PROSPECTIVE TEACHERS' LOCUS OF CONTROL, PERSISTENT BEHAVIOUR, CLASSROOM ANXIETY AND PROFESSIONAL MASTERY BELIEFS

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ABSTRACT

This study was conducted to measure the prospective teachers' locus of control, persistent behaviour, classroom anxiety and professional mastery beliefs during teacher education program. An intact classroom of B.Ed program was randomly selected as a sample of the study. 70 prospective teachers including 67 females (95.7%) and 3 males (4.3%) with mean age of 1.83 (SD= 0.38) participated in this study. Teacher self-efficacy scale was administered at the end of first, second and third semesters of B.Ed program. Results showed that prospective teachers' locus of control, persistent behaviour, classroom anxiety and professional mastery beliefs remained stable and did not change significantly. For further investigation focused group discussions with prospective teachers were carried out. The findings of this study can help to develop and improve teacher education programs and pre-service teaching practices. Teacher education programs must be designed to bridge the gap between theory and practice to better prepare these teachers.

Keywords: *Locus of control, persistent behaviour, classroom anxiety, professional mastery, beliefs, teacher education.*

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INTRODUCTION

The significance of self-efficacy beliefs in teaching has been an interesting topic for researchers. Teachers' sense of self-efficacy affects teaching and promotes students' learning (Hoy & Spero, 2005) and it also has an impact on the professional development of teachers (Yeo et al., 2008). Several impactful influences on the development of prospective teachers' self-efficacy beliefs were examined at the induction stage of pre-service teacher education (Mulholland & Wallace, 2001). The teacher education programme is the critical time period for developing the self-efficacy beliefs of prospective teachers and it could be significant to the continuing development of prospective teachers' self-efficacy beliefs (Hoy & Spero, 2005).

Prospective teachers' efficacy beliefs relate to teachers' ability / competency to make a difference in students' learning. Prospective teachers' self-efficacy beliefs development has been of great interest to researchers because once efficacy beliefs are established they appear to be somewhat resistant to change (Tschannen-Moran et al., 1998). Prospective teachers' sense of personal efficacy increases during teacher education and teaching practice (Fives et al., 2007; Hoy & Woolfolk, 1990; Spector, 1990; Woolfolk, 2004). Ashton (1984) reported, the purpose of teacher training programme is to enhance the self-confidence and self-efficacy beliefs in teachers for effective classroom learning. Trainee teachers are provided the essential practical skills, components of teacher efficacy beliefs and teacher motivation. Bandura (1997) declared that prospective teachers with a greater sense of efficacy are more eager to accept challenging goals, have more determination and are more persistent in unfavourable situations.

Ashton (1984) highlighted the importance of teacher education programme for the development of teacher efficacy. A teacher training programme needs to conduct different teaching contexts for prospective teachers to practice and implement the concepts of teaching skills and pedagogies. They must be provided teaching experience under the supervision of experienced teachers to learn more about instructing and managing students in the classroom.

Training and teacher education programmes are the substantial aspects for developing efficacy in a teaching career (Woolfolk, 2004). Gordon (2000) reported that teacher education programmes provide problem solving tasks and learning based activities to student teachers to develop their self-efficacy beliefs

for teaching. Teaching practice is also a significant factor which affects or change prospective teachers' efficacy beliefs. Teaching practice is an event in which prospective teachers apply their theoretical knowledge regarding teaching skills in practice (Katrina, 2004). This teaching opportunity provides experience to prospective teachers how they have to apply their core knowledge and pedagogical skills during teaching and motivate students for learning. This teaching practice duration also helps to develop their personal teaching philosophies (Plourde, 2002).

Locus of control, persistent behaviour, classroom anxiety and professional mastery beliefs are the substantial indicators of self-efficacy beliefs (Myers, 2005; Woolfolk, 2004).

Locus of control is a significant factor of self -efficacy (Woolfolk, 2004). It refers to the person's belief about his/her ability to control his/her own behaviour in a given situation (Ajzen & Madden, 1986). Individuals with internal locus of control tend to believe that they have control on their willpower and they are instrumental in happening events, likewise individuals with external locus of control tend to believe events are caused by external factors like, luck or fate.

Self-efficacy beliefs have a significant relationship with levels of persistence. Self-efficacy beliefs have an effect on the selection of individuals' actions and activities, the exertion they spend on those actions and activities, how long they continue with them when they face problems and how they search out the coping strategies for them (Bandura, 1997). Individuals with high self-efficacy can demonstrate more persistent behaviour on difficult tasks than those individuals with low efficacy (Luthans, 2002; Myers, 2005).

