused?	83	1	9	7.45	1.823
11. How much can you assist families in helping their children do well in school?	85	2	9	7.11	2.053
12. How well can you implement alternative strategies in your classroom?	85	1	9	7.12	1.930
Valid N (listwise)	78				

Table 11 presents the descriptive statistics of the TSES dimensions and the internal consistency reliabilities given as Cronbach's alpha for each dimension. The highest dimension was *Efficacy for Student Engagement* ($M=29.06$, $SD=6.906$), followed by *Efficacy for Instructional Strategies* ($M=28.65$, $SD=6.762$). The lowest dimension was *Efficacy for Classroom Management* ($M=27.55$, $SD=8.949$).

Table 11***Description of Each Dimension in TSES***

Teacher Sense of Efficacy Factor	Mean	Variance	Std. Deviation	N of Items	Cronbach's Alpha
Efficacy for Classroom Management; #1, 6, 7, 8	27.55	80.079	8.949	4	.91
Efficacy for Student Engagement; #2, 3, 4, 11	29.06	47.688	6.906	4	.86
Efficacy for Instructional Strategies; #5, 9, 10, 12	28.65	45.729	6.762	4	.87
Teacher Sense of Efficacy Scale	85.42	435.910	20.878	12	.95

Findings by Research Questions

Research Question 1 (RQ1): To what extent do teachers in a selected school district in Saudi Arabia perceive that the behavior of their school leader reflects a transformational leadership style? The first question for this study asked participants to indicate the degree to which they believed their school principal engaged in transformational leadership. Data were collected by having them respond to the (PLQ), designed by Jantzi and Leithwood (1996).

The first section in the Qualtrics link survey included a list of 24 items. Table 12 provides the mean scores, standard deviations, and the percentage of level of agreement of each of the 24 survey items. The level of agreement percentage was calculated for each question by combining the "strongly agree" and "agree" responses. The higher mean score indicates that more participants agreed with the questions regards transformation principals' practices dimension. As shown in Table 12, the highest mean scores and percentage of agreement for each dimension are reported as follows: (a) *Vision*, Question 2: "My principal commands respect from everyone on the faculty" (90.6 valid percent, $M=3.44$, $SD=0.851$); (b) *Modeling*, Question 7, "My principal symbolizes success and accomplishment within the profession of education" (87.1%, $M=3.39$, $SD = 0.905$); (c) *Group Goals Acceptance*, Question 10, "My principal encourages faculty members to work toward the same goals" (88.3%, $M=3.41$, $SD= 0.904$); (d) *Individualized Support*, Question 17: "My principal takes my opinion into consideration when initiating actions that affect my work" (84.7%, $M=3.32$, $SD=0.971$); (e) *Intellectual Stimulation*, Question 20, "My principal stimulates me to think about what I am doing for the school's students" (84.7%, $M=$

3.25, $SD= 0.937$); and (f) *High Performance Expectations*, Question 24, “My principal does not settle for second best in the performance of our work as the school’s faculty” (88.2%, $M= 3.41$, $SD= 0.877$).

Table 12

Descriptive Statistics for Each Item in Transformational Leadership Questionnaire

PLQ Dimensions and Survey Questions	N	Min	Max	Mean	S.D.	% Strongly Agree + Agree
VISION						
1. My principal has both the capacity and the judgment to overcome most obstacles.	85	1	4	3.42	.807	89.4
2. My principal commands respect from everyone on the faculty.	85	1	4	3.44	.851	90.6
3. My principal excites faculty with visions of what we may be able to accomplish if we work together as a team.	85	1	4	3.32	.929	84.7
4. My principal makes faculty members feel and act like leaders.	85	1	4	3.22	.968	81.2
5. My principal gives the faculty a sense of overall purpose for its leadership role.	85	1	4	3.27	.944	82.3
MODELING						
6. My principal leads by “doing” rather than simply by “telling”.	85	1	4	3.27	1.005	81.2
7. My principal symbolizes success and accomplishment within the profession of education.	84	1	4	3.39	.905	84.7
8. My principal provides good models for faculty members to follow.	84	1	4	3.39	.905	84.7

(continued)

Table 12 (cont.)

PLQ Dimensions and Survey Questions	N	Min	Max	Mean	S.D.	% Strongly Agree + Agree
MODELING						
9. My principal provides for our participation in the process of developing school goals.	85	1	4	3.42	.807	89.4
10. My principal encourages faculty members to work toward the same goals.	85	1	4	3.41	.904	88.3
11. My principal uses problem solving with the faculty to generate school goals.	85	1	4	3.29	.974	84.7
12. My principal works toward whole faculty consensus in establishing priorities for school goals.	83	1	4	3.24	.995	80.0
13. My principal regularly encourages faculty members to evaluate our progress toward achievement of school goals.	85	1	4	3.35	.948	85.9
INDIVIDUALIZED SUPPORT						
14. My principal provides for extended training to develop my knowledge and skills relevant to being a member of the school faculty.	85	1	4	3.13	.949	80.0
15. My principal provides the necessary resources to support my implementation of the school's program.	85	1	4	2.99	1.006	72.9
16. My principal treats me as an individual with unique needs and expertise.	83	1	4	3.27	.938	81.2
17. My principal takes my opinion into consideration when initiating actions that affect my work.	84	1	4	3.32	.971	84.7
18. My principal behaves in a manner thoughtful of my personal needs.	85	1	4	3.25	.987	82.3

(continued)

Table 12 (cont.)

PLQ Dimensions and Survey Questions	N	Min	Max	Mean	S.D.	% Strongly Agree + Agree
INTELLECTUAL STIMULATION						
19. My principal challenges me to reexamine some basic assumptions I have about my work in the school.	84	1	4	3.13	.941	80.0
20. My principal stimulates me to think about what I am doing for the school's students.	85	1	4	3.25	.937	84.7
21. My principal provides information that helps me think of ways to implement the school's program.	85	1	4	3.14	.915	83.5
HIGH PERFORMANCE EXPECTATIONS						
22. My principal insists on only the best performance from the school's faculty.	85	1	4	3.32	.954	87.1
23. My principal shows us that there are high expectations for the school's faculty as professionals.	85	1	4	3.34	.920	88.2
24. My principal does not settle for second best in the performance of our work as the school's faculty.	85	1	4	3.41	.877	88.2
Valid N (listwise)	78					

Research Question 2 (RQ2): What is the relationship between Saudi teachers' perceptions of their principals' transformational leadership style and their sense of self-efficacy? Data collected from both surveys the PLQ and TSES were used to examine correlations between the teachers' perceptions of their principal's transformational leadership practices and the teachers' sense of efficacy. The Pearson's correlation coefficient was used to analyze the overall relationship between the independent variable (transformational leadership) and the dependent variable (teacher sense of efficacy) as shown in Table 13. As indicated in the results shown in this table, the respondents' perception of transformational leadership style had a statistically significant moderate positive correlation with teacher sense of efficacy ($r=.046, p < .05$).

Table 13

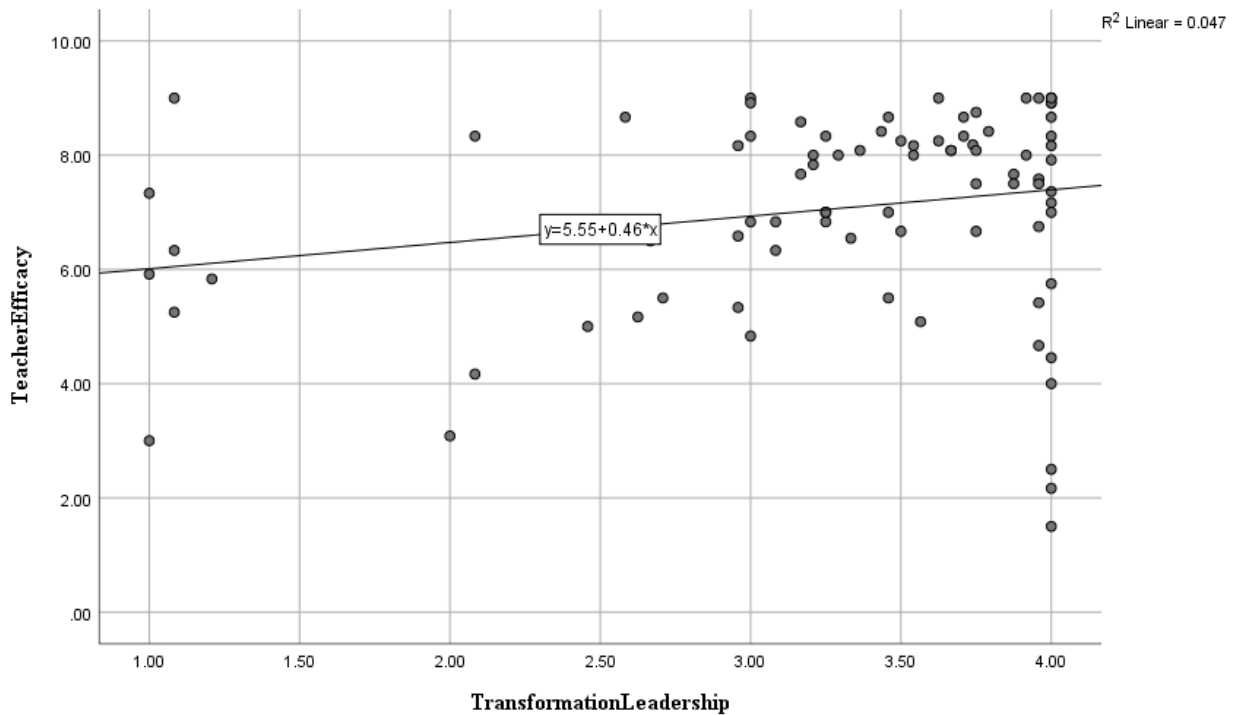
Pearson's Correlations of Teachers' Perceptions of Principals' Transformational Leadership Practices and Teachers' Sense of Efficacy

		Teachers' sense of efficacy
Transformational leadership	Pearson Correlation	.217*
	Sig. (2-tailed)	.046
	N	85

*. Correlation is significant at the 0.05 level (2-tailed).

Figure 1

Simple Scatter Plot of Teacher Efficacy by Transformational Leadership



As shown in Figure 1, there was a positive relationship between X (TL) and Y(TSE). In addition, the bivariate Pearson's correlation coefficient was used to analyze the relationships between the six transformational leadership dimensions and each of the three factors pertaining to teacher sense of efficacy factors by using multiple items (dimensions) rather than a single item. In total, 18 possible correlations were considered, with a total of seven correlations identified between the dimensions; the results of the correlational analysis are presented in Table

14. The highest correlation indicated that *Modeling* was significantly correlated with *Efficacy for Instructional Strategies*, ($r = .278^{**} p \leq .001$), while the second highest correlation was between *Vision* and *Instructional Strategies* ($r = .261^* p \leq .05$); a similarly significant level of correlation was recorded between *Modeling* and *Student Engagement* ($r = .261^* p \leq .05$). The remaining correlations are as follows: (a) *Goals Acceptance* was significantly correlated with *Instructional Strategies* ($r = .259^* p \leq .05$); (b) *Individualized Support* was significantly correlated with *Instructional Strategies* ($r = .247^* p \leq .05$); (c) *Vision* was significantly correlated with *Student Engagement* ($r = .232^* p \leq .05$). The lowest correlation was found for *Goals Acceptance* and *Student Engagement* ($r = .225^* p \leq .05$). In contrast, data indicated that *Intellectual Stimulation* and *High Expectations* were not significantly correlated to any of the three dimensions of teacher sense of efficacy. In addition, efficacy for *classroom management* was not found to be significant for any dimensions of transformational leadership.

