Effect of Self-Efficacy on Trainee Teachers' Effectiveness

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Abstract

Self-efficacy as Bandura (1986) defines is, one's own judgments of what one can accomplish with their skills. It is judgments about, what one thinks one can do. These judgments are a product of a complex process of self-appraisal and self-persuasion that relies on cognitive processing of diverse sources of efficacy information as, past performance, accomplishments, vicarious experiences, verbal persuasion, and physiological states. The present research is about assessing self-efficacy of trainee teachers and its impact on their teaching effectiveness. It is attempted under two major points. First point explores the range of self-efficacy scores of trainee teachers and also discusses the level of self-efficacy. Second explores the role of self-efficacy in enhancing trainee teachers' effectiveness. Descriptive survey method has been used for the purpose of data collection. A sample of 1003 trainee teachers was collected from Aligarh district of Uttar Pradesh (India) through simple random sampling technique. The tool used for data collection was, teacher self-efficacy scale (TSES) developed by Schwarzer, Schmitz, &Daytner (1999). Descriptive as well as inferential statistical techniques have been used for the purpose of analysis. The data has been analyzed by using SPSS version 16. The major finding of the present research is that, trainee teachers are having moderate level of self-efficacy. Some suggestions have also been provided in the paper to enhance self-efficacy of trainee teachers that will help in retention of good teachers in the profession of teaching, and in attracting best minds in the educational sector. Further, suggestions are also given to increase effectiveness of trainee teachers by enhancing their self-efficacy.

Keywords: Self-Efficacy, grit, trainee teachers, teacher educators, education.

Introduction

The progress of any nation depends on its population and their qualities. The quality of population is determined by their education. In the words of Yadav & Lakshmi (2003), education is the process of human development. Education aims at an all-round development of personality of the child. Teaching may occur in many

situations. Its focus must be on students' learning (Yadav & Lakshmi, 2003). Agencies of education are broadly classified into formal and informal agencies. School is one of the most important formal agencies. Here the child is exposed to the formal rules of socialization that help him to fit in the society at large. Teacher is the one who is directly engaged in instructing a group of pupils or students (Asia and the Pacific Programme of Educational Innovation for Development, 1990). In the words of Cunningham, *"teacher is actually the artist, who moulds his material (students) in his studio (i.e. school) according to his ideas (i.e. aims and objectives)"* (Kaur, 2016)

Teaching is the most important profession as it entails the shaping of child's future. Shaheen (2015) stressed that, a teacher's positive attitude towards the profession may kindle many lives and in the same way one's negative attitude may spoil many lives equally. OECD (2017) states that education systems, the world over, have a problem in recruiting high-quality graduates as teachers. Therefore, the teaching profession needs to be competitive with other occupations in attracting talented and motivated people. It is also stressed that, people attracted to the teaching profession should be generally of the right passion who are not only willing to assist learners but are appropriate role models for learners. Maphosa et al. (2014) suggests that teaching should not be taken as a career for those who cannot be accommodated in other careers, as it is a danger to have people who become teachers by default. In this regard, the State of Victoria in Australia as stated in the Department of Education and Early Childhood Development (2013) points out that, teaching is a career choice for talented people with the skills and attributes that make great teachers.

There are certain qualities that are expected and are vital for a teacher to possess so as to effectively perform the set tasks in schools. It takes a lot of hard work and dedication to produce the desired qualities in a teacher. For a good teacher, Kidwell (2013) as cited by Maphosa et al. (2014) reports that, a teacher should be able to create learning environments where students are active participants as individuals and as members of collaborative groups. On teachers' qualities, Tribune Media Services (2013) suggested that, unless you have an open mind, a good sense of humour, patience and excellent people skills, teaching may not be your calling. Similar view is presented by Coombe and Barlow (2009) that, a teacher should have a 'calling' for the profession.

