

# Intrinsic Motivation, Extrinsic Motivation and Test Anxiety as Correlates of Self-Directed Learning among Urban Distance Learners



**Amita Kaistha**

Assistant Professor (Education),  
Dept. of Distance Education,  
Punjabi University, Patiala,  
Punjab, India

## Abstract

The present study is an attempt to explore intrinsic motivation, extrinsic motivation and test anxiety as correlates of self-directed learning among distance learners. A randomly selected representative sample of 312 post graduate students from urban area is taken for the study. Motivated Strategies for Learning Questionnaire (MSLQ, Pintrich, et.al. 1991) and Self-directed learning inventory are used as research tools. The results of the study revealed that intrinsic motivation is positively and significantly correlated with components of self-directed learning (awareness, learning strategies, learning activities, evaluation, interpersonal skills) and self-directed learning (overall), whereas, extrinsic motivation showed negligible and non-significant relationship with all the components of self-directed learning and self-directed learning (overall). However the correlation of test anxiety is negative and significant with all the components of self-directed learning and self-directed learning (overall).

**Keywords:** Self-Directed Learning, Intrinsic Motivation, Extrinsic Motivation, Test Anxiety, Urban Distance Learners.

## Introduction

Quick urbanization because of globalization and privatization resulted into easy access to advanced technology, information, better placement services and early jobs. Because of these conditions people from rural areas get attracted towards cities for better education, good health services, better living conditions and securities of life etc. Economic development, growth of private sector and growth of employment in cities demand more skillful workers and professionally sound people with strong self-beliefs and capacities along with the skill of self-development and self-direction, so as to keep pace with these economic advancements and to have frequent growth in life. Solely formal education system because of many constraints cannot cater to this need of society of providing higher education to the masses. After completing secondary education very less percentage of student population got the chance to enter into formal education system for getting higher education. Therefore, distance education as a best alternate which provides the opportunity to a large number of students to get higher education and complete their educational qualification and also give boost to their social, economic as well as professional growth. In other words, we can say that distance mode of education owes the responsibility to satisfy the urge of masses to get higher education. In distance education the process of teaching-learning differs from that of formal education. Here students and teachers are separated from each other and learning takes places in separation through the use of print materials, mechanical and electronic media and occasional instructions between teacher (instructor) and student. The prerequisite of distance education system is autonomy on the part of the learner for his better learning and success. This autonomy is a channel which leads the students towards inculcation of the skill of self-directed learning which helps them to achieve their goals and success in life.

## Review of Literature

The skill of self-learning is very much necessary for professional growth so as to be abreast with the changes posed by urbanization.

E: ISSN No. 2349-9443

Everyone should owe the responsibility of improving his/her skills as the need and demand arises in the society. Self-directed learning is a process whereby individual take the initiative in creating learning needs, articulating learning goals, recognizing resources (human and material) for learning, selecting and employing appropriate learning strategies, and evaluating learning outcomes with or without the help of others" (Knowles, 1975). Self-direction is Autonomy, self-management, learner control and autodidaxy (Candy, 1991). In the words of Gibbons (2002) "self-directed learning is a process of acquiring the knowledge for self-development and skill development irrespective of time and situation". Self-directed learning is focused and purposive mental process in which the person is involved in identification and searching out of information" (Long, 1987). During the process of self-directed learning the learner take part in information processing and constructs new knowledge at his own (Phillips, 1995 and McCombs, 2001) and self-monitor his learning progress (Zimmerman, 1998).

Research findings of Mok & Cheng (2002) reported cognitive factors (meta-cognition, self understanding, the difficulty level of task and awareness), control factors (self-control, control of the learning context), and affective factors as contributors towards self-directed learning. The affective factors in self-directed learning include the learner's motivation to learn (Dweck, 1986), attitudes toward learning, learning anxiety, test anxiety as well as the values placed on the learning task and the significance of the learning outcomes (Mok & Lung, 2005). Findings of the research study by Oladoke (2006) revealed that the doctoral learners possessed self-directed learning characteristics and they apply these characteristics to their learning, learning styles, motivation, control and convenience of learning during online course.

