# The Effects of Transformational, Transactional, and Laissez-Faire Leadership on Principal's Self-Efficacy

RIDWAN RIDWAN<sup>1</sup>, SUDJARWO SUDJARWO<sup>1</sup>, SULPAKAR SULPAKAR<sup>1</sup>, HASAN HARIRI<sup>1</sup>, RIAS TUSIANAH<sup>2</sup>, USASTIAWATY C.A.S ISNAINY<sup>3</sup>, M. ARIFKI ZAINARO<sup>3</sup>, HERDIAN HERDIAN<sup>4</sup>, BUJANG RAHMAN<sup>4</sup>

<sup>1</sup>Educational Doctorate Program, FKIP Universitas Lampung, Bandar Lampung City, 35141, INDONESIA

<sup>2</sup>SMP Negeri 1 Seputih Agung, Central Lampung Regency INDONESIA
 <sup>3</sup>Department of Nursing Management, Universitas Malahayati Bandar Lampung City, INDONESIA
 <sup>4</sup>Educational Doctorate Program, FKIP Universitas Lampung, Bandar Lampung City, 35141, INDONESIA

Abstract: - Many people fail to reach the pinnacle of their careers because they experience a crisis of self-efficacy. Self-efficacy plays an important role in the success of a job mission. However, self-efficacy is a variable that has been influenced and other times it can influence other variables. This study aims to analyze how transformational, transactional, and laissez-faire leadership interact with self-efficacy. This research is a survey and data obtained from respondents as many as 140 high school teachers in the form of self-reports, and the data is collected using SEM Amos Version 22. The results of Amos processing show that Transformational and laissez-faire leadership styles negatively affect self-efficacy. Only transactional leadership style positively affects self-efficacy. The research concludes that only transactional leadership has a positive effect on self-efficacy because followers (teachers) have different backgrounds and motivations and the majority of followers (teachers) have not yet reached the level of self-actualization.

Key-Words: Effect, Transformational, Transactional, Laissez-Faire, Self-Efficacy, And Motivation

Received: June 18, 2021. Revised: January 15, 2022. Accepted: February 22, 2022. Published: March 26, 2022.

# 1 Introduction

People often fail to start something or reach a career stage because of a self-efficacy deficit. On the other hand, people who succeed in reaching the stage of being a leader and succeed in leadership because they have self-confidence. Many studies reveal that self-confidence is a good predictor of their career success. However, self-efficacy does not come by itself. It will be with those self-efficacy builders, such as the mastery of knowledge they encounter. Just as a literature study on cervical health found the cause of the patient's self-confidence to ask for and be given treatment assistance. It was found that having knowledge about cervical cancer, shame on others, fear of the pain of screening, fear of finding abnormal conditions, and wrong attitude towards women's screening process [1, 2]. Including the lack of awareness and perceive the unimportance of cervical cancer screening are the factors [3]. In addition, some women do not realize the importance of screening, do not receive news and information from health workers, preventing women from learning to develop self-efficacy, which can help them decide on cervical cancer screening [4]. Thus,

medical experts face difficulties in providing assistance for cervical cancer treatment. In this regard, the world will face many problems related to improving the quality of life, especially in the health sector. This shows that self-efficacy becomes very important.

Assessment of perceived self-efficacy includes three dimensions [5], such as 1) Strength dimension is an assessment of actions that make women confident, 2) The generality dimension emphasizes selfassessment to build self-confidence, and 3) the Magnitude dimension aims to have self-expectations that can lead to success. Women have high degrees in all three dimensions because women have the determination to succeed [6]. Self-efficacy can indeed affect but self-efficacy can also be influenced [7]. A good leader will pay attention to and develop a sense of followers' efficacy. On the other hand, a leader who does not want to develop his followers and intends to break the relationship simply destroys his followers' efficacy. When selfefficacy collapses, everything collapses. Followers will not survive and continue to grow. Followers

will find a new comfortable place for themselves [8].

To be able to develop follower self-efficacy, a leader must have a good management and leadership system. For example, in the health sector, having an occupational health and management system does not fully guarantee the creation of a safe working environment and the reduction of work accidents. In addition to the management system, there is a need for leadership in occupational safety to carry out operations and ensure the continuity of occupational health and safety activities. The conceptualization of safety leadership plays an important role in explaining how to implement an occupational health and safety management system and improve an organization's safety performance. In this regard, contemporary leadership theory introduces three approaches. The theories that contribute to the development of safety leadership are as follows: "Transformational Leadership Theory", "Transactional Leadership Theory" and "Delegative Leadership (Laissez-Faire). In addition, the Multifactor Leadership Questionnaire (MLQ) was formed to define leadership behaviors [9].

It has been proven that "Leadership" is the most strategic component in what is known as an organizational system, consisting of various elements, such as structure, goals, relationships, rewards, procedures, and organizational policies, always depending on the needs for the flexibility created by external factors. Transformational Leadership plays a dominant role in contemporary leadership theory, which is confirmed by surveys to be highly correlated with the full specter of organizational outcomes, such as effectiveness, motivation, innovation, job engagement, satisfaction, learning, etc. [10-12]. This hypothetical relationship between Transformational Leadership and organizational outcomes is empirically demonstrated by research that proves the effect of this type of leadership practice on variables referred to as leadership outcomes namely, followers perceived leadership effectiveness and follower job satisfaction [13, 14].

The apparent effect of Transformational Leadership on these independent variables, compared with the effects of Transactional and Laissez-faire Leadership, explains the distinct status of this type of leadership and its strong influence on various organizational outcomes. At the same time, this fact forms empirical evidence of the validity of Bass's

Multifactor Leadership Theory, as the most comprehensive and reliable model that describes modern leadership [15, 16]. The biggest challenge in this research is the verification of the application of this leadership model in the reality of Indonesian organizations, especially the detection of transformational, transactional, and laissez-faire leadership characteristics in Lampung public administration of education (SMA level).

The purpose of this study is to highlight the effect of modern leadership types, under the Multifactor Leadership Theory, namely Transformational, Transactional, and Laissez-Faire Leadership types. The aim of the study focuses on the effects of the three leadership styles on the followers' perceived leadership outcomes on namely principals' self-efficacy.

was conducted because This research the Multifactor Leadership Questionnaire (MLQ) was stated to have a very strong influence on other variables such as job satisfaction, organizational commitment, and others. As a reference is a study on research that intends to analyze the effect of the Multifactor Leadership Questionnaire (MLQ) and the results show that Transformational Leadership was found to strongly and positively determine such as follower perceived leadership effectiveness and follower job satisfaction, while the positive impact of Transactional Leadership on these two criteria proved to be less strong, followed by a very strong negative effect of Laissez-faire Leadership. The conclusions drawn can be applied in public sector organizations with high performance standards. This study intends to analyze the influence of the Multifactor Leadership Questionnaire (MLQ) on the efficacy of high school principals. While the item of principals' efficacy taken from Tschannen- Moran & Gareis [17, 18]. To achieve this, this research was guided by the following research questions:

- 1. What leadership has the positive influence on self-efficacy?
- 2. What leadership has the negative influence on self-efficacy?

## 2 Literature Review

#### 2.1 Multifactor Leadership

When including a subsection you must use, for its heading, small letters, 12pt, left justified, bold, Times New Roman as here. While the term safe has been in use for a long time, job safety is a recent term that has been introduced to the agenda and is used with industrialization. In a broad sense,

salvation refers to a legal order in society in which people can live without shared. Occupational safety is related to employees doing work naturally and it expresses the protection of safety of employees in the workplace against the dangers arising from the work they do [19]

A number of surveys have shown that leadership serves as a catalyst for optimizing organizational outcomes. Motivation, commitment, satisfaction, training, and opportunities for learning, creativity, innovation, high efficiency and effectiveness of employees and organizations are highly dependent on the role and practice of leadership strengths [20, 21]. For many elements of the impact of leadership on organizations and employees, some researchers suggest that it would be difficult, if not impossible, to measure accurately [22-24].

