

A Study of University Students' Motivation and Its Relationship with Their Academic Performance

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Abstract

God-gifted talents, best teachers and best schooling augment the academic performance and students' motivation is prerequisite for students' accomplishment. This study attempts to identify the influence of students' motivation on their academic performance.

The sample of 342 individuals studying in different universities of Pakistan was selected. Questionnaires comprising three parts were sent directly to targeted segment. In the first part, the first few questions are related to personal information; second part consists of thirty questions of "The University Student Motivation and Satisfaction Questionnaire Version 2", which was used to measure students' extrinsic and intrinsic motivation, and last part is related to academics performance of the students. The study delineates that students' motivations dimensions extrinsic motivation and intrinsic motivation has positive impact on academic performance of students. Academics performance amplifies between the ranges of 23 percent and 34 percent due to extrinsic motivation and intrinsic motivation and the overall model is significant ($p < 0.05$). When we compare variables on individual bases, students who adapt self-exploratory variable and altruism variable, rejection of alternative options variable tend to perform better, whereas student who adapt career and qualifications variable, social enjoyment variable and social pressure variable tend to perform less then expected. The study accentuates that students' motivation is a vital part of students' success.

Keywords: Students' motivation, Academic performance, Intrinsic motivation, Extrinsic motivation

1. Introduction

The motivation of students is an important issue in higher education, particularly owing to importance of academic performance in their professional life. This study is focused on identifying the factors that will help educational thinkers to know students' attitudes towards learning, what facilitates learning and what hinders in

the process of learning. This will assist education community to predict student academic performance and identifying the students before their grades begin to fall (Kamauru, 2000). Lumsden (1994) has investigated that passion to learn seems to shrink as children grow. Learning sometimes becomes compulsion than pleasure, that's why large number of students leaves education before graduation. Due to unpleasant attitude of students towards education very few are actually mentally present in the classroom.

Student motivation is the element that leads students' attitude towards learning process. Number of studies has been conducted to probe the role of student motivation toward academic performance and different definitions of students' motivation have been used by various researches. For instance Lumsden, (1994) analyzed students' involvement towards education and sources of their motivation. Marshal (1987) viewed students' motivation as a force beneficial to the learner. Ames (1990) stated that motivation to learning is dependant on long-term, quality attachment in learning and pledge to the process of learning. Most motivation theorist believes that motivation is involved in the performance of all learned responses and leaned behavior will not occur unless it is energized. Bomia et al. (1997) has suggested student motivation as student willingness, need, desire and obligation to participate and be booming in the learning process.

Student motivation is often separated into two types: Intrinsic motivation and extrinsic motivation.

Intrinsic motivation: A student is intrinsically motivated when he or she is motivated from within: Intrinsically motivated students keenly engage themselves in learning out of oddity, interest, or enjoyment, or in order to achieve their own scholarly and personal goals. Dev (1997) viewed that student who is intrinsically motivated will not need any type of reward or incentive to instigate or complete a task. This type of student is more likely to complete the chosen task and eager by the challenging nature of an activity. Lepper (1988) viewed intrinsic motivation for own sake for the enjoyment it provides, the learning it permits, or the feeling of accomplishment it evokes. **Extrinsic motivation:** Dev, (1997) viewed that extrinsically motivated student engages in learning purely for attaining a reward or for avoiding some punishment. Lepper (1988) states extrinsic motivation means to obtain some reward or avoid some punishment external to the activity itself such as grades, stickers or teacher approval.

Thus students with intrinsic motivation are more enthusiastic, self driven, challenging and feel pleasure in their studies and students with extrinsic motivation try to drag themselves with academic assignments, feel compelled to learn, and always put minimal efforts to achieve maximum appreciations. Intrinsically motivated, students tend to utilize strategies that require more effort and that allow them to process information more intensely. Condry and Chambers (1978) found that when students were confronted with multifarious intellectual tasks, those with an intrinsic direction used more logical information-gathering and decision-making strategies than did students who were extrinsically motivated. Students with an intrinsic orientation also tend to prefer tasks that are fairly challenging, whereas extrinsically oriented students incline toward tasks that are low in degree of difficulty. Extrinsically oriented students are prone to put forth the minimal amount of effort necessary to get the maximal reward (Lepper, 1988). Brooks et al., (1998) states that to motivate students extrinsically, students should be publicly recognized for their academic achievements; which may be done through giving out stickers, candy, and other rewards; and taking away privileges, such as recess, on the basis of students' poor academic performance.

