

Impact of Leadership on Teachers' Efficacy of Senior Secondary School Teachers

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Abstract

The purpose of this research is to examine the relationships between various attributes pertaining to **senior school teachers' leadership behaviours** and the Self-Efficacy of teachers. The old saying that whatever happened at the top percolates down is applicable in the present academic world. Therefore, Leadership is a vital role in influencing teachers' efficacy. The present paper is an attempt to bring out the attributes of leadership, those which significantly influence Teachers' Efficacy. Regression Analysis was performed to test the relationship.

Keywords:-Leadership, Teacher Efficacy, Teacher, Vision

Introduction

The goal of education is to improve one's standard of living and open up new opportunities for fulfilment in life. Learners' potentials are realised, their competences are boosted and their abilities, preferences, and beliefs are enriched when they participate in an educational system that is both sound and successful. The importance of a high-quality teacher education programme that encourages growth and development has been emphasised here. It has been established that teaching competency and self-efficacy are two crucial factors in teacher development, and that these two factors each have their own criteria, dimensions, and qualities. We have evaluated the aspects that contribute to pupils' success in the upper secondary years. This chapter also covers the study's aims and hypotheses, as well as its confines and restrictions. All progressive nations have dedicated to the goal of delivering "Quality Education for All" through universalizing basic education. They've also come to appreciate that increasing access to high-quality secondary education is crucial to getting where they want to go. economic and social progress.

Despite the fact that a college degree may greatly improve this situation, only a small percentage of the population has access to such programmes. On the other hand, access to public schools means that education of any kind is within reach for virtually everyone in a given community; this gives the standard and effectiveness of public schools added weight in the context of individual, communal, and national progress.

Literature Review

According to the study, expanding awareness of how schools might increase student accomplishment can benefit by focusing on teachers' perceptions of their own efficacy as educators. Teacher efficacy can be defined as the conviction held by educators that the efforts they make in the classroom can have a beneficial effect on the academic performance of their students. It is an important organisational component that a student's accomplishment can be positively influenced by the atmosphere at school. This is crucial since student learning and achievement are directly related to each other. It is a key organisational variable to take into consideration while thinking about the learning and accomplishments of students. When specific student demographic data and earlier successes were taken into account, Goddard (2001) found that collective efficacy was a major determinant in boosting student achievement. This was found when particular student demographic variables were taken into consideration. In addition, it is believed that disparities in student accomplishment between schools are impacted, at least in part, by the aggregate teacher efficacy, that is believed to be of substantial importance. It is possible to make the case that the level of confidence that teachers have in their own abilities is a significant element in the level of academic accomplishment attained by pupils, as well as in the performance of teachers and schools. In addition, having a thorough understanding of efficiency is essential in order to facilitate overall growth within an educational institution. However, Goddard (2001) said that further research is needed to fully comprehend the idea of collective efficacy because existing studies have mostly focused on the theoretical framework. Klassen (2010) argued that statements made

by educators should serve as the basis for studies investigating their effectiveness. So, it is important to study teacher efficacy in connection to different demographics and institutional factors.

In recent decades, principals have been viewed through the lens of facility manager, political leader, instructional guru, and agent of transformation. Due to the increased pressure to perform, principle instructional leadership has risen to the forefront of efforts to reform educational institutions around the world. In the United States, school administrators often face pressure from state mandated policies to raise students' performance on standardised tests (Shin et al., 2013). However, meta-analyses of education studies indicate that leadership indirectly influences student achievement via links that are still completely understood (Leithwood and Jantzi, 2005; Scheerens, 2012). Consequently, a deeper comprehension is necessary for the future of ongoing reform initiatives.

Modern institutions have rethought their missions in light of shifting societal norms, placing a premium on strong school administration. Leadership in the classroom has been found to affect both teacher & student performance, as well as the effectiveness of lessons and the overall atmosphere in the classroom. (Al-Mahdy, Emam, & Hallinger, 2018; Flessa, Bramwell, Fernandez, & Weinstein, 2017; Hallinger, 2015; Hallinger, Hosseingholizadeh, Hashemi, & Kouhsari, 2017; Huber, Tulowitzki, & Hameyer, 2017; Sammons, Hillman & Mortimore, 1995; Shatzer, Caldarella, Hallam, & Brown, 2013; Truong & Hallinger, 2017). The study's findings suggest that principals can have a significant impact on their students' development by helping them acquire a broader range of skills, rather than just the ones traditionally associated with academic success. (Borden, 2011; Hallinger, 2003 ; Hallinger, Adams, Harris, & Suzette Jones, 2018; Hallinger, Bickman, & Davis, 1996; Heck, Larsen, & Marcoulides, 1990; Marks & Printy, 2003). As a result, school leaders choose a variety of leadership styles in order to reorganise the school in a manner that is consistent with the goals and objectives of the school, as well as to enhance the level of academic achievement among students and the level of motivation among teachers. (Arar & Abu Nasra, 2019; Bellibas & Liu, 2018; Leithwood, Patten, & Jantzi, 2010).