The Multifactor Leadership Questionnaire and application of the Multifactor Leadership Theory facilitate valid and reliable estimation of the two key-dependent variables, referred to as leadership results, such as leadership effectiveness and job satisfaction [13, 25]. After the introduction of the questionnaire, an assessment of this dimension in the empirical study was carried out through employee imagery, thus creating an anthropocentric estimate of this dimension based on their perception of "following" the instructions and suggestions of the leader. It means follower centric perception [22, 23, 26, 27].

Multifactor leadership is used as the dependent variable, becoming popular because it represents the two classic dimensions of leadership orientation: confident leadership, job-oriented leadership expressed through the variable Perceived Leadership by Followers" and "Human relationsoriented leadership expressed through the variable like follower job satisfaction. It is empirically accepted that leadership, to be judged as functional for an organization, must exert a multiple and equal positive effect on the two dependent variables [13, 14, 281.

Thus, in the context of this Multifactor Leadership Theory, which emphasizes the balanced impact of leadership on tasks and employees, it is empirically proven that when employees perceive their leadership to be effective, they state that they are satisfied with their work. Likewise, when employees express satisfaction with their jobs, they see their leadership as effective, precisely because effective leadership and job satisfaction are two interrelated

facts of successful organizations [12, 20, 22, 23, 26].

# 2.2 Multifactor Leadership Theory and Leadership Outcomes

Given the above-mentioned model, the special effects applied by Transformational Leadership on the dependent variables mentioned above can be measured and assessed empirically compared to the respective effects applied by Transactional Leadership and Laissez-faire Leadership on the same dependent variable. At the same time, empirical verification of the effects and different responses performed by each leadership type on the two dependent variables (criteria) was used as strong evidence for the construct validity of the Multifactor Leadership Questionnaire mentioned above. This fact consequently highlights the value of the appropriate Multifactor Leadership Theory as a tool for interpreting and assessing modern leadership and its influence modern on organizations [22, 27, 29].

## 2.3 Transformational Leadership

Until recently traditional leadership theory had focused primarily on the assignment of tasks and their fulfillment by employees (referred to as "followers" by Bass), in exchange for possible rewards or sanctions by the leader. This version of "compromised" leadership is limited to basic "transactions" between leaders and members. Bass identified the need to develop a new leadership model that would be able to encourage and motivate members to go beyond their personal interests, in search of the greater good for the team and the organization, through achieving optimal levels of performance. This type of leadership is identified as "Transformational Leadership". It was developed mainly in the 1990s, but remains up-to-date as it appears to be the most relevant and modern approach to the concept of "leadership" and the results this concept produces [13, 24, 27, 30].

Transformational Leadership motivates and inspires ("transforms") followers to achieve results beyond expectations. It envisions followers' concerns, preoccupations, and needs, it alters ("transforms") their perception of organizational problems, prompts them to tackle old problems in new ways and focus on team success and not individual success. "Transformational Leaders", taking into account the skills and shortcomings of followers, relate delegated tasks to goals and procedures that require the highest possible efficiency and benefit to the organization [13, 20, 22, 30]. "Transformational

Leadership" improves the motivation, morale and performance of followers, through a variety of "Transformational Leaders" instruments. personal identity and the concept of individual benefit with the perspectives of organizational identity and team benefits. collective Transformational Leader, embodying the role described in this model, inspires and challenges his followers to demonstrate a greater level of selfreflection on their work and organization [12, 20, 22, 29, 30]. Transformational Leadership has been shaped theoretically which consists of four important qualities (factors):

- a) Charisma or Idealized Influence that creates and advances the vision and mission, instilling virtue, respect, and mutual trust. Transformational leaders act in beautiful and innovative ways, exhibit attitudes and values that exert maximum influence on others (followers), to seek their self-reflection with these leaders. [20, 22, 30].
- b) Inspiration or Inspiration Motivation that communicates high expectations, uses symbols that focus on efforts, and expresses the end goal in a simple way. Transformational leaders are visionaries who inspire and motivate others, instilling the idea that they can achieve beyond expectations [20, 22, 30].
- c) Intellectual stimulation that demands intelligence, logic, and wise decision making in solving problems. Transformational leaders show others new ways of thinking, new ways to seize opportunities, focus on creativity, development and innovation [20, 22, 30].

Individualized Considerations that target each follower individually, guide, advise, and empower them. Transformational leaders express personal responsibility and serve as mentors to others. Such a leader respects the personality and contribution of each individual to the overall effort and assigns tasks according to the talents and interests of each employee [20, 22, 30].

## 2.4 Transactional Leadership

Transactional Leadership is the process of transactions between leaders and followers. It is based on the fulfillment of contractual obligations arising from their duties, in return for the leader's attention to full oversight of the process of achieving goals and rewards for those who comply. Transactional leaders define the roles and responsibilities of each worker/employee

individually and they also reward, either financially, with a raise, or morally, with recognition and promotion, workers/employees who have achieved their goals [10, 15, 30].

Unlike transformational leadership, transactional leaders do not focus on a vision of the future, but they insist on current practices, asking followers to formally abide by the rules. Transactional leaders are committed to existing procedures, ignoring the need to develop ideas to improve organizational efficiency and effectiveness. They focus on the personal motives and interests of others rather than the common interests of the team and the organization [20, 24, 30, 31].

#### 2.5 Laissez-Faire Leadership

Transactional Leadership refers to the lower needs of people, in needs theory terms [32], whereas Transformational Leadership is concerned with higher needs. However, the two types of leadership, despite their differences, do not contradict each other, but act as complementary, mutually reinforcing ideas of leaders. Clearly, characteristics of transformational leadership lead to better outcomes for organizations, if these elements coexist with transactional leadership, according to Bass' so-called "augmentation hypothesis" [24, 30, 31]. Transactional Leadership" has been established theoretically which consists of three important qualities:

- exchange payments in return for effort, promising to reward good performance, and compensating for achievements. Employees who have not succeeded as expected are "penalized" in the form of sanctions. The entire relationship between leader and follower is governed by the established transaction principle, which is the reward for good performance and adverse consequences in return for poor performance [20, 22, 30].
- b) Management by exception-active assumes that the leader keeps others constantly guided by him, identifies deviations from the rules and makes the best corrective action [20, 22, 30].
- Management by passive-exception considers that the leader intervenes only in extreme cases where standards are not respected (basically

one step under Laissez-Faire Leadership [20, 22, 30].

Transformational and Transactional Leadership Types, although different, do not compete with each other, but are complementary forms of leadership. These two leadership styles can coexist in the same leader but at different levels. Leaders, for example, may exhibit both transformational and transactional features, but they manifest these features in varying amounts and intensity so that one style appears more distinct than another. Empirical studies aimed at testing the validity of Bass's Multifactor Leadership Theory have shown a strong positive correlation that exists between Transformational and Transactional Leadership Types [10, 16, 22, 23, 33, 34].

This type of leadership is non-existent and non-existent leadership that avoids decision-making, does not exercise power, and denies responsibility. Laissez-faire leaders are not informed of their duties, they do not decide, do not guide, and do not intervene if problems arise. They let other people do their job any way they want, regardless of the results that come with it [20, 22, 30].

Laissez-faire leadership is a negative component of the Multifactor Leadership model. Several empirical studies studying this kind of leader behavior have shown a strong negative correlation that exists between Laissez-faire Leadership and the other two types of Leadership [15, 16, 20, 22].

