



ORIGINAL RESEARCH PAPER

Education

GENDER DIFFERENCES IN MOTIVATIONAL BELIEFS AND LEARNING STRATEGIES AMONG PROSPECTIVE TEACHERS

KEY WORDS: Motivational Beliefs, Learning Strategies, Prospective Teachers.

Sandeep Kaur

Research Fellow Department of Education and Community Service Punjabi University, Patiala

ABSTRACT

In the present study, an attempt was made to explore gender differences in motivational beliefs and learning strategies among prospective teachers. The data was collected from 300 prospective teachers of Punjab through self-prepared socio-demographic sheet and Motivational Strategies for Learning Questionnaire (MSLQ). The reliability for the questionnaire has been by internal consistency and test-retest reliability. The dimensions of external goal orientation and control of learning beliefs have significant gender differences. Females were found to be significantly higher in external goal orientation and control of learning beliefs while internal goal orientation, task value, self-efficacy for learning and performance, test anxiety, rehearsal, elaboration, organization, critical thinking, meta-cognitive self-regulation, time and study management, effort regulation, peer learning and help seeking dimensions have non-significant gender differences. Therefore, the results of the study revealed no significant gender difference in motivational beliefs and learning strategies among the prospective teachers. Educational Implications of the results have been discussed.

Motivational Beliefs

Motivation refers to the forces encouraging a person to engage on a task or to pursue a goal in the school setting, it concerns the reasons for which a student works persistently to reach desirable result (Wolters & Rosenthal, 2000). Motivational beliefs refer to the opinions, judgment and values that students hold about objects, events or subject matter domains. Motivational beliefs act as a frame of reference that guide student's thinking, feelings and actions in a subject area. It is noteworthy that a students' beliefs about a domain may be dominantly favorable (optimistic) or unfavorable (pessimistic), thus providing a positive or negative context for learning. Knowledge of the students' motivational beliefs will help us to create learning environments that are well suited to their psychological needs. Motivation is also one of the founding constructs of psychology.

The word "motivation" is derived from the Latin word 'movere' which means "to move" hence in this basic sense, the study of motivation is the study of action (Eccles & Wigfield, 2002). Motivation in field of classroom learning is based on how learners think about the consequences of their behavior (motivational beliefs). Motivational beliefs also refer to the students' opinions of the efficacy or effectiveness of learning and teaching methods. According to Pintrich (1999) motivation is the most important component of learning in any educational environment. It is considered to be one of the best determining factors of students' success. Leonard & Scholl (1995) proposed five factors as the sources of motivation such as instrumental motivation (rewards and punish), intrinsic process motivation (enjoyment and fun), goal internalization (self-determined values and goals), internal self-concept based motivation (matching behavior with internally developed ideal self-external self-based motivation (matching behavior with externally developed ideal self). Individuals are influenced by five factors, though in varying degrees than can change in specific situation. Motivation is one of the most important components of learning in any educational environment (Maehr, 1984). The field of motivation is so broad and rich that in just 60 years that have been major upheavals in the field of metaphors and important new areas uncovered with essential new concepts introduced.

Learning Strategies

Learning strategies are "operations employed by the learner to aid the acquisition, storage, retrieval, and use of information, they are specific actions taken by the learner to make learning easier, faster, more enjoyable, more self-directed, more effective, and more transferable to new situations" (Oxford, 1990). Learning strategies are "those

process which are consciously selected by learners and which may result in action taken to enhance the learning through the storage, retention, recall, and application of information" (Cohen, 1998). Learners at all levels use strategies such as reading text repeatedly, copying notes, consulting peer, and asking instructors for clarification to actively process information and thereby influencing their mastery of material (Pintrich et al., 1993). Learning strategies are assessed by the Motivated Strategies and Learning Questionnaire (MSLQ) are rehearsal, elaboration, organization, critical thinking and meta-cognitive regulation.