The instructional leadership practises of school principals and the views of teachers in their collective efficacy both contribute to the effectiveness of schools. The instructional leadership practises of school principals and the views of teachers in their collective efficacy both contributes to the performance of schools. (Blatti, Clinton, & Graham, 2019; Chong & Ong, 2016; Goddard, Goddard, Kim, & Miller, 2015; Madimetsa, Challens, & Mgadla, 2018; Voelkel & Chrispeels, 2017). When it comes to managing the teaching process and cultivating a healthy school environment, school principals can make effective use of the expertise and abilities of their teaching staff. The concept of collective teacher efficacy, which is founded on cooperation among educators, has an effect on the academic performance of students as well as the growth of schools. (Goddard, Hoy, & Hoy, 2000; Kim & Seo, 2018; Ninković & Knežević Florić, 2016; Qadach, Schechter, & Da'as, 2019; Tschannen-Moran & Barr, 2004).

The instructional leadership practises of school principals create collective effectiveness beliefs amongst teachers by fostering an environment that encourages collaborating & sharing. (Chong & Ong, 2016; Goddard et al., 2015). It has been observed that principals of schools that encourage collaboration among teachers are able to raise the overall level of teacher efficacy in schools. (Fancera & Bliss, 2011; Mosoge, Challens, & Xaba, 2018; Tschannen-Moran & Barr, 2004). In the same vein, increased levels of collective teacher efficacy improve classroom instruction, school atmosphere, teacher dedication, innovative problem - solving skills, and involvement in decision-making procedures (Al-Mahdy et al., 2018; Bandura, 1993; Goddard, 2001). Within the context of this model, it is possible to make the assertion that high levels of collective teacher efficacy support a high degree of cooperation and synergies among teachers, which in turn makes it easier for schools to find solutions to problems.

Derrington and Angelle (2013) There is "a clear and significant association between collective efficacy and the extent of teacher leadership in a school," as stated in the article. (p. 6). 719 educators hailing from 50 different schools across the United States took part in the study. The researchers observed that informal teacher leaders provided assistance to other educators and actively shared ideas "on a wide variety of themes such as learning, teaching, and managing the classroom." (p. 6). The researchers came to the conclusion that educators who did believe in the ability of the faculty as a whole and in the capacity of teaching staff formed schools where the scope of teacher leadership was larger. Additionally, the scientists found that the relationship between the constructs of teacher leadership and CTE encouraged achievement for students, teachers, and schools.

In addition, Kirby and DiPaola (2011) discovered that collective efficacy, which is one component of the concept of "academic optimism," contributed to the development of better relationships among schools, communities, and families. The researchers in this study found a statistically significant positive link between academic optimism and parental and community engagement in urban primary schools. This relationship was found to exist in urban schools. The researchers pointed out that the importance of the relationship between CTE and community engagement in urban schools is notable because recent research backs up previous results that parents from working class families are less likely to be interested in their children's education. In their investigation of the implementation of inclusive education, Lyons et al. (2016) made the observation that parents were deemed to be "part of a team" and that "concerted efforts were made to involve parents in authentic and meaningful ways." This is another important finding that bears consideration.

Self-efficacy, as defined by Bandura (1977), is the belief that one has the ability to carry out a task or assignment successfully. It aids in the actualization of desired outcomes and enhanced efficiency. A person's belief in his or her own ability to overcome challenges in providing a service is a major factor in shaping his or her behaviour and level of success in overcoming those challenges. School instructors' confidence in their own abilities is likely to lay a solid groundwork for their future success as educators. If a teacher has confidence in their own abilities, they will be better equipped to help their students achieve their goals and overcome any difficulties they may encounter while providing that service. According to Bandura's (1994) theory of learned behaviour, self-efficacy is formed, organised, and modified in response to four types of influencing factors: mastery experiences, vicarious experiences, persuasive arguments, and physiological feedback (emotional arousal). According to research by Iaochite and Souza Neto (2014), teachers need to be prepared to deal with "considerable cognitive, emotional, and practical demands" as a result of "m the relationships among interpersonal behaviours, environmental behaviours, and their own 12 behaviours" in the classroom. Teachers need confidence in their own capacities to persevere and resilience in the face of adversity in order to meet these objectives (Fives & Buehl, 2008, as cited in Iaochite & Souza Neto, 2014). The field of educational psychology is quite comprehensive.

The teaching process places significant cognitive, emotional, and practical demands on educators, and they need to learn how to meet those demands in order to be successful. These demands are the result of relationships among the behaviours of students, other people in the classroom, and the teachers themselves. In order for teachers to successfully manage these expectations, they need to possess a particular set of knowledge and skills, and they need to have faith in their own capacities to be resilient and persistent in the face of adversity (Fives & Buehl, 2008, as cited in Iaochite & Souza Neto, 2014). There has been a significant amount of study done in educational psychology on the numerous aspects that affect a teacher's sense of self-efficacy. For instance, Pfitzner-Eden (2016) investigated the effects of different types of experiences, such as mastery experiences, vicarious experiences, verbal persuasion, and physiological and affective states, on the self-efficacy of instructors. Two different groups, or cohorts, were created out of the participants in this study. One group consists of future educators who have not yet completed their bachelor's degrees. The second group is comprised of advanced preservice teachers who are either working for their master's degrees or are in their final year of study for their bachelor's degrees. At both the first and second cohorts, the German translation of the Scale for Teacher Self-Efficacy (STSE) was the survey instrument that was utilised for this research (Pfitzner-Eden et al., 2014).