In intrinsic and extrinsic motivation we have found the following sources of motivation which has also been confirmed by the students during data collection.

<Insert Figure 1 here>

Motivation is state of mind that stimulates activities and human body actions. The figure 1 provides a brief overview of the different sources of student motivation that are under consideration. The distinctive source intrinsic or extrinsic motivated can be traced from observation of individual in classroom or in other work environments.

The sources of motivation have been explained in details in table 1 below. It is important to know what factors shape student motivation and how intrinsic motivation can be incited into the students. Many studies have been conducted to identify the factors that influence in development of student motivation.

Brophy (1986) suggested motivation to learn as an ability acquired through general experience but motivated most directly through modeling, communication of expectations and direct instruction or socialization by other e.g. parents and teachers. So teachers and parents are the main intermediaries who play an important role in development of students' motivation.

<Insert table 1 here>

Parents being the most initial source of information introduce the world to their children and help them to understand and create the image of outside world by answering their questions, familiarizing them to different situations, telling different rituals and stories and thus children develop their attitude towards life and learning. Certainly if children have developed confidence, sense of self-worth and competence they will be ready to take challenges and successes. On the other hand if children do not perceive themselves competent they will develop an internal fear of failure or cost for appreciation or reward. So it is very important how they start their first fight.

Sometimes parents are so curious about their child's education and career that they keep reminding and injecting the minds of their child that education is the only solution to future miseries. Even they threaten to punish their child for poor performance. In such circumstances the child believes that education is compulsion for them and is inevitable to survive. Large number of students could not get rid of their fears and often fail to continue. School policies and goals in academic settings are also few factors that influence in development of student motivation. Lastly unnecessary external rewards can also attract students to achieve certain level of performance as suggested by Brooks et al., (1998).

In academic institutions the role of teacher is very vital to help students to develop an attitude towards learning. Raffini (1993) ascertained that beliefs of teachers about themselves, their teaching nature of the expatiations they hold for students exert powerful influence on students' behavior towards learning. Deborah et al. (1999) also stated that large number of students attempt to learn if their teacher expect them to learn. So teachers should view themselves as 'active socialization agent' capable of stimulating students motivation to learn (Brophy, 1986). Stipek (1988) and Proctor (1984) also emphasized the role of teacher efficacy as a powerful input element related to student motivation.

In brief motivational factors are the predictors of academic performance. This study will investigate the influence of intrinsic and extrinsic motivational factors on academic performance. It is hypothesized that students who have high intrinsic motivation will achieve higher Grade Point Average (GPA) and their performance will remain constant. Whereas students who are extrinsically motivated will have low GPA and their performance may not remain constant.

2. Research Methodology

2.1 Sample

The sample consisted of 342 university students of different programs in various universities of Islamabad and Lahore, Pakistan. The students were asked about how motivated they are about their university experience and what really motivated them to study. The questionnaire was distributed among both male and female students. There were 82% male and 18% female students in the survey with an average age of 20 years. The following technical card contains the brief information regarding research methodology:

- | | |
|--------------------------------------|------------------------|
| • Purpose of study | Exploration |
| • Types of investigation | Correlations |
| • Extent of researchers interference | Minimal |
| • Study setting | Non-contrived |
| • Measurement | Scaling |
| • Unit of analysis | Individuals |
| • Sampling design | Simple random sampling |
| • Sample size | n = 250 |
| • Time horizon | One shot |
| • Data collection method | Questionnaire |
| • Data analysis | Analysis of Variance |

The above given self explanatory table describes different parts of research methodology in brief. For statistical purpose analysis of variance has been conducted using SPSS 17 version.

2.2 Instrumentation and Measurement

"The University Student Motivation and Satisfaction Questionnaire version 2" (TUSMSQ2) instrument was developed by Neill (2004) to measure student's motivation.

TUSMSQ2 instrument contains 30-items. The questions measure both Intrinsic and Extrinsic motivation of students. There were two intrinsic motivators; Self-exploration and Altruism and four extrinsic motivators; rejection of Alternative options, career and qualifications, Social enjoyment, and Social pressure in the questionnaire. The questions were based on five point Likert scale. For each item, students rated themselves on a scale of 1 to 5; 1 being "Very False", towards, 5 being "Very True".

