



A Review of Teachers' Self-Efficacy and to What Extent it is Influenced by Instructional Leadership in Educational Institutions

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Paper ID: 13A9M

Volume 13 Issue 9

Received 01 April 2022

Received in revised form 17 June 2022

Accepted 24 June 2022

Available online 1 July 2022

Keywords:

School mission; School climate; Teacher efficiency;

Abstract

The role of teachers in delivering functioning instructive practices is crucial. The literature has shown that instructional leadership can be linked to teachers' beliefs and behaviours, which contribute to positive transformation in schools. The success of a national education system is correlated with two factors: instructional leadership and teachers' self-efficacy, which is based on the belief that "good schools have good principals." This paper reviews teachers' self-efficacy and how it is influenced by instructional leadership in educational institutions. It has been found that principals as instructional leaders have a crucial role in influencing students' academic achievement. For example, principals influence processes, structures, and self-efficacy among teachers, thereby contributing to students indirectly. Studies emphasized the vital role of principals in promoting perceptions of teachers' self-efficacy. Many Studies revealed that principals' leadership is critical for teachers' self-efficacy. Therefore, teachers' self-efficacy significantly impacts the relationship with the role of school principals as instructional leaders. Ultimately, the teachers' beliefs about efficacy can enhance students' academic achievement and classroom instruction in the educational setting to achieve a successful national educational system.

Disciplinary: Education.

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Cite This Article:

Mydin, A. A, Alaklabi, S and, Alomar, A. (2022). A Review of Teachers' Self-Efficacy and to What Extent it is Influenced by Instructional Leadership in Educational Institutions. *International Transaction Journal of Engineering, Management, & Applied Sciences & Technologies*, 13(9), 13A9M, 1-12. <http://TUENGR.COM/V13/13A9M.pdf> DOI: 10.14456/ITJEMAST.2022.181

1 Introduction

Over the last decade, global educational systems have considerably modified the long-held ideologies and beliefs that steered them; however, administrators have managed educational

reforms with small-scale outside input only. According to Kulophas et al. (2018), the success of these reforms necessitated collaborative tactics with the contribution of various parties in any educational system. Nguyen et al. (2020) stressed that teachers or instructors have a crucial role in effective educational practice. A review of the literature in this respect has revealed that instructional leadership can be linked to teachers' beliefs and behaviours, which contribute to positive transformation in educational settings like schools. Effective leadership involves the abilities and methods that drive teachers to become more interested and involved in schools. It also involves improving the professional development of teachers, as well as student learning (Duignan, 2014; Özdemir et al., 2020; Alazmi & Al-Mahdy, 2020). Even though instructional leadership is similar to transformational leadership, it emphasizes the leader's persistent manifestation of ethical behaviour over charisma (Jeong et al., 2016). Scholars believe that educational leadership is vital in increasing employees' self-esteem and engagement (Al Samkari & David, 2019). Employees will be more productive and diligent if their employers promote the workers' development and their constructive engagement (Guohao et al., 2021). The success of a national education system is correlated with two factors: instructional leadership and teachers' self-efficacy in line with the belief that 'good schools have good principals' (Hallinger, 2012; Liu et al., 2021). Therefore, instructional leaders must make efforts to implement changes that strongly influence the quality of teaching, team, and collaborative efforts among teachers and spirituality in schools. By doing this, the academic achievement of students will be ensured. This paper aims to review the concept of teachers' self-efficacy and how it is influenced by instructional leadership in educational institutions.

2 Teachers' Self-Efficacy

2.1 Definition of Teacher Self-Efficacy

A teacher's self-efficacy involves the teacher's confidence in their capability to influence valued students' outcomes (Jaafar & Lailia, 2019). However, the teacher's self-efficacy as a specific concept is perceived and measured differently by researchers from different backgrounds and perspectives. The effectiveness of teachers refers to teachers' judgments of their capabilities to achieve the desired results of students' learning and engagement, particularly with problematic students (Swan et al., 2011). Teachers' efficacy is the confidence of having specific capabilities and skills to work as instructional leaders in a classroom, those who contribute to the instructional policy at school (Qadach et al., 2020). Woolfolk and Shaughnessy (2004) emphasized that teachers' efficacy refers to those who believe in their skills in fostering students' involvement and learning. In other words, teachers have self-efficacy when they are assured of their power to positively influence students' learning, particularly problematic and unmotivated students (Poulou et al., 2019).