The STSE is an adapted version of the Teacher Sense of Efficacy Scale (TSES) (Tschannen-Moran & Woolfolk Hoy, 2001), which provides a stable three-dimensional assessment of teacher self-efficacy for teacher educators at various stages of teacher preparation. The TSES was developed by Tschannen-Moran and Woolfolk Hoy. According to Pfitzner-Eden (2016), a sense of teaching efficacy effects the behaviour of teachers during instruction, the arrangement of the classroom, and the reinforcement patterns given to students who are particularly having difficulty. Those who are preparing to become teachers and have a high teaching efficacy are more likely to have humanistic beliefs towards the control of children, in comparison to those who have a low teaching effectiveness. According to the findings of this study, educators who possess a greater level of pre-teaching abilities are more prepared to deal with a variety of educational demands than educators who possess a lower degree of preparation (Pfitzner-Eden, 2016). Results also demonstrated that more effective preservice teachers were able to be less vocally reactive toward classroom management and unfavourable situations, which enabled students to settle some of their problems and took teacher confidence to new heights (Pfitzner-Eden, 2016). Effective educators are more likely to recognise and experience less failure among their students, which is likely related to a lessened desire to protect themselves against the potentially bad outcomes of their teaching (Henson, 2001; Pfitzner-Eden, 2016).

High-efficacy teachers have extensive training and experience, which allows them to operate a high-quality classroom in which their pupils have a greater chance of succeeding as a direct result of the high-efficacy teacher (Pfitzner-Eden, 2016). It has been hypothesised that teachers with varying degrees of experience and levels of self-efficacy can achieve comparable levels of favourable and fruitful outcomes. Imagine a scenario in which low-efficacy instructors were given the opportunity to participate in classroom instruction, where they could interact with students in a positive and encouraging setting while also gaining valuable teaching experience. If this is the true, then they have the same potential for achievement as their high-efficacy counterparts (Pfitzner-Eden, 2016). According to Pfitzner-Eden (2016), the student life has the potential to provide teachers with low self-efficacy with an opportunity for growth and development that will help them become high-efficacy teachers.

Objective

To determine how different attributes of Leadership influence Teachers Efficacy.

Hypothesis

H₀: There is no significant correlation between teacher Efficacy & following attributes of leadership- Vision, Flexibility, Directing, Delegating, Thoughtfulness, Pedagogical Leader

H₁: There is a significant correlation between teacher Efficacy & following attributes of leadership- Vision, Flexibility, Directing, Delegating, Thoughtfulness, and Pedagogical Leader.

Reliability and Validity of Questionnaire

1. Test Retest Reliability

Correlation matrix reflecting the data collected on two different dates from the same set of 30 respondents.

The table reflects that there is a significant correlation between the data collected on two different days by the same 30 respondents.

