

Association of Motivation with the Academic Achievement at Secondary Level in Pakistan

Tariq Javed¹, Professor Dr. Muhammad Aslam Asghar²

¹(PhD Scholar), Faculty of Social Sciences, Mohi-ud-Din Islamic University Nerian Sharif AJ&K

²Faculty of Social Sciences, Mohi-ud-Din Islamic University Nerian Sharif AJ&K

Received: March 28, 2017

Accepted: May 17, 2017

ABSTRACT

The study investigates the alliance of intrinsic and extrinsic motivation with the academic achievement of class X learners. The subjects for research consisted of 380 male and female secondary school teachers, working in 39 secondary schools along with 430 secondary school boys and girls, who were selected randomly by using multistage sampling skills. The objectives of the study were (a) to identify the present level of motivation for class X learners, and (b) to find out its effect on the academic achievement at secondary school level. It was hypothesized that (1) there is no amalgamation between the inclusive outcome of motivation in relation to teachers and learners, and (2) there is no guild of motivation with the academic achievement of learners. The research was descriptive (Survey) in nature. Research tool was developed on a five point Likert scale regarding intrinsic & extrinsic motivational techniques. The validity of research tool was validated by experts in the relevant field. The value of Cronbach Alpha (internal consistency) was found. 0.814 by using SPSS. Non parametric statistical tests, i.e. Chi Square and Mann-Whitney U test were applied for analysis purpose. The results were found significant in relation to motivation for academic achievement of secondary school students.

KEY WORDS: Motivation, Intrinsic motivation, Extrinsic motivation, Academic achievement, GPA, Statistical Tests, Secondary Schools

INTRODUCTION

All human beings want to engage themselves in different behaviors to achieve success for survival. Intrinsic theory of motivation is based on intrinsic and biological factors. Most of the animals seasonally migrate from one place to another due to their specific needs and because of their intrinsic motivation, which may occur on the basis of their needs. Similarly, learners are also motivated for certain behaviors due to natural inborn characteristics [1]. Those psychological forces through which the direction of individual's behavior, strength of effort and course of action during problem phase can be determined are named as motivation [2]. Kumar has expressed that the motivation is procured from the term motive which defines the movement towards the goal through mind and behavior. Motivation is the process to influence on an individual's behavior, so it can be called as the net amount of effort and energy which is consumed to achieve certain organizational goals. Motivation is associated with the needs and rewards or incentives [3]. Many researchers have thought that motivation is directly linked with goals [3]. Some scholars have strong position that motivation is purely a psychological phenomenon [4]. It is also a devotion of an individual to complete a specific task [5]. The motivation provides a basic purpose and direction to accomplish the behavioral process [6], while Ahlstrom & Bruton have stated that motivation is an intrinsic power which provides stimulus to an individual to achieve goals. Positive emotions of an individual are promoted and negative emotions are avoided through motivation [7]. However, Latham has stated that motivation is the acceptance of individual's need in a real environment. The level of satisfaction with learners and the level of performance towards achievement increases with the high level of acceptance of needs [8].

Academic achievement is the performance level of a student which focuses on attaining learning objectives, desired knowledge, skills and competencies in the learning process. When a student completes course activities with active, successful participation ultimately enhancement of academic achievement occurs. Both Grades and GPA are the traditional ways to measure performance of students [9]. Measurement of academic success in terms of GPA or Grades is known as academic achievement [10, 11].

The teacher is the main agent of motivation and encouragement for learners in the classroom. The teacher can enhance the level of motivation of the learners through effective strategy which builds a strong positive relationship and confidence on their abilities in studies. The classroom environment facilitates the learner socially and creates the ability of mutual respect and honor among the learners. The learners obtain emotional support and encouragement from teachers and peers to achieve educational goals [12]. Consequently, there is a direct association between motivation and the academic achievement of learners.

STATEMENT OF THE PROBLEM

The focus of the research was to enquire the association of motivation with the academic achievement at secondary level in Pakistan.

OBJECTIVES OF THE STUDY

The following were the objectives of the study:

- i. To identify the present state of motivation at secondary level.
- ii. To find out the effect of motivation on the academic achievement.

NULL HYPOTHESES

Two null hypotheses were constructed by the researcher.

- H_{O_1} : There is no amalgamation between the inclusive outcome of motivation in relation to teachers and learners.
- H_{O_2} : There is no guild of motivation with the academic achievement of Class X learners.

RESEARCH DESIGN

The research explicates the association of motivation and academic achievement of learners in teaching learning process. The facts and figures were collected through survey research. The association of independent variable motivation and academic achievement of students was studied. Data were collected from representative groups of male and female Teachers and learners of class X. The analysis of data was made through statistical tests.

POPULATION OF THE STUDY

The research was carried out in academic session 2013-2015 to see the productiveness of motivation on the academic achievement of class X learners. 2375 teachers along with 12648 Class X learners in 134 institutions amalgamated with the Federal Board of Intermediate and secondary education Islamabad, Pakistan (Result Gazette, 2014) comprised the population of the study.

