



Examining the Relationship between Attribution Style and Personality Characteristics and Academic Performance of Bandar Abbas High School Students

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ABSTRACT

The purpose of this research is to examine the relation between attribution styles and personality characteristics and academic performance Bandar Abbas high school students. The community research is all of the high school student boys of Bandar Abbas. For this purpose, 386 sample students were selected with the use of multistage stratified random sampling. We were selecting the 46-question attribution style questionnaire and 60-question NEO questionnaire as collection tool. The results of analysing have shown that there is a positive correlation between compatibility factor and academic performance, among personality characteristics, compatibility and among attribution styles, positive attribution style are the ones which define the performance. Results of the present research along with intensifying the important role of positive attribution style in academic achievement of students could help us prevent harmful consequences of failure by controlling factors result in failure.

Keywords: Attribution Style, Personality Characteristics, Academic Performance and Secondary School.

INTRODUCTION

The educated human force has played an important role in planning, organizing, leading, managing and controlling the community of developed countries and as you know the development of every developed community for its main reason depends on optimized educational programs. One of the standards and purposes of the successful educational system is the academic achievement of trainees. On this basis, the related expert and psychologists always emphasize on examining different educational aspects [1]. Academic achievement of the individual is defined as the academic learning level of the individual [2].

Researches in which personality dimensions depend on academic achievement, indicate negative correlation between neuroticism personality dimension and academic achievement, according to these researches, factors such as anxiety and depression which are derived of this personality dimension will result in academic achievement gaps [3 & 4]. Neurotic individuals have less concentration to resolve their problems than the others. [5].

Reaction of different individuals is the direct result of cognitive evaluation and understanding of situations, therefore, during two recent decades, examining the explanation style or methods of individuals and stressful incident which play an important role in psychological healthy, has attracted major attraction [6]. Weiner is a social psychologist who is known for developing a form of attribution theory. He is one of prominent research psychologists who developed attribution theory which explains the emotional and motivational entailments of academic success and failure [7]. Attribution theory explains the causes of an event or behavior especially in success or failure. Weiner believes that most of individuals' explanations about success or failure have three important stages, including: external and internal attribution, stability and instability, controllable and uncontrollable of individuals [7].

The first attribution dimension is internal or external attributions. Internal attribution assigns the individual himself for the failure meaning he relates causality to factors such as intelligence or giftedness whereas external attribution related causality to outside and environmental agents such as other people or social conditions. The second attribution dimension is generality. General reasons would generalize many life situations of the individual but specific reason relates to only one or a few situations. The third attribution dimension is stability (stable or instable). Stable reasons are consistent during time while instable reasons would change during the time [8]. The purpose of the attribution theory from the view of its founder is to examine how people explain and how they answer to the questions of questionnaire which are beginning with "why". Attribution theory explains the processes of explaining incidents and the emotional and behavior consequences which are derived of such explanations [9].

Seligman is among pioneers of applying attribution theory in mental health who introduces two categories regarding the relation between attribution style and mental health: 1- Pessimistic attribution style which means assigning negative incidents to internal factors which follows depression. 2- Optimistic attribution style which means assigning positive incidents to internal factors which follows happiness. Optimistic people expect to see good things happening to them; pessimistic people on the other hand, expect bad things [10].

Students who usually represent internal, stable and general explanations for bad incident happened to them, will be less successful than who explain bad incidents with consideration to external, instable and specific factors. Also students, who explain positive incidents with consideration to external, instable and specific factors, are less successful than who represent internal, stable and general explanations for positive incidents [11].

All port, who is among great researchers, determines personality as follows: personality is the dynamic organization within the individual of those psychophysical systems that determine his unique adjustments to the environment [12]. Kasta et al. [13] came into this result that there are five important dimensions between individual differences of personality specifics:

1- Neuroticism (N): is a personality trait characterized by anxiety, stress, looking for pity, hostility, obsessive impulse, depression and low self-esteem.

2- Extroversion (E): is a personality trait characterized by being positive, courageous, and energetic and being friendly.

3- Openness (O): is a personality trait characterized by being curious, love for art, being artistic, flexibility and rationality.

4- Agreeableness (A): is a personality trait characterized by generosity, kindness, sympathy with any one, altruism and being able to trust people.

5- Conscientiousness (C): is a personality trait characterized by being organized, neat, efficient, and trustworthy, self-discipline, self-organization, being reasonable and being peaceful.

Musgrav-marquart et al. [14] found a meaningful relation academic achievement and flexibility, conscientiousness and neuroticism as result of their study in the relation between personality traits and academic performance. But the results gained from the studies of Defruyt et al. [15] from one side emphasize on the negative and meaningful relation between neuroticism and academic performance and on the other hand emphasize on positive relation between conscientiousness, flexibility and generosity with academic performance.