Additionally, simple linear regression was performed to examine the degree to which teacher self-efficacy could be predicted by transformational leadership. The results showed that transformational leadership could significantly predict levels of teacher sense of efficacy for this population of teachers ($R^2 = .047, F = 4.116, p < .05$). Specifically, transformational leadership overall explained 4.7 % of the variance in teachers' efficacy. Tables 15, 16, and 17 show regression coefficients, indicating that the models were significant in predicting teacher sense of efficacy.

Table 14***Pearson's Correlations of Teachers' Perceptions of Principals' Transformational Leadership Dimensions and Teachers' Sense of Efficacy Factor***

Leadership Dimension		Classroom Management	Student Engagement	Instructional Strategies
Vision	Pearson	.177	.232*	.261*
	Correlation			
	Sig. (2-tailed)	.105	.033	.016
	N	85	85	85
Modeling	Pearson	.167	.261*	.278**
	Correlation			
	Sig. (2-tailed)	.127	.016	.010
	N	85	85	85
Goals Acceptance	Pearson	.174	.225*	.259*
	Correlation			
	Sig. (2-tailed)	.112	.038	.017
	N	85	85	85
Individualized Support	Pearson	.162	.191	.247*
	Correlation			
	Sig. (2-tailed)	.139	.080	.022
	N	85	85	85
Intellectual Stimulation	Pearson	.110	.137	.180
	Correlation			
	Sig. (2-tailed)	.314	.213	.100
	N	85	85	85
High Expectations	Pearson	.149	.180	.208
	Correlation			
	Sig. (2-tailed)	.173	.099	.057
	N	85	85	85

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

* Correlation is significant at the 0.05 level (2-tailed)

Table 15**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.217 ^a	.047	.036	1.73423

a. Predictors: (Constant), Transformational leadership

Table 16**ANOVA Table for Regression**

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	12.380	1	12.380	4.116	.046 ^b
	Residual	249.627	83	3.008		
	Total	262.007	84			

a. Dependent Variable: Teachers' Efficacy

b. Predictors: (Constant), Transformational leadership

Table 17**Regression Coefficient for Transformational Leadership**

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	5.551	.771		7.200	.000
	TL	.461	.227	.217	2.029	.046

a. Dependent Variable: Teachers' Efficacy

With respect to the second research question, the Pearson correlation analysis indicated acceptance of the alternative hypothesis and reject the null hypothesis, in that there was a statistically significant positive correlation between the teachers' perceptions of their principals' transformational leadership and their sense of efficacy.

Research Question 3 (RQ3): *To what extent are teaching experience and level of education able to predict Saudi teachers' perceptions of transformational leadership and their sense of self-efficacy?* To investigate the hypothesis, multiple linear regression was used to

examine whether the teaching experience and level of education could predict teachers' perception of the school principals' transformational leadership and teachers' sense of efficacy significantly. Tables 18, 19, and 20 show regression coefficients, indicating that teaching experience and level of education did not predict transformational leadership significantly.

Table 18

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.139 ^a	.019	-.006	.85147	2.023

a. Predictors: (Constant), Teaching experience, and Level of education

b. Dependent Variable: Transformational leadership.

Table 19

ANOVA for Regression

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	1.099	2	.549	.758	.472 ^b
Residual	55.825	77	.725		
Total	56.924	79			

a. Dependent Variable: Transformational leadership

b. Predictors: (Constant), Teaching experience, and Level of education

Table 20

Regression Coefficient for Teachers' Perceptions of Principals' Transformational Leadership by Level of Education and Teaching Experience.

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.	95.0% Confidence Interval for B	
		B	Std. Error	Beta			Lower Bound	Upper Bound
1	(Constant)	3.188	.613		5.197	.000	1.966	4.409
	Level of Education	.322	.402	.092	.802	.425	-.478	1.122
	Teaching experience	-.080	.106	-.087	-.751	.455	-.290	.131

a. Dependent Variable: Transformational leadership

The Analysis of Variance (ANOVA) indicated that the regression model for teaching experience and educational background did not predict perceptions of transformational leadership significantly ($R^2=.019$, $F=0.75$, $p = 0.47$). Specifically, teaching experience and level of education together explained only 2% of the variance in the perceptions of transformational leadership. Thus, the null hypothesis was accepted: “*H30: There are no significant differences in teachers’ perceptions of transformational leadership and teachers’ sense of self- efficacy that are dependent upon teaching experience, and level of education.*”

Table 21

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.175 ^a	.031	.006	1.79302	1.788

a. Predictors: (Constant), Teaching experience, and Level of education

b. Dependent Variable: Teachers’ efficacy.

Table 22

ANOVA for Regression Coefficient for Teachers’ Efficacy by Level of Education and Teaching Experience.

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	7.835	2	3.917	1.219	.301 ^b
	Residual	247.550	77	3.215		
	Total	255.385	79			

a. Dependent Variable: Teachers’ efficacy

b. Predictors: (Constant), Teaching experience, and Level of education

Table 23***Regression Coefficients for Teacher Experience***

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.	95.0% Confidence Interval for B	
		B	Std. Error	Beta			Lower Bound	Upper Bound
1	(Constant)	7.073	1.292		5.476	.000	4.501	9.645
	Level of education	-.768	.846	-.104	-.908	.367	-2.452	.916
	Teaching experience	.236	.223	.121	1.058	.293	-.208	.680

a. Dependent Variable: Teachers' efficacy

Tables 21, 22, and 23 show regression coefficients indicating that neither teaching experience nor level of education were significant predictors of a teacher's sense of efficacy ($R^2=0.031$, $F=1.129$, $p=0.30$) and null hypothesis was accepted "*H3o: There are no significant differences in teachers' perceptions of transformational leadership and teachers' sense of self-efficacy that are dependent upon teaching experience, and level of education.*" The result revealed that only 3% of the variance in teachers' efficacy could be explained by the two independent variables.

Research Question 4 (RQ4): *What are the differences in teachers' perceptions of principals' transformational leadership style in elementary and secondary schools?* T-test analysis was used to examine the differences between elementary and secondary teachers' perceptions of their principals' transformational leadership behaviors. As shown in Tables 24 and 25, significant differences were found between the perceptions of elementary and secondary teachers with regards to their principal's transformational leadership ($F=2.073$; $P = .005$). The result indicate that elementary school teachers ($M=3.4936$, $SD=.74013$) perceived that their principals reflected the behaviors of transformational leadership at higher levels in comparison to teachers in secondary schools ($M=2.9881$, $SD=.87888$) conditions; $t(82) = 2.853$, $p = .005$. Thus, the null hypotheses (*There are no differences in teachers' perceptions of principals' transformational leadership style in elementary and secondary schools*) was rejected.

Table 24

T-Test Result Comparing Elementary and Secondary School Teachers' Perceptions of Their Principals' Transformational Leadership Behaviors.

	School Level	N	Mean	Std. Deviation	Std. Error Mean
Transformational leadership	Elementary schools	49	3.4936	.74013	.10573
	Secondary schools	35	2.9881	.87888	.14856

Table 25

Independent Samples Test of Transformational leadership

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	T	Df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Transformational leadership	Equal variances assumed	2.073	.154	2.853	82	.005	.50550	.17718	.15303	.85797
	Equal variances not assumed			2.772	65.302	.007	.50550	.18234	.14137	.86963

Summary

Descriptive and statistical analyses indicated that teachers did perceived their principals to be transformational leaders, in that 72% to 90.6% of scores ranged from “agree” to “strongly agree” for all survey items. The Pearson correlation and a 2-tailed test analysis indicated acceptance of the alternative hypothesis—namely, that for this population of female Saudi teachers, there was a statistically significant positive correlation between the teachers’ level of sense of self-efficacy and their principals’ transformational leadership style. Importantly, the results showed that, overall, transformational leadership did significantly predict teacher sense of efficacy ($R^2 = .047$, $F = 4.116$, $p < .05$).

The Pearson’s correlation coefficient was utilized to examine the six transformational leadership dimensions and their correlations to each of the three teacher-sense-of-efficacy

factors. The highest identified correlation was between Modeling and Efficacy for Instructional Strategies, ($r = .278^{**}$ $p \leq .001$), while the second highest correlation was between Vision and Instructional Strategies ($r = .261^*$ $p \leq .05$). In contrast, data indicated that Intellectual Stimulation and High Expectations were not significantly correlated to any of the three dimensions of teacher sense of efficacy. Results also confirmed that efficacy for classroom management was not significantly correlated to any of the six transformational dimensions. In contrast, the regression model revealed that teaching experience and educational background did not significantly predict perceptions of transformational leadership ($R^2 = .019$, $F = 0.75$, $p = 0.47$). Moreover, the results for teaching experience, and teachers' level of educational together also did not significantly predict teacher perceptions of their self-efficacy ($R^2 = 0.031$ $F = 1.129$, $p = 0.30$). Accordingly, the null hypothesis was accepted.

Finally, T-test analysis was used to examine the differences between elementary and secondary teachers' perceptions of their principals' transformational leadership behaviors. The result shows that significant differences were found between the perceptions of elementary and secondary teachers with regards to their principal's transformational leadership behaviors ($F = 2.073$; $p = .005$). Accordingly, the null hypothesis was rejected.

Chapter 5

Summary, Discussion, and Conclusion

Introduction

To reiterate, the goal of this study was to identify the degree to which the transformational leadership practices of school principals as perceived by teachers impacted their own sense of self-efficacy. Chapter 4 presented the statistical analyses of this investigation and identified the various correlations that were identified between the variables. This chapter will provide an overview of the study, its findings, and their relationship with current literature reports, as well as implications, recommendations for further research, and conclusions.

Summary of the Study

School principals who espouse the tenets and approaches of transformational leadership are reported to support teachers in helping students reach optimal scholastic outcomes (Leithwood, 2000). As Anderson (2017) stated, “Transformational leadership style is a viable choice for educational leaders seeking to transform schools to systems capable of meeting stakeholder demands (i.e. the students, local community, state, and federal)” (p. 8). Transformational school leaders have the potential to be highly influential, which is positively correlated with teacher satisfaction, teacher self-efficacy, student achievement, and a supportive school culture (e.g., Bennardo, 2007; Espinoza, 2013; Griffin, 2009; Lane, 2016; Leithwood et al., 1999b; Lilla, 2013; Lussiez, 2009; Maguire, 2016; Nelson, 2012; Ngang, 2011; Sompongam, 2016).