SAMPLE

The sample of the study was selected through multistage sampling. 380 male and female secondary school teachers working in 39 secondary institutions along with 430 Class X learners were randomly selected as a sample for the research purpose.

The categorization of sample was constructed by the researcher. Foundation of categories were comprised the basis of number of students. 8597 students of Rawalpindi and Wah regions were named as large category of schools. 2380 of Lahore, Multan and Peshawar regions were designated as medium category schools, while 1740 students of Kharian, Gujranwala, Bahawalpur, Karachi and Quetta Regions were labeled as small category schools. FBISE is the examining and evaluating body of all the sample schools.

REVIEW OF LITERATURE

Several researches have proved that peer emotional support and higher academic achievement are positively correlated in terms of behaviorally and emotionally engaging of learners in a classroom environment. These associations are directly linked to perceptions, feelings, emotions and sense of satisfaction of learners during the teaching learning process. Motivation provides the ability to enhance cognitive engagement of learners to compete and achieve higher educational achievement [13]. Ken has suggested some strategies of learner motivation as summarized below:

- i. The passion of teacher motivates learner towards learning. The teacher should be a role model for students. The teacher should present the lesson or task with great enthusiasm and devotion.
- ii. Teacher should take personal interest during instruction so that students motivate about their inner abilities.
- iii. Concrete examples from daily life as per lesson must be delivered.
- iv. Students must engage in the learning process.
- v. Activity based learning should be promoted to enhance the interest of the learners.
- vi. Teacher should set realistic and achievable objectives of the lesson.

- vii. Positive feedback should be provided at the proper time.
- viii. Teacher should acknowledge the hard working of learners.
- ix. Constructive criticism must be promoted in a classroom environment.
- x. Formative assessment can be used to evaluate the learner's level of achievement [15].

The interest of students towards learning and higher achievement is created through intrinsic motivation. Different motivational techniques are used to reshape the behavior of learners in order to achieve academic goals [13]. The mechanism of motivation is transmitted and exposed to others through social lines. The achievement of goals spreads among the learners rapidly and automatically which is a source of inspiration for other learners [16] and thus goals are also associated with the relationship of others [17], achievement of goals through motivation can be made with the help of sharing and discussion [18].

Motivation and emotions are directly associated with the cognitive performance [19]. Emotions are the sub processes of affective and cognitive domains of learning. Motivations and emotions, both help in the adjustment of an individual in a specific environment [20]. Motivation is also considered as the will of an individual to learn, discover more and to get rewards and avoidance from punishment [21]. Similarly, it is the intrinsic state of an individual's behavior through which he moves towards desirable tasks or gets away from undesirable tasks [20].

There are many factors through which people can be motivated. People are motivated due to strong extrinsic forces. Intrinsic motivation of learners can be created on the basis of their interest and willingness towards the achievements because such a state of doing something is enjoyable and interested in them. It is found from different researches that the goals of individuals provide the opportunities to act [22]. Ryan & Deci have suggested that the quality of an individual's performance can be enhanced due to intrinsic motivation, because it provides pleasure and satisfaction [23]. Similarly, Thomas has said that intrinsically motivated learners want to find out the solutions of the problems because the problems are challenging for them and the solutions of problems give a sense of satisfaction to them. There are four types of rewards for intrinsically motivated learners: (a) concept of expression, (b) choice of selection, (c) position of challenge and (d) movement towards enhancement. All these variables give satisfaction and pleasure to learners. Intrinsically motivated individuals make their own selection of choices and acknowledge their feelings, emotions and self directed opportunities [24].

Factors affecting learner achievement are shown in figure 1 and 2:



Figure 1 : Extrinsic Motivation Factors Affecting Learner's Academic Achievement



Figure 2: Intrinsic Motivation Factors Affecting Learner's Academic Achievement

Intelligence under stimulus and response approach is considered as the main factor to achieve high academic achievement, which has been admitted fact for many years in any educational system and yet it has an effective approach. Teachers use many effective variations like supervision, guidance, counseling, evaluation, internal control, external control, punishment and encouragement make confidence in the learning process. Students feel pleasure, happiness, eagerness, anxiety and tiredness under such circumstances. Most of the teachers create an internal classroom learning environment through any external control [25].

METHODOLOGY

The motive of the research was to see the reflection of intrinsic and extrinsic motivation in producing high academic achievement. The research design of the study is shown in Figure 3.

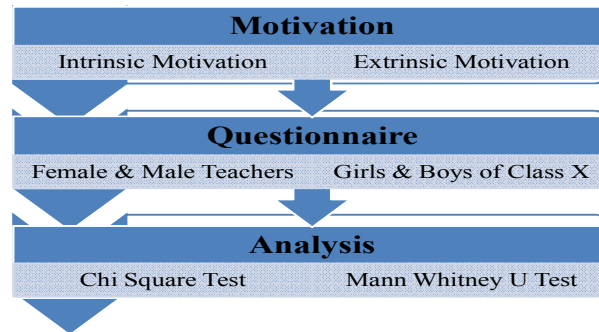


Figure 3: Research Design of the study

RESEARCH INSTRUMENT

Five point questionnaire on a Likert scale was constructed by the researcher. A questionnaire was consisted 14 statements about the nature and association of motivation and academic achievement. A questionnaire was translated in Urdu version for class X students to obtain an accurate response. Cronbach Alpha was used to test the internal consistency of the research instrument. The pilot study was conducted to look over the effectiveness of instrument for study. The value of Cronbach Alpha was .814.

