

Students' Academic Performance and its Relationship with their Intrinsic and Extrinsic Motivation

Muhammad Ayub Buzdar^{*}
Muhammad Naeem Mohsin^{**}
Romana Akbar^{***}
Noor Mohammad^{****}

Abstract

In educational perspective, motivation is associated to learning and academic stimulation. At university level motivation of students is vital in light of the fact that it is fundamental for their accomplishment in the professional life to be entered. In this study, the academic performance of the students in relation to their intrinsic and extrinsic motivation is explored. Focus of the research study was to explore the academic performance of the students at university level and to trace out the relationship of academic performance with their intrinsic and extrinsic motivation. 600 students from different departments of the university participated in the study. Harter's scale for measuring intrinsic and extrinsic motivation modified by Lepper (2005) and self-developed scale for academic performance were used to collect data. Pearson product moment correlation showed significant relationship between the students' academic performance and their intrinsic and extrinsic motivation.

Keywords: Stimulation, Incentives, Self-determination, Achievement

Introduction

Concept of motivation has been defined by different people in different ways. In its simplest term it is urging to do something. Motivation refers to the reasons for specific behavior (Lai, 2011). In simple words motivation provides the individuals with the force essential for directing and empowering their energy and passion to lead them to better satisfaction and better educational performance (Coetzee, 2011). The researchers and psychologists have found three types of motivation comprising intrinsic motivation, extrinsic motivation, amotivation.

* Assistant Professor, Department of Education, Government College University Faisalabad. ayubbuzdar@gmail.com

** Chairman/Associate Professor, Department of Education, Government College University Faisalabad

*** MPhil Scholar, Department of Education, Government College University Faisalabad

**** Assistant Professor, Faculty of Education, Lasbela University Lasbela

What individuals do without any type of external incentives is called intrinsic motivation. Such actions are done by the individual for fun and enjoyment rather than for external rewards and gifts. From birth all individuals are active, playful, and inquiring. They do not need external incentives to do such actions. The experimental studies done on animal behavior found the existence of intrinsic motivation. When the researchers found many animals showing spontaneous and playful activities without rewards or incentives for them to do the actions (Ryan & Deci, 2000). Students with positive level of intrinsic motivation may show better results and higher level of satisfaction (Ayub, 2010). The literature recommends that students should be intrinsically motivated in order to make progress in their academic career. For most of the actions individuals are not intrinsically motivated and this arises the need for some reward and external motives. Thus extrinsic motivation is related to the action that is done to get some rewards (Coetzee, 2011).

The students who are extrinsically motivated determine the standards of their performance according to social norms and customs and hence they are normally more social and friendly. These tendencies of externally motivated students can be used by the teachers to make the academic performance of the students better and effective (Coetzee, 2011). Amotivation is stated as having no motivation. It simply means the students who are neither intrinsically motivated nor extrinsically (Coetzee, 2011). These students have negative concepts about learning process and their contribution in learning is normally very low (Ayub, 2010).

Many psychologists have presented theories of motivation. These are categorized as content theories and process theories. Content theories are concerned with the instincts that motivate people to do some work (Turabik & Baskan, 2015). These theories assume that all the individuals have the similar needs and these needs motivate them for actions or to fulfill the needs (Literature Review on Theories of Motivation, n.d.). These theories include Maslow's hierarchy of needs, Herzberg's two factor theory, McClelland's need for achievement theory and Alfred's E.R.G theory. Process theories emphasize the cognitive differences of the individuals. These theories put emphasis on the behaviors of the human beings and try to find out the causes of certain behaviors can be controlled. The theories fall under this category are as Vroom's Expectancy Theory, Goal Setting Theory, Self Regulation Theories, Self Efficacy Theory, and Adam's Equity Theory.

Academic achievement shows outcomes of the performance that indicate the degree to which student has achieved specific goals that were kept in focus by the school, college and university for the instructional activities of the students (Soufi, Damirchi, Sedghi, & Sabayan, 2014). The competent and successful people are those who are highly educated. Too much emphasis is placed on educated and excellent performance as was never before. Academic performance of students is also very

important. There is a great impact of academic performance on student's motivation and determination. Students with poor academic performance fail to seek admission to higher level institutions. Dropout rate of students increases because of poor performance. That is why the academic performance of the students has always been a topic of interest for the researchers and educators (Valli Jayanthi et al., 2014). Every government provides various facilities for students' learning and education to get good results from them. Academic performance of students is vital for the institutions. These are the operators of society to advance education in the country. Responsibility of the preparation of future era lies on them. Furthermore, foundations whether open or private attempt to do their commitment viably.