It includes cognitive strategies for rehearsing, attending to, encoding and retrieving relevant verbal information and intellectual skills. Cognitive activities associated with learning generally planning a problem-solving approach or solution strategy monitoring, understanding and comprehension, evaluating progress towards one, goals and effectiveness and efficiency of solution strategies and modifying ones' approach to problem solving. Keefe (1979) believed that learning strategies are characteristics of cognitive, affective and psychological behaviors that serve relatively stable indicators of how learners perceive, interact with and respond to learning environment. Cognitive psychologist made a distinction between rote learning a meaningful learning by Ausubel et al. (1978) rote learning is verbatim memorization and is not necessarily by any understanding of terms. Sometimes learners are unable to explain information that is learning by rote and they are not able to translate the information in their own words. Meaningful learning on the other hand, is learning that is tied to previous knowledge and it is understood well enough to be manipulated and applied to novel situation, most learning is neither completely rote nor meaningful and can be placed on a rote meaningful continuum. Eric Hobson (2003) believed that meta-cognitive strategy is a necessary condition for academic success, knowledge alone is not sufficient. Bandura (1978) believed that primary goals are advancing knowledge and improving understanding meaningfully according to the needs and interests of learners. They tend to actively analyze needs and interests of learners.

Significance Of The Study

The present study has been undertaken to investigate the gender differences in motivational beliefs and learning strategies among prospective teachers. In this rapidly changing world, motivation is concerned with arousal of interest in learning and to that extent, is basic to learning. So, motivational beliefs and learning strategies are required for both male and female prospective teachers to learn and teach in education institutions. In the present study, female teachers

are significantly higher on the control of learning dimension of motivational beliefs and no gender difference found on rehearsal, elaboration, organization, critical thinking and meta-cognitive self-regulation dimensions of learning strategies. And there are also no gender differences on time and study, effort regulations, peer learning, help seeking dimensions of resource management strategies. The study may have implications to use motivational beliefs and learning strategies in evaluating their own performances so that motivational beliefs and learning strategies can be implemented properly among prospective teachers.

Review Of Related Literature

Ahmed & Khanam (2014) found that female had more control of learning beliefs than males. The study investigated by Balam (2015) revealed no significant differences between male and female post graduate students regarding strategies and motivation. However, Spahr (2015) results showed that significant differences in learning strategies and motivation of graduate learners between genders. Moalosi & Forcheh (2015) showed that females outperformed males with respect to student engagement but there were no significant gender differences with respect to instructional strategies and classroom management. Soraya & Surabaya (2020) investigated that there were differences between the motivational strategies done by male teacher and female teacher related to their gender. Liu (2021) study found that there were significant gender differences in the self-regulated online learning. The findings indicated that females performed better than males in various dimensions of learners' online self-regulated learning. Ostovar (2021) reported no significant difference was found among girls and boys in motivational components and self-regulated learning strategies.

Objective Of The Study

To explore gender differences in motivational beliefs and learning strategies among prospective teachers.

METHOD

The study was conducted through descriptive method of research.

Participants

A stratified random sample of 300 prospective teachers were selected from B.Ed. colleges in Fatahgarh Sahib, Patiala and Sangrur districts of Punjab. Out of the sample of 300 prospective teachers, 279 were females and 21 were males.

Instruments

The following tools were used by the investigator in the present study:

Self-Prepared Socio-Demographic Sheet: It was prepared by investigator herself and was used in order to seek the information about the personal variables such as name, gender, locale (urban/rural), academic achievement in terms of percentage of marks obtained in graduation of the prospective teachers were taken for analysis.

Motivational Strategies for Learning Questionnaire (MSLQ): The Motivational Strategies for Learning Questionnaire (MSLQ) developed by Pintrich et al. (1991) was used as a research tool in order to collect data for present study. MSLQ is a self-report instrument designed to assess teacher trainees' motivational orientations and their use of different learning strategies for a college course. There are 81 items on the 1991 version of the MSLQ. The scale was employed to assess the motivational beliefs and learning strategies of the teacher trainees. Each item has a seven-point response-Not at all true of me to very true of me. The questionnaire assessed the motivational beliefs and learning strategies over the following 15 dimensions viz. Intrinsic Goal

Orientation, Extrinsic Goal Orientation, Task Value, Control of Learning Beliefs, Self-Efficacy for Learning and Performance, Test Anxiety, Rehearsal, Elaboration, Organization, Critical Thinking, Meta-cognitive Self-Regulation, Time and Study Environment, Effort Regulation, Peer Learning and Help Seeking.