Transformational leadership emphasizes the relationships between leaders and followers and how those personal linkages can be used to accomplish shared organizational goals (Northouse, 2015). Northouse (2015) also described transformational leadership as a leadership style with the potential to change people since it focuses on motivating them and considering their personal needs and values. Tschannen-Moran et al. (1998) defined teacher *self-efficacy* as the “teacher’s belief in his or her capability to organize and execute courses of action required to successfully accomplish a specific teaching task in a particular context” (p. 233). Additionally, self-efficacy can also exert a positive effect on the personality of teacher and her/his level of commitment; for instance, Nir and Kranot (2006) indicated that teachers with high self-efficacy are more confident in their classrooms and demonstrate greater levels of commitment to

teaching. Further, Guskey (1988) indicated that teachers with higher self-efficacy tend to be more passionate in teaching.

This investigation was designed to investigate the transformational leadership characteristics of school principals as viewed by female teachers within one all-female school district within Jeddah, Saudi Arabia, and how those perceptions impacted their own sense of efficacy. This study was, in part, inspired by a mandate in Saudi Arabia known as Saudi Vision 2030, which advocates using leadership to inspire teachers to improve educational outcomes and prepare their students to be better learners and responsible citizens for the nation's future. Accordingly, this study is expected to expand the body of literature that related to transformational leadership and self-efficacy in the academic field in Saudi Arabia. Recommendations for future research may also be applied more broadly to other educational settings wherein transformational leadership is practiced.

Review of Methodology: This study implemented a quantitative, nonexperimental, predictive research design to investigate the relationship between teachers' perceptions regarding their principal's transformational leadership practices and their perceived self-efficacy. Data for this study were obtained through the implementation of two survey instruments: (PLQ) and the (TSES). The independent or predictor variable was transformational leadership, while the dependent variable was teachers' perceptions of self-efficacy. The PLQ (Jantzi & Leithwood, 1996) measures the six critical characteristics of transformational leadership: vision, modeling, goal acceptance, individualized support, intellectual stimulation, and high expectations. The survey included 24 items; responses were rated on a four-point Likert scale (from "strongly disagree" to "strongly agree"). Ratings of the instrument's reliability (Cronbach's alpha) yielded a strong reliability coefficient of .98, with a range of .92 to .96 for the six transformational leadership behaviors.

In total, 85 fully completed surveys were analyzed for this study. Participants completed both the (PLQ) and the short form of the Teachers' Sense of Efficacy Scale (Tschannen-Moran & Hoy, 2001), which included 12 items for measuring the following three dimensions: (a) efficacy for student engagement, (b) efficacy for instructional strategies, and (c) efficacy for classroom management. Ratings of the TSES's reliability yielded a strong reliability coefficient of 0.95, with a range of 0.86 to 0.91 for all three dimensions. This study also includes data on specific demographic factors such as teaching experience and level of education which were

included as moderating variables. In summary, 57.6% of teachers taught in elementary schools, and 41.2% taught in secondary schools (middle and high schools combined). With respect to level of education, 88.2% of teachers held a bachelor's degree and 5.9% of teachers held a master's degree (no teacher held a doctorate). Regarding number of teaching years, 2.4% of teacher had fewer than five years of teaching experience; 22.4% had been teaching for between six and ten years; and 11.8% of teachers had taught between 11 and 15 years. The majority of participants (63.5 %) indicated that they had worked in the educational field for 15 years or more, which reflects their long experience in teaching.

Demographic data also included the number of years respondents had taught at their current school. The largest group (50.6%) had worked in their current school for fewer than five years; 28.2 % had worked between six to ten years in their current school, while 7.1% had taught in their current school for 11 and 15 years. Finally, 14.1% of teachers had been in their current school for more than 15 years. Although the eight school principals of these schools did not contribute data to this study, all had worked in their current schools for more than 5 years, which reflects that even teachers who worked less than five years in their current schools likely knew their principals' leadership style very well. Again, these demographic variables were assessed in terms of whether they were moderating influences on each teacher's perceptions of their principals' transformational leadership practices and their sense of efficacy.

Data-collection was performed using the Qualtrics Survey Software involving teachers from eight all-female schools (four elementary schools, two middle schools, and two high schools) located in the Al Nuzhah District in Jeddah, Saudi Arabia. From a total teacher population of 208 females who were asked to take part in this study, data from 85 teachers were analyzed, which corresponds to a 40% response rate. This low response rate could be associated with the specific period of time when the data collection started, which overlapped with the period when teachers were preparing for final examinations at the close of the semester in Saudi Arabia. Among those who did respond, 15 surveys had to be removed due to missing data. Subsequently, a total of 85 surveys were analyzed using SPSS, with descriptive statistics used to determine the frequencies, means, standard deviations, and the level of agreement of the survey results. Simple linear regression analysis was conducted to determine the level of prediction of teachers' sense of efficacy as related to their perceptions of their principals' transformational leadership. A Pearson's correlation statistic was used to analyze the relationships between the six

transformational leadership dimensions and each of the three-teacher sense of efficacy factors. In addition, data were analyzed with multiple regressions to test if teaching experience and level of education moderated the relationship between the two variables. Finally, t-test analysis was used to examine the differences between elementary and secondary teachers' perceptions of their principals' transformational leadership practices.

Findings and Their Relation to the Literature

The findings from this study confirmed that within this population of respondents, transformational leadership had a significant positive correlation with teacher sense of efficacy. Thus, results from this study uphold prior research findings about this relationship (Espinoza, 2013; Griffin, 2009; Lilla, 2013; Lussiez, 2009; Maguire, 2016; Mehdinezhad & Mansouri, 2016; Nelson, 2012; Sompongdam, 2016). Four research questions guided this investigation, each of which is discussed in the following sections according to data results.

Research Question 1: *To what extent do teachers in a selected school district in Saudi Arabia perceive that the behavior of their school leader reflects a transformational leadership style?*

The first question sought to determine the extent to which teachers in a selected school district in Saudi Arabia perceived that the behavior of their school leader reflected a transformational leadership style. Descriptive data analyses showed that teachers agreed that their school leaders' behavior reflected transformational leadership characteristics.

The higher mean score indicates that more participants agreed with the questions regarding the practice dimensions of transformational principals, in that 90.6% to 72% of scores ranged from "agree" to "strongly agree" for all survey items.

The following result yielded the highest mean scores for the six transformational leadership dimensions from (Jantzi & Leithwood, 1996): (1). Identifying and articulating a vision -Q2: "My principal commands respect from everyone on the faculty". (2). Providing an appropriate model -Q7: "My principal symbolizes success and accomplishment within the profession of education". (3). Fostering the acceptance of group goals – Q10: "My principal encourages faculty members to work toward the same goals". (4). Providing individualized support – Q17: "My principal takes my opinion into consideration when initiating actions that affect my work". (5). Providing intellectual stimulation – Q20: "My principal stimulates me to

think about what I am doing for the school's students". (6). Holding high performance expectations – Q24: "My principal does not settle for second best in the performance of our work as the school's faculty".

These findings confirmed that this study's respondents perceived that their principals were proactive in identifying new opportunities for them to act upon, inspiring them within their school's vision of the future, and considered them to be partners in working toward that vision. Indeed, their school principals promoted assistance among schoolteachers and assisted them to work together toward a shared goals, while evidencing respect and care about their personal needs. The teachers in this study viewed their principals as exemplifying the values of their schools and were worthy of emulating. Teachers agreed that their principals expected a high level of excellence, quality, and performance from them. In conclusion, the null hypothesis (H_{10} : *Teachers do not perceive that the behavior of their school leader reflects the transformational leadership style*) was rejected.

Research Question 2: *What is the relationship between Saudi teachers' perceptions of their principals' transformational leadership style and their sense of self-efficacy?*

Two questionnaires were used to collect data to respond to this question: The Principal Leadership Questionnaire, designed by Jantzi and Leithwood (1996), and the short form of the Teacher Self Efficacy Scale (Tschannen-Moran & Hoy, 2001). H_{20} was stated as follows: *There is no significant differences between teachers' perception of their principals' transformational leadership style and their teachers' self- efficacy.*

To address this research question, a simple linear regression and bivariate analysis using Pearson correlation coefficients and a 2-tailed test used were used to examine this relationship, findings revealed a significant positive correlation between teachers' perceptions of their principals' transformational leadership and their sense of efficacy. Furthermore, transformational leadership could significantly predict levels of teacher sense of efficacy. Therefore, the null hypothesis was rejected.

The findings from this research study are consistent those of other researchers who showed that the behaviors of transformational principals had a statistically significant positive effect on a teacher's sense of efficacy. For instance, Nelson (2012) reported a statistically significant correlation between transformational leadership practices and teacher efficacy. The findings from this study also support those of Sompongdam (2016), who concluded that a

principal's transformational leadership behaviors could predict a teacher's sense of efficacy. Similarly, Nir and Kranot (2006) described how teachers who work under the direction of a transformational leader are more likely to display higher levels of efficacy in comparison to those who work for leaders using a different leadership approach. Further, based on their data from investigating principals who practice a transformational leadership style, Ross and Gray (2006b) reported a significant positive effect on teacher beliefs in terms of their collective capacity to teach with purpose and confidence, as well as on their commitment to shared work values. Therefore, the results of the present study are consistent with a number of prior literature reports that confirm the positive correlation between transformational leadership and its effect on teachers' self-efficacy (e.g., Bennardo, 2007; Espinoza, 2013; Griffin, 2009; Lilla, 2013; Lussiez, 2009; Maguire, 2016; Mehdinezhad & Mansouri, 2016).

Moreover, data from this study confirmed that four leadership practices were perceived by teachers as being the most powerful in terms of enhancing their self-efficacy in the classroom engagement and identifying different strategies: (a) identifying and articulating a vision, (b) providing an appropriate model, (c) fostering the acceptance of group goals, and (d) providing individualized support. These positive correlations are consistent with the research of Sompongdam (2016), who asserted that developing a shared vision for a school, which is led by a principal espousing transformational leadership, is the most important variable for predicting teacher self-efficacy. These findings are also in line with a report by Espinoza (2013), who identified a statistically significant correlation between transformational leadership and the effective instructional strategies of teachers. In contrast, the data findings confirmed the absence of a statistically significant correlation between individualized support and student engagement; similarly, no correlations were identified between the three teacher-efficacy factors and intellectual stimulation and high expectations. Finally, no statistically significant correlation could be confirmed between efficacy for classroom management and any of the dimensions of transformational leadership.

In summary, there are many factors that can impact a teacher's ability to manage a classroom effectively. As noted by Kayalar and Kayalar (2018), the interest of students in the subject, the impact of family influences, and the physical facilities of the classroom itself (e.g., factors over which the teacher may have little control) can also be important to achieving effective classroom management. The non-significant correlation between these variables could

be attributed to the smaller sample size of this study; a larger sample size might have produced different results.

