Relationship of Academic Intrinsic Motivation and Psychological Well-being among Students

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Abstract: Academic intrinsic motivation is an emerging topic in the field of psychology and education studies. Academic intrinsic motivation, that refers to the forces and factors which internally motivates the individual to achieve highest standards in academics, need to be understood. The purpose of the study was to see the relationship between academic intrinsic motivation and psychological well-being among students. It was hypothesized a significant relationship exists between academic motivation and psychological well-being. The correlation coefficient was computed between psychological well-being and dimensions of academic motivation in male and female students. Academic Intrinsic Motivation Questionnaire, and Psychological Well-Being Scale were selected to measure Academic Intrinsic Motivation and Psychological Well-being among Students. The result of the study reveals that both the hypotheses are partially confirmed. Although academic intrinsic motivation is essential for college success and is associated with the students’ psychological well-being, findings of this study indicate that there is a significant negative correlation between the dimensions of extrinsic motivation and psychological well-being among male subjects. Among female subjects, there is a significant negative correlation between need achievement dimension of intrinsic motivation and psychological well-being.
Keywords: Academic motivation; intrinsic motivation; extrinsic motivation; psychological well-being.

1. Introduction

Academic intrinsic motivation is essential for academic success. It is a student’s desire as reflected in approach, persistence and level of interest regarding academic subjects when student’s competence is judged against a standard of performance or excellence (Elliott 1999; McClelland 1961; Wigfield; Eccles 2002). Motivation is an internal and external factor that stimulates desire and energy in people to be continually interested and committed to a job, role of subject, or to make an effort to attain a goal. Motivation results from the interaction of both conscious and unconscious factors such as the: (1) intensity of desire or need (2) incentive or reward value of the goal and (3) expectations of the individual and his or her peers.

There are many factors which influence the psychological well-being of students. The academic intrinsic motivation is an emerging topic in this area. Academic intrinsic motivation, which means the forces and factors which internally motivates the individual to achieve highest standards in academics, needs to be understood. The person with intrinsic motivation is internally motivated to achieve the goal. Most of the students want to achieve the goal because others motivate them. There are, however, some students who are not motivated by others, but are themselves motivated to achieve the highest standards in education. Those people who are having academic intrinsic motivation are psychologically sound because they get satisfaction by achieving good standards in education. Academic intrinsic motivation is a factor that is essential for student’s success. A large number of students carry out education. The motivations behind such academic resolution vary across many intrinsic and extrinsic factors.

Motivation is the activation of goal-oriented behavior. Motivation is said to be intrinsic and extrinsic in nature.

Intrinsic and extrinsic motivation:

Intrinsic motivation refers to motivation that is driven by an interest or employment in the task itself and exists within the individual rather than relying on any external pressure. It has been studied by social and education settings. It is usually associated with high educational achievement and enjoyment by students. Explanation of intrinsic motivation has been given in the context of Deci and Ryan’s theory, ‘students are likely to be intrinsically motivated.’

Extrinsic motivation comes from outside the individual. Common extrinsic motivations are rewards like money and grades, coercion and threat of punishment. Competition is a general extrinsic
motivation factor because it encourages the performers to win and beat others, not to enjoy the intrinsic rewards of the activity.

Empirical research has demonstrated that intrinsic motivation is associated with positive psychosocial adjustment. Students who are intrinsically motivated to learn to have better academic performance and get more education than students who are not intrinsically motivated (Deci, Vallerand, Pelletier, & Ryan, 1991).

The other major variable in this research paper is psychological well-being which means a combination of self-acceptance, personal growth, and purpose in life, environmental mastery, autonomy and positive relations with others. Psychological well-being is a subjective feeling of contentment, happiness, satisfaction, with life’s experience and of one’s role in the world of work, a sense of achievement, utility, belongingness and no distress or worry of work, it emphasizes positive characteristics of growth and development. Ryan and Deci (2001) uphold the view that wellbeing is not best captured by hedonic conceptions of ‘happiness’ alone. Instead, Self-determination theory (macro-theory of human motivation, personality development, and well-being) also employs the concept of Eudaimonia, or wellbeing defined as vital, full functioning, as a complementary approach.

A mini-theory was recently introduced called Goal Contents Theory (GCT). Research has shown that materialism and other extrinsic goals such as fame or image do not tend to enhance need satisfaction, and thus do not foster well-being, even when one is successful in attaining them (Kasser & Ryan, 1996; Niemiec et al. 2009).

**Objectives**

I. To know the significant relationship between the dimensions of academic intrinsic and extrinsic motivation and psychological well-being in male and female subjects.

II. To know the significant difference between male and female subjects on psychological well-being and on total intrinsic and extrinsic motivation.

**Research questions**

i. Is there any significant relationship between dimensions of academic intrinsic and extrinsic motivation and psychological well-being in male and female subjects?

ii. Is there any significant difference between male and female subjects on psychological well-being and on total intrinsic and extrinsic motivation?

