

# Investigating Relationship between Intellectual Characteristics and Academic Achievement Motive among Educational Sciences Students

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## Abstract

Objective of the present study was to investigate relationship between intellectual characteristics and academic achievement motivation of educational sciences students of Isfahan city. The variables studied in this research were: (1) capacity and ability of individual to exalt, (2) ability of high level experiment from self-awareness, (3) ability of investigation and strainness of experiments and activities, (4) ability to employ intellectual resources in life problem-solving, and (5) ability to do virtuous acts.

Population of the study was all educational sciences students of Isfahan city in academic year of 211-12. 370 male and female students were selected through stratified random sampling technique. Tools used in the present study were Academic Achievement Motivation (AAM) and Intellectual Characteristics (IC) questionnaires developed by the investigator. Content validity and retest reliability procedures were used to measure validity and reliability of the tools, respectively. To analyze the data, simple regression, multiple regression, factor analysis and secretion coefficient methods were applied. The findings showed that there was not a significant relationship between capacity and ability for straining of the works. However, a significant relationship was found between intellectual characteristics and academic achievement motive. Also, the findings indicate that factors, namely, ability to employ

intellectual resources in life problem-solving, and ability of investigation and strainness of experiments and activities had the most effect on motive.

**Keywords:** Intellectual Characteristics, Academic Achievement, Virtuous Acts, High Level, Experiments, Life Problems.

### Introduction

It seems that spirituality is one of the internal needs of human beings that exist in heart, thoughts and rituals of people; some consider it as a territory and ultimate and conclusive concern of human being and some others have negative attitudes towards this. As far as meaning and profoundness is concerned spirituality, like emotion, can have several degrees and can appear intentionally or unintentionally, developed or undeveloped, morbidly or unmorbidly. Nevertheless, due to several aspects of spirituality no integrated definition has ever been given. Some regard spirituality as implying the highest levels of cognitive, moral or emotional development and others consider it as an attitude that requires the maximum level of human experiences. According to James (1970), "spirituality" is a source of uninterrupted effort to answer the whys of life.

In the combined viewpoint, spirituality is treated as the sense of connection with himself, the world, other s and the world above. In this viewpoint the focus is on human's spirituality position. The world is looked at as purposeful in this view point, and the human must know the presented guidance to this world and follow it. This way man can get himself in line with the totality of the universe and become in harmony and agreement with it, loves everything and fulfills spirituality in himself (Spirituality & Tacey, 2003). In this view point of spiritual human the existence is meaningful and understandable and humanity is related to a meaningful and ontological sense (Groome, 1998; Boyer, 1994).

Spiritual human being's characteristics are in line with at least five aspects (Zohar & Marshall, 2000) and according to these aspects spiritual human being becomes researchable and examinable. In other words these characteristics can be effective in examining spiritual states and help the researcher in identifying spiritual human beings. These characteristics are:

- 1- The capacity and capability for sublimating works with respect to the world being purposeful from one side and the integrity of the universe from other side.
- 2- The capability of doing peak experiences in order to achieve more self-awareness.
- 3 – The capability of examining and refining experiences and daily activities according to spiritual and religious feelings.
- 4 – The capability of implementing spiritual resources in resolving life's problems and daily activities.
- 5 – The capability of doing activities with virtue, such as forgiveness, sacrifice and the like.

The motivation for educational improvement has been examined as an essential need by McClelland Atkinson, Clark and Lowell. Spence (1983) believes that those people who have a strong need to progress are usually successful in activities and assess their performance against internally or externally posed criteria which are usually higher than that of ordinary people.

Zohar & Marshall (2000) in investigating the effect of these characteristics on other personal states of individuals, proved that at least in some characteristics such as implementing

experiences and getting help from spirituality in resolving life's problems and attaining high spirit, there's a relation between factors of motivation for progress and spirituality.

The motivation for educational improvement is related to many of the personality dimensions such as intelligence, disposition and mental characteristics (Smith, 1969; Smith & Helmreich, 1983). In addition to this, the motivation for success is related to many of the theological and spiritual areas. This motivation can be accompanied with spirituality, development and success (Buttle, 1960; Mahabadi, 1994; Gage, Berliner, 1998).

Gronlund's research (1986) showed that spiritual beliefs can be effective in increasing the motivation for educational improvement. There are evidences that many of students' motivational patterns are related to spiritual values because spiritual values are closely related to motivational system and could cause evolutions (Super, 1973; Spaulding, 1996).