The following items contain the key to sources of motivation mentioned in the survey:-

- Rejection of Alternative options (Extrinsic) 1, 7,13,19,25
- Self-exploration (Intrinsic) 2, 8,14,20,26
- Career and Qualifications (Extrinsic) 3, 9,15,21,27
- Social enjoyment (Extrinsic) 4, 10,16,22,28
- Social Pressure (Extrinsic) 5, 11, 17, 23, 29
- Altruism (Intrinsic) 6, 12,18,24,30

The above mentioned self-explanatory table contains the key of the items mentioned in the survey questionnaire. This shows that each source is given due consideration in the survey and items were mixed in the survey regarding the source of student motivation.

2.3 Procedure

The questionnaires were distributed randomly among the students of different programs of different semesters and their responses were collected. Data was analyzed using SPSS for Windows (version 17.0) for accurate analysis and results. Analysis included regression analysis, and analysis of variance (ANOVA).

3. Result and Discussion

The following report begins with the results of the respondents' information on segments like gender and languages. This study, conducted on the student motivation and its Impact on student performance, revealed that 82.4% respondents are male while 17.6% female, who participated in this study. Female segment of the sample is comparatively insignificant in the study. This study reveals percentages of languages: of these, 34.5% respondents belong to Punjabi language, 8.6% respondents belong to Sindhi language, 10.8% respondents belong to Pashto language, 6.5% respondents belong to Saraiki language, 33.5% respondents belong to Urdu language, 0.7% respondents belong to Hindco language and 5.4% respondents belong to Baluchi language. Different languages are spoken in various parts of the country. However, in one university students come from different parts of the country and speak different languages. Four major provincial languages and three other languages, commonly spoken in some of the provinces, were also included in the study. Languages reflect cultural values of their respective provinces. Now we have a clear picture of the respondents' answers regarding student motivation and student performance, as shown in the table:

<Insert table 2 here>

Table 2 reports the results of regression analyses with the values of R-Square=0.80 and the F-statistics= 16.010. The results reveal that the model is significant ($p < .10$) and there is a strong relationship between independent and dependent variables. The independent variables of the study show strong relationship with the dependent variable. The variables when compared on an individual basis, all variables are insignificant ($p > .05$). The regression coefficient for Rejection Alternative Option is 0.173, which suggests that employee performance is sensitive to Rejection Alternative Option and increase by 17% due to it. The regression coefficient for Career Qualification is 0.088, which suggests that employee performance is sensitive to Career Qualification and increase by 08% due to it.

The regression coefficient for Social Enjoyment is 0.069, which suggests that employee performance is sensitive to Social Enjoyment and increase by 07% due to it. The regression coefficient for Social Pressure is 0.035, which suggests that employee performance is sensitive to Social Pressure and increase by 03% due to it. The regression coefficient for Self Exploration is 0.100, which suggests that employee performance is sensitive to Self Exploration and increase by 10% due to it. The regression coefficient for Altruism is 0.112, which suggests that employee performance is sensitive to Social Pressure and increase by 11% due to it. The model is overall significant ($p < .10$) and all independent variables are significantly important to student performance, though with varying degree of importance. The results describe the understanding of student performance through elements of extrinsic and intrinsic motivation.

<Insert table 3 here>

Table 3 reports the results of regression analyses with the values of R-Square=0.79 and the F-statistics=24.585. The results reveal that the model is significant ($p < .05$) and there is a strong relationship between independent and dependent variables. The independent variables of the study show strong relationship with the dependent variable. The variables when compared on an individual basis, both the variables are insignificant ($p < .05$). The regression coefficient for extrinsic motivation is 0.342, which suggests that employee performance is sensitive to extrinsic motivation and increase by 34% due to it. The regression coefficient of intrinsic motivation is 0.237 in this model and significant, which means that it decreases employee performance by 23%. The model is overall

significant ($p < .05$) and both independent variables are significantly important to student performance, though with varying degree of importance.

4. Discussion

Rejection of alternative options, career and qualifications and social pressure imbue the academic performance. Similarly, intrinsic motivation achieved through respect of altruism, and self-exploration. This study investigates student motivation and its impact on student academic performance. Student performance will increase between 23 percent and 34 percent due to extrinsic and intrinsic motivation. T-value of both tables show relevant importance of elements of extrinsic and intrinsic motivation for academic performance. Overall model is significant.

This study reveals R-square is 80 percent which show strong relationship of students' motivation with their performance. Academics performance will increase 34 percent due to extrinsic motivation where as academics performance will increase 23 percent due to intrinsic motivation.