Research Question 3: *To what extent are teaching experience and level of education able to predict Saudi teachers' perceptions of transformational leadership and their sense of self-efficacy?*

The purpose of this question was to determine whether selected demographic factors such as teaching experience and level of education served as significant predictors of perceptions of transformational leadership and teacher self-efficacy. Multiple linear regression was used to examine the research questions. The results showed that these two moderating variables had no impact on teacher perceptions of their transformational principals and their self-efficacy. In other words, neither the respondent's level of educational training (bachelor's degree or master's degree) nor length of classroom service had any impact on the dependent variables. The findings of this study support those of Maguire (2016), who indicated that teachers' years of experience did not have a statistically significant correlation with both teachers' perception of transformational leadership style and teacher efficacy. In contrast, this study's results are not consistent with Bennardo (2007), who conducted a demographic analysis of the relationship that included the moderating factors of years of experience and highest degree earned. Bennardo concluded that a teacher's sense of self-efficacy was at the lowest point at the start of teacher's career but tended to increase the longer the teacher spent in the classroom. Furthermore, the researcher also stated that teacher's self-efficacy increased with degree level. The small simple size of the current study could have led to this result, with a larger sample size possibly yielding different results.

Research Question 4: *What are the differences in teachers' perceptions of principals' transformational leadership style in elementary and secondary schools?*

To answer this question, T-test analysis was used to examine the differences between elementary and secondary teachers' perceptions of their principals' transformational leadership behaviors, with results indicating a significant difference between the two cohorts. Specifically, the results confirmed that the elementary school teachers who took part in this study perceived that their principals reflected behaviors of transformational leadership to a greater degree in comparison to the secondary-school teacher-respondents. This outcome contradicts the findings of Espinoza (2013), who reported no significant differences between the perceptions of

elementary and secondary teachers with respect to their principals' transformational leadership behaviors. The findings associated with the current study could be explained by the number of responses received from elementary-level teachers (49), which was higher in comparison the combined total of middle and high school teachers (35). It should also be noted that Espinoza (2013) used a larger sample size of (128 elementary school teachers and 155 secondary teachers). Another important difference in comparing the results from this study to those of Espinoza (2013) is that the latter's study was conducted in a school district in south Texas (U.S.); in contrast, this study's findings are based on data from eight all-female schools in Jeddah, Saudi Arabia.

Implications for Practice

The findings from this investigation have several implications for practice. First, this study could be useful to educational administrators in providing another evidence-based study on the potentially significant impact of transformational leadership on the self-efficacy of teaching staff. This relationship then has positive implications for educational outcomes. Schmidt-Davis and Bottoms (2011) stated that "teaching and school leadership are inextricably linked—it is neither teachers alone nor principals alone who improve schools, but teachers and principals working together" (p.5). Because principals are in a position to actively influence teaching and learning, the findings reported herein may be beneficial to them in becoming aware of the practical applications of transformational leadership and its effectiveness in improving both leadership development and teacher efficacy. A transformational leader builds open, authentic and motivational relationships with their staff to ensure that all school members are working toward a common goal. Principals who engage in transformational leadership tend to hold a more positive, realistic, and plausible vision of the future that satisfies the interests and needs of teachers; this style of leadership also creates trust by including followers in the creation and achievement of common goals and strategies. Transformational leaders are willing to learn and relearn and value skills development and education for their schools (Northouse, 2015), which promotes reciprocal feelings of confidence, optimism, and high expectations.

In confirming a positive correlation between transformational leadership and teacher self-efficacy, this study may also be useful to teachers who are interested in developing their personal sense of self-efficacy. By emphasizing the potential importance of feeling empowered in one's

ability to teach and engage with students, teachers are more likely to positively impact learning in the classroom. Therefore, the results of this study could help teachers identify areas of strength and weakness. Finally, the conceptual framework utilized for this investigation could benefit other researchers who are seeking to understand gender-based differences in the importance of transformational leadership and its relationship to teacher efficacy.

Recommendations for Further Research

Suggestions for future research include investigating the correlations between transformational leadership behaviors and teacher self-efficacy, while also incorporating quantitative measures of student achievement. Future researcher could also consider studying teachers' self-efficacy, with students' achievement. A follow-on study should be conducted in larger school districts with a larger population sample or applying the same methodological approach to all-male schools in Saudi Arabia, private schools, or international schools. Another study should be designed to study transformational leadership—and particularly the factors of intellectual stimulation and high expectations—in terms of classroom management specifically. A follow-on study could also be developed to determine whether there are any school level-based differences in perceptions of teachers' self-efficacy. Furthermore, a subsequent study using a different methodological approach (qualitative or mixed-methods), coupled with including the perspectives of both principals and teachers, may provide additional information regarding perceptions and practices.

References

- Acharya, A. S., Prakash, A., Saxena, P., & Nigam, A. (2013). Sampling: Why and how of it. *Indian Journal of Medical Specialties*, 4(2), 330-333.
doi:10.1016/j.infoandorg.2016.02.001
- Achurra, C., & Villardón, L. (2013). Teacher self-efficacy and student learning. *The European Journal of Social and Behavioural Science*, 1(1), 366-383.
- Anderson, M. (2017). Transformational leadership in education: A review of existing literature. *International Social Science Review*, 3(1), 1-13.
<https://digitalcommons.northgeorgia.edu/issr/vol93/iss1/4>
- Antonakis, J., & Day, D.V. (Eds.). (2017). *The nature of leadership*. (3rd Ed.) Sage Publications.
- Ashton, P. (1985). Motivation and teachers sense of efficacy. In C. Ames & R. Ames (Eds.), *Research on motivation in education, (Vol. 2), The classroom milieu* (pp. 141-174). Orlando, FL: Academic Press.
- Armor, D., Conroy-Oseguera, P., Cox, M., King, N., McDonnell, L., Pascal, A., Pauly, E., & Zellman, G. (1976). *Analysis of the school preferred reading programs in selected Los Angeles minority schools* (Rep. No. R-2007-LAUDS). Santa Monica, CA: RAND. (ERIC Document Reproduction Service No. 1).
- Ashton, P. T., & Webb, R. B. (1986). *Making a difference: Teachers' sense of efficacy and student achievement*. New York: Longman
- Bandura, A. (1986). *Social foundations of thought and action: A social cognitive theory*. Englewood Cliffs, NJ: Prentice Hall.
- Bandura, A. (1994). Self-efficacy. In V. S. Ramachaudran (Ed.), *Encyclopedia of Human Behavior* (Vol. 4, pp. 71-81). New York, NY: Academic Press.
- Bandura, A. (1997). *Self-efficacy: The exercise of control*. New York, NY: W. H. Freeman and Company.
- Bandura, A. (1998). *Health promotion from the perspective of social cognitive theory*. New York, NY: Routledge.
- Bandura, A. (2013). Social cognitive theory. In E. H. Kessler (Ed.), *Encyclopedia of Management Theory* (Vol. 2, pp. 710-715). Thousand Oaks, CA: SAGE Reference.
- Bass, B. M. (1985). *Leadership and performance beyond expectations*. New York, NY: Free Press.

- Bass, B. M. (2008). *The Bass handbook of leadership: Theory, research and managerial applications* (4th ed.). New York, NY: Free Press.
- Bass, B. M., & Avolio, B. J. (1994). *Improving organizational effectiveness through transformational leadership*. Thousand Oaks, CA: Sage Publications.
- Bass, B. M., & Riggio, R. E. (2006). *Transformational leadership*. Psychology Press.
- Bass, B. M., & Stogdill, R. M. (1990). *Bass & Stogdill's handbook of leadership: Theory, research, and managerial applications*. New York, NY: Simon and Schuster.
- Behr, D. (2017). Assessing the use of back translation: the shortcomings of back translation as a quality testing method. *International Journal of Social Research Methodology*, 20(6), 573–584. <https://doi-org.ezproxy.lib.vt.edu/10.1080/13645579.2016.1252188>.
- Bennardo, D. P. (2007). *The transformational leadership characteristics of the building principal as a predictor of high school teacher efficacy* (Doctoral dissertation, St. John's University (New York), School of Education and Human Services).
- Bennis, W., & Nanus, B. (1985). *Leaders: The strategies for taking charge*. New York, NY: Harper & Row.
- Bugenhagen, M. J. (2006). *Antecedents of transactional, transformational, and servant leadership: A constructive-development theory approach*. Theses & Dissertations, Agricultural Leadership, Education & Communication Department, 2.
- Burns, J. M. (1978). *Leadership* (1st ed.). New York, NY: Harper & Row.
- Chang, M. L., & Engelhard Jr, G. (2016). Examining the teachers' sense of efficacy scale at the item level with Rasch measurement model. *Journal of Psychoeducational Assessment*, 34(2), 177-191.
- Creswell, J. W. (2012). *Educational research: Planning, conducting, and evaluating quantitative* (4th ed.). Upper Saddle River, NJ: Prentice Hall.
- Day, C., Gu, Q., & Sammons, P. (2016). The impact of leadership on student outcomes: How successful school leaders use transformational and instructional strategies to make a difference. *Educational Administration Quarterly*, 52(2), 221-258.
- Dussault, M., Payette, D., & Leroux, M. (2008). Principals' transformational leadership and teachers' collective efficacy. *Psychological Reports*, 102(2), 401-410.
- Ebmeier, H. (2003). How supervision influences teacher efficacy and commitment: An investigation of a path model. *Journal of Curriculum and Supervision*, 18(2), 110.

- Espinoza, S. M. (2013). *The effects of principal's transformational leadership behaviors on teacher leadership development and teacher self-efficacy*. (Doctoral dissertation, The University of Texas-Pan American.)
- Evans, R. (2010). *Seven secrets of the savvy school leader: A guide to surviving and thriving*. John Wiley & Sons.
- Field, A. (2014). *Discovering statistics using IBM SPSS statistics*. Thousand Oaks, CA: Sage.
- Geisinger, K. F. (2003). Testing and assessment in cross-cultural psychology. In J. R. Graham, & J. A. Naglieri (Eds.), *Handbook of psychology, 10*, 95–117. Hoboken, NJ: Wiley.
- Gibson, S., & Dembo M. (1984). Teacher efficacy: A construct validation. *Journal of Educational Psychology, 76*, 569-582.
- Gist, M. E., & Mitchell, T. R. (1992). Self-efficacy: A theoretical analysis of its determinants and malleability. *The Academy of Management Review, 17*(2), 183-211.
10.5465/AMR.1992.4279530
- Griffin, K. L. (2009). The relationship between self-efficacy of teachers and their perception of the school principal's leadership style (Ph.D.). Available from ProQuest Dissertations & Theses Global. (305157061).
- Guskey, T. R. (1988). Teacher efficacy, self-concept, and attitudes toward the implementation of instructional innovation. *Teaching and Teacher Education, 4*, 63–69.
- Hallinger, P., & Heck, R. H. (1996). Reassessing the principal's role in school effectiveness: A review of empirical research, 1980-1995. *Educational Administration Quarterly, 32*(1), 5-44. doi:10.1177/0013161X96032001002
- Henson, R. K., Kogan, L. R., & Vacha-Haase, T. (2001). A reliability generalization study of the teacher efficacy scale and related instruments. *Educational and Psychological Measurement, 61*(3), 404-420.
- Hicks, S. (2012). *Self-efficacy and classroom management: A correlation study regarding the factors that influence classroom management* (Doctoral dissertation, Liberty University)
- Hipp, K. A. (1997). *Documenting the effects of transformational leadership behavior on teacher efficacy*. Paper presented at the annual meeting of the American Educational Research Association (Chicago, IL, March 24-28, 1997).

