

EFFECT OF INTRINSIC AND EXTRINSIC MOTIVATION ON ACADEMIC PERFORMANCE

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Abstract

The aim of the present study was to explore relationship between intrinsic and extrinsic motivation on academic performance. Based on literature review following hypotheses were formulated 1) there would be a positive correlation between intrinsic and extrinsic motivation on academic performance. 2). There would be a gender difference on intrinsic and extrinsic motivation on academic performance. A sample of 200 students (100 males and 100 females) was selected from different colleges of Karachi. The age of the participants ranged from 18-21 years (with mean age of 18.56 years). Their educational level was at least intermediate and socioeconomic status was middle and high class. The Academic Motivation Scale (Vallerand, 1992) was administered to assess academic intrinsic and extrinsic motivation and academic performance was measured through last GPA. In order to interpret the results Pearson Product Moment Correlation Coefficients was calculated to assess relationship between academic motivations. Results suggest that intrinsic and extrinsic motivation and academic performance were positively correlated ($r=.563$; $n=200$; $sig=.000$). Furthermore, gender difference was found ($t=4.324$, $p<.05$) on motivation and academic performance. To conclude, findings of the results illustrates that motivation improves academic performance of the students. In addition, there is gender difference in motivation type and academic performance.

Key Words: Intrinsic Motivation, Extrinsic Motivation, Academic Performance

JEL Classification: Z0000

Introduction

Motivation is a significantly important factor for academic learning and achievement across childhood through adolescence (Elliot & Dweck, 2005). According to Uguroglu & Walbert (1979), motivation is an important contributor to student achievement. Research has shown that motivation is related to various outcomes such as curiosity, persistence, learning and performance (Deci and Ryan, 1985). According to Self-determination theory (Ryan & Deci, 2000) there are three types of motivation i.e. extrinsic motivation, intrinsic motivation, and amotivation.

Extrinsic motivation can be defined as, "it pertains to a wide variety of behaviors that are engaged in as a means to an end and not for their own sake" (Deci, 1975). There are four-type of extrinsic motivation according to self-determination theory i.e. external regulation, introjections, and identification. External regulation behavior is regulated through external means such as rewards and constraints. In introjected regulation, an individual begins to internalize the reasons for his or her actions. Furthermore, the extent to which the behavior becomes valued and judged important for the individual, and especially that it is perceived as chosen by oneself, then the internalization of extrinsic motives becomes regulated through identification.

Intrinsic motivation refers to be in an activity for itself, and the pleasure and satisfaction derived from participation (Deci, 1975). Academic intrinsic motivation plays a significant role in achievement, competency and academic learning. Deci and Ryan (1985) posit that intrinsic motivation stems from the innate psychological needs of competence and self-determination. Literature suggests intrinsic motivation reveals the presence of three types of intrinsic motivation: to know, to experience stimulation, and to accomplish things. Intrinsic motivation to know relays to several constructs such as exploration, curiosity, learning goals, intrinsic intellectuality, and finally intrinsic motivation to learn (Gottfried, 1985; Harter, 1981). Intrinsic motivation towards an accomplishment has been studied in developmental psychology as well as in educational research

under the concept such as mastery motivation (Harter, 1981). Other researchers suggest that individual interact with the environment in order to feel competent, and to create unique accomplishments (Deci, 1975; Deci and Ryan, 1985, 1991). Intrinsic motivation to experience stimulation take place when someone engages in an activity in order to experience stimulating sensations (e.g., aesthetic experiences, sensory pleasure, with fun and excitement) derived from one's engagement in the activity. Research on the dynamic and holistic sensation of flow, on feelings of excitement in intrinsic motivation, on aesthetic stimulating experiences, and peak experiences is representative of this form of intrinsic motivation.

Amotivated is the third type of motivation. In amotivated motivation, individuals neither intrinsically motivated nor extrinsically motivated. Amotivated individual experience feelings of incompetence and expectancies of uncontrollability they perceive their behavior as caused by forces out of their own control. They feel undecieved, and start asking themselves why in the world, they go to school. Eventually, they may stop participating in academic activities.

Numerous studies suggested that from childhood through adolescence, across varied populations, those with higher academic intrinsic motivation have been found to be more competent in school, generally evidencing significantly greater academic achievement, more positive perceptions of their academic competency, lower academic anxiety, and less extrinsic motivation (Gottfried, A.W., Gottfried, Cook, & Morris, 2005).

Gender difference is one of the important variables in motivation type. Literature shows that, "boys show a greater degree of extrinsic motivational orientation" (Anderman & Anderman, 1999), while girls show a greater intrinsic motivation (Mecca & Holt, 1993). Whereas on academic performance Schiefele, Krapp, and Winteler (1992) strongly suggested that, "male students' performance accords their interest level more than is the case for female students". In particular, "female students' academic performance is less associated with their interests than male students' academic performance" (Schiefele, Krapp, & Winteler, 1992).

In the light of above studies, the main objective of the present study was to examine the relationship between extrinsic and intrinsic motivation on academic performance. Furthermore, this study explores the gender differences on the variable of extrinsic motivations, and intrinsic motivation.