Every student has diversified experience of knowledge, abilities, talents and aspirations and come from different social, regional and political backgrounds which may affect their motivation to learn. Some student having abundance of skill due to best schooling and other are vice versa. However, student motivation is a prerequisite of academic performance (Masitsa, 2008). Effective learning in the classroom depends on the teacher's ability, which creates interest related to subject matter. Student performance depends upon the forces which are affecting during the studies (Erickson, 1978). There is no magical formula for accessing accurate level of students' motivation other than extrinsic motivation and intrinsic motivation questionnaire.

5. Conclusion and Recommendations

The study examined the influence of student motivation on academic performance. The study found positive and mutually causal relationship between student's motivation and student's academic performance. This relationship is reciprocal, meaning students who are more motivated perform better and student who perform better become more motivated.

In this study, R-square is 80 percent, this shows very strong relationship of students' motivation with academics performance. T-value also shows relevant importance of students' motivation toward the student academics performance. Extrinsic and intrinsic motivations enhance their academic performance between ranges of 23 percent and 34 percent. When we checked on individual element of extrinsic motivation and intrinsic motivation, we found that Academics performance will increase 17 percent due to rejection alternative option. Academics performance will increase 09 percent due to career qualification. Academics performance will increase 07 percent due to social enjoyment. Academics performance will increase 04 percent due to social pressure. Academics performance will increase 10 percent due to self exploration. Academics performance will increase 12 percent due to altruism. Blank (1997); Dev (1997); Kushman (2000) and Woods (1995) also associated high motivation and engagement in learning as consisted link to reduce dropout rates and increase levels of student performance.

From these findings we conclude that students who are intrinsically motivated perform much better academically than students who are extrinsically motivated. Extrinsically motivated students might do a good job or perform well to achieve a certain reward, but it does not keep them motivated for long-term and over all performance does not change or is consistent. They might perform very well in one semester or quiz to achieve a certain reward or goal and then next semester might show poor performance because the reward did not exist anymore. Their performance does not remain constant as a result. Students' who are intrinsically motivated take up tasks or perform well academically for their own interest and for their own learning. These kinds of students are truly interested in learning and in achieving high goals. This shows in their overall consistent performance.

From these results and Analysis, this study concludes that academic performance is positively influenced by intrinsic motivation and negatively affected by extrinsic motivation. Further research is required to address the question that 'How students' intrinsic motivation can be increased?'

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Appendix A

Closed Items and Codes

The 30 items in The University Student Motivation and Satisfaction Questionnaire Version 2 (TUSMSQ version 2) are displayed in the table, along with the item numbers, variable codes (for use in data analysis), the target factor, and the response scale.

No.	Factor	I attend university...
1	RA	because I don't know what else to do.
2	SE	to understand myself better.
3	QC	to gain valuable skills for my career.
4	SO	because its fun place to be.
5	SP	because others expect me to get a degree.
6	AL	because I genuinely want to help others.
7	RA	because it's a better alternative than working.
8	SE	because I want to explore new ideas.
9	QC	to enhance my job prospects.
10	SO	because I enjoy the social life.
11	SP	because other people have told me I should.
12	AL	because I want to contribute to society.
13	RA	to avoid being unemployed.
14	SE	because I want to challenge myself.
15	QC	in order to get the qualification.
16	SO	because I enjoy the social environment.
17	SP	because it would disappoint other people if I didn't.
18	AL	because I want to help solve society's problems.
19	RA	because it gives me something to do.
20	SE	for my personal growth and development.
21	QC	because it will help set up my future career.
22	SO	because of the social opportunities.
23	SP	it seems to be the recommended thing to do.
24	AL	because I want to improve the world situation.
25	RA	because I don't have any better options.
26	SE	because I love learning.
27	QC	so I can get a better job.
28	SO	because its a great place to develop friendships.
29	SP	of social expectations from those around me.
30	AL	because I want to be more useful to society.