Motivation is very important factor for educational life of the students. Most research work has been done on motivation due to its relevant importance. But mostly the cognitive factors of motivation are discussed by the researchers in relation to the academic performance. The effective factors relating to motivation as intrinsic and extrinsic motivation are not given much importance by the researchers. Especially in Pakistani context no concern is shown to the motivation of the students for improving their performance. The results of researches conducted in other countries are not suitable and applicable in Pakistan Because of cultural differences. Likewise the situations prevailing in our educational institutions are different. Thus the focus of the study was on the extrinsic and intrinsic motivation of the students and its effects on the academic performance of the students.

The Current Study

Student's academic performance is a basic concern for educationists. Proper motivation of students may play helpful role for good performance of the students. In this study the academic performance of the students is explored keeping in view its relationship with intrinsic and extrinsic motivation of the students. Students of top ranking university of Pakistan participated in the study. Focus of the study was to investigate the relationship of intrinsic and extrinsic motivation of the students with their academic performance. The study found answer to the following research questions.

1. What level of intrinsic and extrinsic motivation exists among students included in the sample?
2. What is academic performance of students included in the sample?
3. To what extent motivation is related with academic performance at university level?

Research Methodology

We focused our study to explore academic performance of the students in relation to their intrinsic and extrinsic motivation. To meet this objective, we followed quantitative research approach to achieve the target. Survey method was considered appropriate for the purpose of data collection. Scale originally developed by Harter (1981) for measuring motivation and modified by Lepper (2005) was utilized to explore intrinsic and extrinsic motivation of the students. Another scale for exploring the next aspect of the study i.e., academic performance of students was self-developed by the researchers. This scale consisted of five subscales i.e. Assignment and Classroom Tasks, Learning Performance, Class Participation, Learning Comprehension and Learning Cooperation and Coordination. The instrument was developed using five point Likert scale. The instrument was presented to ten field experts/educationists working at Government College University to check the content and face validity of scales. Their comments helped us to improve the scale. Secondly, the instrument was first given to 100 students of master's level for pilot testing. They were asked to point out any problem they found in reading, understanding and responding to the items. Almost all of the students found the instrument easy and understandable. Final instrument was prepared and modified keeping in view the opinion or observations of the experts and results of pilot testing. Overall reliability of the instrument was calculated as .88.

600 masters level students enrolled at Government College University, Faisalabad, Pakistan participated in the study. The students were selected from 6 faculties and 20 departments of the university. These students were enrolled in social sciences, medical sciences as well as in arts and humanities. The students were selected through multiphase random sampling where at first phase the faculties were selected. In second phase departments were selected and in third phase the students were selected from each department randomly. Students were asked to give their opinion confidently which was assured to them. Data collected from students was analyzed using SPSS.

Findings of the study

Means of each subscale were calculated through SPSS software. Mean score (see table 1) for the subscales of intrinsic motivation (i.e., challenge (M=3.78), curiosity (M=4.06) and independent mastery (M=3.98) show that students have strong tendency to be internally motivated for their performance. Whereas the mean score for the subscales of extrinsic motivation (i.e., easy work (M=3.09), pleasing teacher (M=3.10) and dependence on teacher (M=3.82) show that tendency for extrinsic motivation for studies is average among the students. The mean score for the subscales of academic performance (i.e., assignment and classroom tasks (M=3.78), learning performance (M=3.06), class participation (M=3.21), learning comprehension (M=3.02) and learning cooperation and coordination (M=3.55) show that prevalence of academic performance among students is also average. Overall prevalence of intrinsic motivation is average

with M=3.94, prevalence of extrinsic motivation is moderate with M=3.33 and the prevalence of academic performance is average with M=3.35. It is found that students are more intrinsically motivated than extrinsically motivated for their academic performance.

Table 1
Mean score representing the student's opinion against different subscales of intrinsic and extrinsic motivation and academic performance

Scale	Subscale	Mean	SD
Intrinsic Motivation	Challenge	3.78	.686
	Curiosity	4.06	.592
	Independent mastery	3.98	.647
Extrinsic Motivation	Easy Work	3.09	.647
	Pleasing Teacher	3.10	.759
	Dependence on Teacher	3.82	.751
Academic Performance	Assignment and Classroom Tasks	3.78	.609
	Learning Performance	3.06	.636
	Class Participation	3.21	.637
	Learning Comprehension	3.02	.721
	Learning cooperation and coordination	3.55	.611

The table 2 indicates positive and significant relationship among various constructs of intrinsic and extrinsic motivation and academic performance. Only two constructs of extrinsic motivation (dependence on teacher and easy work) have insignificant relationship with the constructs of academic performance (learning performance and class participation) respectively. It indicates that intrinsic and extrinsic motivation has a positive and significant relationship with academic performance of the students.