Various theories have discussed students' motivational behavior as predictor of success. Motivation provides energy to human behaviour for performing certain tasks and gives direction to his actions and ensure the endurance of his behaviour for performing that task. According to Brown (2007) motivation is "when the internally or externally administered reward is expected; choices are made to pursue the goals and the effort applied to realize them". In other words it is the belief of a student that he can accomplish a task and his judgment about his capability to perform that task successfully (Bandura, 1977). Turner (1995) described motivation as 'use of high ranking self-regulated strategies of learning (e.g. planning, monitoring, attentiveness and association) autonomously'. It is an important aspect in academic performance and learning and is also characterized as willingness and volition (Elliot & Dweck, 2005). A study on postgraduate students reported that students with high academic performance have higher level of intrinsic and extrinsic goal orientation, male students have higher scores on intrinsic goal orientation and extrinsic goal orientation, whereas, female students scored more in test anxiety (Banta, 2005). Shelly (2009) in a research study observed that strategic learning approach is positively and significantly

# Asian Resonance

related with intrinsic motivation, extrinsic motivation on the other hand surface learning approach was found to be significantly but negatively related with intrinsic motivation. Jahedi (2012) reported a significant correlation between the components of motivational beliefs and self-regulated learning components.

To enable learners so that they can advance their abilities, they need the curriculum and challenging and high quality instructional process. Creating learning opportunities to boost students' abilities in particular areas helps to increase students' motivational beliefs in those areas (Csikszentmihalyi, Rathunde, & Whalen, 1993; Renzulli & Reis, 1997; 3 Tomlinson, 2005). Regarding motivational beliefs Wolters and Rosenthal (2000) stated that studies exploring students' motivational beliefs have revealed that students with higher task value and a learning goal orientation are likely to develop "greater use of strategies that are designed to regulate students' cognitive and meta-cognitive engagement in academic tasks" (p.806). Students who have high motivational beliefs tend to use motivational regulation strategies than the ones who have low motivational beliefs. Motivation involves willingness for action to achieve a goal. Simon (1967) describes motivation as a cognitive process in which "a goal-terminating mechanism permits the processor to satisfice, dealing generally with one goal" (p.39).

Certain researches revealed that a particular level of anxiety may motivate the students and energize them to improve upon their academic achievement. Grow (1991) concluded that students with low self-directed learning readiness when exposed to a self-directed learning project, exhibit high level of anxiety on the contrary learners with a high self-directed learning readiness when exposed to increasing levels of teacher direction also exhibit high levels of anxiety (Wiley 1983, Grow 1991).

Motivation plays an imperative role in refining the quality of distance education (Latha, 1994). Research studies reported relationship between intrinsic motivation and academic success (Ayub, 2010 and Boyer & Usinger 2012). As per the educational opportunities available to the students from urban areas much has been expected from them. Therefore, there is need to explore intrinsic motivation, extrinsic motivation and test anxiety motivational beliefs among them in relation to self-directed learning. With this intention the researcher has undertaken the research problem entitled:

## **Intrinsic Motivation, Extrinsic Motivation and Test Anxiety as Correlates of Self-Directed Learning among Urban Distance Learners**

### **Objectives**

1. To study self-directed learning among urban distance learners in relation to intrinsic motivation.
2. To study self-directed learning among urban distance learners in relation to extrinsic motivation.
3. To study self-directed learning among urban distance learners in relation to test anxiety.

E: ISSN No. 2349-9443

**Hypotheses**

1. There will be a positive and significant relationship of self-directed learning with intrinsic motivation among urban distance learners.
2. There will be a positive and significant relationship of self-directed learning with extrinsic motivation among urban distance learners.
3. There will be a negative and significant relationship of self-directed learning with test anxiety among urban distance learners.

**Method**

**Sample**

This study was conducted by following descriptive method of research. A randomly selected sample of 312 students from urban area pursuing their post-graduation in various courses from the Department of Distance Education, Punjabi university, Patiala and University School of Open Learning, Panjab University, Chandigarh, was taken up for the study.

**Research Tools**

1. Motivated Strategies for Learning Questionnaire (MSLQ) developed by Pintrich et.al. 1991. This tool consists of two sections (i) motivation section and (ii) learning strategies section. In present investigation only three subscales intrinsic motivation, extrinsic motivation and test anxiety from motivation section were taken up to collect the data from the selected sample.
2. Self-developed Self-directed learning inventory was used, which is based on the Self Rating Scale of Self-directed Learning (SRSSDL) developed by Swapna Naskar Williamson (2007). The tool comprised of 25 items pertaining to five dimensions of self-directed learning namely awareness, learning strategies, learning activities, evaluation and interpersonal skills.