DATA ANALYSIS AND RESULTS

The analysis of the collected data was made through non parametric statistical tests. Chi square was used to explore the nature of motivation at the secondary level while the association of motivation and academic achievement was calculated through Mann Whitney U Test. The detail of analysis is stated in the following tables.

Table 1: Overall Motivation Scores in Large Institutions

Category	Strongly Agreed	Agreed	Neutral	Disagreed	Strongly Disagreed	Total	χ^2
Lady Teachers	754	534	28	78	06	1400	333.98
Girls of Class X	702	459	26	169	44	1400	
Male Teachers	583	629	23	84	11	1330	
Boys of Class X	689	464	50	216	121	1540	
At 0.05 level of significance		d f= 12		Tabulated value = 21.03			

Table 2: Overall Motivation Scores in Medium Institutions

Category	Strongly Agreed	Agreed	Neutral	Disagreed	Strongly Disagreed	Total	χ^2
Lady Teachers	224	326	69	37	114	770	93.49
Girls of Class X	211	185	67	51	144	658	
Male Teachers	230	370	42	50	106	798	
Boys of Class X	258	219	57	32	134	700	
At 0.05 level of significance		d f= 12		Tabulated value = 21.03			

Table 3: Overall Motivation Scores in Small Institutions

Category	Strongly Agreed	Agreed	Neutral	Disagreed	Strongly Disagreed	Total	χ^2
Female Teachers	63	19	12	111	103	308	197.34
Girls of Class X	164	08	81	228	149	630	
Male Teachers	55	36	05	112	100	308	
Boys of Class X	141	127	81	153	254	756	
At 0.05 level of significance		d f= 12		Tabulated value = 21.03			

Table 1, Table 2 and Table 3 stipulate the calculated and tabulated values of chi square in all the three categories of institutions in relation to see the existence of motivation as per opinion of litigators. The calculated values of chi square in all the three tables were greater than the tabulated value of chi square by using 12 degrees of freedom. Therefore, first above mentioned hypothesis H_{01} was not accepted.

Table 4: Net Effect of Motivation on the Academic Achievement

Responses “A”	Achievement Level “B”	Values for “A”	Ranks for “A”	Values for “B”	Rank for “B”
4074	485	541	4	000	1
3376	628	1286	8	119	2
541	858	1321	9	485	3
1321	632	3376	11	628	5
1286	119	4074	12	632	6
	000			858	7
	1903			1903	10
Result Detail “A”		Result Detail “B”		Result Detail Combined “A & B”	
Sum of Ranks= 44		Sum of Ranks= 34		Sum of Ranks= 78	
Mean of Ranks= 8.8		Mean of Ranks= 4.86		Mean of Ranks= 6.5	
Expected sum of Ranks= 32.5		Expected sum of Ranks= 45.5		S.D= 6.157	
Expected Mean of Ranks= 6.5		Expected Mean of Ranks= 6.5			
U-value= 6		U- value= 29			
Expected U-value:17.5		Expected U-value:17.5			
Result “A” – Z-ratio					
The Z-score is -1.7864. The p-value is 0.07346.					
U-value= 6. The tabulated value of U is 5 at “p” less and equal to .05.					
At 0.05 level of significance					

The net guild of motivation on the academic achievement of Class X learners as per responses of all litigators in all institutions is mentioned below:

Table 4 declares that the net guild of intrinsic and extrinsic motivation on the academic achievement of learners of Class X. The calculated value of "U" in Mann Whitney U test was not located in acceptance region. Therefore, above alluded second hypothesis H_{02} was rejected.

FINDINGS

The results were observed significant association exists in relation to motivation. Greater computed value of chi square as compared to table value, the existence of intrinsic and extrinsic motivation facilitates learners of class X during the teaching learning process in all the categories of institutions (Table 1, Table 2 and Table 3). The value of U in Mann Whitney two tailed U- test was also found greater than the table value, which illustrated the effectiveness of motivation for academic achievement of students from of all the three categories of schools (Table 4).

CONCLUSION

The research concluded on the foundation of analysis and findings that there is a positive and significant association in relation to motivation with the academic achievement of class X learners.

RECOMMENDATIONS

After going through studious research on the association of motivation with the academic achievement at secondary level in Pakistan, the researcher was able to suggest following recommendations on the base line of findings and conclusion:

- i. Authorities/administration may introduce training programs on motivation for the teachers to enhance their knowledge and competence and at the same time enable them to use various motivating techniques in the classroom.
- ii. To promote motivational techniques in teaching learning process at secondary level, libraries of the institutions may be transformed to online libraries.

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