- Howell, J. M., & Avolio, B. J. (1993). Transformational leadership, transactional leadership, locus of control, and support for innovation: Key predictors of consolidated business-unit performance. *Journal of Applied Psychology, 78*, 891–902.
- Jantzi, D., & Leithwood, K. (1996). Toward an explanation of variation in teachers' perceptions of transformational school leadership. *Educational Administration Quarterly, 32*(4), 512. <https://doi-org.ezproxy.lib.vt.edu/10.1177/0013161X9603200404>
- Katzenmeyer M., & Moller, G. (2001). *Awakening the sleeping giant: Helping teachers develop as leaders* (2nd ed.). Thousand Oaks, CA: Corwin Press.
- Kayalar, F., & Kayalar, F. (2018). The factors affecting classroom management in language courses in higher education. *International Journal of Languages Education, 6*(4), 187-196. 10.18298/ijlet.3220
- Kormos, C., & Gifford, R. (2014). The validity of self-report measures of proenvironmental behavior: A meta-analytic review. *Journal of Environmental Psychology, 40*, 359-371.
- Klassen, R. M., & Tze, V. M. C. (2014). Teachers' self-efficacy, personality, and teaching effectiveness: A meta-analysis. *Educational Research Review, 12*, 59-76. doi:10.1016/j.edurev.2014.06.001
- Lane, E. S. (2016). *Examining the relationship between principal leadership and school climate* (Doctoral dissertation, University of Denver). <https://digitalcommons.du.edu/etd/1094/>
- Leedy, P.D., & Ormrod, J.E. (2010). *Practical research: Planning and design* (9th ed.). Pearson Educational International, Boston.
- Leithwood, K. (1994). Leadership for school restructuring. *Educational Administration Quarterly, 30*, 498-518.
- Leithwood, K., & Jantzi, D. (2000). The effects of transformational leadership on organizational conditions and student engagement with school. *Journal of Educational Administration, 38*, 113-129.
- Leithwood, K., & Jantzi, D. (1999). Transformational school leadership effects: A replication. *School Effectiveness and School Improvement, 10*, 451-479.
- Leithwood, K., Jantzi, D., & Steinbach, R. (1999a). Changing leadership for changing times. Buckingham: Open University Press.
- Leithwood, K., Jantzi, D., & Fernandez, A. (1994). Transformational leadership and teachers' commitment to change. In J. Murphy and K.S. Louis (Eds.), *Reshaping the principalship:*

- Insights from transformational reform efforts* (pp. 77-98). Thousand Oaks, CA: Corwin Press.
- Leithwood, K. A., Menzies, T., Jantzi, D., & Leithwood, J. (1999b). Teacher burnout: A critical challenge for leaders of restructuring schools. In R. Vandenberghe & A. M. Huberman (Eds.), *Understanding and preventing teacher burnout: A sourcebook of international research and practice* (pp. 85-114). New York, Cambridge University Press.
<http://dx.doi.org/10.1017/CBO9780511527784.006>
- Leithwood, K., & Jantzi, D. (2005). A review of transformational school leadership research 1996–2005. *Leadership and Policy in Schools*, 4(3), 177-199.
- Leithwood, K., & Jantzi, D. (2008). Linking leadership to student learning: The contributions of leader efficacy. *Educational Administration Quarterly*, 44(4), 496-528.
 doi:10.1177/0013161X08321501
- Levy, P. S. (2013). *Sampling of populations: Methods and applications*. Hoboken, NJ: Wiley & Sons.
- Lilla, D. (2013). *Principal transformational leadership behaviors, teachers' sense of efficacy, and student graduation rates in high needs high schools*. (Doctoral thesis, Dowling College). <https://www.proquest.com/dissertations-theses/principal-transformational-leadership-behaviors/docview/1448692760/se-2?accountid=201395>
- Liontos, L. (1992). *Transformational leadership*. ERIC Digest 72. <http://ericdigests.org/1992-2/leadership.htm>
- Louis, K. S., & Murphy, J. (1999). *Handbook of research on educational administration: A project of the American Educational Research Association*. San Francisco: Jossey-Bass Publishers, c1999.
<http://search.ebscohost.com.ezproxy.lib.vt.edu/login.aspx?direct=true&db=cat07058a&AN=vtp.383529&site=eds-live&scope=site>
- Lussiez, Y. W. (2009). *The empathic principal: The relationship between empathy, transformational leadership, and teacher self-efficacy*. The University of New Mexico.
- Maguire, S. J. (2016). *Comparing transformational and transactional leadership styles of principals and their impact on school climate, teacher efficacy and student academic achievement* (Doctoral thesis, Trident University International). <https://search-proquest->

com.ezproxy.lib.vt.edu/pqdtglobal/docview/1824687058/FB9D5E38BFB54219PQ/1?accountid=14826

- Mehdinezhad, V., & Mansouri, M. (2016). School principals' leadership behaviours and its relation with teachers' sense of self-efficacy. *International Journal of Instruction*, 9(2), 51–60. <https://eric.ed.gov/?id=EJ1106336>
- McMillian, J. H. & Wergin, J. F. (2010). *Understanding and evaluating educational research* (4th ed). Published by Pearson, ISBN – 10: 0-13-501678-9
- McLaughlin, M. W., & Marsh, D. D. (1978). Staff development and school change. *Teachers College Record*, 80, 70-94.
- Miles, J. N. V., & Shevlin, M. (2001). *Applying regression and correlation: A guide for students and researchers*. London, UK: Sage.
- Ministry of Education <https://www.moe.gov.sa/en/Pages/default.aspx>
- Nelson, A. L. (2012). *The relationship between middle school teachers' perceptions of principals' transformational leadership practices, teachers' sense of efficacy and student achievement*. (Doctoral dissertation, The University of Southern Mississippi.) <https://aquila.usm.edu/dissertations/853/>
- Nicholson, M. R. (2003). *Transformational leadership and collective efficacy: A model of school achievement* (Doctoral dissertation, The Ohio State University).
- Nir, A. E., & Kranot, N. (2006). School principal's leadership style and teacher's self-efficacy. *Planning and Changing*, 37(3), 205-218.
- Ngang, T. K. (2011). The effect of transformational leadership on school culture in male' primary schools Maldives. *Procedia-Social and Behavioral Sciences*, 30, 2575-2580.
- Northouse, P. G. (2018). *Leadership: Theory and practice*. (8th ed.). Sage publications.
- Northouse, P. G. (2015). *Leadership: Theory and practice* (7th ed.). Los Angeles, CA: Sage Publications, Inc.
- Page, C. S., Pendergraft, B., & Wilson, J. (2014). Examining elementary teachers' sense of efficacy in three settings in the southeast. *Journal of Inquiry and Action in Education*, 5(3), 31-41.
- Peagler, P. L. (2003). An examination of teacher efficacy and transformational leadership behaviors of principals in urban middle schools. *Psychology & Health*, 13(4), 623-649. 10.1080/08870449808407422

- Peters R., Kruse, J., Buckmiller, T., & Townsley, M. (2017). "It's just not fair?" Making sense of secondary students' resistance to a standards-based grading. *American Secondary Education*, 45(3), 9-28.
https://www.hanoverhigh.org/uploaded/Hanover_High_School/Library/Staff_Research/Its_Just_Not_Fair!_Making_S.pdf
- Phillips, D. M. (2015). *The relationship between teacher efficacy levels and Virginia standards of learning fifth grade math achievement in one Virginia school division* (Doctoral dissertation, Virginia Polytechnic Institute and State University).
- Pope, S. E. (2015). *A relationship study of assistant principals' reported self-efficacy and organizational efficacy levels based upon job preparation experiences in one K-12 public school district* (Doctoral dissertation, Virginia Polytechnic Institute and State University).
<http://hdl.handle.net/10919/73164>
- Rauch, C. F., & Behling, O. (1984). Functionalism: Basis for an alternate approach to the study of leadership. In J. Hunt (Ed.), *Leaders and managers: International perspectives on managerial behavior and leadership*. New York: Pergamon Press.
<http://ntuuk.ebib.com/patron/FullRecord.aspx?p=1874825>
- Reale Ambasciata dell'Arabia Saudita a Roma. (2017, Dec 30). *Saudi Vision 2030's Goals: Education*. https://www.youtube.com/watch?v=ln0gofOF_KI
- Robinson, K., & Aronica, L. (2015). *Creative schools: The grassroots revolution that's transforming education*. Penguin Books.
- Ross, J. A. (1992). Teacher efficacy and the effect of coaching on student achievement. *Canadian Journal of Education*, 17(1), 51–65.
- Ross, J. A., & Gray, P. (2006). School leadership and student achievement: The mediating effects of teacher beliefs. *Canadian Journal of Education*, 29(3), 798-822.
- Ross, J. A. & Gray, P. (2006b) Transformational leadership and teacher commitment to organizational values: The mediating effects of collective teacher efficacy. *School Effectiveness and School Improvement*, 17(2), 179-199.
- Saleh, I. M., & Khine, M. S. (2014). New school culture and effectiveness in schools. In *Reframing Transformational Leadership* (pp. 1-6). SensePublishers.

- Schmidt-Davis, J. & Bottoms, G. (2011). *What's next? Let's stop gambling on school performance and plan for principal succession*. https://www.sreb.org/sites/main/files/file-attachments/11v19_principal_succession_planning.pdf?1459947373
- Sompongdam, P. (2016). A mixed method study on the influence of principal's transformational leadership on teacher efficacy (Doctoral dissertation, St. John's University (New York), *School of Education and Human Services*).
- Soodak, L., & Podell, D. (1996). Teacher efficacy: Toward the understanding of a multi-faceted construct. *Teacher and Teacher Education, 12*, 401-411.
- Stein, M. K., & Wang, M. C. (1988). Teacher development and school improvement: The process of teacher change. *Teaching and Teacher Education, 4*(2), 171-187.
doi:10.1016/0742-051X(88)90016-9
- Stogdill, R. M. (1974). *Handbook of leadership: A survey of theory and research*. New York, NY: Free Press.
- Taylor, J. (2010). Education: Teach to the test. *Psychology Today*, September 28.
<https://www.psychologytoday.com/us/blog/the-power-prime/201009/education-test-the-teach>
- Tannenbaum, R., Weschler, I. R., & Massarik, F. (1961). *Leadership and organization: A behavioral science approach*. New York, NY: McGraw Hill.
- Tschannen-Moran, M., Hoy, A., & Hoy, W. (1998). Teacher efficacy: Its meaning and measure. *Review of Educational Research, 68*(2), 202-248.
<http://www.jstor.org.ezproxy.lib.vt.edu/stable/1170754>
- Tschannen-Moran, M., & Hoy, A. W. (2001). Teacher efficacy: Capturing an elusive construct. *Teaching and Teacher Education, 17*, 783-805. [https://doi-org.ezproxy.lib.vt.edu/10.1016/S0742-051X\(01\)00036-1](https://doi-org.ezproxy.lib.vt.edu/10.1016/S0742-051X(01)00036-1)
- Wood, R., & Bandura, A. (1989). Social cognitive theory of organizational management. *The Academy of Management Review, 14*(3), 361-384. doi:10.5465/AMR.1989.4279067
- Yammarino, F. J., Dubinsky, A. J., & Spangler, W. D. (1998). Transformational and contingent reward leadership: Individual, dyad, and group level of analysis. *The Leadership Quarterly, 9*(1), 27-54.
- Yost, R. (2002). Mentoring as a means of enhancing teacher efficacy. *Clearing House, 75*(4), 195-197.

