

Cross-Sectional Study of Prospective Teachers' Sense of Self-Efficacy

Sadia Shaukat, Aishah Siddiquah

Abstract: The present study was conducted to investigate the changes in self efficacy of prospective teachers during a professional teacher training program. Self efficacy is the personal judgment or belief of how well one can execute the courses of actions required to deal with prospective situations. Researches support that teachers' self efficacy has been found to be one of the important variables related to positive teaching behaviors and students' achievement. Teachers with high self efficacy work harder and persist longer even when students are difficult to teach. It was hypothesized that the professional teacher training program would bring positive changes in self efficacy of prospective teachers. To test this hypothesis the researchers conducted a cross sectional study to investigate the changes in students during a professional teacher training program. For this purpose the researchers developed a questionnaire on five point (likert type scale) to measure the self efficacy of previous (before final year) and final year students of two year professional teacher training program. A sample of 289 prospective teachers was conveniently selected, out of which 146 students were selected from previous (before final year) and 143 students from final year. Data Analysis was conducted through t test, which showed that there was a significant difference between the previous (before final year) and final year students' sense of self efficacy. Moreover significant gender difference was also found.

Keyword: prospective teachers, self efficacy, locus of control, persistency, professional teacher training program

Self –Efficacy

Self-efficacy is a person's judgment about his or her ability to effectively perform a task, reach a goal, realization about the consequences of the actions, and overcoming obstacles for achieving the desired outcomes required to deal with prospective situations. (Barons and Byrne, 2005; Osborne, 1996; Donnell, Reeve, Smith, 2007, Huffman, 2006, Luthans, 2002,)

Self efficacy beliefs provide the foundation for human motivation; well being and personal accomplishment .Self efficacy beliefs help to determine the outcomes one

expects. Confident individuals anticipate successful outcomes. (Nayak and Rao, 2002). Efficacy beliefs also help to determine how much effort people will expend on an activity, how long they will persevere when confronting obstacles, and how flexible they will be in the face of unfavorable situations. (Luthans, 2002).

The higher the sense of self efficacy, the greater the effort, persistent and resilience. People with a strong sense of personal competence approach difficult tasks as challenges to be mastered rather than as threats to be avoided. They have greater intrinsic interest and deep engrossments in activities, set themselves challenging goals and maintain strong commitment to them, and heighten and sustain their efforts in the face of failure. Self efficacy beliefs also create the type of self fulfilling prophecy in which one accomplishes what one believes one can accomplish. Self efficacy has proven to be more consistent predictor of behavioral outcomes. Self-efficacy has been especially prominent in the studies of education such as academic achievement, attribution of success and failure, goal setting, career development and teaching (Nayak and Rao, 2002).

Teacher Efficacy

The role of self efficacy in teaching and learning continues to interest researchers and practitioners alike. (Hoy, 2000).The issue of teacher's efficacy is of importance as teacher preparation programs through the world attempt to address shortages of qualified competent teachers (Cakiroglu and Boone,2005) Teacher self efficacy has been found to be one of the important variables related to positive teaching behavior and student's achievement. (Gibson and Dembo, 1985; Woolfolk2004; Henson, 2001).

Teacher efficacy means teachers' belief that he or she can reach even the most difficult students and help them to learn. (Woolfolk, 2004; Henson, 2001). Teacher efficacy has been associated with significant variables as students' motivation; teachers' adoption of innovations, teachers' competence, teachers' class room management strategies, and time spent teaching certain subjects to special education (Hoy, 2000).

Teachers with a high sense of efficacy work harder and persist longer even when students are difficult to teach, in part because these teachers believe in themselves and in

their students. Teacher's sense of personal efficacy in high schools where other teachers and administrators have high expectations for students and where teachers receive help from the principals in solving instructions and management problems (Woolfolk, 2004). Meta analysis results of 114 studies with 21,616 participants showed that there is 72% probability that persons with high self-efficacy on a task have better performance than those with low self-efficacy (Stajkovic and Luthans, 1998). Researches support that teachers with a high sense of self efficacy have an effect on students' achievement. Self efficacious teachers spent more time on students' monitoring and checking their home work, provide opportunities to students to correct their responses through their questioning (Dimbo and Gibson, 1985).

Sources of Developing Self-Efficacy

According to Bandura (1994) and Pajares (2002) individuals form their self-efficacy beliefs by interpreting information primarily from four sources.

1. The most influential source is their own direct experiences or mastery experiences. Successes raise efficacy beliefs while failures lower self efficacy.
2. People form their self efficacy beliefs for interpreting the results of their actions through the vicarious experiences of observing others performing tasks.
3. Individuals also create and develop self efficacy beliefs as a result of the social persuasions they receive from others. These persuasions can involve exposure to the verbal judgments that others provide. Persuaders play an important role in the development of an individual's self beliefs.
4. Somatic and emotional states such as anxiety, stress, arousal and mood states also provide information about efficacy beliefs. People can gauge their degree of confidence by their emotional reactions to a task and provide cues about the anticipated success or failure of the out come, like people in depressed mood lower their self efficacy for performing the tasks. One way to enhance self efficacy beliefs is to improve physical and emotional

wellbeing and reduce negative emotional states, because individuals have the capability to alter their thinking and feelings, and in this way self efficacy beliefs can be enhanced.