**Hypothesis**

i. There would be a significant relationship between dimensions of academic intrinsic and extrinsic motivation and psychological well-being.
ii. There would be a significant difference between male and female subjects on psychological well-being and on total intrinsic and extrinsic motivation.

2. Methods

2.1. Participants

Students (n=100) of Aligarh Muslim University in age group from 20-23 years participated in this study at an equal male and female ratio. There were 50 males and 50 females in the study and participants were selected by random sampling.

2.2. Tools

The following tools were used for the study:

Academic Intrinsic Motivation Questionnaire developed by Regina M. Shia, Wheeling Jesuit University, was used that consisted of 6 factors: Two intrinsic factors and four extrinsic factors. Intrinsic motivation factors include: Mastery goals and Need for achievement. Extrinsic motivation factors include: Authority expectations (family and professors), peer acceptance, fear of failure, and power motivations.

Psychological Well-Being Scale, a 21-item Hindi version inventory, comprised of two measures: P.G.I. Well-being Scale and Life Satisfaction scale was selected to measure the well-being among students. A Hindi version of P.G.I. Well-being Scale was developed by Mougdil, Verma, Kaur and Pal (1986). That also consisted of 20 items. One item out of the 5 items of Diener’s Life Satisfaction Scale developed by Diener et al. (1985) was added in the Psychological Well-being Scale.

2.3. Statistical Analysis

The following appropriate statistical techniques were used to analyze and signify the data:

I. Mean and Standard Deviation

II. Pearson’s Product Moment coefficient of correlation – Significant Correlation

III. T-Test – Significant Mean Difference

The statistical analysis was carried out using the software program SPSS (Statistical Package for the Social Sciences) version 17.0. Mean and standard deviation was computed in order to compare the scores of male and female students on well-being and on the two dimensions of academic motivation separately. Pearson’s product moment ‘r’ was calculated to determine any significant relationship between scores of male and female students on psychological well-being and dimensions of intrinsic and extrinsic motivation. T-Test was computed to compare the means and to determine any significance difference between the mean scores of male and female students on both the variables.
3. Results

In table 1, correlation between dimension of intrinsic and extrinsic motivation and psychological well-being was computed and was found to be very low on the dimensions of intrinsic motivation: 0.027 in mastery goals and 0.021 in need achievement. There was a significant but negative correlation, -0.216, -0.151, -0.252, between the dimensions of extrinsic motivation that is, peer acceptance, power motivation and fear of failure respectively, and psychological well-being among male students. In case of female students, there was a low positive relationship between peer acceptance, a dimension of extrinsic motivation, and psychological well-being: 0.141 and an inverse relationship between need achievement, a dimension of intrinsic motivation, and psychological well-being: -0.43. A very low correlation was found between the rest of the dimensions and well-being in both males and females.

**Table 1.** Correlation coefficients between well-being and dimensions of Academic motivation in males and females

<table>
<thead>
<tr>
<th>Psychological Well-being</th>
<th>Academic motivation</th>
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</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Intrinsic</td>
<td>Extrinsic</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Mastery</td>
<td>Need</td>
<td>Authority</td>
<td>Power</td>
<td>Peer</td>
</tr>
<tr>
<td>Males</td>
<td>0.027</td>
<td>0.021</td>
<td>0.015</td>
<td>-0.151**</td>
<td>-0.216**</td>
</tr>
<tr>
<td>Females</td>
<td>0.052</td>
<td>-0.43</td>
<td>-0.40</td>
<td>0.030</td>
<td>0.141</td>
</tr>
</tbody>
</table>

In table 2, t-value was computed of the mean scores of males and females on psychological well-being. Mean score of males was found to be higher viz. 12.98 than mean scores of females viz. 12.72. There was no significant difference between the mean scores of males and females, i.e. t = 0.447 at any level of significance. Standard deviation of males and females was found to be 3.11 and 3.26 respectively.

**Table 2.** Comparison of mean score of Psychological Well-Being among male and female students

<table>
<thead>
<tr>
<th>Gender</th>
<th>N</th>
<th>Mean</th>
<th>S.D</th>
<th>t-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Psychological Well-being</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>50</td>
<td>12.98</td>
<td>3.11</td>
<td>0.447</td>
</tr>
<tr>
<td>Female</td>
<td>50</td>
<td>12.72</td>
<td>3.26</td>
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</tbody>
</table>

Not significant at 0.05

Table 3 indicates the mean scores and t-value of male and female students on intrinsic and extrinsic motivation. The result obtained on academic intrinsic motivation in case of males was less than that of females. The Mean score of male was 94.82 and mean score of female was 97.78. Standard
deviation of scores of male and female student was found to be 14.33 and 20.78 respectively on intrinsic dimension. In case of extrinsic academic motivation, the mean score of males was again found to be less than the mean score of females. The mean score of males was 153.72 and mean score of females was 166.92. Standard deviation of scores of male and female students was 19.53 and 14.06 respectively. There was a significant mean difference of males and females on extrinsic motivation that was computed by applying t-test and was found to be 3.751 at 0.01 level of significance. The t-value in case of intrinsic motivation was insignificant.