Considering fast growth of industrialization and expanding urbanization and mechanical life in the current age, recognizing such personality traits become more important for the one who wants to plan comprehensively and correctly in order to prevent from problems occurring. Since student play important role in building the future of our society, teachers and educational centers need to know such traits so they can know their students better for adjusting educational plans and methods more compatible with requirements. Since we can't generalize outside researches conducted in this matter [14, 16, 17, 15, 16, 17, 18 & 19]. To Iranian students considering cultural and social differences between foreign and Iranian students, and also that such researches haven't examine all personality characteristics, attribution style with academic performance, most of such researches were conducted on university students. Therefore, the purpose of this study is to examine the relation of attribution styles and personality traits of students with academic performance on secondary boy students of Bandar Abbas.

MATERIALS AND METHODS

This study is a regression analysis research. In this research, the relation between variables would be analyzed based on the purpose of the research. In researches which regression analysis is used, the purpose is usually to predict one or more standard variables among one or more predictor variables. If the purpose is to predict one standard variable among more than one predictor variables, we would use of multiple regression model. If the purpose is to predict more than one standard variables simultaneously among predictor variables or their subset, we would use of multivariate regression [20].

Statistical community, sample and method of sampling

Statistical community of the present research includes all secondary boy students of Bandar Abbas in academic year of 2011-2012, which are collectively 6962 individuals. Table number 3-1 shows the volume of community.

Table1. Students divided according to areas

Title	Student	High school	Class
Area 1	4776	26	194
Area 2	2186	11	90
Total	6962	37	284

In order to achieve the proper sample volume, first we use Cochran formula as follows and the volume sample according to this method is yielded 284 individuals.

Multistage sampling: after that the necessary volume sample is determined and proportion of each subgroups of community, is also determined by proportionate stratified sampling method. Then we utilize multistage sampling method on selected students and necessary data are also gained. For this purpose, community members (secondary boy students) are ordered from greater to smaller units, for this purpose:

First stage unit

Selected high school

High school 1

High school 2

High school 10

Second stage unit

Selected class

Class 1 & 2

Class 3 & 4 ...

Class 19 & 20

Third stage unit

Students

6 5 4 3 2 1

5 7 8 9 10 11 12

55 56 57 58 59 60

For this purpose, we would first list all high schools of Bandar Abbas according to alphabetical order, and then we would assign each of them a number and determine a random number by the use of random number table.

Research tool

In order to collecting research information, we used of academic average of students as academic performance of them. In order to evaluate Attribution Style Questionnaire (ASQ), we used of a questionnaire and in order to evaluate personality traits, we used of NEO personality five factor questionnaires.

A) Attribution Style Questionnaire (ASQ)

Attribution style questionnaire is used in order to measure positive or negative thinking style. This attribution questionnaire is a self-report tool includes 12 hypothetical situations (six positive situations and six negative situations). Each of these situations would be followed by four questions. For each situation, tastes would be asked to imagine that situation has happened to them. Then they should decide about the cause of occurring that situation. Then they should grade the cause of that incident with a seven graded scale [21]. Generally, ASQ includes 48 questions. Manzo [22] reported final coefficients of attribution style questionnaire with the use of Cronbach's alpha method for positive attribution styles as 0.76 and for negative attribution styles as 0.81. Revick [23] reported stability of sub scales of ASQ (internal-external), (stable-unstable) and (general-specific) as 0.39 to 0.64. He noted that when the grade of questionnaire is computed for positive, negative and total incidents, range of 0.69 to 0.73 is yielded for positive and negative incidents.

Shahini Yeilagh [24] has used factor analysis in a research for examining the simplicity of attribution styles questionnaire structure in two stage study (preliminary and main stages). Results have shown that based on theoretical basis of questionnaire and Scree test, it is only possible to show two strong factors which collectively explain 40.16 percent of ASQ materials variance (23.52 first factor and 16.64 second factor.)

B) NEO personality five factor questionnaire:

NEO personality questionnaire, short and reviewed form: NEO-PI-R is a reviewed form of NEO personality questionnaire and also is substituted for it; NEO-PI-R is presented by Paol Tee et al. [25]. In this research, we are using short form of this kind of questionnaire which has 60 questions (NEO-FFI), answering to questions should be ranked in the five-grade likert scale such as "I totally disagree", "I disagree", "I have no idea", "I agree" and "I totally agree."

MacCarey et al, performed NEO 60-question form for 208 students for 3 months, they gained stability coefficients as 0.83, 0.75, 0.80, 0.79 and 0.79 respectively for N, E, O, A and C factors [25]. Roushan et al. [26] have acknowledged Cronbach's alpha factors of this test in the range of 0.72 (for flexibility) to 0.87 (for neuroticism).

RESULTS

Demographic information of sample community :

Table 3-4. Frequency table, percentage and cumulative percentage of students participated in the research with respect to their fields of study.

According to table 2, the frequency, percentage and cumulative percentage of the students in the research, are organized according to the academic fields of study.

Table 2. The frequency, percentage and cumulative percentage of the students in the research

Field of study	Frequency	Percentage	Cumulative percentage
1 st grade	114	29.5	29.5
Humanities	86	22.3	51.8
Experimental SC	95	24.6	76.4
Mathematics & physics	91	23.6	100.0
Total	386	100.0	-

Inferential findings of research

Second hypothesis: Is there a relation between attribution styles and academic performance of the students?