Table 1. Sources of Motivation

Sources of Motivation	
<u>Intrinsic</u> Self-exploration	<ul style="list-style-type: none"> • Student with full motivation and is actually interested in learning and exploring ideas for its own sake. • Believed to do well and show good result. • e.g. 'I attend university because I have a genuine interest in the subject I am studying'.
Altruism	<ul style="list-style-type: none"> • Wants to learn for own satisfaction, becoming useful to the society, helping others and solving their problems. • Believe to be genuinely motivated and show better results. • e.g. 'I attend university because I want to be more useful to society.'
<u>Extrinsic</u> Rejection of Alternative Options	<ul style="list-style-type: none"> • Concerned with their careers and more inclined towards completing the degree only to get good jobs in future. • Continuing studies just to avoid working or because does not know what else to do. • Believed to be de-motivated and can not keep a consistent performance academically. • e.g. 'I attend university because I don't know what else I would do'.
Career and Qualifications	<ul style="list-style-type: none"> • Concerned with their careers and inclined towards completing the degree only to get good jobs in future. • Concerned with getting the degree but not for learning sake. • Believe to show good performance but not for long-term or where the reward does not exist anymore. • e.g. 'I attend university to enhance my job prospects'.
Social Enjoyment	<ul style="list-style-type: none"> • View University as a socializing place where they can have fun and make friends. • De-motivated students who are thought to show very little academic performance. • e.g. 'I attend university because I enjoy the social life'.
Social Pressure	<ul style="list-style-type: none"> • Surrounded by social pressures, peers, parents, etc. • Try to live up to other's expectations. • Do not have genuine interest in studies with no consistency. • e.g. 'I attend university because others expect me to get a degree'.

Table 2. Regression analysis of elements Student Motivation and University Student Performance

Variables	Coefficient Beta	Std. Error	t-Value	Sig.
Constant	1.075	.520	2.067	.069
Rejection of Alternative Option	.173	.163	1.065	.315
Career Qualification	.088	.233	.378	.714
Social Enjoyment	.069	.346	.198	.847
Social Pressure	.035	.271	.130	.899
Self-Exploration	.100	.229	.437	.672
Altruism	.112	.150	.744	.476
R-Square	.80			
F-Statistic	16.010			
Significant	.009			

Dependent Variable: Student Performance

Table 3. Regression Analysis of Students’ Intrinsic and Extrinsic Motivation & Student Academic Performance

Variables	Coefficient Beta	Std. Error	t-Value	Sig.
Constant	1.005	.358	2.808	.015
Extrinsic Motivation	.342	.168	2.039	.062
Intrinsic Motivation	.237	.118	2.007	.066
R-Square	0.79			
F-Statistic	24.585			
Significant	.000			

Dependent Variable: University Student Performance

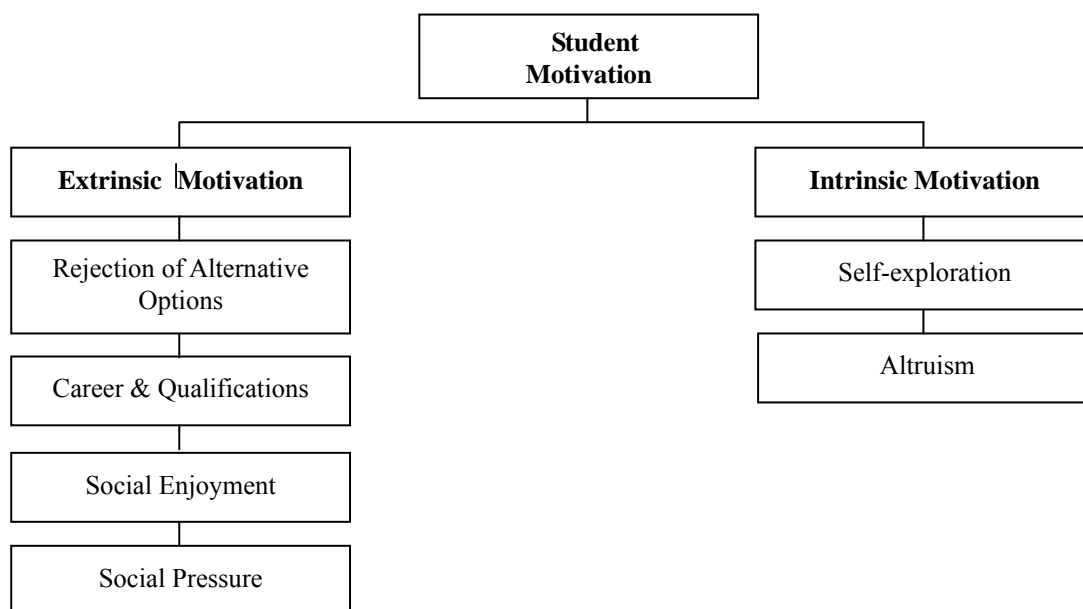


Figure 1. Sources of Student Motivation