RESULTS AND DISCUSSION

Descriptive statistics namely mean, median and standard deviation were employed to study the motivational beliefs, learning strategies among the prospective teachers. The use of t-test was made to study the gender-wise differences in motivational beliefs and learning strategies among prospective teachers.

Gender differences in motivational beliefs and learning strategies among prospective teachers:

A description In order to find out the gender differences in motivational beliefs and learning strategies of prospective teachers, the data of male and female was subjected to mean scores and standard deviations obtained on motivation strategies and learning questionnaire and then t-test was employed to know their significance of difference. The mean scores, SD of male and female prospective teachers along with t-test are presented in the table I.

The table I shows that the mean scores, SD of male and female on 15 dimensions of motivational beliefs and learning strategies. Mean value in case of 'extrinsic goal orientation' dimension of motivational beliefs for male and female came out to be 21.62 and 23.57 respectively. The t-value testing motivational beliefs of male and female turned out to be 3.93 for 'extrinsic goal orientation' dimension of motivational beliefs which is significance at 0.01 level of significance.

The perusal of table I reveals the mean scores, SD of male and female on 15 dimensions of motivational beliefs and learning strategies. Mean value in case of 'control of learning beliefs' dimension of motivational beliefs for male and female came out to be 20.48 and 22.62 respectively. The t-value testing motivational beliefs of male and female turned out to be 2.22 for 'control of learning beliefs' dimension of motivational beliefs which is significant at 0.05 level of significance.

Table I: Gender Differences in Motivational Beliefs and Learning Strategies among Prospective Teachers

Sr.	Dimensions	Gender	Mean	SD	t-value
1.	Internal Goal Orientation	Male	22.33	3.17	0.91
		Female	23.17	4.14	
2.	External Goal Orientation	Male	21.62	5.88	3.93**
		Female	23.57	4.44	
3.	Task Value	Male	33.10	4.15	1.04
		Female	34.51	6.15	
4.	Control of Learning Beliefs	Male	20.48	4.20	2.22**
		Female	22.62	4.27	
5.	Self-Efficacy for Learning and Performance	Male	43.19	8.56	1.85
		Female	46.35	7.45	
6.	Test Anxiety	Male	18.62	5.85	0.45
		Female	19.29	6.62	
7.	Rehearsal	Male	22.33	3.73	0.06
		Female	22.28	4.15	
8.	Elaboration	Male	33.00	5.42	0.44
		Female	33.60	6.14	
9.	Organization	Male	21.38	3.56	0.29
		Female	21.65	4.27	
10.	Critical Thinking	Male	25.19	4.57	0.62
		Female	25.95	5.52	
11.	Meta-Cognitive Self-Regulation	Male	62.48	10.54	0.29
		Female	63.19	10.71	
12.	Time and Study Environment	Male	42.43	7.62	0.44
		Female	41.71	7.17	
13.	Effort Regulation	Male	17.19	3.69	0.98
		Female	18.16	4.44	
14.	Peer Learning	Male	16.33	2.22	1.24
		Female	15.37	3.48	
15.	Help Seeking	Male	21.62	3.56	0.46
		Female	21.17	4.35	

*p<0.05; **p<0.01

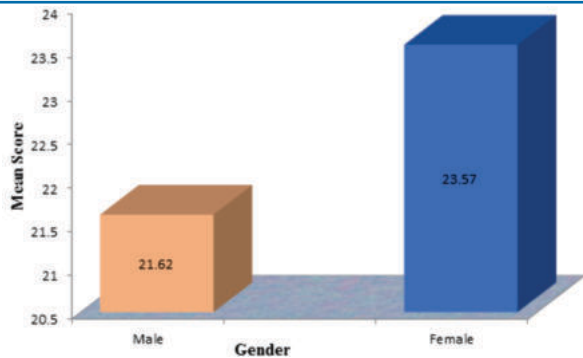


Fig. I Gender Differences in 'external goal orientation' dimension of motivational beliefs among Prospective Teachers

The figure I indicated that there were significant gender differences in 'external goal orientation' dimension of motivational beliefs. Female were found to be significantly higher on 'external goal orientation' dimension of motivational beliefs than their counterparts.