In today's time, young graduates also look upon teaching as a profession of old people. Hence, they feel themselves less efficacious. The present research tries to explore *self-efficacy of trainee teachers and its impact on their effectiveness.*

Self-Efficacy

The psychological concept of 'self-efficacy' originated in the social cognitive theory of Albert Bandura (Bandura, 1977). Self-efficacy is very important in determining grit of the individual and the vice versa. Bandura (1982) defines perceived self-efficacy as "judgments of how well one can execute courses of action required to deal with prospective situations". Bandura (1986) defined self-efficacy as "people's judgment

of their capabilities to organize and execute courses of action required to attain designated types of performances." Therefore, self-efficacy is the belief that one has in himself or herself in being able to execute a specific task successfully (Bandura 1977, 1982, 1986, 1997). Eccles and Wigfield (2002) defined self-efficacy as an individual's confidence in his or her "ability to organize and execute a given course of action to solve a problem or accomplish a task". Pintrich& DeGroot (1990) suggested that, individuals with higher self-efficacy tend to be more motivated and successful on a given task.

Self-efficacy beliefs are not judgments about one's skills, rather, they are one's judgments of what one can accomplish with those skills (Bandura, 1986). In other words, self-efficacy judgments are about what one thinks one can do. These judgments are a product of a complex process of self-appraisal and self-persuasion that relies on cognitive processing of diverse sources of efficacy information (Bandura, 1990). Bandura (1977, 1986) categorized these sources of self-efficacy as, past performance, accomplishments, vicarious experiences, verbal persuasion, and physiological states.

Literature Review

Self-efficacy is a noncognitive trait that will assist in understanding student performance. It has been used in many studies to predict human behavior (Gore, 2006). Self-efficacy is correlated to academics (Chemers, Hu, &Gracia, 2001; Duckworth, 2016; Duckworth, & Quinn, 2009; Vuong, Brown-Welty, &Tracz, 2010). There is a strong connection between goal accomplishment and self-efficacy. Self-efficacy contributes to belief in one's ability to accomplish goals (Bandura, 1997; Bandura, &Cervone, 1983). Academic self-efficacy is about applying Bandura's definition of self-efficacy to academic goals (Duckworth, & Quinn 2009; Bandura, 1997). Researchers defined academic self-efficacy as "students' confidence in mastering academic subjects."

Hsieh (2007) studied students' goal orientation and self-efficacy on academic performance and found that students' approach and self-image plays an important role in academic success. It was also found that GPA is positively correlated with self-efficacy (r=.36) and with goal orientation (r=.40). Gore (2006) views self efficacy for a college graduate as the degree of confidence in completing college tasks.

Lent, Brown, & Larkin (1984) suggested that students' belief in their ability would translate into sustainable effort towards their goals. Chemers, Hu, & Garcia (2001) found that students with higher levels of self-efficacy perform at a higher academic level. Shaheen& Jahan (2018) found that mothers' qualification directly influences one's ability to persevere. Thereby making individuals more efficacious. This research paper explores self-efficacy scores of trainee teachers and effect of gender on self-efficacy of trainee teachers. It also explores the role of self-efficacy in enhancing trainee teachers' effectiveness.

Objectives of the Study

   I.   To find out the level of self-efficacy of trainee teachers.
  II.   To find out the difference in trainee teachers' self efficacy in relation to gender.
 III.   To study the role of self-efficacy in enhancing trainee teachers' effectiveness.

Hypothesis of the Study

In the light of the above-mentioned objectives, following research hypotheses have been formulated:

   I.   Trainee teachers have low level of self-efficacy.
  II.   Trainee teachers of different genders do not differ significantly in their self-efficacy.

Methodology

Descriptive Survey Design is used for the present study. All trainee teachers pursuing B.Ed. course from the District Aligarh, Uttar Pradesh (U.P.) constituted the target population for the present study. Simple random sampling technique has been employed by the investigators with the purpose to select a sample of 1003 trainee teachers pursuing B.Ed. course randomly from teacher education institutes of Aligarh district of Uttar Pradesh (India). The total data (1003 trainee teachers) has been collected in regard to trainee teachers' self-efficacy.

A research tool namely, Teacher Self-Efficacy Scale (TSES) developed by Schwarzer, Schmitz, &Daytner (1999) has been used for the purpose of data collection. TSES is four-point Likert scale consisting of 10 items. The total score ranges between 10 and 40. Total score is calculated by finding the sum of all the items. Higher score indicates more teaching self-efficacy.

According to Schwarzer, Schmitz, &Daytner (1999), the amount of time teachers spend voluntarily with their students is strongly associated with their Teacher Self–Efficacy. TSES yielded higher associations with several other personal attitudes unlike General Self–Efficacy scale. This is an indication of discriminant validity of the instrument (Schwarzer, Schmitz, & Daytner (1999).

