



## The relationship between student's impulsiveness and timidity with their educational achievement

**Karim Babaeian\* and Fereshteh Jamshidzadeh\*\***

\*BS in primary education, teacher in public education, Iran

\*\*BS in primary education, secretary in public, Iran

(Corresponding author: Karim Babaeian)

(Received 01 October, 2015, Accepted 18 November, 2015)

(Published by Research Trend, Website: [www.researchtrend.net](http://www.researchtrend.net))

**ABSTRACT:** Identification of factors which have a negative impact on student's educational achievement and trying to resolve them is a huge step toward their educational improvement. This research is a descriptive one which its statistical population consists of students in 1st grade in Aseman abad' town high schools that 100 of them are selected through multi-phase random sampling as research's sample. They answered to Barratt's impulsiveness and Samouei's timidity scales. For educational progress measurement we used annual grades average. Data were analyzed with Pearson's correlation factor and regression technique. The results showed that there is a significant negative relationship between student's impulsiveness and timidity and their educational achievement.

**Keywords:** Timidity, Impulsiveness, Educational achievement

### INTRODUCTION

One of the most important issues in field of educational psychology and educational procedures is student's educational achievement. Educational success is a high-priority issue in the field of educational systems. Researchers tried to identify the factors which can improve learner's performance or conversely prevent them from higher achievements and move toward increasing the level of student's educational performance. One of those factors which can have a direct impact on student's success is their personality characteristics. We can argue that identification and trying to resolve psychological characteristics which have a negative impact on educational achievement is a critical factor for student's educational progress.

Educational achievement is defined as having enough dominance about theoretical knowledge and information in a specific area. Educational achievement is an estimator of how far students go for realization of educational objects in a specific course (saif, 2003). Atkinson et al (1998) define educational achievement as learned abilities which are gathered through courses or in other words student's educational acquisitions in academic fields which can be measured with standard and pre-defined tests (Saif, 2005). One of the most important issues about educational achievement is having an attention toward psychological factors. Impulsivity is one of psychological traits which are the basis for quick and unplanned reactions to internal or external drivers, without caring about the consequences of these reactions for themselves or others (Moeller et al, 2001). Psychoanalysis argue that impulsive behavior relates people to their efforts to overcome loneliness, feeling guilty and depressed or other painful emotions

which works through acting (Sadock, 2001, translated by pourafkari). According to behavioral approach impulsivity consider short-time but less valuable benefits against long-term but more valuable benefits (Petry, 2004). Some authors believe that impulsivity might be an obstacle against learning in the first years of transformation (McMurrin, Blair, Egan, 2002). Mosti et al (2014) investigated the relationship between the dimensions of, operational performance and academic achievement. The results show that there is a negative and moderately significant correlation between impulsivity and academic achievement. One of other traits that many of researchers investigated its relationship with academic achievement is timidity. Timidity is some kind of social stress which consists of being stressful, anxious and shy in social groups (Vogel et al, 2006). Timidity is not classified as some kind of mental disorder at DMS-IV classification and is mostly considered as some kind of personality trait. Nonetheless timidity is an issue which has negative consequences, like a child which face the risk of behavioral or psychological problems because of extreme timidity (Lorant et al, 2000), shy people usually like themselves less than normal and consider themselves less lovely and active than social people. Also these people are judged in the same way by other at the same age (Zimbardo, 2001). Shy people pay more attention to negative dimensions of their personality; they consider their weaknesses more important and their strength less valuable. This will lead to a fragile and weak mindset. These people not only have a negative image about them but also think others do not believe them and make unusual judgments (Lizgic et al, 2004).

In any society there is a large group of children, adolescents and adults which deal with this behavioral disorder that prevent them from growing their social personality. In most of cases, timidity is the main obstacle for improving abilities, creativities and fulfilling responsibilities (Afruz, 2002). Rahim Pour, Khosravi & Mohammady Far (2014) investigated the relationship between class's social and mental condition and student's timidity with their academic achievement. The results show that there is a significant negative relationship between student's timidity and their educational performance. Although in a wide range of studies there is always an investigation about the role of individual factors in academic achievement but there is a lack of research about the identification of antecedents and fundamental factors which have a negative impact on academic achievement especially in our country. So in this article we try to consider some of variables which might help researchers to identify students which face the risk of academic failure.