Yukl, G. A. (2006). *Leadership in organizations* (6th ed.). Upper Saddle River, NJ:
Pearson/Prentice Hall.

Appendix A
Permission to Use Questionnaires

Dear Dr. Leithwood,

I am an educational leadership doctoral student at Virginia Tech University in Blacksburg, Virginia. I have started my dissertation on transformational leadership and teachers' self- efficacy. I am investigating a potential correlation between teachers' perception of transformational leadership practices in their schools and their level of self-efficacy. I am interested in using your instrument Principal Leadership Questionnaire.

As I will be conducting my research in Saudi Arabia, Jeddah, it will be necessary to translate the instrument into Arabic. The translation process will involve a professor in Virginia Tech who is fluent in both Arabic and English and two Arabic native speakers, whom both hold PhDs from American universities and are fluent in English and Arabic.

I am requesting your official permission to use the Principal Leadership Questionnaire as part of my dissertation research.

Please let me know if I can provide you with any additional information as you consider my request. Thank you for your time and attention.

Respectfully,

Sara Alrehaili
Doctoral Student
Virginia Polytechnic Institute and State University

Kenneth Leithwood

Fri, May 3, 2019,
8:11 AM

to me

You are welcome to use the instrument.

Permission to Use (TSES) Teachers' Sense of Efficacy Scale

Dear Dr. Hoy,

I am an educational leadership doctoral student at Virginia Tech University in Blacksburg, Virginia. I have started my dissertation on transformational leadership and teachers' self-efficacy. I am investigating a potential correlation between teachers' perception of transformational leadership characteristics in their schools and their level of self-efficacy. I am interested in using your instrument (Teachers' Sense of Efficacy Scale- TSES).

As I will be conducting my research in Saudi Arabia, Jeddah, it will be necessary to translate the instrument into Arabic. The translation process will involve a professor in Virginia Tech who is fluent in both Arabic and English and two Arabic native speakers, whom both hold PhDs from American universities and are fluent in English and Arabic.

I am requesting your official permission to use (TSES- Teachers' Sense of Efficacy) Scale as part of my dissertation research.

Please let me know if I can provide you with any additional information as you consider my request. Thank you for your time and attention.

Respectfully,

Sara Alrehaili
Doctoral Student
Virginia Polytechnic Institute and State University

Anita Woolfolk Hoy

Mon, Apr 29, 2019,
3:37 PM

to me

You are welcome to use the TSES in your research as you describe below. This website might be helpful to you:

<http://u.osu.edu/hoy.17/research/instruments/>

Best wishes in your work.

Appendix B

Consent Form for Participants to Participate in Research

TITLE OF THE RESEARCH STUDY:

Teachers' Perception of Principals' Transformational Leadership Practice and Teaching Efficacy in Selected Schools in Saudi Arabia.

PURPOSE OF STUDY:

This study is designed to examine the principals' level of transformational leadership as determined by their teachers and teachers' sense of self-efficacy.

COMPLETION TIME

You will complete a two-part questionnaire designed to collect specific information about the research topic. The first questionnaire will assess your perceptions of your principal's transformational leadership practices. The second questionnaire is intended to measure your self-efficacy. Completion time for both questionnaires should be 10 to 15 minutes.

YOUR SELECTION FOR PARTICIPATION:

The sample of this research is female teachers within Al-Nuzhah district, Jeddah. This sample will include female teachers in elementary, middle, and high schools within Al-Nuzhah district. However, this information won't identify you personally.

PROCEDURES:

you are voluntarily participating, then you will be asked to participate in a demographic question form and two surveys. The surveys are distributed through the online survey company, Qualtrics. these surveys should take about less than 15 minutes.

POSSIBLE RISKS:

None

RESPONSES

Please be Truthful in responding to survey items.

CONFIDENTIALITY AND ANONYMITY

Please remember that no names will be used the study.

CONFIDENTIALITY

all information used in this research will not include any information that can directly identify you. Results will show teachers perceptions of your principal's leadership style, your teaching efficacy, years of experience, level of education. After the successful completion of the project, any data associated with this investigation (either printed or stored on the researcher's computer) will be destroyed.

SOURCE OF FUNDING AND COST TO PARTICIPATE

There are no sources of funding.

None

RETURNING/SUBMITTING QUESTIONNAIRES

When you are complete please select submit to ensure sending the surveys.

SIGNATURE

I acknowledge that I have been notified of the study purpose by Sara Alrehaili, a Doctoral student at Virginia Tech University. I read and understand this consent form and voluntarily participating in this study.

I have read the informed consent information above, (choose one)

- I agree to participate. (Survey Continues)
- I don't agree to participate. (Program Automatically Terminates)

Appendix B Informed Consent (ARABIC)

معلومات عن الدراسة وخطاب الموافقة

عنوان الدراسة البحثية والغرض منها

تصور المعلمين لممارسات القيادة التحويلية للمديرين وفعالية التدريس في مدارس مختارة في المملكة العربية السعودية. الغرض من هذه الدراسة هو دراسة العلاقة بين تصورات المعلمات لممارسات القيادة التحويلية لمديراتهم ، وارتباطها بمدى إحساس المعلمات بالكفاءة و الفعالية الذاتية في العملية التعليمية.

وقت الإنجاز

ستكتمل استبياناً من جزأين مصمم لجمع معلومات محددة حول موضوع البحث. سيقوم الاستبيان الأول تصوراتك عن ممارسات القيادة التحويلية لمديرك. يهدف الاستبيان الثاني إلى قياس فعاليتك الذاتية. يجب أن يكون وقت استكمال كلا الاستبيانين من 10 إلى 15 دقيقة

اختيارك للمشاركة

عينة هذا البحث معلمات من منطقة النزهة بجدة. ستشمل هذه العينة المعلمات في المدارس الابتدائية والمتوسطة والثانوية في منطقة النزهة. ومع ذلك ، فإن المعلومات التي تقدمها لن تكون مرتبطة بأي معلومات شخصية.

إجراءات واستجابات

المشاركة طوعية ، وإذا وافقت على المشاركة في هذه الدراسة ، فسُطلب منك المشاركة في نموذج سؤال ديموغرافي يجب أن يستغرق .واستبيانين. يتم توزيع الاستطلاعات من خلال شركة الاستطلاعات عبر الإنترنت ببرنامج كوالترس، ..إكمال الاستبيانات حوالي 15 دقيقة أو أقل

يرجى التحلي بالصراحة في ردودك على كل سؤال. تعطي الردود الصادقة الأساس لبحث جيد ودقيق.

السرية وعدم الكشف عن الهوية

، يرجى تذكر أن الدراسة لن تستخدم أسماء الأفراد. سيتم الإبلاغ عن النتائج النهائية فقط ؛ لذلك ، لن يتم تحديد المشاركين ، ستشير أي نتائج بحث منشورة إلى متوسطات المجموعة فقط ولن تتضمن أي معلومات يمكن أن تحدد هويتك مباشرة، تتضمن هذه المعارف غير المباشرة تصورك لأسلوب قيادة مديرك ، وفعالية التدريس الخاصة بك وسنوات الخبرة ، ومستوى التعليم بعد الانتهاء بنجاح من المشروع ، سيتم إتلاف أي بيانات مرتبطة بهذا التحقيق (سواء كانت مطبوعة أو مخزنة على كمبيوتر الباحث)

. مصدر تمويل و تكلفة المشاركة : لا توجد

إرجاع / إرسال الاستبيانات

عند الانتهاء ، يرجى تحديد إرسال لضمان إرسال الاستطلاعات

توقيع المشارك في البحث

أقر بأنني قد أبلغت بطبيعة هذه الدراسة والغرض منها التي تقوم بها سارة الرحيلي ، طالبة الدكتوراه في جامعة فرجينيا للتكنولوجيا. قرأت وفهمت إجراءات وشروط مشاركتي الموضحة أعلاه. سيتم تقديم الموافقة الطوعية التالية لك في الاستبيان

لقد قرأت معلومات الموافقة المسبقة أعلاه ، (اختر واحدة)

- أوافق على المشاركة. (يستمر الاستطلاع)
- أنا لا أوافق على المشاركة. (ينتهي البرنامج تلقائيًا)

Appendix C

Informing School Principals about the Research Study

Dear Principal,

My name is Sara Alrehaili, I am currently pursuing my Ph.D. in Educational Leadership and Policy Studies at Virginia Tech (Virginia Polytechnic Institute and State University) in Blacksburg, Virginia (USA).

The focus of my doctoral research is to examine the relationship between teachers' perceptions of their principal's transformational leadership practices, and the teachers' sense of self-efficacy. This investigation was prompted by a growing body of research indicating that school leaders can and do play a role in enhancing a positive climate and culture to enable teachers to achieve optimal self-efficacy and enhanced classroom performance. The sample population for this research will be female teachers within the Al Nuzhah district, Jeddah, who teach in elementary, middle, and high schools.

In order to conduct this study, I will need to administer a short demographic survey, and then an online survey that is a composite of two instruments: the 12-item Teachers' Sense of Efficacy Scale (TSES), and the 24-item Principal Leadership Questionnaire. For your information, both are attached to this request. In terms of time, it should not take longer than 15 minutes to complete the questionnaire and surveys. Importantly, full confidentiality will be maintained. The teachers will not be identified in any way, and the resulting data will not be shared with anyone who is not involved in this investigation.

I am writing to request your permission to ask your teachers to participate in this study, which I will initiate in November 2019 and conclude by the end of December 2019. This study has been approved by the Department of Education-Jeddah. Your willingness to let your teachers participate anonymously in the study would be much appreciated. Accordingly, I will need to trouble you to compile a list of email addresses for your teachers so that I can contact them directly, or forward the study link to the teachers in your school inviting them to take part in the study.

Please contact me at ... or via email at ... or with any questions or concerns – and your permission to contact the teachers in your school to request their assistance.

Thank you so much for your time and consideration. The success of this study rests on the assistance from fellow administrators like you, and I am most grateful to you for your assistance and support.

Sincerely,
Sara Alrehaili

Appendix C

Informing School Principals about the Research Study (ARABIC)

تعريف لمديرات المدارس حول الدراسة البحثية

الفاضلة مديرة المدرسة

اسمي سارة الرحيلي ، أتابع حاليًا دراستي لنيل درجة الدكتوراه في القيادة التربوية ودراسات السياسات التعليمية في جامعة فرجينيا للتكنولوجيا في مدينة بلاكسبرج ، فرجينيا (الولايات المتحدة الأمريكية)

يركز موضوع بحث الدكتوراه على دراسة العلاقة بين تصورات المعلمات لممارسات القيادة التحويلية لمديراتهم ، وارتباطها بمدى إحساس المعلمات بالكفاءة و الفعالية الذاتية في الفصل الدراسي.