2.2 Theoretical Framework and Models of Teacher Efficacy

In many studies, teachers' self-efficacy is tackled from two different theoretical foundations, including Rotter's (1966) concept of internal and external control or locus of control theory and Bandura's (1997) Social Cognitive Theory (Tschannen-Moran & Hoy, 2001). Teachers' self-efficacy was first envisaged by the RAND cooperation researchers in the 1970s based on the work of Rotter's (1966) Social Learning Theory. This theory is grounded in the notion that teachers believe they can control the fortification of actions; such control of reinforcement is performed by them (internal) or the surrounding environment (external). Students' motivation and performance became significant learning outcomes, largely dependent on teachers' teaching behaviours. Therefore, it is believed that teachers with a reliable level of efficacy can control and influence students' achievements and motivations (Guskey & Passaro, 1994). In contrast, it has also been presumed that teachers' self-efficacy can decline if teachers depend on external factors only, for instance, students' abilities or home environments, to be more influential on students' learning than teachers' abilities.

The Social Cognitive Theory and the construct of the self-initiated refer to people, i.e., teachers, who perceive the levels of expected competence they display in each situation. Moreover, self-efficacy moulds one's patterns of ideas, thoughts, and emotions, enabling successful actions. Consequently, substantial practical efforts are made to pursue their goals and be resilient when facing difficulty. In achieving their goals, self-efficacy is a significant factor in motivating people to continue despite setbacks and take proactive actions to overcome problems or situations that influence their lives (Bandura, 1993, 1997).

The Social Cognitive Theory proposes the second type of expectation, which is the 'outcome expectancy'; this is different from the expectations of efficacy. The efficacy expectation can manifest when people plan the required actions to carry out tasks, whereas outcome expectancy can manifest when persons expect potential consequences of achieving tasks at a certain prescribed competence level (Bandura, 1997).

According to Dixon et al. (2020), self-efficacy is a specific judgment about the ability to achieve tasks task, which refers to a non-inherently evaluative judgment. It is all about one's perceptions of self-competence instead of the actual competence level. Such a distinction is necessary to be observed due to people's tendency to misjudge or undervalue their actual abilities.

In line with this argument, Bandura (1997) suggested that individuals with higher levels of self-efficacy enjoy specific characteristics; these people display practical actions in teaching. Bandura (1997) acknowledged such characteristics of high self-efficacy people. First, they have the capability of thinking soundly and thoroughly; they often exhibit high aspirations and goals; they can set challenges and address these obstacles; they can visualize fruitful outcomes; they inspire themselves towards setting specific goals and developing plans of action; they attract support and confidence from other people. Therefore, teacher self-efficacy is conceptualized as the teachers'

belief in their capabilities of planning, organizing, and carrying out different tasks toward achieving educational goals.

2.3 Measures of Efficacy

2.3.1 Teacher Self-Efficacy Scales

Various assessment methods have been used to assess teacher self-efficacy. However, there is no consensus on how self-efficacy scales for teachers should be designed (Skaalvik & Skaalvik, 2007). Some researchers attempted to develop more generic teacher self-efficacy assessments that were unrelated to specific behaviours or situations (X. M. Liu et al., 2001; Lehmann, 2014; De Smul et al., 2018). Because it is a domain-specific construct, teacher self-efficacy assessments should be tailored to the instructional functioning domain (De Smul et al., 2018).

2.3.2 Teachers' Sense of Efficacy Scale

The Teachers' Sense Efficacy Scale (TSES) Model is based on thorough analyses of previous in the field of efficacy, which covered both models based on the Teacher Locus of Control perspective and Bandura's social cognitive theory and scales used to measure self-efficacy.

To clarify the conceptual limitations and the measurement issues in the TSES analysis, Tschannen-Moran et al. (1998) conducted a comprehensive review of the available literature to present a refined TSE definition. Tschannen-Moran and Hoy (2001) indicated that teacher self-efficacy involves the teachers' belief in their abilities to teach and motivate students regardless of their abilities or backgrounds. This conception suggests that teacher self-efficacy judgments can originate from individual assessments of certain factors, complicating the teaching process. It also entails an evaluation of a self-perception of individual teaching abilities, which refers to the analysis of teaching competence. Concerted efforts were made by Tschannen-Moran and Hoy (2001) to develop a multidimensional and comprehensive efficacy model.