### 2.6 Self-Efficacy

Self-efficacy is a person's perspective on his ability to direct and carry out a number of actions to achieve a certain level of performance [35-39]. In other words, it is a holistic view of the individual about his or her believed capacity to perform a task. For example, a math teacher's belief that he or she can successfully teach calculus to a class of twelfth graders is an efficacy assessment. Similarly, principals with high self-efficacy may believe that they can have a positive effect on student achievement or they may increase the emphasis on academic learning in schools. Perception of self-efficacy is oriented towards the future to be able to achieve a certain level of performance.

Belief in efficacy is not a fixed character in the individual, but belief in efficacy is an active belief system and can be developed based on what is experienced in context [35]. Therefore, self-efficacy is changeable and may vary depending on the

context and specificity of the task. So that self-efficacy varies in existence. There are individual self-efficacy, group efficacy, and efficacy in an organization. In the school context, teacher self-efficacy beliefs can be defined as individual teachers' beliefs in their ability to perform certain teaching tasks at a certain level of quality in certain situations [40].

In an attempt to clarify some misconceptions about the definition of teacher self-efficacy, it is stated that self-efficacy beliefs are task and situation-specific, in the sense that efficacy beliefs are not believed to be individual traits [41], but rather an active and learned belief system. experienced in context [40]

# 2.6.1 Teacher Self Efficacy and Teacher Collective Efficacy

As defined by Bandura that self-efficacy is perceived as belief in one's ability to organize and carry out the course of action required to produce a given achievement or personal belief that one is capable of doing what is required to complete a task. at a certain level of quality [42]. Teacher selfefficacy is defined as teachers' individual beliefs in their ability to perform certain teaching tasks at a certain level of quality in certain situations [40]. Collective teacher efficacy is a particular form of self-efficacy in which the target of belief is the organization to which the individual belongs. It is the perception of teachers in schools that overall faculty efforts will have a positive effect on students [43]. Collective teacher efficacy is linked to teachers' influence over school decisions [44] and inspires teachers' willingness to help one another to meet school goals [45].

A study on Principal Leadership and Teacher Efficacy involving 328 participants was conducted "to examine the relationship between principals' instructional leadership behaviors with teacher self-efficacy and collective efficacy, and also to observe the direct and indirect effects, through teachers' self-efficacy, on instructional leadership on the collective efficacy of teachers [46]. The principal's instructional leadership behavior has a positive and significant effect on teacher self-efficacy. This study reveals that instructional leadership affects collective efficacy indirectly through teacher self-efficacy [46].

A study involving 366 teachers who were grouped into four based on years of service: 0-3 years, 4-7 years, 8-14 years, and >15 years concluded that three of the eleven principal behaviors had a

relationship which is significant with teacher efficacy. The three behaviors are: (a) modeling instructional expectations, (b) communication, and (c) providing contingent rewards. For those with 0-3 vears of teaching, modeling instructional expectations predict teacher efficacy; for those aged modeling of instructional 4-7 years, communication expectations predicts efficacy; for those aged 8-14, it is communication, consideration, and modeling of instructional expectations in this order that influences their success, and for those over 15 it is an inspiring teacher. The study concludes that building teacher efficacy should be approached in different ways when working with teachers at different levels of teaching experience. [47, 48].

The results showed that the contribution of transformational leadership style to the explanation of personal teacher efficacy was not statistically significant when work-related variables were controlled for in the Pearson Test of English (PTE) analysis. The main conclusion is that the relationship between personal teacher efficacy and principal's leadership style is somewhat complicated, but is demonstrated by teacher satisfaction on the job. These findings do not verify but rather suggest positive work causation experiences that increase teacher satisfaction may contribute to increased PTE. Transformational leaders are more likely to form the types of work circumstances that allow for individual satisfaction and, therefore, allow PTE to thrive [48].

# 2.6.2 School Leadership, Teacher Efficacy, and Student Achievement

Research on teacher efficacy and student achievement shows that a teacher who exhibits high self-efficacy, is organized, open to new ideas that relate to student needs, is less cursing when students make mistakes, is more confident in their teaching and is more likely to use strategic strategies. affirmative class management [49-51]. Other studies have linked teacher efficacy to student outcomes, that students perform better standardized tests than their peers when taught by a teacher with a high score on self-efficacy compared to when taught by a teacher with lower efficacy scores [49, 52, 53].

Previous studies have linked school leadership style to teacher efficacy. Ross and Gray [54] claims that by setting worthy goals, clarifying standards, and actions of teacher layers of student outcomes, a principal influences teacher self-assessment which contributes to success. The principal understands the

existence of teachers and students as followers to be able to increase efficacy in order to achieve school goals.

Teacher efficacy, defined as teachers' belief in their ability to have a positive effect on student learning, has been associated with student achievement, student motivation. and teacher classroom management strategies [55]. Further research provided evidence that principals significantly influence teachers' experiences in their work and impact teachers' efforts [56, 57]. Support is needed for the idea that principals' leadership style may be a significant influencing factor on teachers' personal self-efficacy [58]. There is evidence in research that effective principals improve student achievement and also that there is a positive relationship between high levels of teacher self-efficacy and increased student achievement [47, 59].

# 3 Methods

## 3.1 Research Design

This survey is an ex-post facto descriptive study on the effect of multifactor leadership on self-efficacy. The Multifactor Leadership Questionnaire was used as a research tool through a five-point Likert scale. Transformational (TRASF), Transactional (TRANSC), and Laissez-faire (LF) Leadership Types were measured by the MLQ/6S form of Bass and Avolio [60], while self-efficacy was measured by the principal's self-efficacy from Tschannen- Moran, Gareis SE1 was Management self-efficacy, SE2 was Learning Leadership, SE3 was Moral Leadership self-efficacy [61].

#### 3.2 Population and Sample

The sample is part of a number of characteristics in the population to be studied. It can be concluded that the sample is part of the population to be studied and represents the characteristics of the population. The sample in this study amounted to 140 teachers in Pesawaran Regency, Lampung Province.

# 3.3 Data Analysis

The data of this research is Confirmatory Factor Analysis (CFA) data. CFA is part of SEM (Structural Equation Modeling) to test how a measured variable or indicator is good in describing or representing a number of a factor. In CFA factors are also known as constructs. Measurement theory is used to determine how variables are measured,

systematically and logically describe a construct that is displayed in a model [62].

Determining whether an indicator is valid or not can use the magnitude of the correlation coefficient between the indicator/construct score and the total score. This score indicates the magnitude of the factor load. A good construct is if it has a load factor of at least 0.30. So, if the value of 0.30, it is said to be a valid indicator [63, 64]

After the measurement model is formulated, the next step is to determine the loading factor of each variable. Determining factor loading in confirmatory factor analysis is the same as determining factor loading in exploratory factor analysis. The trick is the Maximum Likelihood Estimation (MLE) method. After obtaining the loading factor, the next stage is testing the measurement model which is seen based on the goodness of fit value obtained by the model.

Schumacker and Lomax [65] suggested that in using CFA, at least 3 factors must be determined and the latent construct relationship was based on a theoretical basis. The model must be identifiable and have a unique value to facilitate estimation. The measurement of the model with CFA is determined by the difference between the indicators and the construct and the specification of the relationship between the observed and the variable whether it is reflexive or formative. In order for estimates to be accurate and unbiased, data normality and the amount of asymptotic data are required [66].