<table>
<thead>
<tr>
<th>Table 3. Comparison of mean scores on intrinsic and extrinsic motivation</th>
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<tbody>
<tr>
<td><strong>Gender</strong></td>
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<td>------------------</td>
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<tr>
<td><strong>Intrinsic</strong></td>
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<tr>
<td>Male</td>
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<tr>
<td>Female</td>
</tr>
<tr>
<td><strong>Extrinsic</strong></td>
</tr>
<tr>
<td>Male</td>
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<tr>
<td>Female</td>
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</tbody>
</table>

**NS**Not significant at 0.05 level  
**Significant at 0.01 Level

4. Discussion

One of the important factors that determine academic performance and well-being is motivation. It is a prerequisite for students’ engagement in learning and is a means to achieve some academic outcomes and thereby is associated with well-being. Researchers have pointed out that student’s intrinsic and extrinsic motivation and engagement can influence their learning outcome. Intrinsic motivation if cultivated can lead to many academic and social/emotional improvements among students. It is associated with various psychological benefits, for example, enhanced persistence, pro-social behavior and happiness.

In this context, the purpose of the study was to see the relationship between academic intrinsic motivation and psychological well-being among students. It was hypothesized a significant relationship between academic motivation and psychological well-being. The Correlation coefficient was computed between psychological well-being and dimensions of academic motivation in male and female students.

It is seen that among male subjects a significant and negative correlation was found between power motivation, peer pressure and fear of failure dimensions of extrinsic motivation and psychological well-being. And in female subjects, a significant and negative correlation was found out between need achievement dimension of intrinsic motivation and psychological well-being. There is however, no significant difference between male and female subjects on psychological well-being. However, male
and female subjects differ significantly on extrinsic motivation and no significant difference was found out on intrinsic motivation.

Hence, both the hypothesis are partially confirmed. Although academic intrinsic motivation is essential for college success and is associated with the students’ psychological well-being, our findings indicate that mostly there is a negative significant correlation between the dimensions of extrinsic motivation and psychological well-being in male subjects, and in female subjects, there is a significant negative correlation between need achievement dimension of intrinsic motivation and psychological well-being. The plausible explanation for the present finding can be attributed to the different tasks and motivational characteristics of competence settings viz. a viz. task involving/ego involving climate and win/lose competitive settings is a source of perceived stress and greater psychological distress among students. The fact is, every student is not and cannot be always intrinsically motivated towards a certain task. The Majority of researchers believed that motivation is neither exclusively intrinsic nor extrinsic in orientation. The efficacy of intrinsic and extrinsic motivation depends upon time and context and academic motivation results from the interaction of both conscious and unconscious factors such as intensity of desire or need, the incentive/reward value of the goal, expectation of the individual and his/her peers.

The present findings of the study reflect that in the present competitive scenario of academic life, students lack intrinsic motivation because they have academic anxiety due to competition. Competition has a negative outcome on performance, problem solving and personal relationship, i.e. competition undermines intrinsic motivation (Deci et. al 1981; Vallerand et. al 1986).

Regarding the second objective and hypothesis that male and female students will differ significantly on psychological well-being and in total intrinsic and extrinsic motivation in which no significant relationships was found, other relevant factors that may be responsible for achieving similar score on the well-being scale. No significant difference was found out on intrinsic motivation, but a significant difference was found out on extrinsic motivation. These findings can be attributed to the fact that both male and female students lack academic intrinsic motivation, but female subjects comparatively scored higher on extrinsic motivation indicating that they are more extrinsically motivated in terms of parental and peer expectations.

5. Conclusion

The results of this study show a significant, but negative correlation between the dimensions of extrinsic motivation that is peer acceptance, power motivation and fear of failure and psychological well-being among male students. While as in female students, there was a low positive relationship between peer acceptance, a dimension of extrinsic motivation, and psychological well-being and an inverse
relationship between need achievement, dimension of intrinsic motivation, and psychological well-being. A very low correlation was found between rest of the dimensions and well-being in both males and females. The findings could not find a significant difference between the mean scores of males and females. The results also reveal that there was a significant mean difference of males and females on extrinsic motivation.

The present findings have important implications for parents, teachers and educational planners. Since, the efficacy of intrinsic and extrinsic motivation depends on time and context, it is important for educators to know the importance of intrinsic motivation as well as different types of extrinsic motivations. To promote learning among students, teachers could use more active and vocational forms of extrinsic motivational strategies for teaching purpose.

References