Therefore, Tschannen-Moran and Hoy (2001) realized that a more comprehensive and multidimensional scale for assessing efficacy must be developed, where items described the types of tasks representative of frequent teaching activities. The TSE conceptual framework explains the significant teachers' judgments and the constituents of the teaching responsibilities, in addition to clear evidence of teachers' mastery, e.g., how to perform successful teaching tasks. This framework depends upon a social-cognitive standpoint about a triadic-reciprocal association between people, the environment, and behaviours. As shown in Figure 1, the two boxes (left to right) are in harmony with the teacher efficacy model suggested by Bandura. The importance of teachers in such experiences has made them significant sources of efficacy information (Bandura, 1997).

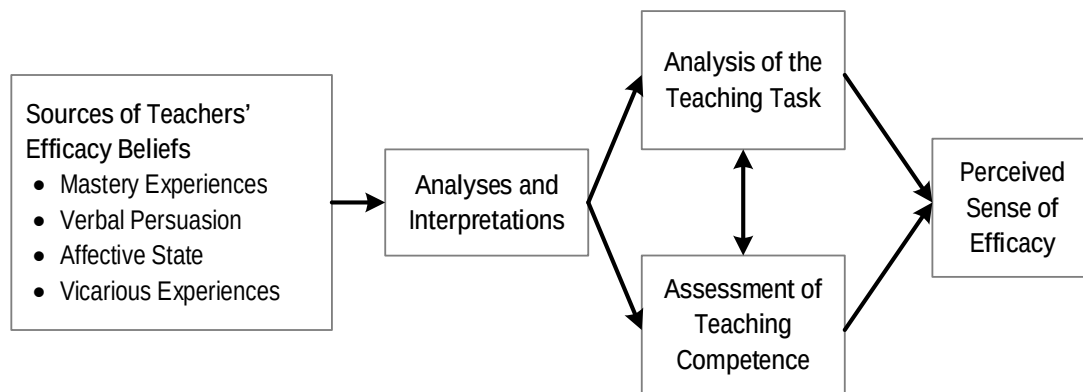


Figure 1: Portion of the process model of self-efficacy of teachers
Source: (Tschannen-Moran et al., 1998)

2.3.3 Dimensions Teachers' Sense of Efficacy Scale (TSES)

Based on Bandura's social cognitive theory and self-efficacy and Teacher Locus of Control perspective theory, a 24-item Teachers' Sense of Efficacy Scale (TSES) has been developed, consisting of 3 dimensions, including the efficacy of students' engagement instructional approaches, and classroom management. Moreover, factor analysis confirmed the presence of three distinct dimensions (Tschannen-Moran & Hoy, 2001).

- First Dimension: Efficacy in Students' Engagement

This dimension refers to the teacher's self-confidence in handling matters related to students and increasing the student's level of engagement in the learning process. Teachers believe that they can motivate students, which could be a major pathway by which teachers can positively influence students' academic achievement and cognitive development to foster their creativity. Teachers' self-efficacy regarding motivation can be theorized and evaluated as nurturing and encouraging students to respect learning and, at the same time, believe they will perform more efficiently in the classroom (Tschannen-Moran & Hoy, 2001; Skaalvik & Skaalvik, 2007).

- Second Dimension: Efficacy in Instructional Strategies

This dimension refers to teachers' confidence in delivering learning materials in the classroom. Most of the tasks can be carried out in class, which is interactive or preparation for class. These tasks can be applied in both pre-active or interactive forms because teachers can generate questions and plan lessons before class or on the spot; where teachers focus on pre-active components of teaching during the preparation programs, they experience less time pressure and cognitive demand as instructions are well-planned, and they feel more efficacious (Rwodzi, 2018).

- Third Dimension: Efficacy in Classroom Management

This dimension refers to the self-efficacy of teachers' beliefs regarding managing their classroom effectively, solving students' discipline problems, controlling, and preventing disruptive behaviours. Critical tasks associated with teachers' competence and task analyses are evaluated in this instrument.