| | | Correlation ^a | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|------|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| | | V001 | V002 | V003 | V004 | V005 | F001 | F002 | F003 | F004 | F005 | F006 | F007 | F008 | F009 | F010 | F011 | F012 | F013 | F014 | F015 | F016 | F017 | F018 | F019 | F020 | F021 | F022 | F023 | F024 | F025 | F026 | F027 | F028 | F029 | F030 | F031 | F032 |
| V001 Pearson Correlation | 1 | .804 | .742 | .652 | .693 | .110 | .344 | .159 | .358 | .244 | .822 | .812 | .567 | .509 | .417 | .464 | .214 | .395 | .670 | .478 | .772 | .604 | .722 | .582 | .048 | .079 | .229 | .278 | .712 | .581 | .792 | .601 | .581 | .689 | .450 | .450 | .450 | .450 |
| V001 Pearson Correlation Sig. (2-tailed) | | .004 | .005 | .005 | .005 | .124 | .004 | .017 | .004 | .004 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 |
| V002 Pearson Correlation | .804 | 1 | .815 | .557 | .234 | .268 | .417 | .271 | .384 | .320 | .778 | .759 | .456 | .400 | .303 | .403 | .439 | .446 | .556 | .768 | .615 | .479 | .532 | .424 | .526 | .086 | .084 | .584 | .584 | .584 | .584 | .584 | .584 | .584 | .584 | .584 | .584 | .584 |
| V002 Pearson Correlation Sig. (2-tailed) | | | 1 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 |
| V003 Pearson Correlation | .742 | .557 | 1 | .844 | .268 | .180 | .384 | .209 | .527 | .422 | .777 | .767 | .467 | .407 | .303 | .403 | .439 | .446 | .556 | .768 | .615 | .479 | .532 | .424 | .526 | .086 | .084 | .584 | .584 | .584 | .584 | .584 | .584 | .584 | .584 | .584 | .584 | .584 |
| V003 Pearson Correlation Sig. (2-tailed) | | | | 1 | .004 | .009 | .007 | .003 | .004 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 |
| V004 Pearson Correlation | .652 | .234 | .844 | 1 | .209 | .127 | .384 | .247 | .467 | .422 | .777 | .767 | .467 | .407 | .303 | .403 | .439 | .446 | .556 | .768 | .615 | .479 | .532 | .424 | .526 | .086 | .084 | .584 | .584 | .584 | .584 | .584 | .584 | .584 | .584 | .584 | .584 | .584 |
| V004 Pearson Correlation Sig. (2-tailed) | | | | | 1 | .014 | .007 | .003 | .004 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 |
| V005 Pearson Correlation | .693 | .110 | .268 | .209 | .127 | 1 | .337 | .529 | .221 | .682 | .203 | .287 | .248 | .114 | .303 | .016 | .142 | .142 | .278 | .131 | .159 | .150 | .162 | .087 | .061 | .477 | .340 | .096 | .204 | .488 | .180 | .155 | .218 | .436 | .209 | .229 | .229 | |
| V005 Pearson Correlation Sig. (2-tailed) | | | | | | 1 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | |
| V006 Pearson Correlation | .344 | .358 | .417 | .384 | .320 | .778 | 1 | .747 | .537 | .373 | .484 | .509 | .429 | .389 | .337 | .224 | .755 | .622 | .506 | .481 | .362 | .317 | .332 | .237 | .218 | .035 | .067 | .630 | .630 | .531 | .372 | .477 | .420 | .211 | .264 | .283 | .368 | |
| V006 Pearson Correlation Sig. (2-tailed) | | | | | | | 1 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 |
| V007 Pearson Correlation | .159 | .159 | .221 | .209 | .221 | .682 | .747 | 1 | .642 | .409 | .373 | .513 | .344 | .320 | .039 | .039 | .434 | .640 | .600 | .500 | .324 | .203 | .205 | .176 | .149 | .174 | .141 | .201 | .307 | .427 | .322 | .308 | .219 | .362 | .186 | .244 | | |
| V007 Pearson Correlation Sig. (2-tailed) | | | | | | | | 1 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | |
| V008 Pearson Correlation | .358 | .417 | .384 | .320 | .778 | .747 | .537 | .642 | 1 | .642 | .409 | .373 | .513 | .344 | .320 | .039 | .039 | .434 | .640 | .600 | .500 | .324 | .203 | .205 | .176 | .149 | .174 | .141 | .201 | .307 | .427 | .322 | .308 | .219 | .362 | .186 | .244 | |
| V008 Pearson Correlation Sig. (2-tailed) | | | | | | | | | 1 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 |
| V009 Pearson Correlation | .244 | .244 | .244 | .244 | .244 | .244 | .244 | .244 | .244 | 1 | .642 | .409 | .373 | .513 | .344 | .320 | .039 | .039 | .434 | .640 | .600 | .500 | .324 | .203 | .205 | .176 | .149 | .174 | .141 | .201 | .307 | .427 | .322 | .308 | .219 | .362 | .186 | .244 |
| V009 Pearson Correlation Sig. (2-tailed) | | | | | | | | | | | 1 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 |
| V010 Pearson Correlation | .209 | .209 | .209 | .209 | .209 | .209 | .209 | .209 | .209 | .209 | 1 | .642 | .409 | .373 | .513 | .344 | .320 | .039 | .039 | .434 | .640 | .600 | .500 | .324 | .203 | .205 | .176 | .149 | .174 | .141 | .201 | .307 | .427 | .322 | .308 | .219 | .362 | .186 |
| V010 Pearson Correlation Sig. (2-tailed) | | | | | | | | | | | | 1 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 |