**Results**

**Statistical treatment of data**

The coefficients of correlation of self-directed learning (total) and its five dimensions with intrinsic motivation, extrinsic motivation, and test anxiety were computed for the sample of 312 urban distance learners and results of which are given in the following tables-

**Table 1: Self-directed Learning among urban distance learners in relation to Intrinsic motivation**

Sr. No.	Components of Self-directed Learning	Intrinsic motivation
1	Awareness	0.19**
2	Learning Strategies	0.24**
3	Learning Activities	0.28**
4	Evaluation	0.36**
5	Interpersonal Skills	0.24**
6	Self-directed Learning (overall)	0.36**

\*\*p<.01; \*p<.05

Table 1 shows that for urban distance learners' co-efficients of correlation of intrinsic motivation with awareness, learning strategies, learning activities, evaluation and interpersonal skills components of self-directed learning and self-directed learning (overall) are 0.19, 0.24, 0.28, 0.36, 0.24 and

# Asian Resonance

0.36 respectively. All these values of 'r' are positive and significant at 0.01 level. It shows that there exists a positive and significant relationship of intrinsic motivation with all the components of self-directed learning and self-directed learning (overall) thereby meaning that intrinsically motivated students are aware of their learning capacities, they pursue various learning strategies and perform different learning activities, they are able to evaluate their performance and have good interpersonal skills.

**Table 2: Self-directed Learning among urban distance learners in relation to Extrinsic motivation**

Sr. No.	Components of Self-directed Learning	Extrinsic motivation
1	Awareness	-0.08
2	Learning Strategies	-0.03
3	Learning Activities	0.05
4	Evaluation	0.10
5	Interpersonal Skills	0.03
6	Self-directed Learning (overall)	0.01

\*\*p<.01; \*p<.05

It may be observed from table 2 that for urban students the coefficients of correlation of extrinsic motivation with awareness, learning strategies, learning activities, evaluation and interpersonal skills components of self-directed learning and self-directed learning (overall) came out to be -0.08, -0.03, 0.05, 0.10, 0.03 and 0.01 respectively. All these values of 'r' are not significant even at 0.05 level. It indicates that for urban distance learners there exists no significant relationship between extrinsic motivation and all the components of self-directed learning and self-directed learning (overall).

**Table 3: Self-directed Learning among urban distance learners in relation to Test Anxiety**

Sr. No.	Components of Self-directed Learning	Test Anxiety
1	Awareness	-0.29**
2	Learning Strategies	-0.28**
3	Learning Activities	-0.31**
4	Evaluation	-0.14*
5	Interpersonal Skills	-0.30**
6	Self-directed Learning (overall)	-0.38**

\*\*p<.01; \*p<.05

It is clear from table 3 that for urban distance learners co-efficient of correlation of test anxiety with awareness, learning strategies, learning activities and interpersonal skills components of self-directed learning and self-directed learning (overall) came out to be -0.29, -0.28, -0.31, -0.30 and -0.38 respectively. All these values of 'r' are negative and are significant at 0.01 level, whereas, for evaluation component of self-directed learning the value of 'r' came out to be -0.14, which is also negative but significant at 0.05 level. This indicates that there exists significantly

E: ISSN No. 2349-9443

negative relationship of all the components of self-directed learning (awareness, learning strategies, learning activities, evaluation, interpersonal skills) and self-directed learning (overall) with test anxiety. Therefore, it may be inferred that there is a negative relationship between self-directed learning and test anxiety. Learner with high level of self-directed learning will be less anxious as compared to learner with low level of self-directedness.

#### Discussion

1. The results of present study indicate that intrinsic motivation has positive and significant relationship with awareness, learning strategies, learning activities, evaluation, interpersonal skills components of self-directed learning and self-directed learning (overall) among urban distance learners. These results can be discussed in the light of the findings of Marcou and Philippou (2005) who in their study reported a significant relationship between all components of self-regulated strategies and all motivational beliefs, where intrinsic motivation showed significant relation with problem solving performance. Study reported that students using self-regulated learning strategies have the prospects of having increased motivational beliefs and vice versa. Also, Kaur (2013) reported positive relationship of motivational beliefs including intrinsic goal orientation with learning strategies. Whereas, the research findings of Kingir et al. (2013) reported no significant relationships between self-regulation and goal orientations. Oladoke (2006) reported that affect abilities helps learner's to become self-directed in learning
2. Present study reported that extrinsic motivation has negligible and non-significant relationship with all the components of self-directed learning and self-directed learning (overall). This finding can be justified in the light of findings of Marcou and Philippou (2005) who reported that the Problem solving performance component of self-regulated strategies showed no significant relationship with extrinsic goal orientation.
3. Present study observed that test anxiety has negative and significant correlation with self-directed learning for urban distance learners. The results are in tune with the research evidences of Wiley (1983); O'Kell's (1988); Richardson (1988) and Grow, (1991) who reported negative relationship between anxiety and self-directed learning. The magnitude of relationship of test anxiety with all components of self-directed learning and self-directed learning (overall) was found to be strong for urban distance learners.