**MATERIALS AND METHODS**

This research is a correlation research. Statistical population for this research consists of all male and female students which are studying in 1st grade in high schools in the academic year of 1393-94. The sample consists of 100 students which are selected through multi-phase random sampling (50 male, 50 female students).

**Tools.** Barratt's impulsiveness scale (BIS-111): Its 11th version was designed by Barratt *et al* (2004). This questionnaire has 30 items which each one has four options which evaluate cognitive impulsivity, impulsive action and the lack of program. The least and highest scores are 30 and 120 respectively. Patton, Stanford and Barratt (1995) reported the internal reliability for overall score of questionnaire between 0.79 and 0.83.

Naderi and Haghshenas (2009) performed a research which validates Barratt's impulsivity scale in Iran for the first time by calculating its correlation with Zuckerman's emotion dynamics scale in a group of students. The correlation factor was 0.28 for  $p < 0.005$  and its reliability factor was 0.72 based on Cronbach's alpha and 0.6 based on halving technique.

Timidity questionnaire: This questionnaire was designed by Samouei in Isfahan (2003). It contains 44 items which are codified by likert spectrum with five options (never, seldom, sometimes, often and always). Its reliability based on Cronbach's alpha, halving and re-test in 3 weeks was 0.83, 0.7 and 0.97 respectively. Its validity was 0.3 which were calculated based on correlation between questionnaire and interviews scores.

Academic achievement: for academic achievement students annual grade's average was used

**FINDINGS**

Mean and standard deviations are shown in table 1. As we can see from table 2, there is a significant negative relationship between impulsivity, timidity and academic achievement ( $r = -0.573$  and  $-0.742$ ).

Based on results for F parameter, the variance for academic achievement is mainly described by impulsivity. The impulsivity's impact coefficient show that we can predict the changes in academic achievement with confidence ( $p < 0.001$ ) so null hypothesis is rejected and researcher's hypothesis is confirmed (Table 3).

Based on results for F parameter in Table 4, the variance for academic achievement can be explained by timidity. Timidity can predict changes in academic achievement with great confidence so null hypothesis is rejected and researcher's hypothesis is confirmed.

**Table 1: Statistic parameters for research variables.**

Variable	Mean	Standard deviation
Impulsivity	71.97	24.23
Timidity	97.56	21.3
Academic achievement	17.02	1.76

**Table 2: Correlation coefficient between impulsivity, timidity and academic achievement.**

Variable	Coefficient	Significance level	size
Impulsivity	$r = -0.573$	0.001	100
Timidity	$r = -0.742$	0.013	100

**Table 3: Summary of regression model and coefficients for academic achievement based on impulsivity.**

Predictor	F	B	SE		.t
Impulsivity	3.718	-0.14	0.547	-0.328	1.928
		$R^2 = 0.328$	$R = -0.573$	$P < 0.001$	

**Table 4: Summary of regression model and coefficients for academic achievement based on timidity.**

Predictor	F	B	SE		.t
Timidity	6.349	-0.02	0.807	-0.55	2.52
		$R^2 = 0.55$	$R = -0.742$	$0 < 0.05$	

## RESULTS AND DISCUSSION

This research was performed with the goal of investigating the relationship between impulsivity and timidity with educational achievement of female students. The results show that there is significant negative relationship between these factors and educational achievement. In other words both impulsivity and timidity have a reverse relationship with educational achievement. The results of this research has conformity with researches which are done by Rahim pour *et al* (2014), Paul (2013), Santesso *et al* (2004), Zimbardo & Radl (2001), Lizgic *et al* (2004), Mosti *et al* (2014) and Lozano *et al* (2014). It seems that those students who have a high level of impulsivity react quickly and make decisions much faster; these phenomena force them not to pay attention to all aspects of issue in problem solving or answering to questions and make many mistakes which have an impact on their reliability and results of genetic tests. Many of students which have a high degree of IQ and a considerable capacity for learning, loose their educational motivation just because of emotional poverty, lack of self-confidence, timidity and so on and consequently they can't have a desirable academic improvement. Anxiety of people who are shy in public places is mainly because of clumsily behavior and failure in responding to different social situations. For shy students, their actual performance is the second important factor behind their mental feelings about their fears and discomfort of revealing their shortcomings. Since both impulsivity and timidity reveal an outlook of reduction in academic achievement so any unscheduled and impulsive reaction or withdrawal and isolation in adolescence especially in long periods should be investigated cautiously and the main reason should be identified. It seems that by identifying students which are at higher levels of these factors and applying required clinical interventions by psychologists and consultants in counseling centers and regular exercises and being aware of them we can reduce impulsivity and timidity in them. Reaching a balance in this area is a useful tool for improving student's academic performance

One of the limitations for this research is considering the annual grades average as an indicator of educational success while ignoring (not controlling) other variables which might have an impact on educational advancement.