#### 3.4 Model-fit Criteria

Determining model fit in CFA requires examining several goodness-of-fit indices. One of the criteria is the model fit summary (CMIN/DF) test, the Likelihood Ratio Test statistic which is expressed as

a chi-square statistic ( $\chi 2$ ). Large sample sizes often result in chi-square statistics resulting in statistically significant differences between the sample data and the hypothesized model. Because CFA is a large sample statistic, the chi-square statistic is often a poor measure of model fit. Marsh and Hocevar [67] recommend the Likelihood Ratio Test Statistic to be in the 2-5 range to show a reasonable fit.

Given the limitations of chi-squared for measuring model fit, statistics and other indices were used to evaluate model fit. The Root Mean Square Error of Approximation (RMSEA) measures how well the hypothesized model will fit the population covariance matrix. RMSEA value < .05 indicates a good fit and value < .08 indicates a reasonable approximation error in the population [68]. Reporting the 90% confidence interval RMSEA helps in interpreting the model fit, as well as the closeness of the fit measured by the probability value, PCLOSE, where a value >.05 indicates a good fit with the population [68]. Standardized Root Mean Square Residual (SRMR) represents the mean residual between the hypothesized model and the sample data, and the smaller the SRMR value the better with 0 indicating a perfect fit, < .05 reflecting a model fit [68], and < .08 is recognized as a good match [69]. The Comparative Fit Index (CFI) takes into account sample size and provides a complete measure of data covariance, with values ranging from 0 to 1.00. Hu and Bentler [69] recommend that a cutoff value of 0.95 is a better indicator of fit. The Tucker-Lewis Index (TFI), which returns a value between 0 and 1.00, shows a good match when the value is also close to 0.95 [69].

Table 1. Goodness of Fit Model

		Decision
Criteria of Goodness of Fit Model	Score	
1. Marsh and Hocevar [67] recommend the Likelihood Ratio Test statistic to be in the 2-5 range to show a reasonable fit.	2.077	Fit
2. Root Mean Square Error of Approximation (RMSEA): < .05 shows a good fit and a value of <.08 indicates a reasonable approximation error in the population [68, 70]	.088	Fit
3. Standardized Root Mean Square Residual (SRMR) represents the mean residual between the hypothesized model and the sample data, and the smaller the SRMR value the better with 0 indicating a perfect fit, < 0.05 reflecting a model fit [68], and < 0.08 is recognized as a good match [69].	.690	Fit

4.	Comparative Fit Index (CFI) takes sample size into		
	account and provides a complete measure of data	.817	Fit
	covariance, with values ranging from 0 to 1.00. Hu and		
	Bentler [69] recommend that a cut-off value of 0.95 is a		
	better indicator of fit.		
5.	Tucker-Lewis Index (TFI), which yields a value between 0		_
	and 1.00, indicating a good match when the value is also	.803	Fit
	close to 0.95. [69].		

# 4 Results and Discussion

#### 4.1 Results

In this section, the researcher presents research data which includes demographic data, Regression Weights, Standardized Regression Weights, Total Effects and Direct Effects, and Standardized Total Effects and Standardized Direct Effects.

Tabel 2. Demographic Data

No	Data	Total	%	No	Data	Total	%
1	Gender			4	Years of service		
	Males	48	34		1 - 5 year	28	20
	Famales	92	66	-	6 - 10 year	31	22
	Total	140	100	-	11 - 15 year	41	29
2	Educatiaon			•	> 16 year	40	29
	S1	120	86	•	Total	140	100
	S2	20	14	5	Working with the		
	Total	140	100	•	present principal		
3	Ages				6 months	9	6
	< 30 years	25	18	•	1 years	96	69
	31 - 35	36	26	•	2 years	21	15
	36 - 40	22	16	•	3 years	3	2
	41 - 45	11	8	•	4 years	3	2
	46 - 50	17	12	-	> 5 years	8	6
	51 - 55	20	14	-	Total	140	100
	> 56	9	6				
	Total	140	100	-			

Table 2 shows demographic data consisting of gender, education, age, years of service, and length of service with the current principal. There are more female respondents (66%) than male respondents. The educational background of the respondents is dominated by S1 degrees (86%) compared to S2. The age of the respondents ranged from < 30 to > 56 years and the distribution was relatively balanced, but the largest number of respondents was in the age

range of 31-35 (26%). The number of years of service of respondents is also relatively evenly distributed with the highest number in the range of 11-15 years, 41 respondents (29%). The last is the length of work with the current principal who has worked at most for 1 year, 96 respondents (69%).

Tabel 3. Regression Weights: (Group number 1 - Default model)

			Estimate	S.E.	C.R.	P Label
SE1 (Management)	<	TRASF	-1,071	,527	-2,033	,042 par_1
SE2 (Learning Leadership)	<	TRASF	-1,678	,742	-2,262	,024 par_2
SE3 (Moral Leadership)	<	TRASF	-1,065	,530	-2,008	,045 par_3
SE1 (Management)	<	TRANSC	1,599	,571	2,802	,005 par_4
SE2 (Learning Leadership)	<	TRANSC	2,893	,756	3,828	*** par_5

E-ISSN: 2224-3410 42 Volume 19, 2022

			Estimate	S.E.	C.R.	P Label
SE3 (Moral Leadership)	<	TRANSC	2,241	,551	4,065	*** par_6
SE2 (Learning Leadership)	<	LF	-,659	,209	-3,146	,002 par_7
SE1 (Management)	<	LF	-,230	,135	-1,710	,087 par_8
SE3 (Moral Leadership)	<	LF	-,342	,144	-2,371	,018 par_9

Table 3 shows the effect of the three leadership styles combined in the multifactor leadership style: transformational, transactional, and laissez-faire.

Transformational and laissez-faire leadership styles negatively affect self-efficacy. Only transactional leadership style positively affects self-efficacy.

Tabel 4. Standardized Regression Weights: (Group number 1 - Default model)

			Estimate
SE1 (Management)	<	TRASF	-1,311
SE2 (Learning Leadership)	<	TRASF	-1,321
SE3 (Moral Leadership)	<	TRASF	-,826
SE1 (Management)	<	TRANSC	2,131
SE2 (Learning Leadership)	<	TRANSC	2,479
SE3 (Moral Leadership)	<	TRANSC	1,894
SE2 (Learning Leadership)	<	LF	-,615
SE1 (Management)	<	LF	-,334
SE3 (Moral Leadership)	<	LF	-,315

Table 4 shows the effect of the three leadership styles combined in the multifactor leadership style: transformational, transactional, and laissez-faire, on the computational model. The transformational leadership style has a negative effect of -1,311 on management self-efficacy. In other words, transformational affects management self-efficacy

by 1.311%, and 98.68% is influenced by other factors. Transformational and laissez-faire leadership styles negatively affect self-efficacy. Only transactional leadership style positively affects self-efficacy.

Tabel 5. Total Effects and Direct Effects (Group number 1 - Default model)

	LF	TRANSC	TRASF
SE3 (Moral Leadership)	-,342	2,241	-1,065
SE2 (Learning Leadership)	-,659	2,893	-1,678
SE1 (Management)	-,230	1,599	-1,071

Table 5 shows the total and direct effect of the three leadership styles combined in the multifactor leadership style: transformational, transactional, and

laissez-faire. It is only transactional leadership has positive effect on elf-efficacy.

Tabel 6. Standardized Total Effects and Standardized Direct Effects (Group number 1 - Default model)

	LF	TRANSC	TRASF
SE3 (Moral Leadership)	-,315	1,894	-,826
SE2 (Learning Leadership)	-,615	2,479	-1,321
SE1 (Management)	-,334	2,131	-1,311

E-ISSN: 2224-3410 43 Volume 19, 2022

Table 6 shows the total and direct effects. LF and Transformational affect self-efficacy negatively and only transactional leadership style affects self-efficacy positively.