#### Conclusions

To summarize, it can be said that among urban students all the components of self-directed learning and self-directed learning (overall) has significant magnitude of relationship with intrinsic motivation which shows that students who are more intrinsically motivated are more aware of their learning capacities and actions. They pursue and adapt various learning strategies and learning activities to become self-directed learner in their task and owe the

# Asian Resonance

responsibility of their own learning. They have the ability to evaluate their performance from time to time and have well developed interpersonal skills and are more independent and self-directed in their learning. Test anxiety has a reciprocal relationship with self-directed learning skill. Learner with high self-directed learning skill showed less test anxiety as compared to the learner with low level self-directed learning. A comfortable and congenial environment which helps them to develop their learning abilities and motivational beliefs should be provided so as to boost up their self-learning skill. In distance education system such resources should be provided to the students which enhance their intrinsic and extrinsic motivational beliefs and help them to become highly self-directed learner and get success in life. Internally motivated learners actively process information and events, while utilizing the learning resources available to them in order to obtain new knowledge and skills in a self-directed way (Keller & Suzuki, 2004).

#### References

1. Ayub, N. (2010). *Effect of intrinsic and extrinsic motivation on academic performance*. Retrieved July 30, 2016 from [https://www.researchgate.net/publication/255712855\\_Effect\\_of\\_Intrinsic\\_and\\_Extrinsic\\_Motivation\\_on\\_Academic\\_Performance](https://www.researchgate.net/publication/255712855_Effect_of_Intrinsic_and_Extrinsic_Motivation_on_Academic_Performance)
2. Bandura, A. (1977). *Self-efficacy: Toward a unifying theory of behavioural change*. *Psychological Review*, 84(2), 191-215.
3. Banta, S. (2005). *Learning strategies and motivational components of academic performance of postgraduate students in distance and campus based education (Unpublished Ph.D. thesis in Education)*. Himachal Pradesh University, Shimla.
4. Boyer, N., & Usinger, P. (2012). *Tracking pathways to success: identifying learning success factors across course delivery formats*. *International Journal of Self-Directed Learning*, 9(1), 25-37.
5. Brown, L. V. (2007). *Psychology of motivation*. New York: Nova Publishers.
6. Candy, P. (1991). *Self-direction for life-long learning: A comprehensive guide to theory and practice*. San Francisco: Jossey-Bass.
7. Csikszentmihalyi, M., Rathunde, K., & Whalen, S. (1993). *Talented teenagers: The roots of success and failure*. New York: Cambridge University Press.
8. Dweck, C. S. (1986). *Motivational Processes Affecting Learning*. *American Psychologist*, 41, 1040-1048.
9. Elliot, A. J., & Dweck, C. S. (2005). *Handbook of competence and motivation*. New York: Guilford Press.
10. Gibbons, M. (2002). *The self-directed learning handbook: Challenging adolescent students to excel*. San Francisco, CA: Jossey Bass.
11. Grow G (1991). *Teaching learners to be self-directed*. *Adult Education Quarterly*, 41(3), 125-149