عينة البحث هم المعلمات في منطقة النزهة بجدة ، اللاتي يدرسن في المدارس الابتدائية والمتوسطة والثانوية. الهدف من هذه الدراسة هو لاثراء المعرفة في مجال القيادة التربوية ولبيان استخدام أسلوب القيادة التحويلية على كفاءة الذاتية للمعلمات.

من أجل إجراء هذه الدراسة ، سأحتاج إلى تحليل استبانتين و هما: مقياس الكفاءة الذاتية بالمعلمات المكون من 12 عبارة ، واستبيان مدى ممارسة مديرة المدرسة للقيادة التحويلية والمكون من 24 عبارة (كلاهما مرفق بهذا الطلب). من حيث الوقت ، يجب ألا يستغرق الأمر أكثر من 15 دقيقة لاستكمال الاستبانتين. الأهم من ذلك ، سيتم الحفاظ على السرية الكاملة. ، ولن يتم استخدام أي أسماء في هذه الدراسة ورقم الرمز في كل استبيان مخصص للتحليل الإحصائي فقط ولا يُظهر هويتك أو هوية المدرسة.

لن تتم مشاركة البيانات الناتجة مع أي شخص غير مشارك في هذا البحث. عندما أكمل هذه الدراسة سيتم حذف جميع البيانات، وسأكون سعيدًا بمشاركة النتائج معك.

أكتب إليكم لأطلب إذنكم بالسماح بمشاركة و تعاون معلمات مدرستك في هذه الدراسة ، والتي سأبدأها في نوفمبر 2019/صفر 1441 وتختتم بنهاية ديسمبر 2019/أربع ثاني 1441. وقد تمت الموافقة على هذه الدراسة من قبل وزارة التربية والتعليم بجدة(مرفق).

سيكون موضع تقدير كبير استعدادك للسماح لمعلماتك بالمشاركة في الدراسة. وفقًا لذلك ، سأحتاج الى معرفة العدد الفعلي للمعلمات و إلى قائمة بعناوين البريد الإلكتروني للمعلمات حتى أتمكن من التواصل معهم وإرسال الاستبيانات عن طريقك بعد موافقتك.

إذا كانت لديك أسئلة أو استفسارات ، فلا تتردد في التواصل عبر البريد الإلكتروني.

شكرًا جزيلاً على وقتك. يعتمد نجاحي في هذه الدراسة على مساعدتك ، وأنا ممتنة جدًا لك على مساعدتك ودعمك.

مع جزيل الشكر
الباحثة: أ.سارة الرحيلي

Appendix D

Invitation Letter to Teachers to Participate

Dear Teachers:

My name is Sara Alrehaili, I am currently pursuing my Ph.D. in Educational Leadership and Policy Studies at Virginia Tech (Virginia Polytechnic Institute and State University) in Blacksburg, Virginia (USA).

The focus of my doctoral research is to examine the relationship between teachers' perceptions of their principal's transformational leadership practices and their sense of self-efficacy.

This investigation was prompted by a growing body of research indicating that school leaders can and do play a role in enhancing a positive school climate and culture to enable teachers to achieve optimal self-efficacy and enhanced classroom performance.

Prior research shows that the school principal who practices transformational leadership is likely to gain the trust, loyalty, respect, and appreciation of teachers who work under their direction. Importantly, the transformational leader has the potential to inspire and motivate her followers to accomplish a shared goal, which in the school setting is identifying and implementing different approaches and strategies to drive knowledge outcomes for students. For this study, the Principal Leadership Questionnaire (PLQ) will be used to measure the six critical characteristics of transformational leadership as perceived by teachers: (a) identifying a shared vision, (b) providing the best model, (c) sharing goals, (d) providing personal support, (e) enhancing intellectual stimulation, and (f) holding high performance expectations within the classroom.

In addition, teachers' efficacy refers to the degree to which teachers believe in themselves and in their ability to be effective in the classroom. For this study, the Teachers' Sense of Efficacy Scale (TSES) will be used to measure three aspects of a teacher's sense of efficacy: (1) efficacy in instructional strategies, (2) efficacy in being able to engage students in learning, and (3) efficacy in classroom management. The sample population for this research will be female teachers within the Al Nuzhah district in Jeddah who teach in elementary, middle, and high schools.

In order to conduct this study, I will need to administer a short demographic survey, and then an online survey that is a composite of two instruments: the 24-item Principal Leadership Questionnaire, and the 12-item Teachers' Sense of Efficacy Scale. In terms of time, it should not take longer than 15 minutes to complete the questionnaire and surveys.

Note that as a wholly voluntary participant you can withdraw from the study at any time.

Again, I stress that your participation in this study is completely voluntary; I ensure that the confidentiality of the school and the anonymity of participating teachers will be strenuously maintained. No names will be used in this study and the code number on each questionnaire is for statistical analysis only and will not compromise your anonymity. If you have questions or concerns, please feel free to contact me at [REDACTED] or via email

Thank you so much for your time, consideration, and assistance.

Sincerely,
Sara Alrehaili

Appendix D

Invitation Letter to Teachers to Participate (ARABIC)

عزيزاتي المعلمات الفاضلات
اسمي سارة الرحيلي , حالياً أتابع دراسة مرحلة الدكتوراه في القيادة التربوية ودراسات السياسات في
جامعة فرجينيا للتكنولوجيا في بلاكسبيرج ، فرجينيا (الولايات المتحدة الأمريكية)
اطلب منكم مساعدتي و المشاركة في انجاز بحث الدكتوراه
يركز بحثي على دراسة العلاقة بين مدى ممارسة قائدات المدارس للقيادة التحولية ، وارتباطها بالكفاءة الذاتية للمعلمات في
العملية التعليمية
تم اختياركم للمشاركة بسبب مؤهلكم و تدريسكم في مدارس حي النزهة بمدينة جدة
من أجل إجراء هذه الدراسة ، سأحتاج إلى تحليل استبانتين و هما: استبيان مدى ممارسة مديرة المدرسة للقيادة التحولية
والمكون من 24 عبارة ،
ومقياس الكفاءة الذاتية بالمعلمات المكون من 12 عبارة
حيث أن الأبحاث تشير إلى أن قادة المدارس التحوليين يمكنهم القيام بدور مهم في تعزيز مناخ وثقافة إيجابية من عدة جوانب
تحديد الرؤية والتعبير عنها ، (2) تقديم نموذج مناسب ، (3) تعزيز قبول أهداف المجموعة ، (4) تقديم الدعم الفردي ، (5)
توفير التحفيز الفكري ، (6) عقد توقعات أداء عالية.. لتمكين المعلمين من تحقيق الكفاءة الذاتية المثلى والأداء الأفضل في
الفصل الدراسي من ناحية (أ) فعالية مشاركة الطلاب ، (ب) فعالية استراتيجيات التدريس ، و (ج) فعالية إدارة الفصل
الدراسي.

. في كل استبيان مخصص للتحليل الإحصائي فقط ولا يؤثر على هويتك. عندما أكمل هذه الدراسة سيتم حذف جميع البيانات
باستطاعتك التوقف عن الإجابة و الإنسحاب بدون اي نتائج. إكمالك لهذا الاستبيان و مشاركتك بمصداقيه تساهم فعلياً في إنجاح
هذا البحث والإثراء

المعرفي في مجال القيادة التربويه
راجيه من الله التوفيق لي و لكم و جعل مشاركتكم صدقه جاريه في موازين حسناتكم

الباحثه: أ. سارة الرحيلي

جامعة فيرجينيا تك

Appendix E
Demographic Questionnaire

1. The level of your school:

Elementary school (1-6) _____

Middle school (7-9) _____

High school (10-12) _____

2. Name of Your Current School;

Elementary school A _____

Elementary school B _____

Elementary school C _____

Elementary school D _____

Middle school E _____

Middle school F _____

High school G _____

High school H _____

3. Highest Level of Education Completed:

Baccalaureate Degree ____

Master's Degree _____

Doctoral Degree _____

4. Total Number of Years as a Teacher:

(0-5) _____

(6-10) _____

(11-15) _____

(more than 15) _____

5. Total Number of Years Teaching at Current School:

(0-5) _____

(6-10) _____

(11-15) _____

(more than 15) _____

Appendix E
Demographic Questions (ARABIC)

الاستبيان الديموغرافي

من أجل مساعدة الدراسة البحثية الحالية ، يرجى اختيار الإجابات أدناه

1. مدرستك:

(1-6) المدرسة الابتدائية _____
(7-9) المرحلة المتوسطة _____
(10-12) المدرسة الثانوية _____

2. اسم مدرستك الحالية:

مدرسة ابتدائية ا _____
مدرسة ابتدائية ب _____
المدرسة الابتدائية ج _____
المدرسة الابتدائية د _____
المدرسة المتوسطة ه _____
المدرسة المتوسطة و _____
المدرسة الثانوية ز _____
المدرسة الثانوية ح _____

3. أعلى مستوى تعليمي مكتمل:

شهادة البكالوريوس _____
ماجستير _____
درجة الدكتوراه _____

4. إجمالي عدد السنوات كمدرس:

(0-5) _____
(6-10) _____
(11-15) _____
(أكثر من 15) _____

5. إجمالي عدد سنوات التدريس في المدرسة الحالية:

(0-5) _____
(6-10) _____
(11-15) _____
(أكثر من 15) _____

Appendix F

Principal Leadership Questionnaire

Please respond by considering how well each statement applies to your principal.

Please use the following scale: 1=Strongly Disagree 2=Disagree 3=Agree 4=Strongly Agree

1. My principal has both the capacity and the judgment to overcome most obstacles.
2. My principal commands respect from everyone on the faculty.
3. My principal excites faculty with visions of what we may be able to accomplish if we work together as a team.
4. My principal makes faculty members feel and act like leaders.
5. My principal gives the faculty a sense of overall purpose for its leadership role.
6. My principal leads by "doing" rather than simply by "telling".
7. My principal symbolizes success and accomplishment within the profession of education.
8. My principal provides good models for faculty members to follow.
9. My principal provides for our participation in the process of developing school goals.
10. My principal encourages faculty members to work toward the same goals.
11. My principal uses problem solving with the faculty to generate school goals.
12. My principal works toward whole faculty consensus in establishing priorities for school goals.
13. My principal regularly encourages faculty members to evaluate our progress toward achievement of school goals.
14. My principal provides for extended training to develop my knowledge and skills relevant to being a member of the school faculty.
15. My principal provides the necessary resources to support my implementation of the school's program.
16. My principal treats me as an individual with unique needs and expertise.
17. My principal takes my opinion into consideration when initiating actions that affect my work.
18. My principal behaves in a manner thoughtful of my personal needs.
19. My principal challenges me to reexamine some basic assumptions I have about my work in the school.
20. My principal stimulates me to think about what I am doing for the school's students.
21. My principal provides information that helps me think of ways to implement the school's program.