It has been found that low self-efficacy is a facet feature of anxiety disorders (Maddux, 1991). Moreover, in studies of academic performance, it has been found that self-efficacy and test anxiety are negatively related (Pintrich & DeGroot, 1990; Smith et al., 1990) and that anxiety is a considerable negative predictor of efficacy strength (Meier et al., 1984). People with high efficacy beliefs control their thinking and have a low level of anxiety (Bandura, 1997). Teachers with high level of anxiety provided less verbal support for their students (Haroortunian & Koon, 1970). Similarly Clark (1970) found teachers with high anxiety beliefs allocated lower grades to their students.

There is a substantial relationship between self-efficacy beliefs and achievement in academic situations (Bandura, 1997; Schunk & Miller, 2002). Self- efficacy is a significant variable in understanding the human beings' achievement behaviour that what knowledge they obtain and how they use it in successful contexts (Schunk, 1982). Self -efficacy relates to personal opinions of how well one can manage and execute behaviour in situations that may be full of novel and stressful elements (Bandura, 1977). Efficacious people may feel confident in achievement situations and can control an anxious situation in a proper way.

Housego (2002) investigated the most important requirement for effective teaching in terms of self- confidence and self-efficacy beliefs. She proposed that the significant goal of pre-service teacher education program is to design those courses which develop or enhance the self-efficacy beliefs of prospective teachers. Housego found no significant difference in the self-efficacy beliefs of prospective teachers after the first, second and third term of secondary education program. No differences by gender or area of study were found.

Prospective teachers with high self-efficacy beliefs showed higher quality preparation in teaching and faced less difficulty in teaching as compared to low efficacious teachers (Burley et al., 1991). Pigge and Marso (1990) found that high self-efficacy prospective teachers handled their students with more care, helped them more in their studies and created a more healthy class room environment. Similarly, Fives et al. (2007) explored the relationship between prospective teachers' burnout and efficacy beliefs. He found that as the self-efficacy beliefs of prospective teachers increased their burnout decreased. He concluded that mastery experiences are a significant source of developing self-efficacy beliefs and reducing stress or anxiety.

Savran and Cakioglu (2003) reported that elementary and secondary pre-service teachers had more positive self-efficacy beliefs regarding science teaching. But secondary science teachers were significantly more efficacious than elementary science teachers in teaching science concepts effectively. Likewise Palmer (2006) wrote a research report on 55 primary pre-service science teachers. He measured science teacher efficacy beliefs during a one semester course on science teaching methods by using an instrument developed by Enochs and Riggs (1990). From a pre-test/post-test design he found that primary pre-service teachers' science efficacy beliefs significantly increased by the end of the

course. Moreover durability in pre-service teachers' science efficacy beliefs was also found in the delayed post- test.

However, some research studies described the non- significant effect of course work and practicum during teacher education on prospective teachers' beliefs regarding teaching. Researchers examined the change of professional skills and personal beliefs in pre-service teachers due to the effect of course work during teacher education (Kagan, 1992). Calderhead and Robson (1991) observed the professional attitude change in 12 prospective teachers enrolled in an elementary education programme after one year of course work. They were interviewed throughout the year about their anxious beliefs as teachers and their understanding of how to teach school students. The participants were also shown videos of different styles of teaching, writing and teaching lessons and evaluating students' performance. However in the actual situation of teaching, prospective teachers were unable to adapt their styles of teaching and methods of teaching according to the needs of pupils.

In Pakistan, a teacher education programme's basic purpose is to train prospective teachers to meet those challenges which they have to face in the classrooms in their future teaching career (Iqbal, 1999). Keeping in view the teacher status and future responsibilities of teachers, three components of teacher training, academic preparation, teaching skills and teaching practice are significantly important (Arends, 1994). Benz et al. (1992) stressed the importance of the teacher training programmes for helping prospective teachers in the decision making processes in the class rooms and recommended this as the most important component of a teacher training programmes. This study was specifically designed for determining the prospective teachers' locus of control, persistent behaviour, classroom anxiety and professional mastery beliefs before joining the teaching profession. This study was carried out with the following research questions:

1. Is there any difference in the locus of control of prospective teachers at the end of each semester of teacher's education program?
2. Is there any difference in the persistent behaviour of prospective teachers at the end of each semester of teacher's education program?
3. Is there any difference in the classroom anxiety of prospective teachers at the end of each semester of teacher's education program?
4. Is there any difference in the professional mastery beliefs of prospective teachers at the end of each semester of teacher's education program?