Research shows that there is an important and positive relationship between religious behaviors and acts and educational improvement. Steward (1998) in his research on the effects of spiritual characteristics on African-American students' academic improvement concluded that the more a student possesses these characteristics, the higher his academic improvement would be. In another research by House (2000) investigated the relation between these two variables on students of one American university since the entrance till the graduation which is four years. Results show that students' spiritual characteristics are among the most important anticipator of their academic improvement. Marsh and O'Neil (1984) found that improvement in mathematics among Australian students is closely related to spiritual characteristics. Despite this relation, results of a study by Robinson & Breslay (2000) on the relation between academic success and spiritual characteristics do not show any significant difference. These researchers concluded that academic success would not be influenced by spiritual characteristics.

Hekmat et al. (2011) in a study under the title of "emotional quotient and self-efficacy as an educational improvement among high school students" concluded that age, gender and self-efficacy can significantly predict educational improvement and even noted that there is an interrelation between socioeconomical status and educational improvement.

In another research by Abar et al. (2009) on the investigation of the relation between religiosity and academic improvement among African-American youth, data analysis revealed that super religious students tend to do their educations the best way possible. Also results of this study indicate a direct relation between parenting approaches and students' religiosity.

Babelan & Moeinkia (2010) in a research investigated the role of emotional quotient in students' academic improvement in distance education system in Iran discovered that components of emotional intelligence (self-awareness and self-expression, self-stimulation, social awareness) have a positive and meaningful relationship with academic improvement.

Focusing on the importance and credibility of spiritual experiences, Maslow (1970) has considered them worthy of scientific examination and has used the term "peak experiences" to define intuition, mysticism and internal enlightenment. He believes that this experience can be effective on the motivation of academic improvement.

In addition to this, discovering the existence of individuals' spiritual experiences in certain areas and in the neural system such as God Region and brain structure in problem solving and improvement, represents grounds for belief-making of the effect of spirituality on motivation, improvement and cognition which confirms Mahyer's (2000) claim indicating the relation between spirituality and motivation for improvement. Newberg, Aquili & Rause (2000), Harris (1988), Anderson (2000) found out that spirituality can influence motivation. Despite the fact that the relation between spiritual characteristics and educational improvement has been the subject matter of so many researches, doing another systematic research in this area still seems necessary. Thus, the main objective of the present study was to investigate the relation between spiritual characteristics and the motivation for educational improvement.

### **Methodology**

The study is descriptive with correlation approach. The population is all male and female students of Educational Sciences in the city of Isfahan during school year of 2011-2012 which are 370. Samples were selected through random sampling and with the use of Morgan table.

### **Instruments**

- 1- Educational improvement motivation questionnaire: it has 59 items which is based on Likert scale and measures 10 factors of Educational improvement motivation including purposefulness, competition, tendency toward work and progress, social dependence, empathy, seeking fame and financial reward, power and self-confidence.
- 2- 2 – Spiritual characteristics questionnaire: this questionnaire includes 30 items about spiritual characteristics in 5 axes of the capacity and capability for sublimating works, gaining peak experience of self-awareness, investigating and refining experiences, implementing spiritual resources in resolving problems and the capability of doing spiritual activities. It is based on Likert scale.

The validity of the two questionnaires has been proved by experts and the reliability was estimated 0.88 through test-retest method. Then questionnaire were distributed among students and data were gathered.

### **Results**

The data obtained through instruments in two levels of descriptive and inferential tabulated in the following tables.

A. the relation between spiritual characteristics and Educational improvement motivation:

Table 1.

*Descriptive data for spiritual characteristics and its relation with Educational improvement motivation*

	Spiritual characteristics	Mean	Std Deviation	Correlation	P
1	the capacity and capability for sublimating works	3/31	0/65	0/56	0/34
2	The capability of gaining peak experience of self-awareness	3/62	0/65	0/102	0/038
3	The capability of investigating and refining experiences	3/56	0/61	0/152	0/043
4	The capability of implementing spiritual resources in resolving problems	3/59	0/69	0/292	0/000
5	The capability of doing virtuous activities	3/81	0/68	0/309	0/000

As could be seen in the table the highest mean score is obtained by the capability of gaining peak experience of self-awareness and the capability of doing virtuous activities and the lowest mean score is attributed to the capability of investigating and refining experiences. In other words, students of Educational Sciences are more capable in two characteristics of gaining experience and doing virtuous activities.

In addition to this, the correlation between two variables of spiritual characteristics and educational improvement is meaningful except for the first one.

Table 2.

*Multiple Regression*

Source	Sum of squares	Mean of squares	f	Significance level
Regression	14290/43	2869/02	13/48	P=0/000
	67389/35	229/79		

As could be seen in the table the regression of the variables in the equation with regard to  $f = 13.48$  and  $p = 0.000$  is meaningful. In other words the mean scores in the table are reliable.