Methodology

Sample

The Sample comprised of 200 (i.e. 100 males; 100 females). The age range is between 18-21 years and means age was 18.56. Each participant has completed his high school and studies in various colleges situated in Karachi, Pakistan. Participants belong to different socio-economic background. All subjects volunteered to participate in the study.

Measure

A demographic form was filled by the participants, which included the information about age, gender, qualification, family structure, and socio economic status.

Academic Motivation Scale (AMS; Vallerand et al., 1992). The AMS consists of 28 items. Each sub scale consists of four items each; thus, subs cales scores can range from four to twenty-eight. There are seven sub scales on the AMS: Intrinsic Motivation to Know (IMTK), Intrinsic Motivation to Accomplish (IMTA), Intrinsic Motivation to Experience Stimulation (IMES), Identified Regulation (EMID), Introjected Regulation (EMIN), External Regulation (EMER), and Amotivation (AMOT). That participants rated on a scale ranging from one (does not correspond at all) to seven (corresponds exactly).

Procedure

The questionnaire was distributed to respondents, and they completed the questionnaire manually. The data was collected individually. At the beginning of each questionnaire, an overview was provided. All respondents must fill a

demographic form, which includes information on gender, age, qualification, family structure, and socio economic status. The researcher gave direction for the Academic Motivation Scale (Vallerand, 1992). Participation was voluntary and the responses were anonymous. The respondents were informed about the purpose of the research. The researcher informed participants that all information would be kept confidential.

Statistical Analysis

After collection of data the test sheets were scored. Academic Motivation Scale (Vallerand, 1992) was scored according to the instructions given in the manual. Pearson Product Moment Correlation Coefficient and t-test were applied through Statistical Package for Social Sciences, 13 versions was used to determine the relationship.

RESULTS

Table 1 Correlation between Motivation and Academic Performance

	Grade Point	Significance
Academic Motivation	.563**	.000

Note. Shows correlation between academic motivation and academic performance significant at**p=.000

Table 2 t- test Gender Difference on Academic Motivation and Academic Performance

Variable	Gender	N	Mean	Std Dev	t	df	Sig
Academic Motivation	Female	200	131.13	6.386	4.324	198	.000
	Male	200	126.91	7.379			

Note. Verifies Significant difference was found between male and female ($t = 4.324$, $df = 198$, $p < .05$) on the variable of academic motivation and academic performance

Discussion

The basic aim of the study was to found out correlation between extrinsic and intrinsic motivation on academic performance. Furthermore, the study investigated the gender difference on the variable of extrinsic and intrinsic motivation on academic performance.

The result of the first hypothesis, which evaluates the correlation between motivation and academic performance, is found to be significant ($r = .563$; $n = 200$). These findings are consistent with previous literature. For example, Johnson (1996), Broussard and Garrison (2004), Skaalvik and Skaalvik (2006), and Sandra (2002) found a significant relationship between academic performance and motivation. Similarly, Johnson (1996) found that academic achievement is highly correlated with student's motivation. However, Bank and Finlapson (1980) found that successful students were found to have significantly higher motivation for achievement than unsuccessful students did.

Motivation types also affect on the performance of the student's. Intrinsic and extrinsic motivation effects on the achievements and goals of the students performance. According to Husman and Lens (1999), highly intrinsically motivated students can simultaneously be extrinsic in terms of future goal

orientations. Furthermore, students who are intrinsically motivated to persist longer, conquer more challenges, and demonstrate accomplishments in their academic endeavors than those who are extrinsically motivated (Pintrich & Garcia, 1991). Extrinsically motivated students tend to focus on earning higher grades, obtaining rewards and acceptance from peers. Researchers, for example, Biehler & Snowman, (1990) believe that extrinsic motivational factors diminish students' intrinsic motivation. Students' extrinsic motivational factors combined with positive future goals can actually facilitate their present value and intrinsic motivation (Van Calster, Lens, & Nuttin, 1987).

According to the results, there is a gender difference on the variable of extrinsic and intrinsic motivation on academic performance ($t=4.324, p < .05$). These findings are consistent with Chee, Pino and Smith (2005) indicated that female college students are more likely to have higher academic ethics than male students, which are characterized by higher academic attainment. Furthermore, findings of the study suggested that females were intrinsically motivated than males. In contrast, males were more extrinsically motivated than females. The possible explanations of these findings are that males are expected to be the main breadwinner of the family in our society. For females, academic performance and motivation is based on self-exploration and internal satisfaction. This is the main reason that males are extrinsically motivated as compare to females.

The findings support the significance of motivation to academic performance. The results have implications for the University teachers that they should try as much as they could to motivate their students during instructions. The parents as well as the government should engage in programmes that can motivate the students to improve their academic performance. It is therefore, hoped that these findings will serve as resource materials for higher level educators, scholars, parent, universities authorities, psychologists, counselors, government, and significant others who are concerned with the higher education academic progress of the students.

Conclusion

To conclude, findings of the study illustrate that motivation improves academic performance of the students. These findings suggest that when teachers are caring and supportive and emphasize the teaching learning process over the performance outcomes, and when they give feedback, children tend to be motivated to achieve and to expect success (Daniels, Kalkman, & McCombs, 2001). In addition, there is a gender difference in motivation type and academic performance.

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