METHOD

Participants

Prospective teachers enrolled in the B. Ed program from a metropolitan university constituted the sample of the study. One intact class of Elementary B. Ed program was selected for this longitudinal study. A total of 70 prospective teachers participated in this study. There were 67 females (95.7%) and 3 males (4.3%) enrolled in the B. Ed program. Most of the prospective teachers had bachelor's in Arts background qualification. The mean age of participants was 1.83 (SD= 0.38). A large number of participants (58 with 82.9%) aged less than 20 years and only 12 participants (17.5%) were above 20 years.

Measures

Teacher Self-efficacy Scale

Teacher Self-efficacy Scale developed by Shaukat (2011) was used to measure the prospective teachers' self-efficacy beliefs. It was based on four factors: locus of control, persistent behaviour, classroom anxiety and professional mastery. The scale consisted of 25 items constructed on a 5-point Likert scale. Composite scale reported 0.83 Cronbach alpha reliability. The Cronbach alpha reliability of the locus of control factor was found 0.71, second factor persistent behaviour reported 0.84, third factor classroom anxiety indicated 0.78, and the fourth factor professional mastery beliefs reported 0.84 Cronbach alpha reliability.

Procedure

Data were collected form prospective teachers enrolled in the B. Ed teacher education programme at the end of their first, second and third semester. An intact class of B.Ed program consisted of 70 students responded to this questionnaire. After getting the consent of Head of department for data collection, researchers collected data from participants; participants were given full freedom to leave the survey if they do not wish to fill the questionnaires. Data were gathered through a self-administered approach by the researcher. Before data collection, it was make sure all the participants were present on that day. Researchers collected data from all the participants in their classroom in the same day, participants were given guidelines to fill the questionnaire.

Demographic information like gender, age, qualification was also taken from them. They were also told about the anonymous nature of the survey.

Focused Group Discussion

Focus group discussions (FGD) with B. Ed prospective teachers were organized at mutually appropriate time at the university. The questions of focused group discussions were specifically associated with the teacher self-efficacy questionnaire "Teacher Self-Efficacy Beliefs" designed to investigate the changes in prospective teachers' self-efficacy beliefs on four subscales: locus of control, persistent behaviour, classroom anxiety and professional mastery.

20 participants were selected for focused group discussions with defined criteria. Participants who gained lower and higher means scores on teacher efficacy beliefs composite scale were identified for FGD. Ten participants with lower mean scores and ten participants with higher mean scores were identified. There were eighteen females and only two males participated in FGD. A detailed session of pre-planned focused group discussion of one hour time line was conducted in the classroom of prospective teachers after their class time. Researcher explained the purpose of focused group discussions to prospective teachers and also provided guidelines to respond the questions. A tape recorder was used to record the discussions with prospective teachers with their permission. The researcher assured all the prospective teachers that the discussion matter would be confidential and will not be shared with anyone else.

Pre-planned questions related to teacher self-efficacy were asked from prospective teachers to investigate reasons of change in prospective teachers' efficacy beliefs. The following questions are presented:
- What do you think about the role of teacher educators in the development of locus of control during the teacher education programme?
- What do you think about the role of teacher educators in the development of persistent behaviour during the teacher education programme?
- What do you think about the role of teacher educators in the development of classroom anxiety during the teacher education programme?
- What do you think about the role of teacher educators in the development of professional mastery beliefs during the teacher education programme?
- Why did you select B. Ed teacher education program?
- Why teaching profession is important for you?

RESULTS

Data were analyzed in this study by using repeated measure Analysis of Variance (ANOVA) of the Statistical Package for the Social Sciences (SPSS software) to see the mean score difference in self-efficacy beliefs of prospective teachers enrolled in B. Ed program on the four subscales: locus of control, persistent behaviour, classroom anxiety and professional mastery beliefs across three semesters as suggested by Muller and Peterson (1984).

Table 1
ANOVA for Measuring Prospective Teachers' Locus of Control Enrolled in the B.Ed Programme (n= 70)

Scale	ANOVA		First Semester		Second Semester		Third Semester	
	df	*F*	*M*	*SD*	*M*	*SD*	*M*	*SD*
LOC	2	0.80	4.12	0.40	4.09	0.60	3.99	0.45

Note: LOC= Locus of Control

Table 1shows that there was no significant mean scores difference in the locus of control of prospective teachers at the end of first, second and third semesters.