22. My principal insists on only the best performance from the school's faculty.
23. My principal shows us that there are high expectations for the school's faculty as professionals.
24. My principal does not settle for second best in the performance of our work as the school's faculty.

Appendix F

Principal Leadership Questionnaire (ARABIC)

استبيان اسلوب قيادة المديرية في المدرسة

الرجاء تعبئة الاستبان التالي بما ينطبق على مديرك الحالي من خلال استخدام المقياس التالي:

لا أوافق بشدة. 2- لا أوافق 3- أوافق. 4- اوافق بشد

- 1 مديرتي لديها القدرة على اتخاذ القرار للتغلب على معظم العقبات.
- 2 توجيهات مديرتي تُحترم من قبل المعلمات.
- 3 تثير مديرتي حماسة المعلمات بتجديد الرؤية حول ما نحن قادرين بالقيام به و تحقيقه إذا ما عملنا معاً كفريق.
- 4 تجعل مديرتي المعلمات يشعرون و يتصرفون كقادة.
- 5 تعطي مديرتي المعلمات شعور بالفرض العام من دورها القيادي.
- 6 تقود مديرتي المدرسة "بالفعل" بدلاً من مجرد "الكلام"
- 7 ترمز مديرتي للنجاح و الإنجاز في مهنة التعليم.
- 8 تقدم مديرتي نماذج ناجحة و مميزة للمعلمات ليقتدوا بها.
- 9 توفر مديرتي لنا الفرص للمشاركة في عملية تطوير الأهداف المدرسية.
- 10 تشجع مديرتي المعلمات للعمل نحو تحقيق نفس الأهداف.
- 11 تستخدم مديرتي طريقة "حل المشكلات" مع المعلمات لإنشاء أهداف المدرسة.
- 12 تعمل مديرتي مع المعلمات لتحديد أولويات أهداف المدرسة بالإجماع.
- 13 تشجع مديرتي دائماً المعلمات على تقييم تقدمنا نحو تحقيق أهداف المدرسة.
- 14 توفر مديرة المدرسة تدريباً موسعاً لتطوير معرفتي و مهاراتي ذات الصلة بكوني معلمة في المدرسة.
- 15 توفر مديرتي الموارد اللازمة لدعم تنفيذ المعلمات لبرامج المدرسة.
- 16 تعاملني مديرتي بصفتي فرداً له إحتياجات و خبرات فريدة.
- 17 تأخذ مديرتي رأيي بعين الإعتبار عند بدء الاجراءات التي تؤثر على عملي.
- 18 تتصرف مديرتي بطريقه مدروسة لإحتياجاتي الشخصية.
- 19 تدفعني مديرتي لإعادة النظر في بعض الإفتراضات الأساسية لدي حول العمل في المدرسة.
- 20 تحفزني مديرتي على التفكير في طرق مختلفة لتنفيذ برنامج المدرسة.
- 21 توفر مديرتي معلومات تساعدني على التفكير في طرق مختلفة لتنفيذ برنامج المدرسة.
- 22 تصّر مديرتي على تقديم أفضل أداء من المعلمات في المدرسة.
- 23 توضح لنا المديره أن هناك توقعات كبيرة من المعلمات كخبراء في التعليم.
- 24 مديرتي لا تقبل بالمرتبة الثانية في أداء العمل كمعلمات في المدرسه .

Appendix G
Teachers' Sense of Efficacy Scale (Short Form)

	Item	Nothing		Very Little		Some influence		Quite a bit		A great deal
		1	2	3	4	5	6	7	8	9
1	How much can you do to control disruptive behavior in the classroom?	1	2	3	4	5	6	7	8	9
2	How much can you do to motivate students who show low interest in schoolwork?	1	2	3	4	5	6	7	8	9
3	How much can you do to get students to believe they can do well in schoolwork?	1	2	3	4	5	6	7	8	9
4	How much can you do to help your students value learning?	1	2	3	4	5	6	7	8	9
5	To what extent can you craft good questions for your students?	1	2	3	4	5	6	7	8	9
6	How much can you do to get children to follow classroom rules?	1	2	3	4	5	6	7	8	9
7	How much can you do to calm a student who is disruptive or noisy?	1	2	3	4	5	6	7	8	9
8	How well can you establish a classroom management system with each group of students?	1	2	3	4	5	6	7	8	9
9	How much can you use a variety of assessment strategies?	1	2	3	4	5	6	7	8	9
10	To what extent can you provide an alternative explanation or example when students are confused?	1	2	3	4	5	6	7	8	9
11	How much can you assist families in helping their children do well in school?	1	2	3	4	5	6	7	8	9
12	How well can you implement alternative strategies in your classroom?	1	2	3	4	5	6	7	8	9

Appendix G

Teachers' Sense of Efficacy Scale (Short Form) (ARABIC)

مقياس الفعالية الذاتية للمعلمات

الرقم	العبارة	بدرجة كبيرة جدا	بدرجة كبيرة	بدرجة متوسطة	بدرجة قليلة	بدرجة قليلة جدا	بدرجة كبيرة جدا
1	كم من الجهد تبذلين لضبط السلوك الفوضوي في الفصل؟	9	8	7	6	5	4
2	كم من الجهد تبذلين لتحفيز الطالبات الغير مهتمات بالأعمال المدرسية؟	9	8	7	6	5	4
3	كم من الجهد تبذلين لجعل الطالبات يؤمنون بقدرتهم على الأداء الجيد في القيام بالأعمال المدرسية؟	9	8	7	6	5	4
4	كم من الجهد تبذلين لمساعدة الطالبات لتقدير التعليم؟	9	8	7	6	5	4
5	إلى أي مدى تستطيعين الإبداع في تصميم أسئلة جيدة للطالبات؟	9	8	7	6	5	4
6	كم من الجهد تبذلينه لجعل الطالبات يلتزم من بقواعد الفصل الدراسي؟	9	8	7	6	5	4
7	كم من الجهد تبذلين لضبط سلوك الطالبات الفضوليات أو المزجات؟	9	8	7	6	5	4
8	إلى أي مدى تستطيعين إنشاء نظام إداره صفية يتناسب مع جميع مجموعات الطالبات؟	9	8	7	6	5	4
9	ما مدى استخدامك لاستراتيجيات التقييم المختلفة؟	9	8	7	6	5	4
10	إلى أي مدى يمكنك تقديم شروحات بديله أو أمثله للطالبات الذين يجدون صعوبة في فهم الموضوع؟	9	8	7	6	5	4
11	إلى أي مدى تستطيعين حث الأهالي في مساعدة بناتهن في تحسين أدائهن المدرسي؟	9	8	7	6	5	4
12	إلى أي مدى تستخدمين استراتيجيات بديله في الفصول الدراسية؟	9	8	7	6	5	4

Appendix H

Permission to Conduct a Study in Jeddah (ARABIC)

الرقم بـ: [REDACTED]
التاريخ: ١٤/٩/٢٠١٥
المرفقات: ١

وزارة التعليم
Ministry of Education

الملك عبدالعزيز آل سعود
وزارة التعليم
(٢٨٠)
الإدارة العامة للتعليم بمحافظة جدة
إدارة التخطيط والعلوم والبحوث والدراسات

رؤيتنا : متعلم .. معترف بدينه .. منتم لوطنه .. منتج للمعرفة .. منافس عالمياً .

" تطبيق البحث "

الاسم	سارة [REDACTED] الرحيلي	السجل المدني	[REDACTED]
الجوال	[REDACTED]	البريد الإلكتروني	[REDACTED].com
الجهة المشرفة على البحث	[REDACTED]	التخصص	القيادة التربوية
الدرجة العلمية	الدكتوراه	عينة الدراسة	معلمات جميع المراحل
عنوان الدراسة	علاقة القيادة التحويلية بكفاءة المعلمة الذاتية	الموضوع بشأن	بتطبيق أدوات بحثها في تعليم جدة .

إلى : سعادة مساعد الملحق الثقافي للشؤون الدراسية بالولايات المتحدة الأمريكية.
من : مدير عام التعليم بمحافظة جدة .

السلام عليكم ورحمة الله وبركاته

بناء على إضادتكم للباحثه (الموضح بياناتها أعلاه) ، واستجابة لرغبتها في تزويدكم بالموافقة بتطبيق بحثها و جمع البيانات المتعلقة بعينة الدراسة .
نفيدكم أنه لا مانع لدينا بالموافقة بعد دراسة أداة البحث ؛ وذلك تشجيعاً للبحث العلمي وبما يعود على الوطن يمثل هذه البحوث الميدانية ؛ شاكرين ومقدرين تعاونكم واهتمامكم .
والسلام عليكم ورحمة الله وبركاته

مدير عام التعليم بمحافظة جدة

عبدالله بن أحمد الشافعي

[Handwritten Signature]

Appendix I

IRB Approval Form



BRANY SBER IRB

DATE: 10/21/2019
TO: M. David Alexander, PhD
CC: Sara Alrehailli, [REDACTED]
FROM: Raffaella Hart, MS, CIP, BRANY SBER IRB ([REDACTED])

SUBMISSION TYPE: SBER-Initial Review (Event ID# [REDACTED])
PROTOCOL NUMBER: 19-[REDACTED]
STUDY TITLE: TEACHERS' PERCEPTION OF PRINCIPALS' TRANSFORMATIONAL LEADERSHIP AND TEACHING EFFICACY IN SELECTED FEMALE SCHOOLS IN SAUDI ARABIA

IRB ACTION: **Approved - SBER**

APPROVAL DATE: 10/18/2019
EXPIRATION DATE: Non-expiring
REVIEW TYPE: Expedited Initial Review

Thank you for your submission for the above-referenced study.

1. **BRANY SBER IRB Determination**

Your submission was **APPROVED** by the BRANY SBER IRB via expedited review under category 7. This approval requires that all procedures and activities are performed in accordance with relevant state and local law (including tribal law, when applicable).

2. **Submitted Documents**

- a. 19-042 Alexander - SBER Study Application xForm (2019-09-24), including:
 - VI [REDACTED] Authorization Letter
 - Abstract
 - Department of Education-Jeddah approval
- b. 1 [REDACTED] Research Protocol (Version 10.01.19) (BRANY stamp 10/21/19)
- c. 19-042_Demographic Questionnaire (BRANY stamp 10/21/19)
- d. Email to Inform School Principals about the Research Study (BRANY stamp 10/21/19)
- e. Invitation Letter to Teachers to Participate (BRANY stamp 10/21/19)
- f. Principal Leadership Questionnaire (BRANY stamp 10/21/19)
- g. TSES-scoring-short form (BRANY stamp 10/21/19)
- h. Informed Consent Form (Version A)

Modifications are in accord with those required by the IRB, and were incorporated as indicated in the enclosed redlined version.

3. **Provisions of BRANY SBER IRB Approval**

- a. This study requires consent of subjects to be obtained. You must continue to monitor the subject's willingness to be in the study for the duration of the subject's participation. Only use the current IRB-approved and stamped forms in the consent process. Each subject must receive a copy of his/her signed consent/permission/assent