B. the analysis of the relation between spirituality and the motivation for success:

Table 3.

*Regression analysis of the relation between spiritual characteristics and the motivation for educational improvement*

	Spiritual characteristics	R	R <sup>2</sup>	f	sig	B	Bet	t	Significance level
1	the capacity and capability for sublimating works	0/46	0/0132	0/81	0/43	0/39	0/47	0/895	0/3420
2	The capability of gaining peak experience of self-awareness	0/102	0/011	8156	0/038	0/308	0/108	1/83	0/037
3	The capability of investigating and refining experiences	0/152	0/023	7/06	0/043	0/522	0/152	3/63	0/043
4	The capability of implementing spiritual resources in resolving problems	0/282	0/095	26/83	0/000	0/512	0/291	5/19	0/000
5	The capability of doing virtuous activities	0/319	0/085	40/5	0/000	0/513	0/308	5/6	0/000

Regression analysis shows that among five categories of spiritual characteristics there is a significant relationship between the capability of gaining peak experience, the capability of refining and motivation for improvement. And there is no significant relationship between the capacity and capability for sublimating works and motivation for educational improvement.

Multiple correlation and predicting coefficient show that remaining variables in the table account for changes of the variable of motivation for educational improvement.

Table 4.

*The Examination of The Effectiveness of Predicting Variables In Regression Equation*

	Spiritual characteristics	B	SEB	Beta	Significance level
1	The capability of implementing spiritual resources	0/348	0/125	0/189	0/003
2	The capability of doing virtuous activities	0/62	0/225	0/184	0/0049
3	The capability of gaining peak experience of self-awareness	0/45	0/167	0/154	0/005
4	Inconstancy	145/59	8/46	-	0/000

Beta coefficient in the table show that the highest level of influence is attributed to the capability of implementing spiritual resources and then the capability of doing virtuous activities and the capability of gaining peak experience of self-awareness. The last two ones have less influence on educational improvement than the first variable.

### Discussion and Conclusion

Results of the study show that the capability of implementing spiritual resources has had the highest influence on students' educational improvement. In other words, Good relationship with God, implementing spiritual resources, the pure spirits and resort to religious sanctities can influence the motivation for educational improvement. This result is in line with those of

Spaulding (1996) and Buttle (1960) and shows that believing in spiritual resources would help man in hardship and difficult situations would make him achieve success and improvement.

Attitudes that are conveyed to people from overt and covert spiritual resources influence their education value and their improvement and increase the motivation. Gronlund (1986) showed that reliance on spiritual resources can develop positive attitude and motivation for improvement and put the individual in a state of satisfaction and confidence. The capability of gaining peak experience of self-awareness is another spiritual characteristic that influences the motivation for educational improvement. The capability of peak experience can create a state in students that make them aware of their capabilities, make selections and realize themselves. In this state, with regard to human dignity can enter a new attitude which is important in directing talents and achieve self-stimulus management to make progress and this movement would result in more development. These results are consistent with researches by Tacey (2003) and Priestley (2001). These scholars demonstrated that in the field of self-management, man would become aware of his capabilities and in facing problems will find mechanism to deal with and resolve those problems which is effective in making progress.

Motivation for success is related to other spiritual factors such as the capability of doing virtuous activities, refining useless experiences and sublimating works. In other words each of these three factors can be very effective in increasing motivation for success but the relationship in sublimating and increasing the capacity is less important and no significant relationship could be seen. May be this is due to the fact that people do not have a good attitude in increasing the capacity and sublimating the works and this would decrease correlation. Thus education in spiritual aspects is necessary. Zohar & Marshall (2000) in addition to confirming the existence of the relation between spiritual characteristic and motivation for educational improvement emphasize that perspectives of these capabilities and spiritual characteristics from different individuals' viewpoints and in different religious atmospheres are different and these differences can influence differently on spiritual characteristics and motivation.

Emphasizing the importance of mystic experiences and refining non-spiritual experiences and doing virtuous activities, Maslow (1970) proposed internal enlightenment through which one can achieve higher levels of motivations and especially motivation for success.

Since the motivation for educational improvement can be competitive and could be a threat to some individuals' self-esteem, thus spiritual characteristics must be implemented in a way that invites the student to judge himself because research show that high improvement must be accompanied by self-assessment (*Nate L. Gage, David C. Berliner, 1998*), otherwise negative consequences could arise.

Thus it is suggested that motivation for educational improvement be accompanied with attaining spiritual characteristics in education in order for the individual to be able to plan for doing an action and scheme with respect to moral characteristics in selecting the goals and in the process of the work with regard to weak points and strong points. And achieve an energetic being to flourish his talents with attaining spiritual characteristics and self-management.



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