Table 2
ANOVA for Measuring Prospective Teachers' Persistent Behaviour Enrolled in the B. Ed Programme (n= 70)

Scale	*ANOVA*		First Semester		Second Semester		Third Semester	
	df	*F*	*M*	*SD*	*M*	*SD*	*M*	*SD*
Persistent behaviour	2	2.72	4.56	0.42	4.40	0.57	4.56	0.32

Table 2 shows that there was no significant mean scores difference in the persistent behaviour of prospective teachers at the end of first, second and third semesters.

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Table 3
ANOVA for Measuring Prospective Teachers' Classroom Anxiety Enrolled in the B.Ed Programme (n= 70)

Scale	*ANOVA*		First Semester		Second Semester		Third Semester	
	df	*F*	*M*	*SD*	*M*	*SD*	*M*	*SD*
Classroom anxiety	2	2.97	2.04	0.63	2.36	0.98	2.16	0.76

Table 3 shows that there was no significant mean score difference in the classroom anxiety of prospective teachers at the end of first, second and third semesters.

Table 4
ANOVA for Measuring Prospective Teachers' Professional Mastery Beliefs Enrolled in the B. Ed Programme (n= 70)

Scale	*ANOVA*		First Semester		Second Semester		Third Semester	
	df	*F*	*M*	*SD*	*M*	*SD*	*M*	*SD*
Professional mastery	2	1.19	4.52	0.47	4.39	0.61	4.50	0.41

Table 4 shows that there was no significant mean scores difference in the professional mastery beliefs of prospective teachers at the end of first, second and third semesters.

Qualitative data

Focus group discussions with prospective teachers were conducted to find out the opinions of prospective teachers regarding the nature and implications of the teacher education programme.

During group discussions the prospective teachers were asked about the role of teacher educators in the development of ***locus of control*** during the teacher education programme.

Teachers, who are well organized, manage their teaching tasks efficiently and try to make a difference in students' learning. They also try to develop an organized behaviour in their students for accomplishing the classroom tasks properly. Teachers need to perform many duties simultaneously as a part of their job. For an example, a public school teacher is expected to perform a variety of tasks including assessing students' work, maintenance of their attendance record, fee collection, and preparation of results. These are the regular classroom tasks which are performed simultaneously in classrooms by school teachers. Prospective teachers revealed that they were not instructed properly about the classroom tasks which every teacher has to perform in school. Also, how to organize these tasks and manage them concurrently was a missing aspect from the teacher education programme.

Responses of prospective teachers:

'I was taught about the planning and organizing of classroom tasks but I am not confident to use these strategies practically. I do not know exactly what type of tasks usually teacher needs to do in a regular classroom'.

'I wished to learn the designing of pre- planned schedules for the completion of classroom task for future use. I was just taught theories of management and its important aspects. I do not know to design such schedules practically'.

'Fortunately! I got the book "How to organize self" on pre-planned activities from the library. I read how to organize academic tasks. Now I will make pre-planned schedule for my all assignments'.

Persistent behaviour beliefs

The persistency in behaviour is an essential characteristic of a professional teacher. This quality can be imparted to students through teaching and role modelling on the part of teacher educators. When prospective teachers were asked about the inclusion of this aspect, they denied its presence in the teacher education programme.

Persistency in teacher behaviour is reflected by the use of varied teaching methods, continuous feedback on the correction of students' mistakes and the determination to complete tasks to near perfection. Prospective teachers reported that their programme had no element in it to produce or develop determination

among the students. Monotonous teaching methods were used and did not emphasize on effective students' learning. No feedback on mistakes was provided to students to avoid them in further assignments. For example prospective teachers reported:

'I gained poor marks in my assignment and paper due to some mistakes, but my teacher did not give me feedback over my work. I remained unaware of my poor grades in that course. I wished to know my mistakes for further improvement'.

'I could not understand some concepts of the Assessment and Measurement subject. My instructor's style was very boring and was not according to the mental level of the students. The teacher did not repeat the important concepts of the lesson and did not make the concepts clear'.

'My instructors guided me about my mistakes in assignment and projects and advised me to avoid these mistakes in further assignments. I tried to adopt drill and practice strategy to avoid these mistakes'.

Classroom anxiety beliefs.

Fear and anxiety affect students' performance so there is a need to train them how to overcome their anxiety beliefs for effective teaching and learning. Prospective teachers explained that they were taught a course of guidance and counselling. Their teachers stressed more on the theory rather than practical implication of these strategies to overcome learning difficulties. The guidance and counselling course was not relevant to prospective teachers' needs like how to manage classroom tasks without getting anxious. Prospective teacher explained:

'My teacher did not teach us the practical use of guidance and counselling techniques. I am nervous about teaching those students who would have learning difficulties'.