2.4 Previous Studies on Teachers' Self-Efficacy

Aljohani (2019) studied teachers' self-efficacy toward intellectually disabled Saudi Arabian students. He investigated the experience of these teachers and how their experience and perspectives impacted their self-efficacy. The findings indicated that teachers had self-motivation to choose Special Education as their major. They experienced differences between teachers' lesson preparation and the reality of the classroom teaching practice. Throughout their experience of teaching ID students, despite the feeling of cultural shock and emotional exhaustion, they still experienced a sense of accomplishment. The teachers revealed that the challenges and issues they faced while teaching the ID students had affected their sense of self-efficacy.

Swan et al. (2011) stated that the nature of actual learning is determined by self-efficacy. Self-efficacy beliefs determine the factors of teachers' performance in a learning process (Akmeşe & Kayhan, 2016). The learning process, in this context, comprises the application of teaching procedures and skills, in addition to classroom management. Besides, teachers' interaction with their students in the classroom and relationships with classmates and parents play a vital role in influencing teachers' performance (Yilmaz et al., 2016).

Eells (2011), Tschannen-Moran and Hoy (2007), and Tschannen-Moran and Gareis (2004) indicated that self-efficacy attitudes are affected by several crucial factors. These factors are the amount of devoted time for teaching, teachers' financial satisfaction, education level, enrolment of the students, region of the school, socioeconomic status, facilities in the school, in addition to cultural, social, and economic conditions. Ciyer et al. (2010) and Fackler and Malmberg (2016) advocated that teachers' efficacy is crucial for preschool students between three to six years because preschool students' essential development, academic, and skill acquisition occur at the fastest level.

In Cyprus (TRNC), Toran (2017) identified professional variables affecting self-efficacy among preschool teachers. He observed and examined data collected from 191 preschool teachers of nurseries and kindergartens. In this study, data were gathered via the Professional Information Form and Teacher's Sense of Efficacy Scale concerning the factors which affect preschool teachers' efficacy. The findings indicated that several factors affect preschool teacher self-efficacy, namely the teacher's department of graduation, his/her residence, the teacher's professional experience duration, the educational environment, and economic competence. The results concluded that these professional variables have significantly affected the teachers' self-efficacy.

The findings of the discussed studies above have shown that teachers' efficacy beliefs undeniably affect the performance of students and teachers' persistence in facing difficulties. Apart from these impacts, (Evers et al., 2002) suggest that solid teacher efficacy also significantly encourages teachers to implement new instructional practices to enhance students' academic success. This argument is in line with what is advocated regarding teacher efficacy (Caprara et al., 2006).

Teachers' belief in self-efficacy significantly influences their performance and motivation. Furthermore, Tschannen-Moran and Woolfolk Hoy (2002) suggested that the quality of teachers could be described, observed, and measured to show teacher change. As such, teachers' self-efficacy beliefs are strongly associated with efforts by teachers to invest in teaching, set teaching goals, and build resilience when plans do not run as expected. In line with these arguments, Ross and Gray (2006) stated that teachers' efficacy is a successful tool to change students' perceptions about their abilities and pave the way to academic success. This is because teachers with strong efficacy work hard to achieve high expectations. They also use effective management approaches and consider unenthusiastic students' needs. Consequently, a higher level of teachers' self-efficacy is a significant factor that positively affects students' learning and, thus, teachers' teaching quality. One of the driving factors that becomes the impetus for the enhancement and consistency of teacher efficacy is the proactive role of instructional leaders (Ross & Gray, 2006).

3 Relationship Between Instructional Leadership and Teacher Self-Efficacy

Many education researchers agree that principals as instructional leaders play a key role in influencing students' academic achievement (Seashore Louis et al., 2010; Swan et al., 2011; Alazmi & Al-Mahdy, 2020). Principals contribute to students indirectly by exerting an impact on processes, structures, and teachers' self-efficacy. Studies emphasized the principals' prominent role in fostering teachers' perceptions of their self-efficacy. Also, principals' leadership is a crucial component of teachers' self-efficacy (Hipp & Bredeson, 1995; Ross & Gray, 2006).