#### 4.2 Discussion

Regarding to question number 1what leadership has the most positive influence on self-efficacy?

Refers to all autput Amos data, it is only trasactional leadership effects positively to principal self-efficacy. Reffeing to Standardized Total Effects and Standardized Direct Effects, descendingly the effects are transactional to learning leadership is 2.479, to management is 2,131, and to moral is 1.894.

Transactional leaders motivate followers by exchanging rewards for services rendered—for example, principals provide new teaching materials or increase planning time for teachers so they can institute new curricular programs. subordinates do their jobs in organizations such as schools, transactional leaders recognize what followers want from work and try to give them what they want. They exchange rewards and promises of reward for effort and respond to followers' selfinterest directly. Transactional leaders pursue costbenefit, economic trade-offs to satisfy current followers' material and psychological needs in exchange for contracted services rendered by subordinates [71].

Transactional leadership is considered to have three components. Contingent reward leadership refers to leader behavior that focuses on clarifying roles and task requirements and providing followers with rewards contingent on follower performance [23]. In other words, this subtype of leadership behavior gives followers what they want in exchange for what the leader wants [24]. Management by active exception means that leaders maintain a high level of vigilance to ensure that standards are met. That is, leaders actively monitor performance and take corrective action when problems become apparent. Management by passive exception means that leaders fail to intervene until the problem becomes serious. These leaders wait to take action until an error or other performance issue occurs and is called in for attention. However, this study uses a 6S questionnaire where passive management-byexception aspiration agrees with laissez-faire [72,

Regarding question 2 what leadership has the negative influence on self-efficacy?

#### a. Transformational leadership

All output Amos calculation show that transformational leadership negatively effects the Referring self-efficacy. three kinds of Standardized Total Effects and Standardized Direct Effects the scores effect descendingly are -1,321 for instructional leadership, -1,311 management, and -,826 for moral leadership.

Leithwood. Jantzi [75] builds ideas using transformational and transactional leadership concepts to formulate an eight-dimensional model for an educational setting-builds a school vision, sets school goals, provides intellectual stimulation, offers individualized support, models best practices, and important organizational values, demonstrates performance expectations higher education, creating a productive school culture, and developing structures to encourage participation in school decisions. The framework is based on two generalizations. First, transformational leadership in schools directly affects school outcomes such as teachers' perceptions of student achievement and student grades. Second, transformational leadership indirectly influenced these outcomes by influencing three critical psychological characteristics of staffschool characteristics. perceived teacher commitment to change, and organizational learning—which in turn influenced outcomes. Based on the findings of the four-year study the school made a variety of structural changes. So it can be concluded that transformational leadership depends on paying attention to all aspects of the model, requires a unique formulation in schools on the basis of individual considerations, and represents a contingency approach [76].

To be successful it is necessary to extend their model and call it a core practice of successful leadership. Basically, they have created an open social system model that includes input, throughput, and outcome variables with transformational leadership being the key process [77, 78].

A number of educational researchers on transformational leadership have found that transformational leaders have a greater positive effect on their educational organizations than transactional leaders [79-81]. Marks and Printy [82] found that transformational and school-wide instructional leadership was positively related to high-quality pedagogy, and that high-level student performance was also evident. This means that transformational leadership cannot be run alone.

Moolenaar, Daly [83] found that the centrality of principals in social networks enabled transformational leadership to develop a positive climate of innovation. More generally, Leithwood and Jantzi [84] reviewed research in the educational

environment and drew four conclusions about the effects of transformational leadership: 1) Its effect on perceived organizational effectiveness is significant and large. 2) The effect on objective and independent indicators of organizational effectiveness is positive and significant, but small in size. 3) The effect on student outcomes measured independently is promising but limited in number. 4) Its effect on student engagement in schools is modest but uniformly positive.

In a more recent study of the effects of transformational leadership in schools, Leithwood and Sun [85] concluded that the new study should broaden the range of mediating and moderating variables studied and urge qualitative researchers to refine the most productive forms of transactional leadership. in schools.

Transformational leadership is being used widely and is generally supported by various research studies. The good news is that transformational leadership models can provide intellectual capital for educational leaders as they face the challenges of modernizing their school organizations. As has been explained in many books about making fundamental changes it is usually fraught with ambiguity and resistance. But transformational leadership offers some promise in overcoming these difficulties. To lead a transformational initiative, however, requires a wide range of abilities, skills, and behaviors that can be developed, taught, and learned [86].

Some evidence supports the hypothesis that transformational leadership can be enhanced through formal training [87]. Therefore, current and future leaders should consider whether the training program will increase their capacity to transform schools. However, transformational negatively affects perceptions of self-efficacy. Therefore, the application of transformational leadership must be carried out carefully and needs a lot of consideration, especially with regard to the level of motivation of followers. It is proven that transformational leadership negatively affects self-efficacy.

Most transactional leadership situations can be very effective. Contingent reward behavior in particular provides a solid foundation for effective leadership. However, increased effort, effectiveness, and job satisfaction result when transactional leadership is coupled with transformational leadership [74].

#### b. Laissezz-Faire Leadership

All output Amos calculation show that laissez-faire leadership negatively effects the three kinds of selfefficacy. Referring to Standardized Total Effects and Standardized Direct Effects the scores effect descendingly are -,615 for instructional leadership, -,334 management, and -,315 for moral leadership. Laissez-faire leadership characterizes this type of leadership as non-transactional with followers. For example, laissez-faire leaders avoid expressing their views or taking action on important issues, failing to make or at least delaying decisions, ignoring responsibilities, not providing feedback, and allowing the authority to remain dormant. It is essentially avoidance or lack of leadership, and the result is the most passive and the least effective. Examples are principals who stay in the office, involve teachers and students as little as possible, show minimal attention to student learning and development or teacher needs, and allow school structures and processes to continue in the same way

Laissez-faire leaders offer little or no guidance to group members and leave decision-making to group members [88]. However, we need to examine the behavior of leaders who delegate tasks to followers. Delegating behavior is identical to laissez-faire leadership behavior. Delegation is a leadership behavior that researchers and practitioners champion as a useful management tool. Delegation can inadvertently trigger subordinates' perceptions of ineffective laissez-faire, depending on the gender of the subordinates and their perception of the competence of the trustworthy manager [89].

Not all followers dislike laissez-faire leadership. Research shows that seven out of ten children prefer a laissez-faire leader to an autocratic just as much as they prefer confusion and disorganization to the strictness and rigidity that exists in an autocratic style. Children under the laissez-faire leadership style displayed more aggressive, hostile, and different behavior as compared to their peers under other leaderships. They also display hostility or jokes that create cracks in the work environment and hostility towards others. Those in the democratic style of leadership showed less aggressiveness and behaved differently when brought under the influence of the autocratic style leader. Even under a laissez-faire leadership style, children act more aggressively than under a democratic style [88].

Children who like laissez-faire are characterized by high self-efficacy. They have a passion, passion, and energy that seems limitless. Children with high efficacy generally also have good self-regulation as well. For a person like this, it fits under leadership that gives little direction. This is because self-efficacy contributes to motivation by determining what goals individuals set for themselves, how much effort they expend, how long they persist in

the face of adversity, and their resilience to failure [90].

In the general organization and management literature, empirical studies of self-efficacy have yielded consistent results. Self-efficacy is associated with work-related performance such as productivity, coping with difficult tasks, career choice, learning and achievement, and the ability to adapt to new technologies [91]. Similar results are seen in educational settings. Self-efficacy research in schools tends to focus on one of two areas or approaches. The first study group examined the effect of student and teacher self-efficacy on various indicators of motivation and achievement. The general finding is that self-efficacy is positively related to student achievement [92], course grades [93], motivasi siswa [94], adoption of innovation by teachers [95, 96], supervisory teacher competency rating [97], teacher class management strategy [98], and is a strong predictor of behavior in general [99]. In addition, experimental studies consistently find that changing self-efficacy beliefs can lead to better use of cognitive strategies and higher levels of academic achievement for math, reading, and writing tasks [100].