| V011 Pearson Correlation | .278 | .278 | .278 | .278 | .278 | .278 | .278 | .278 | .278 | .278 | .278 | 1 | .642 | .409 | .373 | .513 | .344 | .320 | .039 | .039 | .434 | .640 | .600 | .500 | .324 | .203 | .205 | .176 | .149 | .174 | .141 | .201 | .307 | .427 | .322 | .308 | .219 | .362 |
| V011 Pearson Correlation Sig. (2-tailed) | | | | | | | | | | | | | 1 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 |
| V012 Pearson Correlation | .712 | .581 | .792 | .601 | .581 | .689 | .450 | .450 | .450 | .450 | .450 | .450 | 1 | .642 | .409 | .373 | .513 | .344 | .320 | .039 | .039 | .434 | .640 | .600 | .500 | .324 | .203 | .205 | .176 | .149 | .174 | .141 | .201 | .307 | .427 | .322 | .308 | .219 |
| V012 Pearson Correlation Sig. (2-tailed) | | | | | | | | | | | | | | 1 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 |
| V013 Pearson Correlation | .581 | .792 | .601 | .581 | .689 | .450 | .450 | .450 | .450 | .450 | .450 | .450 | .450 | 1 | .642 | .409 | .373 | .513 | .344 | .320 | .039 | .039 | .434 | .640 | .600 | .500 | .324 | .203 | .205 | .176 | .149 | .174 | .141 | .201 | .307 | .427 | .322 | .308 |
| V013 Pearson Correlation Sig. (2-tailed) | | | | | | | | | | | | | | | 1 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 |
| V014 Pearson Correlation | .601 | .581 | .689 | .601 | .581 | .689 | .450 | .450 | .450 | .450 | .450 | .450 | .450 | .450 | 1 | .642 | .409 | .373 | .513 | .344 | .320 | .039 | .039 | .434 | .640 | .600 | .500 | .324 | .203 | .205 | .176 | .149 | .174 | .141 | .201 | .307 | .427 | .322 |
| V014 Pearson Correlation Sig. (2-tailed) | | | | | | | | | | | | | | | | 1 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 |
| V015 Pearson Correlation | .689 | .601 | .581 | .689 | .601 | .581 | .689 | .450 | .450 | .450 | .450 | .450 | .450 | .450 | .450 | 1 | .642 | .409 | .373 | .513 | .344 | .320 | .039 | .039 | .434 | .640 | .600 | .500 | .324 | .203 | .205 | .176 | .149 | .174 | .141 | .201 | .307 | .427 |
| V015 Pearson Correlation Sig. (2-tailed) | | | | | | | | | | | | | | | | | 1 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 |
| V016 Pearson Correlation | .450 | .450 | .450 | .450 | .450 | .450 | .450 | .450 | .450 | .450 | .450 | .450 | .450 | .450 | .450 | .450 | 1 | .642 | .409 | .373 | .513 | .344 | .320 | .039 | .039 | .434 | .640 | .600 | .500 | .324 | .203 | .205 | .176 | .149 | .174 | .141 | .201 | .307 |
| V016 Pearson Correlation Sig. (2-tailed) | | | | | | | | | | | | | | | | | | 1 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 |
| V017 Pearson Correlation | .584 | .584 | .584 | .584 | .584 | .584 | .584 | .584 | .584 | .584 | .584 | .584 | .584 | .584 | .584 | .584 | .584 | 1 | .642 | .409 | .373 | .513 | .344 | .320 | .039 | .039 | .434 | .640 | .600 | .500 | .324 | .203 | .205 | .176 | .149 | .174 | .141 | .201 |
| V017 Pearson Correlation Sig. (2-tailed) | | | | | | | | | | | | | | | | | | | 1 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 |
| V018 Pearson Correlation | .584 | .584 | .584 | .584 | .584 | .584 | .584 | .584 | .584 | .584 | .584 | .584 | .584 | .584 | .584 | .584 | .584 | .584 | 1 | .642 | .409 | .373 | .513 | .344 | .320 | .039 | .039 | .434 | .640 | .600 | .500 | .324 | .203 | .205 | .176 | .149 | .174 | .141 |
| V018 Pearson Correlation Sig. (2-tailed) | | | | | | | | | | | | | | | | | | | | 1 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 |
| V019 Pearson Correlation | .584 | .584 | .584 | .584 | .584 | .584 | .584 | .584 | .584 | .584 | .584 | .584 | .584 | .584 | .584 | .584 | .584 | .584 | .584 | 1 | .642 | .409 | .373 | .513 | .344 | .320 | .039 | .039 | .434 | .640 | .600 | .500 | .324 | .203 | .205 | .176 | .149 | .174 |
| V019 Pearson Correlation Sig. (2-tailed) | | | | | | | | | | | | | | | | | | | | | 1 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 |
| V020 Pearson Correlation | .584 | .584 | .584 | .584 | .584 | .584 | .584 | .584 | .584 | .584 | .584 | .584 | .584 | .584 | .584 | .584 | .584 | .584 | .584 | .584 | 1 | .642 | .409 | .373 | .513 | .344 | .320 | .039 | .039 | .434 | .640 | .600 | .500 | .324 | .203 | .205 | .176 | .149 |
| V020 Pearson Correlation Sig. (2-tailed) | | | | | | | | | | | | | | | | | | | | | | 1 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 |
| V021 Pearson Correlation | .584 | .584 | .584 | .584 | .584 | .584 | .584 | .584 | .584 | .584 | .584 | .584 | .584 | .584 | .584 | .584 | .584 | .5 | | | | | | | | | | | | | | | | | | | | |