Table 3. Coefficient of Regression equation table

Variable	P	F	R ²	R	P	T	β	B
constant	0.001	3.97	0.02	0.14	0.001	24.74	-	18.09
Internal attribution					0.02	-2.30	0.12	-0.26

In order to analyze the above hypothesis the linear multivariate regression with step method was used. As the above table depict, regression equation has advanced to one step which only includes internal attribution variable. Data gained from the above table, shows that correlation between internal attribution style variable with academic performance is 0.14 and its determined coefficient is 0.02. The above coefficient of regression equation table shows the predictor variable (internal and external attribution) in standard variables changes (academic performance), attribution style variable (internal, stable, general) is meaningful with -0.12 of Beta and -2.30 of -t at the level of 0.02 alphas. But the external attribution isn't deemed meaningful predictor for standard variable of academic performance. For this reason, it isn't counted in regression equation.

Second hypothesis: there is a relation between personality traits and academic performance

Table 4. Coefficient of Regression equation table

Variable	P	F	R ²	R	P	T	β	B
constant					0.001	20.55	-	15.47
conformity	0.03	4.30	0.011	0.10	0.03	2.07	0.10	0.03

In order to analyze second hypothesis of the research, we have used of linear multivariate regression with step method. According to the above table, the regression equation has advanced to one step which only includes conformity variable. Based on data received from the above table, the correlation between conformity variable of personality traits dimensions and academic performance is yielded 0.10 and as for its coefficient it is yielded 0.011. The above table shows conformity predictor variable within changes of standard variable (academic performance). The conformity variable was meaningful with the amount of 0.10 beta and 2.07 of -t at the alpha level of 0.03. But the other personality traits (such as neuroticism, extroversion, openness and agreeableness) weren't meaningful predictor for standard variable of academic performance; therefore they were removed of regression equation.

DISCUSSION

Analyzing the first hypothesis of the research showed that generally there is a relation between attribution styles and academic performance. And also the positive attribution style predicted the academic performance of students and negative attribution style wasn't meaningful predictor. For explaining this finding, we can say that boys tend to attribute their failures to lack of enough effort [27 & 28].

Findings of this research infer that there is a meaningful relation between attribution styles and academic performance. These findings verified the findings of Lippett et al. [29] researches. Yates [30] found out that students, in their childhood, use positive and negative attributions for life events. Such attribution styles would affect their perception; the more positive attributions of students are the more successful they would be in academic performance. There is also a meaningful relation between attribution style of students and their advancement in mathematics and between attribution style of students and being purposeful and meaningful in their works. Yates found out that student who have positive attribution style in mathematics, would make more advancement in mathematics and would be more meaningful in their works.

For explaining this result, we can refer to Weiner and Seligman [30 & 32] S. Attributions refer to the procedure with which an individual understands and interprets the causes of his success and failure. Weiner was among psychologist who developed attribution theory which explains the emotional and motivational entailments of academic success and failure, he believed reasons people choose to justify their failures and

successes, includes three dimensions: 1- place of control; 2- stability conditions 3- controllability. Each and every one of success and failure causes is included in one of those three dimensions [7].

Second hypothesis: there is a relation between personality traits (neuroticism, extroversion, openness, conformity and agreeableness) and academic performance.

In order to analyzing this hypothesis, we have used of regression model with step by step method, results gained from the analysis showed that there is a relation between personality trait (conformity) and academic performance. Therefore, it is deemed that among personality traits, conformity is the only element that had meaningful relation with academic performance.

Finding of this research hypothesis, only confirms findings of following researches for conformity element and as for the other personality elements, it doesn't confirm the results. Laidra et al. [33] as results of their research, express that individuals with conformity personality dimension tend to be present in class and they have the ability to make relationship with their teachers and classmates, therefore they are academically more successful. Launce Berry, Soudar Gus et al. [34], have shown based on their research that personality attributes are related to academic advancement, on the other hand, such attributes may be predictor factor for leaving school.

Third hypothesis: there is a relation between personality traits (neuroticism, extroversion, openness, conformity and agreeableness) and attribution styles (positive and negative).

Forth hypothesis: as for predicting academic performance, there are multiple relations between personality traits (neuroticism, extroversion, openness, conformity and agreeableness) and attribution styles (positive and negative).

In this hypothesis, role of personality traits (neuroticism, extroversion, openness, conformity and agreeableness), for predicting academic performance had been examined, resulting that among personality traits, conformity was predictor factor of academic performance. Among attribution styles, positive attribution style had meaningful relation with academic performance .

Related finding to attribution styles of this research hypothesis, didn't confirm findings of some researches [34, 35, 36 & 37]. That is because findings gained from their researches express that when people face with negative incidents, attributing such incidents to internal, stable and general causalities, it is possible that they encounter with depression and mental & physical health problems. Giving a reason for this finding, we can say that social differences viewed as individually or collectively have the same effect both on attribution tendencies and other social behavior aspects [38]. Findings of this research confirm findings of [38, 39 & 40]. Findings of mentioned researchers showed that by increasing positive life events, stable and general attribution style would increase subsequently in which such a change would increase feeling hopeful and decrease depression signs.

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