E: ISSN No. 2349-9443

12. Jahedi, S. (2012). A study of relationship between motivational beliefs and self-regulated strategies and academic achievement of school students. Retrieved February 22, 2013 from <http://hdl.handle.net/10.603/3842>.
13. Kaur, K. (2013). Motivational beliefs and learning strategies as correlates of achievement in Mathematics among college students of Punjab (Unpublished Ph.D. thesis in Education). Punjabi University, Patiala.
14. Keller, J., & Suzuki, K. (2004). Learner motivation and e-learning design: A multinationally validated process. *Journal of Educational Media*, 29, 229–239
15. Kingir, S., Tas, Y., Gok, G., and Vural, S. S. (2013). Relationships among constructivist learning environment perceptions, motivational beliefs, self-regulation and science achievement. *Research in Science & Technological Education*, 31(3), 205-226.
16. Knowles, M. S. (1975). *Self-directed learning: A guide for learners and teachers*. Englewood Cliffs: Prentice Hall/Cambridge.
17. Latha, K.P. (1994). The Role of motivation in Improving the Quality of Distance Education. An article on Distance Education in India: Studies in Quality and Quantitative Aspects. Editor. Manohar K.M. (1994), *Indian Distance Education Association, SDLCE, Kakatiya University, Warangal*.
18. Long, H. B. (1987). Self-directed learning and learning theory. *International Journal of Self-Directed Learning*, 5(1).
19. Marcou, A., & Philippou, G. (2005). Motivational beliefs, Self-regulated learning and Mathematical problem solving. Retrieved December 16, 2016 from [https://www.researchgate.net/publication/251410067\\_Motivational\\_beliefs\\_self-regulated\\_learning\\_and\\_mathematical\\_problem\\_solving](https://www.researchgate.net/publication/251410067_Motivational_beliefs_self-regulated_learning_and_mathematical_problem_solving).
20. McCombs, B. L. (2001). What do we know about learners and learning? The learner-centered framework: Bringing the educational system into balance. *Educational Horizons*, 79(4), 182-93.
21. Mok, M. M. C., & Cheng, Y. C. (2002). A theory of self-learning in a networked human and IT environment: Implications for education reforms. *International Journal of Educational Management*, 15(4), 172-186.
22. Mok, M. M. C., & Lung, C. L. (2005). Developing self-directed learning in student teachers. *International Journal of Self Directed Learning*, 2(1), 18-39.
23. Oladoke, A. O. (2006). Measurement of self-directing learning in online learners. *Dissertation Abstracts International*, 67(01), 61-A.
24. O'Kell, S. P. (1988). A study of the relationships between learning styles, readiness for self-directed learning and teaching preference of learner nurse in one Health district. *Nurse Education Today*, 8, 197-204.
25. Phillips, D. C. (1995). The good, the bad and the ugly: The many faces of constructivism. *Educational Researcher*, 24(7), 5-12.
26. Pintrich, P. R., Smith, D. A. F., Garcia, T., & McKeachie, W. J. (1991). *A manual for the use of the motivated strategies for learning questionnaire (MSLQ)*. The University of Michigan: Ann Arbor, Michigan.
27. Renzulli, J., & Reis, S. (1997). *The schoolwide enrichment model: A comprehensive plan for educational excellence (2nd ed.)*. Manfield Center, CT: Creative Learning Press.
28. Richardson, M. (1988). *Innovating andragogy in a basic nursing course: An evaluation of the self-directing independent study contract with basic nursing students*. *Nurse Education Today*, 8, 315-324.
29. Shelly. (2010). Approaches to learning in relation to motivational beliefs and academic achievement of professional students of Punjab (Ph.D. thesis in Education). Punjabi University, Patiala.
30. Simon, H.A. (1967). Motivational and Emotional controls of cognition [Review of the book *Models of thought*]. *Psychological Review*, 74, 29–39. Retrieved from <http://digitalcollections.library.cmu.edu/awweb/awarchive?type=file&item=33690>
31. Tomlinson, C.A. (2005). Quality curriculum and instruction for highly able students. *Theory into practice*, 44(2), 160–166
32. Turner, J. C. (1995). The influence of classroom contexts on young children's motivation for literacy. *Reading Research Quarterly*, 30(3), 410–441.
33. Wiley, K. (1983). Effects of a self-directing learning project and preference for structure on self-directing learning studies. *Nursing Research*, 32(3), 181-185
34. Williamson, S. N. (2007). Development of a self-rating scale of self-directing learning. *Nurse Researcher*, 14(2), 66-83.
35. Wolters, C. A., & Rosenthal, H. (2000). The relation between students' motivational beliefs and their use of motivational regulation strategies. *International Journal of Educational Research*, 33(7-8), 801-820.
36. Zimmerman, B. J. (1998). Developing self-fulfilling cycles of academic regulation: An analysis of exemplary instructional models. In D. H. Schunk & B. J. Zimmerman (Eds.), *Self-regulated learning and performance* (pp. 1-19). Hillsdale, N.J.: Lawrence Erlbaum Associates.

# Asian Resonance