2. Internal Consistency Reliability

| Item | Cronbach's Alpha | Cronbach's Alpha Based on Standardized Items | No of Items | No of observations | Internal Consistency |
|--------------------|------------------|--|-------------|--------------------|----------------------|
| Vision | 0.724 | 0.724 | 3 | 30 | Acceptable |
| Flexibility | 0.712 | 0.712 | 3 | 30 | Acceptable |
| Directing | 0.701 | 0.702 | 3 | 30 | Acceptable |
| Delegating | 0.721 | 0.721 | 3 | 30 | Acceptable |
| Thoughtfulness | 0.722 | 0.722 | 3 | 30 | Acceptable |
| Pedagogical leader | 0.699 | 0.700 | 3 | 30 | Acceptable |

Validity

1. Content Validity

$$CVR = \frac{N_e - (N/2)}{N/2}$$

CVR= Content Validity Ratio

N_e = number of experts who declare an item of importance

N = The total number of experts Table

TABLE 1 : MINIMUM VALUE OF CVR, $P = .05$, SOURCE: (LAWSHE, 1975)

| No. of Panellists | Minimum Value |
|-------------------|---------------|
| 5 | .99 |
| 6 | .99 |
| 7 | .99 |
| 8 | .75 |
| 9 | .78 |
| 10 | .62 |
| 11 | .59 |
| 12 | .56 |
| 13 | .54 |
| 14 | .51 |
| 15 | .49 |
| 20 | .42 |
| 25 | .37 |
| 30 | .33 |
| 35 | .31 |
| 40 | .29 |

| Item | Question | Judge 1 | Judge 2 | Judge 3 | Judge 4 | Judge 5 | Judge 6 | Judge 7 | Judge 8 | Judge 9 | Judge 10 | Total Count | Content Validity Ratio (CVR) |
|------|----------|---------|---------|---------|---------|---------|---------|---------|---------|---------|----------|-------------|------------------------------|
| V1D1 | | 1 | | 1 | 1 | | 1 | 1 | | 1 | 1 | 7 | 0.75 |
| V1D2 | | 1 | | 1 | 1 | | 1 | 1 | 1 | 1 | | 7 | 0.75 |
| V2D1 | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | 9 | 1.25 |
| V2D2 | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | 1 | 9 | 1.25 |
| V3D1 | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 10 | 1.5 |
| V3D2 | | 1 | 1 | | 1 | | 1 | | 1 | 1 | 1 | 7 | 0.75 |

| | | | | | | | | | | | | | |
|-------|--|---|---|---|---|---|---|---|---|---|---|----|------|
| F1D1 | | 1 | 1 | | 1 | | 1 | 1 | 1 | 1 | 1 | 8 | 1 |
| F1D2 | | 1 | 1 | 1 | | 1 | 1 | 1 | | 1 | 1 | 8 | 1 |
| F2D1 | | 1 | 1 | 1 | | 1 | | 1 | | 1 | 1 | 7 | 0.75 |
| F2D2 | | 1 | 1 | 1 | | 1 | | 1 | 1 | 1 | 1 | 8 | 1 |
| F3D1 | | 1 | 1 | | 1 | 1 | | 1 | | 1 | 1 | 7 | 0.75 |
| F3D2 | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 10 | 1.5 |
| D1D1 | | 1 | 1 | 1 | | 1 | | 1 | | 1 | 1 | 7 | 0.75 |
| D1D2 | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 10 | 1.5 |
| D2D1 | | 1 | 1 | | 1 | | 1 | | 1 | 1 | 1 | 7 | 0.75 |
| D1D2 | | 1 | 1 | 1 | 1 | 1 | | 1 | | 1 | 1 | 8 | 1 |
| D3D1 | | 1 | 1 | 1 | 1 | | 1 | 1 | | 1 | | 7 | 0.75 |
| D3D2 | | 1 | 1 | 1 | 1 | 1 | | 1 | | 1 | | 7 | 0.75 |
| DL1D1 | | 1 | 1 | 1 | | 1 | | 1 | 1 | 1 | 1 | 8 | 1 |
| DL1D2 | | 1 | 1 | | 1 | | | 1 | 1 | 1 | 1 | 7 | 0.75 |
| DL2D1 | | 1 | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 9 | 1.25 |
| DL2D2 | | 1 | 1 | 1 | | 1 | | 1 | | 1 | 1 | 7 | 0.75 |
| DL3D1 | | 1 | | 1 | | 1 | | 1 | 1 | 1 | 1 | 7 | 0.75 |
| DL3D2 | | 1 | 1 | 1 | 1 | | 1 | 1 | 1 | 1 | 1 | 9 | 1.25 |
| T1D1 | | 1 | 1 | | 1 | | | 1 | 1 | 1 | 1 | 7 | 0.75 |
| T1D2 | | 1 | 1 | 1 | 1 | | | 1 | 1 | 1 | 1 | 8 | 1 |
| T2D1 | | 1 | 1 | | 1 | | 1 | 1 | 1 | 1 | 1 | 8 | 1 |
| T2D2 | | | 1 | 1 | 1 | | | 1 | 1 | 1 | 1 | 7 | 0.75 |
| T3D1 | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 10 | 1.5 |
| T3D2 | | | 1 | | 1 | | 1 | 1 | 1 | 1 | 1 | 7 | 0.75 |
| P1D1 | | 1 | 1 | | 1 | | 1 | 1 | 1 | 1 | 1 | 8 | 1 |
| P1D2 | | 1 | 1 | 1 | 1 | 1 | | 1 | 1 | | | 7 | 0.75 |
| P2D1 | | 1 | 1 | | 1 | 1 | | 1 | | 1 | 1 | 7 | 0.75 |
| P2D2 | | 1 | 1 | 1 | | 1 | 1 | | 1 | | 1 | 7 | 0.75 |
| P3D1 | | 1 | | 1 | 1 | | 1 | 1 | | 1 | 1 | 7 | 0.75 |
| P3D2 | | 1 | 1 | 1 | 1 | | 1 | 1 | 1 | | 1 | 8 | 1 |

