Investigating the Relationship of Irrational Beliefs with Anxiety in Iranian Collage Students
(Case study: Under graduate Collage students of Azad University and Payam Nour University)

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ABSTRACT

Irrational beliefs have close relationship with anxiety and can make the person more anxious and distort his perception or understanding. Since humans react or responds to a stimulus after facing it and his or her reaction is based on his interpretation of the events, so a person's beliefs (thoughts) have an impact on the way he or she responds to a stimulus. The aim of this study is to investigate the relationship of irrational beliefs with anxiety in Iranian college students. In present study, anxiety state of college students at BA level in Azad and Payam Nour of Ghorveh, western Iran, in academic year of 2011 – 2012 is considered and compared. To carry out the research the question aire of Irrational Belief of Jones which includes 100 questions and Kattel Anxiety were applied. To analyze data, descriptive statistics, Pearson correlation coefficient and T – test were used. The results suggest that there is a positive and significant relationship between irrational beliefs and anxiety among Iranian college students to the effect that irrational beliefs and anxiety are more common among girls than boys, but the amount may be different in various college environments. Irrational beliefs were more common among Azad students that Payam Nour students. But anxiety was greater among Payam Nour students than Azad students.

KEYWORDS: irrational beliefs, anxiety, students' society, comparison of two societies, Kurdish.

INTRODUCTION

Ellis believes that emotional and cognitive disorder is greatly the result of unreasonable and irrational beliefs of a person and if he or she learns to increase his rational beliefs and decrease irrational thoughts, then he may be released of mental, emotional and behavioral disorder. In Ellis view point, people are radically rational; dealing with their problems is possible by improving people's thoughts and their perception [1]. Many of the cognitive problems are associated with the way people think. Therefore, rationality and cognition are considered in psychological area as an important phenomenon [2, 3]. Irrational thoughts have close relationship with anxiety and can make the person nervous and distort the perception [4]. According to Ellis (1991) anxiety and problems of each person are the result of his or her irrational beliefs [5]. Human beings have the potential to avoid anxiety and distress by the help of positive thoughts and beliefs [6]. Ellis, one of the founder of cognitive model, asserts that emotional and psychological disorder are greatly the result of unreasonable and irrational beliefs of a person and if he learns to increase his rational thoughts and reduce irrational beliefs, then he may be freed of mental, emotional and behavioral disorders [1]. In this study, the relationship of irrational beliefs with anxiety has been analyzed among the students of Azad and Payam Nour University in Ghorveh, western Iran. Irrational beliefs may intensify anxiety and make the person fall in to a vicious circle. Irrational assessment of an event in life, brings about misplaced anxiety in a person, then the person regards this anxiety as sign of a problem; and this problem, in turn, enhances irrational evaluation. Finally, the anxiety caused by an irrational belief, changes in to a big problem which has nothing to do with reality. When anxiety overcomes, the person enlarges (intensifies) the trouble so much that fear caused by anxiety debilitates the person more than real fear from the problem [7].

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Figure 1: vicious circle of anxiety due to irrational beliefs.

In figure (1) a vicious circle due to first irrational evaluation is regarded as a reason for biased assessment; therefore it is possible who apply irrational beliefs become more anxious conversely, those who have rational thoughts become much less anxious: thus by having rational thoughts and replacing them, the amount of anxiety can be reduced and we can guide the person toward achievement [8]. Ellis (1973) believes that when an activating event A, happens to someone, he or she may have two different but contrasting interpretation for A; Hear she may do so on the basis of her or his internal (innate) tendency. One belief is rational (RB) and the other is irrational (IB) [9]. If a person follows rational beliefs: he or she with come up with rational consequences (RC) and would have a normally personality: but if a person is prone to irrational beliefs (IB), he would encounter irrational consequences and accordingly he or she would have an abnormal and anxious character [10].