Table 2
Pearson correlation coefficients showing relationship among intrinsic and extrinsic motivation and academic performance

	<i>Assignment and classroom tasks</i>	<i>Learning performance</i>	<i>Class Participation</i>	<i>comprehension</i>	<i>Learning Cooperation & Coordination</i>
Challenge	.338**	.165**	.355**	.129**	.274**
Curiosity	.445**	.172**	.422**	.112**	.316**
Independent Mastery	.467**	.164**	.210**	.127**	.292**
Easy Work	.038	.192**	.020	.236**	.145**

Pleasing Teacher	.119**	.216**	.254**	.289**	.213**
Dependence on Teacher	.393**	.099*	.404**	.203**	.215**
Intrinsic Motivation	.497**	.202**	.403**	.148**	.354**
Extrinsic Motivation	.281**	.227**	.328**	.333**	.268**

* Correlation is significant at the 0.05 level.

**The correlation coefficient is significant at the 0.01 level;

Discussion

The main objective of the study was to find out the academic performance of the students in relation to their intrinsic and extrinsic motivation. We found the results of study remained consistent with previous researches. For example Ayub (2010) established significant relationship between the students' academic performance and their motivation. Likewise Sikhwari (2014) revealed that academic achievement was significantly correlated with the aspect of motivation among the students. Like these Lepper, Corpus, and Iyengar (2005) also reached the same conclusion of positive correlation between intrinsic and extrinsic motivation and academic performance of the students. According to Afzal et al. (2010) students with high level of intrinsic motivation perform much better academically than those who are extrinsically motivated. Extrinsic motivation according to them does not keep students motivated for long time but it may help them to do a specific job and get a reward. Intrinsically motivated students take challenges and do their work with interest. They have commitment with their own selves to achieve high scores and learn more.

Another study conducted by Rehman and Haider (2013) found that students' learning becomes better when teachers use some kind of rewards or certain types of punishments in the classroom. It shows that intrinsic motivation has direct relationship with the learning and performance of the students. On the same grounds Jovanovic and Matejevic (2014) considered the relationship between rewards and intrinsic motivation for learning and depict significant relationship between intrinsic motivation and learning of the students. They also concluded that certain type of external motivation is necessary to motivate students for their good learning. There is some increase in the motivation of the students there exist a positive improvement in their academic performance is the conclusion of study done by Muhammad et al. (2015). They found direct positive correlation among students' motivation and their academic performance. The same results have been found in result of present study which verifies the result of above mentioned study. A study by Afzal et al. (2010) on students' motivation and its relationship with their academic performance, a positive and mutual relation was found between the variables. They also concluded that the relationship is reciprocal meaning

that students with high level of motivation have outstanding performance as well as the performance of the students remained dominant with high level of motivation.

In a study on relationship between motivation, self-concept and academic achievement of the students conducted by Sikhwari (2014) also reveal significant relationship between motivation and achievement of the students. Findings of Lemos and Veríssimo (2014) also partially support the results of the current study. The study concluded that intrinsic motivation is positively related to the academic achievement of the students but extrinsic motivation has negative relationship with their achievements. This research also verifies the results of Amrai et al. (2011) which depicts relationship between academic motivation and academic achievement of the students remained significant. The results of a study by Lepper et al. (2005) shows positive relationship of intrinsic motivation with the academic achievement of the students and negative relationship with extrinsic motivation of the students. But surprisingly they found low or negative relationship of intrinsic motivation with the academic achievement of students at lower levels of education. At this stage they suggest to motivate students for their good performance.

Conclusions

The focus of the study was on student's academic performance in relation to their intrinsic and extrinsic motivation at university level. For accomplishment of conclusions different statistical procedures were employed. First question of the study was concerning the level of intrinsic and extrinsic motivation exits among students at Government College University Faisalabad. It is found that the prevalence of intrinsic motivation is moderate whereas the prevalence of extrinsic motivation is average. The second question was concerning the academic performance of students at Government College University Faisalabad. The results show that student's academic performance at university level is average. This aspect neither remained very good nor very bad, rather it was satisfactory.

The last and third question was to find the extent to which motivation is related with academic performance at university level. For this purpose Pearson Product correlation revealed the relationship between different indicators of intrinsic and extrinsic motivation as well as indicators of academic motivation. Almost all the indicators of intrinsic and extrinsic motivation were positively correlated with the indicators of academic performance. Just one indicator of extrinsic motivation i.e., easy work was negatively correlated with two indicators of academic performance viz assignment and class room tasks and second indicator class participation. Overall correlation was significant. Summing it up, we concluded that academic performance of the students has positive and significant correlation with their intrinsic and extrinsic motivation. More researches may be conducted to find out the ways on how to improve the intrinsic and extrinsic motivation of the student in future.

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