2. Construct Validity: Convergent & Discriminant Validity

| | | Correlations | | | | | | | | | | | | | | | | | | |
|---|---------------------|--------------|---------|-------|-------|-------|---------|---------|---------|---------|--------|---------|---------|---------|-------|-------|-------|-------|-------|-------|
| | | V1 | V2 | V3 | F1 | F2 | F3 | D1 | D2 | D3 | DL1 | DL2 | DL3 | T1 | T2 | T3 | P1 | P2 | P3 | |
| V1 | Pearson Correlation | | 1.742** | 0.093 | 0.344 | 0.358 | 820** | 567** | 417* | 0.314 | 670** | 773** | 702** | 0.046 | 0.328 | 712** | 790** | 591** | 450* | |
| V2 | Pearson Correlation | 742** | | 1 | 0.286 | 0.354 | 570** | 787** | 863** | 497** | 441* | 748** | 671** | 843** | 0.274 | 369* | 879** | 813** | 754** | 528** |
| V3 | Pearson Correlation | 0.093 | 0.286 | | 1 | 0.234 | 0.339 | 0.336 | 0.357 | 546** | 0.21 | 0.328 | 0.186 | 0.15 | 824** | 0.125 | 374* | 0.328 | 0.277 | 538** |
| F1 | Pearson Correlation | 0.344 | 0.354 | 0.234 | | 1 | 0.531** | 464** | 428* | 0.337 | 755** | 506** | 382* | 0.332 | 0.216 | 960** | 531** | 477** | 0.211 | 0.282 |
| F2 | Pearson Correlation | 0.358 | 570** | 0.339 | 531** | | 1 | 0.521** | 538** | 411* | 492** | 681** | 430* | 484** | 0.266 | 493** | 711** | 524** | 408* | 382* |
| F3 | Pearson Correlation | 820** | 787** | 0.336 | 464** | 521** | | 1 | 0.768** | 470** | 508** | 727** | 841** | 699** | 398* | 419* | 816** | 919** | 801** | 505** |
| D1 | Pearson Correlation | 567** | 863** | 0.357 | 428* | 538** | 768** | | 1 | 0.467** | 420* | 711** | 595** | 740** | 430* | 382* | 831** | 862** | 758** | 463** |
| D2 | Pearson Correlation | 417* | 497** | 546** | 0.337 | 411* | 470** | 467** | | 1 | 0.396* | 497** | 476** | 488** | 527** | 0.273 | 479** | 514** | 0.329 | 870** |
| D3 | Pearson Correlation | 0.314 | 441* | 0.21 | 755** | 492** | 508** | 420* | 396* | | 1 | 0.510** | 0.342 | 410* | 0.265 | 787** | 544** | 487** | 0.318 | 469** |
| DL1 | Pearson Correlation | 670** | 748** | 0.328 | 506** | 681** | 727** | 711** | 497** | 510** | | 1 | 0.524** | 863** | 0.356 | 493** | 939** | 672** | 632** | 506** |
| DL2 | Pearson Correlation | 773** | 671** | 0.186 | 382* | 430* | 841** | 595** | 476** | 0.342 | 524** | | 1 | 0.506** | 0.234 | 0.306 | 634** | 783** | 704** | 401* |
| DL3 | Pearson Correlation | 702** | 843** | 0.15 | 0.332 | 484** | 699** | 740** | 488** | 410* | 863** | 506** | | 1 | 0.198 | 0.345 | 822** | 645** | 688** | 526** |
| T1 | Pearson Correlation | 0.046 | 0.274 | 824** | 0.216 | 0.266 | 398* | 430* | 527** | 0.265 | 0.356 | 0.234 | 0.198 | | 1 | 0.11 | 404* | 0.357 | 0.351 | 559** |
| T2 | Pearson Correlation | 0.328 | 369* | 0.125 | 960** | 493** | 419* | 382* | 0.273 | 787** | 493** | 0.306 | 0.345 | 0.11 | | 1 | 521** | 434* | 0.187 | 0.253 |
| T3 | Pearson Correlation | 712** | 879** | 374* | 531** | 711** | 816** | 831** | 479** | 544** | 939** | 634** | 822** | 404* | 521** | | 1 | 810** | 714** | 484** |
| P1 | Pearson Correlation | 790** | 813** | 0.328 | 477** | 524** | 919** | 862** | 514** | 487** | 672** | 783** | 645** | 0.357 | 434* | 810** | | 1 | 705** | 522** |
| P2 | Pearson Correlation | 591** | 754** | 0.277 | 0.211 | 408* | 801** | 758** | 0.329 | 0.318 | 632** | 704** | 688** | 0.351 | 0.187 | 714** | 705** | | 1 | 0.287 |
| P3 | Pearson Correlation | 450* | 528** | 538** | 0.283 | 382* | 505** | 463** | 870** | 469** | 506** | 401* | 526** | 559** | 0.253 | 484** | 522** | 0.287 | | 1 |
| ** Correlation is significant at the 0.01 level (2-tailed). | | | | | | | | | | | | | | | | | | | | |
| * Correlation is significant at the 0.05 level (2-tailed). | | | | | | | | | | | | | | | | | | | | |