Figure 2: Behavior influenced by beliefs

Ostadian et al (2009), Come to the conclusion that group. Counselling in the form of rational, emotive and behavioral would reduce exam anxiety [11]. Several findings including Norton (2008) and other Iranian research such Agakhan (2007), Vesoqi et al (2010) suggest that cognitive behavioral group therapy is effective in decreasing anxiety and other anxiety – based problems[12, 13, 14]. Various studies refer to the relationship between a person’s cognitive system – especially irrational beliefs and emotional disorder like anxiety [15, 16]. In Ellis perspective, anxiety is created by the effect of irrational beliefs on a person’s emotion and behavior and remedy is done by correcting irrational beliefs and replacing them by rational ones[17]. Linda Hummer research (2007), suggests that the application of cognitive – emotional methods may reduce anxiety[18]. Smith and Zoasky (1987), in a research, considered the connection between irrational beliefs and emotional disorder in a testing group including 73 of attending patients to a mental clinic. Their findings show that correlation coefficient between irrational beliefs with emotional states such as clear anxiety, and rational behavior[19]. The investigation of research and health testing in Germany suggest that anxiety in women is twice as much as that of men [8]. The result of Amini’s research (1997), showed that there is significant difference between irrational beliefs of both men and women[20]. Dounapoush (1998) did a research to analyze normalization of irrational beliefs Test of Jones, the research was done on male and female college students and its results showed the level of irrational beliefs was more common among the girls than the boys [21]. Khaledian (2010), in another research entitled the relationship irrational beliefs with anxiety came to the conclusion that there is positive significant relationship between irrational beliefs and anxiety and these feelings were more common among the girls than boys[22]. Academic achievements depend on a set of complex elements, each require a body of research. Personal elements includes: purposes, irrational beliefs, Anxiety, motivation, methodology, intelligence, physical elements, behaviour and compatibility and mental or emotional conditions. All these elements play a role in academic achievement or failure. The mental and emotional conditions serve as the main element contributes to the academic achievement or failure [23].
METHOD

In this study, the relationship between irrational beliefs and anxiety was investigated particularly based on Irrational beliefs test (IBT). Kattell test. IBT test was developed by Jones (1968), the test has ten scales and each of these scales includes 10 questions based on Likert five – point scale [24]. Total score of IBT ranges from 100 to 500. Low scores show rational beliefs and high score shows irrational beliefs [25]. Scoring of IBT test in Likert five – point scale ranges from strongly disagree to strongly agree. The amount of scores in each scale shows the amount of irrational beliefs in a person. The total scores related to sub – scale phrase constitute its score and total scores of a person, in all scales, shows the total scores of a person's irrational beliefs [24]. Jones, 1968 reported the reliability of test, using test – retest, was 92% and reliability of each of the it’s ten sub – scales ranged 66% to 80%. He also achieved average reliability of all sub – scales as 84%. IBT test validity was achieved by correlating with Depression Test of (Beck) and it was 77% which was significant at 99% [26].

Kattell Anxiety test (1950) was made to assess (evaluate) anxiety and one of the mostly used tools to measure anxiety [27]. In this research, this test will be used to measure anxiety. This test has 40 questions in which the first 20 questions shows hidden anxiety and the other 20 questions show clear and morbid anxiety and the total scores of 40 questions show general (total) anxiety [27]. Which is criterion for total anxiety in this study. The questions in this test have three options in the forms of Yes, Occasionally and No or often, some times and never. Scoring procedure in this test is as follows: 2. 1. 0 and takes 5 to 10 minutes to answer the questions and applies to people over 14 [27]. Given the research topic – investigating the relationship of rational and irrational beliefs with anxiety, this is a field research and since it evaluate (analyzes) the relationship between two variables, it is also correlative study. The statistical populations of this research are all undergraduate college students of Humanities in Ghorveh University – Azad and Payam nour – who were busy studying in 2011 – 12 academic year. Among all the mentioned students who were 1100, 280 participants – 140 from Azad and 140 from Payam nour – were chosen especially based on Krisi & Morgan (1970) [28]. From each college 70 men and 70 women and totally 140 men and 140 women were selected randomly and questionnaire was distributed among them and them was collected.