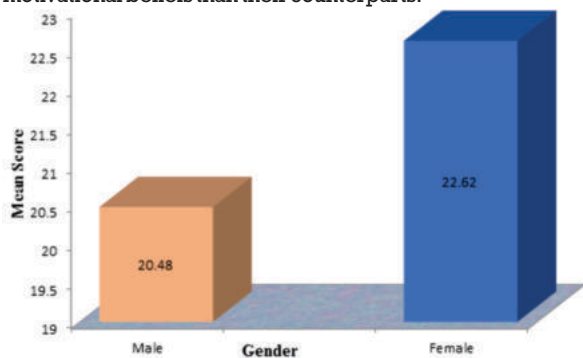


Fig. II Gender Differences in 'control of learning beliefs' dimension of Motivational Beliefs among Prospective Teachers

The figure II shows that there were significant gender differences in 'control of learning beliefs' dimension of motivational beliefs. Females were found to be significantly higher in 'control of learning beliefs' dimension of motivational beliefs than their counterparts.

It could be further noticed from the table I that the t-values testing the motivational beliefs of college student male and female turned out to be 0.91, 1.89, 1.04, 1.85 and 0.45 on the 'intrinsic goal orientation', extrinsic goal orientation, task value, 'self-efficacy for learning and performance' 'test anxiety' dimensions of motivational beliefs respectively. It showed that the t-test came out to be non-significant for 'intrinsic goal orientation', extrinsic goal orientation, task value, 'self-efficacy for learning and performance' 'test anxiety' dimensions of motivational beliefs even at 0.05 levels.

The table I further reveals that the t-value testing the learning strategies of prospective teachers' male and female turned out to be 0.06, 0.44, 0.29, 0.62 and 0.29 on the 'rehearsal', 'elaboration', 'organization', 'critical thinking', 'meta-cognitive self-regulation' dimensions of learning strategies respectively. It showed that the t-test came out to be non-significant for 'rehearsal', 'elaboration', 'organization', 'critical thinking' dimensions of learning strategies even at 0.05 levels.

The table I indicates that the t-value testing the resource management strategies of prospective teachers' male and female turned out to be 0.44, 0.98, 1.24 and 0.46 on the 'time and study environment', 'effort regulation', 'peer learning' 'help seeking' dimensions of resource management

strategies respectively. It showed that the t-test came out to be non-significant for 'time and study environment', 'effort regulation', 'peer learning' 'help seeking' dimensions of resource management strategies even at 0.05 levels. Hence, no gender differences were found. According to Nickki, 2009; Yukselturk et al. 2009 and Balam, E.M. 2015 revealed that there were no significant mean differences among motivational beliefs and learning variables with respect to gender.

Educational Implications

- The findings of the study suggested that male teachers were significantly lower on 'control of learning beliefs' dimension of motivational beliefs. The teachers must encourage the teacher trainees so that they are more likely to study strategically and effectively. Prospective teachers can use motivational beliefs in evaluating their own performance. Motivational beliefs of prospective teachers should be monitored and feedback provided to encourage them for positive outcomes.
- The findings recommended that prospective teachers during their training should provide extrinsic goal orientation such as grades, rewards, praise etc. so that these strategies can produce more beneficial effective results.
- The results of the study recommended that the prospective teachers should be provided environment during training period to enhance their self-efficacy for learning and performance, external goal orientation and control of learning beliefs. Professionals especially recruited for the purpose and teachers can help to serve the purpose.

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