Investigators themselves established the reliability of TSES. Cronbach's Alpha reliability was found to be 0.785. Split half reliability coefficient was found to be 0.722 which when corrected by Spearman Brown Prophecy Formula increased to 0.838.

The data has been analyzed through SPSS. Tabular and graphical representations have also been done for critical analysis of data. Analysis and

interpretation of the data forms the most important part of the study. Textual discussion has been done to make significant interpretation.

Analysis and Interpretation

Objective 1: To find out the level of self-efficacy of trainee teachers.

In order to assess the trainee teachers' level of self-efficacy, following hypothesis was formulated.

Hypothesis 1: Trainee teachers have low level of self-efficacy.

Table No. 1 showing mean self-efficacy score of trainee teachers

Variable	N	Mean	SD
Self- Efficacy	1003	32.22	5.43

The mean score of trainee teachers' self-efficacy is found to be 32.22 with a standard deviation of 5.43. Thus, it can be concluded that trainee teachers are having moderate level of self-efficacy. Therefore, the hypothesis no. 1: trainee teachers are having low level of self-efficacy, is rejected.

Objective 2: To find out the difference in trainee teachers' self efficacy in relation to gender.

In order to study the difference in grit in relation to gender following null hypothesis was formulated.

Hypothesis 2: Trainee teachers of different genders do not differ significantly in their self-efficacy.

Table 2: Table showing Mean Self-Efficacy Score on the basis of Gender

Self-Efficacy	N	Mean	SD	df	t-value
Female	688	32.209	5.415	1001	- 0.78**
Male	315	32.238	5.456		

**Not Significant

An inspection of the Table 2 indicates that the mean value of self efficacy scores of male trainee teachers is 32.238 with a standard deviation of 5.456 and the mean value of self efficacy score of female trainee teachers is 32.209 with a standard deviation of 5.415. On applying t-test, a t-ratio of -0.78 is obtained which is statistically insignificant. Therefore, null hypothesis, Ho.2: trainee teachers of different genders do not differ significantly in their self-efficacy, is accepted. This means that, there is no statistical significant difference in the self-efficacy of female and male trainee teachers. However, male trainee teachers are having higher mean score of self-efficacy as compared to their female counterparts.

The present finding reconfirms the finding of the Kumar and Lal (2006) that, individuals of different genders do not differ significantly in their self-efficacy.

Discussion and Conclusion

Teacher's role is pivotal for overall development of students. Those who join teaching profession against their will are less efficacious and more inclined to choose other professions. This results into frequent career changes of teachers. It resultantly creates instability in the educational sector. The present paper focusses on self-efficacy of trainee teachers.

From the present investigation it is found that trainee teachers are having moderate level of self-efficacy (N= 1003, M= 32.22, SD= 5.43) and grit (N= 1003, M= 42.19, SD= 5.84).

Some suggestions may help in enhancing self efficacy and teaching effectiveness of trainee teachers.

- Teachers can present good models before trainees.
- Verbal persuasion may be given. It brings attitudinal change. Effectiveness of verbal persuasion depends upon the expertness, trustworthiness, and attractiveness of the source.
- Trainees can be provided with frequent chances of accomplishments.
- Intermittent appreciation on achievements may also help in enhancing self efficacy.
- Good physical environment should be provided to trainees.
- Additional facilities must be provided to trainees for academic achievement and higher educational attainment.
- Educators can keep the trainees motivated for developing efficacy(Shaheen & Jahan, 2017).
- College environment should be amicable and teachers must exhibit friendly behaviour.
- Trainees can be trained for developing imaginal experiences i.e. the art of visualising oneself behaving effectively or successfully in a given situation (Maddux, 2000).
- Williams (1995) stressed that systematic desensitization, covert modeling and actual experience is likely to have strong an influence on self-efficacy.
- Girl Education should be stressed and given importance in order to develop a society of educated mothers and efficacious individuals (Shaheen & Jahan, 2018).
- B.A. /B.Sc. should be integrated to B.Ed. (Shaheen, 2014). This will develop professional maturity and permanent interest in trainees for the profession (Safaya, 2005).

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