Professional Development

According to Kydd, Crawford and Riches (1999), professional development is being recognized as crucial not only to the individuals but also to the promotion of effective and efficient organizations. Professional expertise is the capability to perform professional roles; professional expertise is embedded in the quality of the processes that constitute professional work. Professional development is an important concept for teachers. It helps teachers understand how they have to do their jobs. So in this sense training and experience is necessary for developing expertise as a teacher.

Teacher Training

Teacher education is perceived as a continuous process which consists of three distinct but closely interrelated consecutive stages of (a) initial, (b) induction, and (c) in-service education and training. None of these stages seems dispensable as each occupies a significant place in the continuum. Teacher training colleges and institutes are the specialist institutions for the purpose of primary and secondary teachers' education. Teacher training institutions can be used for holding refresher courses, seminars workshops and short term specialist courses for serving teachers on various aspects of education as demanded by the new trends in this field. (Siddiqui, 1991).

Experience and training is also an important element for developing a sense of efficacy in a career. Teachers' sense of self efficacy may be enhanced by providing future teachers with teaching experience in a variety of social context. Teacher education has been debated for many years. Prospective teachers tend to increase their personal sense of efficacy as a consequence of completing student teaching (Woolfolk, 2004). Whatever approaches are taken, future teachers must be prepared to deal with student failure and the uncertainty they feel about whether or not they are having an effect on student learning. (Dimbo and Gibson, 1985). While several studies have assessed the level of self-efficacy and the characteristics of self-efficacious teachers, there is a need to assess

prospective male and female teachers' beliefs about their ability to perform specific teaching competences before going into the classroom. (Brandon, 2000).

Prospective Teachers' Sense of Self-Efficacy

The development of teacher efficacy beliefs among prospective teachers has been and continues to be of interest to the researchers. Course and practical work have differential impacts on personal and general teaching efficacy. Students' teaching provides an opportunity to gather information about one's personal capabilities for teaching. (Hoy, 2000).

Purpose of the Study

The current study was designed to investigate the changes in prospective teachers' sense of self efficacy during the two year professional teacher training program.

This study was guided by the following hypothesis.

It was hypothesized that professional Teacher training program would bring positive changes in prospective teachers' sense of self efficacy.

Method

Participants

In this study 289 students (male 18.7%,female 81.3%) were selected who were enrolled in professional teacher training program in Punjab University Lahore.146 students were selected from previous and 143 from final year. All the nine programs (Elementary,13.8%, Secondary,6.92%, Islamic,20.1%, Science,12.45%, ECE,6.2%, Research and assessment,10.7%, ELT,5.9%, MBE,11.8%, MTE,12.1%). of professional teacher training program were conveniently included in a sample.

Instrument

A questionnaire was developed on a five point likert-type scale, comprised on 25 statements designed by the researchers of the study to measure self efficacy of previous(before final year) and final year students of teacher training program.

Validity and Reliability

54 statements (initial item pool) were developed for measuring the self efficacy of prospective teachers. Those items which had moderate and good mean score, they were selected. It was also validated by the experts. After pilot testing 25 items were finally selected.

Cronbach's alpha was used to determine the internal consistency of the instrument. The reliability coefficient for the questionnaire was.71, which is more than sufficient for 25 items questionnaire. (Ebel, 1986)

Procedure

All the students in the sample were asked to complete the (PTSE) questionnaire during the class time, Demographic data, including information about gender, program and year were also collected from the participants. Most students completed the questionnaire within ten minutes.

Data Analysis

Data analysis was conducted through t Test to determine the significant difference between Gender and Program (Final and previous year).

Results

Table 1 contains the prospective Teachers' means and standard deviations: Male (M=98.1, SD=7.16) and female (M=102.08, SD=8.34).The t (3.24) value, (p=.001) which shows that there is a significant difference between the self efficacy of male and female.

Table 1, t Test on male and female prospective teachers' sense of self efficacy

Variable	N	Mean	Std.Deviation	t value	Significance
Male	54	98.1	7.16	3.24	.001
Female	235	102.08	8.34		

Table 2 contains the Final and Previous year students' mean and standard deviations: Part
206

1(M=100.27, SD=8.31) and Part 2 (M=102.64, SD=8.40).The t (2.41) value, P=.017 shows there is a significant difference between the self efficacy of previous and final year students.

Table 2, t Test on of previous and final year students' sense of self efficacy

Variable	N	Mean	Std.Deviation	t value	Significance
Male	146	100.27	8.31	2.41	0.17
Female	143	102.64	8.40		

Conclusion

The results of the study show that there is a significant difference between the male and female prospective teachers' sense of self efficacy. Female have higher sense of self efficacy than males. There is also a significant difference between the part 1 and part 2 students' sense of self efficacy .Final year students have higher efficacy than previous year. Teacher education programs that facilitate the development of deep learning approaches may be better able to produce students with the kind of problem solving capabilities that sustain their self-efficacy when in the teaching role (Gordon, 2000). So the professional teacher training program is playing a vital role in developing the prospective teachers' sense of self efficacy.