To summarize, self-efficacy is an important motivational factor that influences a number of behavioral and performance outcomes. Self-efficacy is learned through various experiences and is dynamic; it can change over time as new information and experiences are gained: Individuals who have stronger beliefs about their abilities are more successful and persistent in their efforts; 2) Individuals tend to avoid tasks and situations that exceed their capacity; 3) Individuals seek activities that they value they are capable of handling; 4) Individuals develop self-efficacy through the experience of mastery, modeling, persuasion, and physiological arousal. Building teacher efficacy should be approached in different ways based on the motivational characteristics of followers [100].

# **5** Conclusion

A person's leadership style is influenced by the majority of his followers. Transformational leadership places more emphasis on motivation and inspiration, transactional leadership emphasizes more on transactions, and laissez-faire on delegation. Only transactional leadership that positively affects self-efficacy shows that the principal thinks and acts on the basis of the transaction: "I do what and what will I get".

Referring to Maslow's theory of motivation, it means that principals work a lot with teachers who are at the stage of security needs. Referring to McClelland's theory of motivation, it is still at the level of material needs for achievement. Referring to Herzberg's motivation theory, it is still at the level of hygiene factor. Referring to Alderfer's theory of motivation (ERG) it is still at a lower level of counseling needs. Meanwhile, transformational leadership is more about inspiring and motivating. To achieve the practice of delegated leadership will be much more complicated. Delegative or laissezfaire leadership emphasizes "I get something as a logical consequence because I do something". While transactional leadership puts forward "I do something to get something".

# **Implication**

- 1. The laissez-faire leadership style is suitable for followers who are at the top level (5 self-actualization or self-fulfillment to achieve maximum potential for self-development, creativity, and self-expression) according to Maslow's hierarchy of needs theory; at the level of recognition and achievement according to Herzberg's hygiene-motivation theory; at level 5 (from the bottom) namely the level of self-actualization according to Alderfer's theory of motivation (ERG); and at the level of achievement (getting done) according to the theory of motivational needs obtained from McClelland.
- Transformational leadership style is suitable for followers who are at levels three and four according to Maslow's hierarchy of needs theory, at the level of achievement, recognition, and the work itself, responsibility, and progress according to Herzberg's theory; at the level of relatedness needs related to the importance of maintaining interpersonal relationships. These needs are based on social interaction with others and are aligned with the level of needs related to love/possession (such as friendship, family, and sexual intimacy) and needs related to selfesteem (earning respect from others) according to Alderfer's theory of motivation (ERG); and at the level of power (having influence over others) according to the theory of motivational needs obtained from McClelland.
- 3. Transactional leadership style is suitable for followers who are at Level 2: safety and security protection against danger and threats Freedom from fear, anxiety, and chaos needs for structure, order, law, boundaries, and stability Level 1: Physiological Needs according to

Theory Maslow's Hierarchy of Needs; at the level of hygiene: interpersonal relations (with subordinates): interpersonal relations (with colleagues), supervision (technical), policies administration, working conditions, personal life, and job security and salary according to Herzberg's hygiene-motivation theory; at level Level 1 (from below): psychological level Level 2 (from below): safety level according to Alderfer's Motivation Theory (ERG); and at the level of Affiliation (have a good relationship) according to the Theory of Motivation of Needs Obtained from McClelland.

#### References:

- [1] Gatumo, M., et al., Women's knowledge and attitudes related to cervical cancer and cervical cancer screening in Isiolo and Tharaka Nithi counties, Kenya: a cross-sectional study. BMC cancer, 2018. 18(1): p. 1-9.
- [2] Rimande-Joel, R. and G.O. Ekenedo, Knowledge, Belief and practice of cervical cancer screening and prevention among women of Taraba, North-East Nigeria. Asian Pacific journal of cancer prevention: APJCP, 2019. **20**(11): p. 3291.
- [3] Chosamata, M.S., S. Hong, and S. Tiraphat, Determinants of cervical cancer screening utilization among women aged 30-45 years in Blantyre district, Malawi. Journal of public health and development, 2015. 13(3): p. 19-34.
- [4] Alnafisah, R.A., et al., Saudi women's knowledge and attitude toward cervical cancer screening, treatment, and prevention: A cross-sectional study in Qassim Region (2018-2019). Asian Pacific journal of cancer prevention: APJCP, 2019. **20**(10): p. 2965.
- [5] Bandura, A., Self-efficacy: toward a unifying theory of behavioral change. Psychological review, 1977. **84**(2): p. 191.
- [6] Sidabutar, S., et al., Factors Influencing Decisionsto Conduct Early Detection of Cervical Cancer. Health Notions, 2018. **2**(6): p. 630-636.
- [7] Puja Kesuma, T.A.R., et al., Influence and Influenced Between Self-Efficacy and Principal Leadership: A Systematic Review.

  INTERNATIONAL JOURNAL OF EDUCATION AND INFORMATION TECHNOLOGIES, 2021. 15: p. 157-166.
- [8] Tusianah, R., et al., An Integrative Review of Self-efficacy: What Factors Enhance and

- *Impair It?* WSEAS TRANSACTIONS on BUSINESS and ECONOMICS, 2021. **18**: p. 1057-1072.
- [9] Çalış, Ç. and B.Y. Büyükakıncı, *Leadership approach in occupational safety: Taiwan sample*. Procedia Computer Science, 2019. **158**: p. 1052-1057.
- [10] Odumeru, J.A. and I.G. Ogbonna, Transformational vs. transactional leadership theories: Evidence in literature. International review of management and business research, 2013. **2**(2): p. 355.
- [11] Khan, M.J., N. Aslam, and M.N. Riaz, Leadership styles as predictors of innovative work behavior. Pakistan Journal of Social and Clinical Psychology, 2012. 9(2): p. 17-22.
- [12] Podsakoff, P.M., S.B. MacKenzie, and W.H. Bommer, Transformational leader behaviors and substitutes for leadership as determinants of employee satisfaction, commitment, trust, and organizational citizenship behaviors. Journal of management, 1996. **22**(2): p. 259-298.
- [13] Bass, B. and B. Avolio, Multifactor Leadership Questionnaire (MLQ) form 6S. Redwood City, CA: Mined Garden. 1992, Inc.
- [14] Bass, B. and B. Avolio, *Multifactor leadership* questionnaire: Manual and sampler set. Mind Garden Inc., Redwood City, CA, 2004.
- [15] Hinkin, T.R. and C.A. Schriesheim, A theoretical and empirical examination of the transactional and non-leadership dimensions of the Multifactor Leadership Questionnaire (MLQ). The Leadership Quarterly, 2008. 19(5): p. 501-513.
- [16] Tejeda, M.J., T.A. Scandura, and R. Pillai, *The MLQ revisited: Psychometric properties and recommendations*. The leadership quarterly, 2001. **12**(1): p. 31-52.
- [17] Tschannen- Moran, M. and C.R. Gareis, *Principals' sense of efficacy*. Journal of Educational administration, 2004.
- [18] Lovell, C.W., "Principal Efficacy: An Investigation of School Principals' Sense of Efficacy and Indicators of School Effectiveness" (2009). Dissertations. 1087. 2009.
- [19] Çiçek, Ö. and M. Öçal, *Dünyada ve Türkiye'de İş Sağliği ve İş Güvenliğinin Tarihsel Gelişimi*. Hak İş Uluslararası Emek ve Toplum Dergisi, 2016. **5**(11): p. 106-129.
- [20] Day, D.V. and J. Antonakis, *The future of leadership*. The Wiley-Blackwell handbook of the psychology of leadership, change, and organizational development, 2013: p. 221-235.