'It was very unpleasant for me to submit all assignments at the end of semester near to exams, I could not prepare my exams well'.

Professional mastery beliefs.

Professional mastery relates to those teachers who can make a difference in students' learning and have strong understanding of the teaching and learning process. They value teaching as an important profession. They seek professional opportunities for self and others and support all teachers for positive student gain. These are the indicators of professional mastery of teachers which make them confident to bring about a change in students' learning. Prospective teachers reported that they did get the theoretical knowledge of these concepts, but they did not get their practical implications. Prospective teachers said:

'I was told about the importance of confidence, communication skill and mastery of knowledge, classroom management techniques but unfortunately I was not provided enough opportunities to practice these skills. I feel a lack in my professional skills'.

'My instructor taught me a course of teaching profession. I read about good qualities of teachers. Although I was not enough trained to implement such skills in myself'.

'During my study period I was taught by many teachers. The ways of teaching of some teachers were quite impressive, they not only acted as role models for professional teachers but also tried to train us as skilful teachers. However majority of teachers lacked this aspect in their teaching'.

DISCUSSION

The current study has revealed that prospective teachers' locus of control, persistent behaviour, classroom anxiety and professional mastery beliefs remained stable and did not show change significantly with the progression of teacher education program.

B.Ed teacher education is a one year programme and usually prospective teachers are enrolled after graduation with no teaching experience. During a one year teaching education programme they tend to get knowledge about general teaching methods. They generally learn the basic strategies of teaching and there is more emphasis on theoretical rather than practical knowledge. They have to undergo the short span practicum for performing teaching skills at schools. Due to such reasons, prospective teachers did not understand the ground realities of

teaching profession and showed stable (non-significant) results. This research finding is consistent with the study of Housego (2002) who found no significant difference in the self-efficacy beliefs of prospective teachers after the first, second and third term of a secondary education programme.

Prospective teachers engaged in too many curricular activities to meet the course requirements, this engagement over loaded them and kept them occupied in theoretical work only and this trend causes low motivation to develop their locus of control, persistent behaviour, low classroom anxiety and professional mastery beliefs as this research finding is consistent with the previous researches (Ginns & Tulip, 1995; Lin et al., 2001). Prospective teachers were assigned frequent assignments as course requirements irrespective of preparing them to manage classroom related tasks and teaching responsibilities at school level during their teacher education programme.

Conclusion

The teacher education programme is an important aspect of teacher preparation. Focused group discussions with prospective teachers showed that teacher education and teacher preparation are two different concepts of the teaching profession. The teacher education programme is a general scheme relating to teaching strategies and teaching theories. On the other hand, the teacher preparation programme focuses upon the concept of how to teach by applying best pedagogical knowledge (Howey & Zimpher, 1989). According to Hamre and Olyer (2004) teacher education programme has been found to be fundamentally flawed due to the lack of precise knowledge relating to field worldwide. It is very surprising in the Pakistani context, where more emphasis is given to theoretical knowledge and there is little focus on practical knowledge (Situation Analysis of Teacher Education in Pakistan, 2006). The significant evidence can be seen in the nature of courses which are being taught at B.Ed. Most of the courses are based on theoretical knowledge and have lack of professional development skills strategies.

Prospective teachers reported the role of teacher educators for developing their locus of control, persistent behavior, professional mastery beliefs and low classroom anxiety; no special effort was made by teacher educators. So keeping in view the shortcomings of the teacher education programme, it may be believed that the teacher education program is not playing a significant role in developing the teaching efficacy beliefs in prospective

teachers. Another view of the prospective teachers was that teacher efficacy beliefs were not intentionally in the minds of teacher educators while teaching courses because those beliefs were not the part of course outlines and objective of courses.

In order to enhance prospective teachers' teaching efficacy beliefs, they are encouraged to observe and involve variety of teaching experiences during their field experiences. It is no doubt that, field experiences provided the prospective teacher a number of new experiences in the classroom. The teacher education programme should demonstrate more practical work instead of theory. Prospective teachers should be trained by demonstrating practical teaching situations, such as exposure to real classroom teaching and to teachers' duties and role in a classroom for teaching students. By observing the real classroom situation prospective teachers can realize the actual teaching scenario and can be prepared to model their own role according to it.

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