The highlighted matrices indicate the association between the variables associated with four constructs Pedagogical Leadership, Delegating, Vision, Thoughtfulness, Directing, Flexibility

It can be seen that

1. There is a significant correlation within the measures of each construct- **indicating convergent validity**
2. There is no significant correlation between the measures of two constructs- **indicating divergent validity**

Thus construct validity is established

REGRESSION ANALYSIS

Model Summary

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate |
|-------|-------------------|----------|-------------------|----------------------------|
| 1 | .860 ^a | .739 | .735 | .37140 |

REGRESSION ANALYSIS

Model Summary

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate |
|-------|-------------------|----------|-------------------|----------------------------|
| 1 | .860 ^a | .739 | .735 | .37140 |

a. Predictors: (Constant), Pedagogical_Leader, Directing, Delegating, Thoughtfulness, Vision, Flexibility

The adjusted r square =0.735, Thus the independent variables can explain only 73.5%variability in dependent variable.

ANOVA^b

| Model | | Sum of Squares | df | Mean Square | F | Sig. |
|-------|------------|----------------|-----|-------------|---------|-------------------|
| 1 | Regression | 146.757 | 6 | 24.460 | 177.322 | .000 ^a |
| | Residual | 51.727 | 375 | .138 | | |
| | Total | 198.484 | 381 | | | |

a. Predictors: (Constant), Pedagogical Leadership, Directing, Delegating, Thoughtfulness, Vision, Flexibility

b. Dependent Variable: Teacher_Efficacy

Ho : All co-efficients are not significantly different from zero. H1 : At least one co-efficient is significantly different from zero.p-value = 0.000<0.05= α , the level of significance Null Hypothesis Ho is rejected.

Therefore, At 5% level of significance (95% confidence), atleast one co-efficient is significantly different from zero.

Coefficients^a

| Model | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
|------------------------|-----------------------------|------------|---------------------------|--------|------|
| | B | Std. Error | Beta | | |
| 1 (Constant) | 1.249 | .106 | | 11.821 | .000 |
| Vision | .453 | .029 | .657 | 15.661 | .000 |
| Flexibility | .552 | .033 | .039 | 16.543 | .000 |
| Directing | -.071 | .014 | -.150 | -5.046 | .000 |
| Delegating | .087 | .017 | .150 | 5.116 | .000 |
| Thoughtfulness | .080 | .019 | .150 | 4.333 | .000 |
| Pedagogical Leadership | .126 | .017 | .242 | 7.398 | .000 |

a. Dependent Variable: Teacher Efficacy

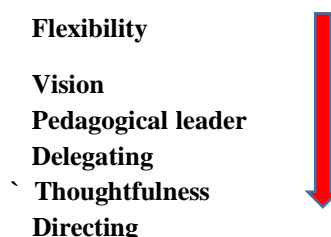
$$\text{Teacher Efficacy} = .453\text{vision} + 0.552\text{ flexibility} - 0.071\text{directing} + 0.087\text{delegating} \\ + 0.080\text{thoughtfulness} + 0.126\text{ pedagogical leader} + 1.249$$

It is observed that p-value all regression co-efficient is less than 0.05 the level of significance. Therefore the researcher may infer all attributes significantly contribute to Teacher Efficacy

It is also observed that there exists a negative impact of directing on Teacher Efficacy.

Findings:

1. Questionnaire designed to measure attributes of leadership contributing to teacher efficacy is reliable and valid
2. Amongst the attributes of leadership contributing to teacher efficacy “Flexibility” is most important
3. Amongst the attributes of leadership contributing to teacher efficacy “Directing” is least important
4. There is a negative impact of “Directing” on teacher efficacy which means as directing increases teacher efficacy decreases.
5. Attributes of leadership contributing to teacher efficacy in descending order of their importance



Conclusion

The research aims to infer the effect of leadership on Teacher efficacy. From the literature review 6 attributes of leadership were identified as Vision, Flexibility, Directing, Delegating, thoughtfulness, and Pedagogical Leader. A Regression Analysis was carried out taking Teacher Efficacy as a dependent variable and aforementioned six variables as independent variables. It was observed that Directing is least contributes to teacher Efficacy the remaining five attributes contribute significantly to teacher efficacy and the attribute of Leadership 'Flexibility' is contributing the most. Further, the attributes of Flexibility & Directing were taken for the first time in this kind of research presuming that their metamorphosis to influence could not be seen on Teacher Efficacy.

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