- [21] Van Seters, D.A. and R.H. Field, *The evolution of leadership theory*. Journal of organizational change management, 1990.
- [22] Antonakis, J., The validity of the transformational, transactional, and laissez-faire leadership model as measured by the Multifactor Leadership Questionnaire (MLQ 5X). 2001: Walden University.
- [23] Antonakis, J., B.J. Avolio, and N. Sivasubramaniam, Context and leadership: An examination of the nine-factor full-range leadership theory using the Multifactor Leadership Questionnaire. The leadership quarterly, 2003. 14(3): p. 261-295.
- [24] Kuhnert, K.W. and P. Lewis, *Transactional* and transformational leadership: A constructive/developmental analysis. Academy of Management review, 1987. **12**(4): p. 648-657.
- [25] Bass, B.M., *Theory of transformational leadership redux*. The Leadership Quarterly, 1995. **6**(4): p. 463-478.
- [26] Yadav, V. and N. Misra, Effect of perceived leadership and organizational commitment on turnover intention of semi-skilled workers in small scale industries. International Journal of Research in Business Studies and Management, 2015. 2(8): p. 8-16.
- [27] Yammarino, F.J. and B.M. Bass, Transformational leadership and multiple levels of analysis. Human relations, 1990. 43(10): p. 975-995.
- [28] Derue, D.S., et al., *Trait and behavioral theories of leadership: An integration and meta- analytic test of their relative validity.* Personnel psychology, 2011. **64**(1): p. 7-52.
- [29] Antonakis, J. and R.J. House, *Instrumental leadership: Measurement and extension of transformational—transactional leadership theory.* The Leadership Quarterly, 2014. **25**(4): p. 746-771.
- [30] Bass, B.M., From transactional to transformational leadership: Learning to share the vision. Organizational dynamics, 1990. **18**(3): p. 19-31.
- [31] Howell, J.M. and B.J. Avolio, Transformational leadership, transactional leadership, locus of control, and support for innovation: Key predictors of consolidatedbusiness-unit performance. Journal of applied psychology, 1993. **78**(6): p. 891.
- [32] Maslow, A.H., *A theory of human motivation*. Psychological review, 1943. **50**(4): p. 370.
- [33] Avolio, B.J., B.M. Bass, and D.I. Jung, Re-examining the components of

- transformational and transactional leadership using the Multifactor Leadership. Journal of occupational and organizational psychology, 1999. **72**(4): p. 441-462.
- [34] Judge, T.A. and R.F. Piccolo, *Transformational* and transactional leadership: a meta-analytic test of their relative validity. Journal of applied psychology, 2004. **89**(5): p. 755.
- [35] Bandura, A., *The anatomy of stages of change*. American journal of health promotion: AJHP, 1997. **12**(1): p. 8-10.
- [36] Bandura, A., Self Eflicacy. The Exercise of Control, New York: W H. Freeman & Co. Student Success, 1997. **333**: p. 48461.
- [37] Bandura, A., Social foundation of thought and action. 1986, Englewood cliffs, NJ: prentice Hall.
- [38] Bandura, A., *The evolution of social cognitive theory*. Great minds in management, 2005: p. 9-35.
- [39] Bandura, A., *Social cognitive theory of self-regulation*. Organizational behavior and human decision processes, 1991. **50**(2): p. 248-287.
- [40] Dellinger, A.B., et al., *Measuring teachers'* self-efficacy beliefs: Development and use of the TEBS-Self. Teaching and teacher education, 2008. **24**(3): p. 751-766.
- [41] Maddux, J.E., Self-efficacy theory, in Self-efficacy, adaptation, and adjustment. 1995, Springer. p. 3-33.
- [42] Bandura, A., W. Freeman, and R. Lightsey, Self-efficacy: The exercise of control. 1999, Springer.
- [43] Goddard, R.D., W.K. Hoy, and A.W. Hoy, Collective teacher efficacy: Its meaning, measure, and impact on student achievement. American educational research journal, 2000. 37(2): p. 479-507.
- [44] Goddard, R., A theoretical and empirical analysis of the measurement of collective efficacy: The development of a short form. Educational and Psychological measurement, 2002. **62**(1): p. 97-110.
- [45] Somech, A. and A. Drach-Zahavy, Understanding extra-role behavior in schools: The relationships between job satisfaction, sense of efficacy, and teachers' extra-role behavior. Teaching and Teacher Education, 2000. **16**(5-6): p. 649-659.
- [46] Calik, T., et al., Examination of Relationships between Instructional Leadership of School Principals and Self-Efficacy of Teachers and Collective Teacher Efficacy. Educational Sciences: Theory and Practice, 2012. 12(4): p. 2498-2504.

- [47] Walker, J. and S. Slear, *The impact of principal leadership behaviors on the efficacy of new and experienced middle school teachers.* NASSP Bulletin, 2011. **95**(1): p. 46-64.
- [48] Nir, A.E. and N. Kranot, *School Principal's Leadership Style and Teachers' Self-Efficacy*. Planning and changing, 2006. **37**: p. 205-218.
- [49] Henson, R.K., Teacher self-efficacy: Substantive implications and measurement dilemmas. 2001.
- [50] Pinkston-Miles, S.J., An analysis of improving teacher efficacy to enhance student learning by developing an evaluation instrument for special education teachers. 2003.
- [51] Scharlach, T.D., START comprehending: Students and teachers actively reading text. The Reading Teacher, 2008. **62**(1): p. 20-31.
- [52] Lin, L., et al., Epidemiologic study of ocular refraction among schoolchildren in Taiwan in 1995. Optometry and vision science: official publication of the American Academy of Optometry, 1999. **76**(5): p. 275-281.
- [53] Muijs, D. and D. Reynolds, *Teachers' beliefs* and behaviors: What really matters? The Journal of Classroom Interaction, 2002: p. 3-15.
- [54] Ross, J.A. and P. Gray, School leadership and student achievement: The mediating effects of teacher beliefs. Canadian Journal of Education/Revue canadienne de l'éducation, 2006: p. 798-822.
- [55] Hoy, W.K. and A.E. Woolfolk, *Teachers' sense* of efficacy and the organizational health of schools. The elementary school journal, 1993. **93**(4): p. 355-372.
- [56] Rosenholtz, S.J., Workplace conditions that affect teacher quality and commitment: Implications for teacher induction programs. The Elementary School Journal, 1989. **89**(4): p. 421-439.
- [57] Geijsel, F., et al., Transformational leadership effects on teachers' commitment and effort toward school reform. Journal of educational administration, 2003.
- [58] Bandura, A., Cultivate self efficacy for personal and organizational effectiveness: Handbook of organization behavior. 2000, Oxford, UK: Blackwell.
- [59] Waters, T., R.J. Marzano, and B. McNulty, Balanced Leadership: What 30 Years of Research Tells Us about the Effect of Leadership on Student Achievement. A Working Paper. 2003.
- [60] Bass, B.M. and B.J. Avolio, *Multifactor leadership questionnaire-short form 6S.*