Furthermore, previous evidence suggested that principals' effective instructional leadership can considerably predict teachers' self-efficacy. In this regard, Duyar et al. (2013), studied the association between the leaders' instructional leadership and teachers' self-efficacy. The results revealed that the direct supervision of instruction of the principals could be associated with increasing teachers' self-efficacy. Likewise, Calik et al. (2012) substantiated a positive, significant association between the principals' instructional leadership and teachers' self-efficacy.

Walker et al. (2009) conducted a study focusing on the effect of principals' instructional leadership behaviour and teachers' self-efficacy at an intermediate school. The researchers suggested that school principals must realize how their leadership behaviour and characteristics can positively affect teachers' self-efficacy. The research involved 366 mid-Atlantic state middle school teachers. The TSES was applied, and some further demographic questions were added. The researchers constructed questions to investigate eleven school principals' behaviours. The study's findings suggested that teachers' self-efficacy significantly affects principals' behaviours, based on the teachers' experience in teaching. The study also revealed three principal behaviours that had a significant impact: modelling instructional prospects, communications, and contingent rewards. However, the most crucial behaviour was modelling instructional prospects. The selected principals demonstrated that they believe in an effective instructional process and participated with the teachers; therefore, the self-efficacy of those teachers has increased considerably (Pearce, 2017).

Additionally, Horton (2013) examined the relationship between the teachers' sense of self-efficacy and the perceptions of the principal's instructional leadership in schools with higher poverty levels. The researcher used TSES and PIMRS as instruments, and the sample included 278 teachers working at schools in two urban Nebraska school districts, USA. The findings showed that principals' leadership behaviours have substantially impacted the teachers' self-efficacy in these schools. The results also revealed that teachers' self-efficacy could significantly influence the students' academic achievement.

The findings were in line with previous studies concerning the examined association between the variables of three scales, including teachers' self-efficacy, teachers' self-efficacy for instructional approaches, and teachers' self-efficacy for classroom management (Hipp & Bredesqn, 1995; Walker et al., 2009). Nevertheless, Horton (2013) found that principals' behaviours in shaping the school's goals significantly influenced teachers' self-efficacy. The outcomes agreed with the posited argument that teachers could enjoy higher levels of efficacy in schools because of decent working conditions and a good teaching environment, through which they are influenced by the role of the principals as instructional leaders (Rimm-Kaufman & Sawyer, 2004; Lambeth, 2008).

Calik et al. (2012) investigated the relationship between the principals' instructional leadership behaviors, and teachers' self-efficacy, with collective efficacy. The scholars developed a new model according to a constructed assumption to establish the association between these variables. The selected sample was three hundred twenty-eight primary school teachers in Ankara, Turkey. The results showed a significant correlation between the assessment of teachers' processes and the use of instructional approaches. The findings also suggested that teachers' self-efficacy is a significant mediator between instructional leadership and the collective teachers' efficacy variables.

Moreover, teachers' self-efficacy depends on instructional leadership; as they asserted, when these principals exhibited instructional leadership behaviors, teachers' attitudes about efficacy improved by evaluating themselves as they are effective teachers in educating their students (Calik et al., 2012). However, further studies are required as recommended by the researchers. Studies can focus on the instructional leadership dimensions included in the PIRMS Scale.

Based on several previous studies, it is evident that teachers' self-efficacy is considerably related to the role of school principals as instructional leaders. The teachers' self-efficacy beliefs can indirectly significantly improve classroom instruction and students' academic achievement.

4 Conclusion

This paper comprehensively reviewed the teacher self-efficacy concept and how it is influenced by instructional leadership in educational institutions. Studies emphasized that the success of any education system is associated with two factors: instructional leadership and the significant self-efficacy of teachers. It has also been reported that principals as instructional leaders play a crucial role in shaping students' academic achievement. Principals contribute to students indirectly via their impact on structures, processes, and teachers' self-efficacy. Moreover,

it was observed that direct supervision for instruction by school principals has a significant, direct relationship with the improved self-efficacy of teachers.

Additionally, a significant, positive association between the principals' instructional leadership and the self-efficacy of teachers has been substantiated by scholars in the literature. However, these studies are limited regarding how teachers' self-efficacy is constructed. Therefore, it is recommended to further investigate and examine methods to construct and improve teachers' self-efficacy in local educational institutions.

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