Recommendations

In the light of above sources of self efficacy, we can develop prospective teacher's sense of self efficacy in the following ways.

- In the perspective of teaching, mastery experiences can be provided to students by presentation, teaching practice and micro teaching. These mastery experiences can be helpful for enhancing their self efficacy.
- Through class room presentations and teaching practice, students learn from one another's performance .These vicarious experiences play an important role in developing self efficacy of prospective teachers.

- Teachers should provide positive feedback to prospective teachers' performance during their professional teacher training program and evaluate their work accurately.
- Teachers help students how they can control their emotions in teaching, because negative emotions can hinder their performance.
- Provide prospective teachers with a variety of experiences in difficult social contexts.
- Provide prospective teachers with skills and opportunities to deal effectively with students' parents.
- Provide prospective teachers with skills and opportunities to deal effectively with students' problems in the classroom.

References

- Bandura, A. (1994). self-efficacy. In V.S. Ramachaudran (Ed.), *Encyclopedia of human behavior* (Vol.4, pp.71-81).New York: Academic press. (Reprinted in H. friedman [Ed.], *Encyclopedia of mental health*. an Diego: academicpress, 1998). Retrieved from <http://www.des.emory.edu/mfp/BanEncy.html>, on 1st, March, 2007.
- Baron, R.A., &Byrne, D. (2005).*Social Psychology*.Delhi: Pearson Education.
- Brandon, D.P. (2000). Self-efficacy: Gender Differences of prospective primary teachers in Botswana *Journal: Research in Education*.ISSN: 0034-5237Volume 64, November 2000, pp 36-43.
- Cakiroglu, J., Cakiroglu, E., &Boone, W.J., (2005).*Pre-service teacher self efficacy beliefs regarding science teaching: A Comparison of pre-service Teachers in Turkey and the U.S.A*. Retrieved from, <http://www.findarticles.com/p/articles/miqa4049/is200504/ain14718070>. on 23, March.2007.
- Dembo, M. &Gibson, S. (1985).Teachers' sense of efficacy: An important factor in

school Improvement. *The Elementary School Journal*, Vol. 86, No.2. (Nov., 1985), pp.173-184. Retrieved from, [http://links.jstor.org/sici?sici=00135984\(198511\)86%3A2%3C173%3ATS0EAI%3E2.0.CO%3B2-J](http://links.jstor.org/sici?sici=00135984(198511)86%3A2%3C173%3ATS0EAI%3E2.0.CO%3B2-J) on 20 March,2007

Ebel, R.L. & Frisbie, D.A., (1986). *Essentials of educational measurement*. Englewood Cliffs: printice Hall.

Henson, K.R. (2001). *Teacher efficacy: substantive implications and measurement dilemmas*. University of North Texas 76203-1337. retrieved from, <http://www.des.emory.edu/mfp/EREkeynote.PDF>. Retrieved on 6th, March.2007.

Hoy, Anita, Wool folk. (2000). Changes in teacher efficacy during the early years of teaching .Paper presented at the annual meeting of the American Educational Research Association, New Orleans, and L.A. Retrieved from <http://www.coe.ohio-state.edu/ahoy/efficacy%2043%2022.pdf> .Retrieved on,9th March.2007.

Huffman, Karen (2006). *Living psychology*. United States of America: John Wiley & sons, Inc.

Kydd,L., Crawford, M., & Riches, C.(1999). *Professional Development for educational management*.U.S.A. Trowbridge.

Luthans, F. (2002). *Organizational behavior*. New York: McGraw Hill.

Nayak, A.K., & Rao, V.K. (2002). *Educational Psychology*. New Delhi: A. P. H.publishing Corporation.

Osborne, R.E. (1996). *Self: An Eclectic approach*. New York: A Siomon & chuster company.

O'Donnell, A.M., Reeve, J., & Smith, J.K. (2007). *Educational psychology, reflection for action*. United States of America: John Wiley & sons, Inc.

Pajares, F. (2002). *Overview of social cognitive theory and of self-efficacy*. Emory University.

Retrieved from, <http://www.des.emory.edu/mfp/eff.html>. Retrieved on 7th, March.2007.

Siddiqui, M. Akhtar. (1991). *In-Service teacher education*. New Delhi: S.B.Nangia.

Stajkovic, A.D. and Luthans, F. "The relationship between self-efficacy and work-related performance: A Meta-Analysis", *Psychological Bulletin*. Vol. 124, No.2, 1998, pp. 240-261.

Wool folk, A. (2004).*Educational psychology* (9th Ed).New Delhi: Pearson Education.
India

Correspondence

Sadia Shaukat, Aisha Siddiquah
Email: sadiashch@msn.com