- Binghamton, NY: Center for Leadership Studies, 1992.
- [61] Tschannen- Moran, M. and C.R. Gareis, *Principals' sense of efficacy: Assessing a promising construct.* Journal of Educational administration, 2004.
- [62] Hair, J.F., et al., *Multivariate data analysis: A global perspective (Vol. 7).* 2010, Upper Saddle River, NJ: Pearson.
- [63] Carmines, E.G. and R.A. Zeller, *Reliability and validity assessment*. 1979: Sage publications.
- [64] Sterner, W.R., S. Hall, and D. Burkholder, An Examination of Confirmatory Factor Analytic Models of the Spiritual Well-Being Scale. The Journal of Counselor Preparation and Supervision, 2021. **14**(2): p. 3.
- [65] Schumacker, R.E. and R.G. Lomax, *A beginner's guide to structural equation modeling*. 2004: psychology press.
- [66] Bollen, K.A., *Confirmatory factor analysis*. Structural equations with latent variables, 1989: p. 226-318.
- [67] Marsh, H.W. and D. Hocevar, Application of confirmatory factor analysis to the study of self-concept: First-and higher order factor models and their invariance across groups. Psychological bulletin, 1985. **97**(3): p. 562.
- [68] Byrne, B.M., Structural equation modeling with AMOS: Basic concepts, applications, and programming (3rd ed.). Routledge., 2016.
- [69] Hu, L. and P.M. Bentler, Structural equation modeling: a multidisciplinary journal cutoff criteria for fit indexes in covariance structure analysis: conventional criteria versus new alternatives. Structural Equation Modeling, 1999. 6(1): p. 37-41.
- [70] Byrne, B.M., Structural equation modeling with AMOS: basic concepts, applications, and programming (multivariate applications series). New York: Taylor & Francis Group, 2010. **396**(1): p. 7384.
- [71] Bass, B.M., *Leadership and performance beyond expectations*. 1985: Collier Macmillan.
- [72] Baek, H., E.H. Byers, and G.F. Vito, Transformational leadership and organizational commitment in Korean police station: Test of second-order MLQ-6 S and OCQ. International journal of police science & management, 2018. **20**(2): p. 155-170.
- [73] Moon, S.E., P.J. Van Dam, and A. Kitsos. Measuring Transformational Leadership in Establishing Nursing Care Excellence. in Healthcare. 2019. Multidisciplinary Digital Publishing Institute.

- [74] Bass, B.M. and R.E. Riggio, *Transformational leadership*. 2006: Psychology press.
- [75] Leithwood, K., D. Jantzi, and R. Steinbach, Leadership and other conditions which foster organizational learning in schools. Organizational learning in schools, 1998. **34**(2): p. 67-90.
- [76] Leithwood, K., Leadership for school restructuring. Educational administration quarterly, 1994. **30**(4): p. 498-518.
- [77] Leithwood, K., R. Aitken, and D. Jantzi, *Making schools smarter: Leading with evidence*. 2006: Corwin Press.
- [78] Leithwood, K., et al., How leadership influences student learning. The Wallace Foundation. Center for Applied Research and Educational Improvement, Ontario Institute for Studies in Education, 2004.
- [79] Silins, H.C., Effective leadership for school reform. Alberta Journal of Educational Research, 1992.
- [80] Hoy, W.K. and C. Miskel, *Educational leadership and reform*. 2006: IAP.
- [81] Levy, P.E., R.T. Cober, and T. Miller, *The effect of transformational and transactional leadership perceptions on feedback- seeking intentions.* Journal of Applied Social Psychology, 2002. **32**(8): p. 1703-1720.
- [82] Marks, H.M. and S.M. Printy, *Principal leadership and school performance: An integration of transformational and instructional leadership.* Educational administration quarterly, 2003. **39**(3): p. 370-397
- [83] Moolenaar, N.M., A.J. Daly, and P.J. Sleegers, Occupying the principal position: Examining relationships between transformational leadership, social network position, and schools' innovative climate. Educational administration quarterly, 2010. **46**(5): p. 623-670
- [84] Leithwood, K. and D. Jantzi, *A review of transformational school leadership research* 1996–2005. Leadership and policy in schools, 2005. **4**(3): p. 177-199.
- [85] Leithwood, K. and J. Sun, *Transformational school leadership effects on schools, teachers and students*. Research and theory in educational administration, 2009. **8**: p. 1-22.
- [86] Bass, B.M., Transformational Leadership: Industrial, Military, and Educational Impact. Mahwah, NJ: Erlbaum. 1998.
- [87] Dvir, T., et al., Impact of transformational leadership on follower development and

- performance: A field experiment. Academy of management journal, 2002. **45**(4): p. 735-744.
- [88] Lewin, K., R. Lippitt, and R.K. White, *Patterns of aggressive behavior in experimentally created "social climates"*. The Journal of social psychology, 1939. **10**(2): p. 269-299.
- [89] Norris, K.R., H. Ghahremani, and G.J. Lemoine, *Is it Laissez-Faire Leadership or Delegation? A Deeper Examination of an Over-Simplified Leadership Phenomenon.*Journal of Leadership & Organizational Studies, 2021: p. 1548051821997407.
- [90] Dickinson, J. and C. Billings, *Practical Foundations and Principles for Teaching*. 2021.
- [91] Gist, M.E. and T.R. Mitchell, *Self-efficacy: A theoretical analysis of its determinants and malleability*. Academy of Management review, 1992. **17**(2): p. 183-211.
- [92] Armor, D., Analysis of the school preferred reading program in selected Los Angeles minority schools. 1976.
- [93] García, T. and P.R. Pintrich, Student Motivation and Self-Regulated Learning: A LISREL Model. 1991.
- [94] Midgley, C., H. Feldlaufer, and J.S. Eccles, Student/teacher relations and attitudes toward mathematics before and after the transition to junior high school. Child development, 1989: p. 981-992.
- [95] Berman, P., Federal Programs Supporting Educational Change, Vol. VII: Factors Affecting Implementation and Continuation. 1977.
- [96] Smylie, M.A., Teacher participation in school decision making: Assessing willingness to participate. Educational Evaluation and Policy Analysis, 1992. **14**(1): p. 53-67.
- [97] Trentham, L., S. Silvern, and R. Brogdon, *Teacher efficacy and teacher competency ratings*. Psychology in the Schools, 1985. **22**(3): p. 343-352.
- [98] Webb, R.B. and P.T. Ashton, *Teacher motivation and the conditions of teaching: A call for ecological reform.* Journal of Thought, 1986: p. 43-60.
- [99] Anderman, E. and L. Anderman, *Attribution theory*. Education. com, 2009. **23**.
- [100] Schunk, D.H., *Self-efficacy and academic motivation*. Educational psychologist, 1991. **26**(3-4): p. 207-231.

Ridwan Ridwan, Sudjarwo Sudjarwo, Sulpakar Sulpakar, Hasan Hariri, Rias Tusianah, Usastiawaty C.A.S Isnainy, M. Arifki Zainaro, Herdian Herdian, Bujang Rahman

WSEAS TRANSACTIONS on ADVANCES in ENGINEERING EDUCATION DOI: 10.37394/232010.2022.19.5

# Contribution of Individual Authors to the Creation of a Scientific Article (Ghostwriting Policy)

Ridwan, Sudjarwo, Hasan Hariri, Bujang Rahman propose ideas and draft research.

Rias Tusianah, Usastiawaty C.A.S Isnainy, M. Arifki Zainaro have organized and executed the collecting data field.

Ridwan, Herdian were responsible for the Statistics. Sulpakar was responsible for the funding.

# Creative Commons Attribution License 4.0 (Attribution 4.0 International, CC BY 4.0)

This article is published under the terms of the Creative Commons Attribution License 4.0 <a href="https://creativecommons.org/licenses/by/4.0/deed.en">https://creativecommons.org/licenses/by/4.0/deed.en</a> \_US

E-ISSN: 2224-3410 51 Volume 19, 2022