## REFERENCES

- AFruz, G. (2002). Psychology and methods of treatment for Shyness. Publications of the Islamic culture Publications, 6thpress. Tehran.
- Atkinson, R., Hilgard, E., Atkinson, R. (1998). Introduction to psychology. Translated by Mohammad Taghi Barahani, 2003. 2nd Volume II. Roshd. Tehran
- Lizgic, F., Akyuz, G., Dogan, & Kugu, N. (2004). Social phobia among university students and its relation to self-esteem and body image. *Canadian Journal of Psychiatry*. **49**(9): 630-634.
- Lorant, T. A., Henderson, L., Zimbardo, P. G. (2000). Comorbidity in chronic shyness. *Depression and Anxiety*. **12**(6): 7-232.
- Lozano, J. H., Gordillo, F & Pérez, M. A. (2014). Impulsivity, intelligence, and academic performance: Testing the interaction hypothesis. *Personality and Individual Differences*. **62**(61): 63-68.
- McMurran, M., Blair, M & Egan, V. (2002). Investigation of the correlations between aggression, impulsiveness, social problem- solving, and alcohol use. *Aggress Behav*. **28** (5): 439-445.
- Moeller, F.G., Barratt, E. S., Dougherty, D. M., Schmitz, J. M & Swann, A.C. (2001). Psychiatric aspects of impulsivity. *American Journal of Psychiatry*. **158**(11): 93-1783
- Mosti, C., Zamzow, J., Culnan, E., Kloss, J & Spiers, M. 2014. Relationship between Subcomponents of Impulsivity, Executive Functioning, and Academic Success. *Arch Clin Neuropsychology*. **29** (6): 563.
- Naderi, F., Haghshenas, F. (2009). Validation of Barratt Impulsiveness Scale (BIS\_11) and Relationship between impulsivity and loneliness, with the use of mobile phone between male and female students University. (MA) Thesis, Islamic Azad University of Ahvaz, Iran.
- Patton, J. H., Stanford, M. S & Barratt, E. S. (1995). Factors structure of the Barratt Impulsiveness Scale. *Journal of Clinical Psychology*. **5**(1): 768-774.
- Paul, J. (2013). A closer examination of the relationship between child shyness and academic performance in china. A thesis submitted to the Faculty of Graduate and Postdoctoral Affairs in partial fulfillment of the requirements for the degree of Master of Arts in Psychology. Carleton University. Ottawa, Canada.
- Petry, N. M. (2001). Substance abuse, pathological gambling and impulsiveness. *Drug and Alcohol Dependency*. **63**(10): 29- 38.
- Rahimpour, H., Khosravi, M & Mohammadyfar, M. (2014). The Relationship between classroom psychological climate and shyness with academic performance among students. *Iranian journal of cognition and education*. **1**(2): 33-36.
- Sadock, B., Sadock, V. (2001). Comprehensive textbook of Psychiatry. Translated by Nusratullah Purafkary. 2004, 2nd press, Azad Publication, Tehran.
- Saif, A. A. (2003). Educational psychology: psychology of learning and Instruction. Agah Publications, Tehran.
- Saif, A.A. (2005). Measurement, Assessment and Educational Evaluation. 7th press, 3rd edition. Dowran Publication, Tehran.
- Samouei, R. (2003). Test reliability and validity of shyness. Psychiatry and Behavioral Sciences Research Institute equip. Tehran, Iran.
- Santesso, D., Schmidt, L & Fox, N. (2004). Are shyness and sociability still a dangerous combination for substance use? Evidence from individual differences. *Personality and Individual Differences*. **37** (1): 5-17.
- Vogel, D.L., Wester, S.R., Heesacker, M., Boysen, G & Seeman, J. (2006). Gender differences in emotional expression: Do mental health trainees overestimate the magnitude? *Journal of Social and Clinical Psychology*. **25** (3): 305-320
- Zimbardo, P. G., Radl, S. L. (2002). The Shy Child: A Parent's Guide to Preventing and Overcoming Shyness from Infancy to Adulthood. ISHK.