Data analyses and research findings

Table (1) shows the statistical indicators including mean and standard deviation of the scores of irrational beliefs, and anxiety.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>Standard deviation</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Irrational beliefs</td>
<td>203.87</td>
<td>11.76</td>
<td>280</td>
</tr>
<tr>
<td>anxiety</td>
<td>31.17</td>
<td>8.86</td>
<td>280</td>
</tr>
</tbody>
</table>

Table (2): correlation between the scores of student’s irrational beliefs and anxiety

<table>
<thead>
<tr>
<th>Irrational beliefs</th>
<th>Persons correlation coefficient</th>
<th>anxiety</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0.429</td>
<td></td>
</tr>
<tr>
<td>Sig</td>
<td>0.00</td>
<td></td>
</tr>
<tr>
<td>ranges number</td>
<td>280</td>
<td></td>
</tr>
</tbody>
</table>

The data in table (2) show that there is positive significant relationship between students irrational and their anxiety r=0.429, p<0.001 meaning that by increasing scores in one of the variable, the scores will also rise in the variable. The data also shows there is positive and significant correlation between the scores of irrational beliefs with anxiety – among Payam Nour University College. r= 0.406, P<0.001, meaning that by increasing scores in one of the variables, the scores will also increase in the other variable. The data also shows there is positive and significant correlation between the scores of irrational beliefs with anxiety – among Azad University College. r= 0.452, P<0.001, meaning that by increasing scores in one of the variables, the scores will also increase in the other variable. The data showed there is significant correlation between irrational beliefs and anxiety among female college students: r= 0.47, p<0.05, meaning that by increasing scores in one variable, the scores will also rise in the other variable. There is significant and positive relationship between irrational beliefs and anxiety of male college students: r= 0.388, p<0.05, meaning that by increasing scores in one variable, the scores will also increase in the other variable.
Table 3: Group difference for students' irrational beliefs in both universities

<table>
<thead>
<tr>
<th>Variable</th>
<th>Azad Mean</th>
<th>Azad Standard deviation</th>
<th>Payam Nour Mean</th>
<th>Payam Nour Standard deviation</th>
<th>df</th>
<th>t</th>
</tr>
</thead>
<tbody>
<tr>
<td>irrational beliefs</td>
<td>209.12</td>
<td>13.11</td>
<td>198.62</td>
<td>10.41</td>
<td>278</td>
<td>7.44***</td>
</tr>
</tbody>
</table>

*** P<0.0001

The data in table (3) show significant difference between students irrational beliefs in Azad and Payam Nour university; such that the amount of students irrational beliefs in Azad university is more than that of Payam Nour. That data show significant difference between irrational beliefs of students in Azad and Payam Nour University. (t=7.44, d f=278, p<0.001) meaning that irrational beliefs of students at Azad university is significantly more than that of Payam Nour university students.

Table 4: Group differences for student’s anxiety in both universities

<table>
<thead>
<tr>
<th>Variable</th>
<th>Azad Mean</th>
<th>Azad Standard deviation</th>
<th>Payam Nour Mean</th>
<th>Payam Nour Standard deviation</th>
<th>df</th>
<th>t</th>
</tr>
</thead>
<tbody>
<tr>
<td>anxiety</td>
<td>29.57</td>
<td>7.63</td>
<td>32.77</td>
<td>8.09</td>
<td>278</td>
<td>3.4***</td>
</tr>
</tbody>
</table>

*** P<0.0001

The data in table (4) show significant difference between students anxiety mean score in Azad sand Payam Nour University. Such that the level of students anxiety in Payam Nour University is more than that of Azad University. These data show significant difference between students anxiety at Azad and payam Nour (t=3.4, d f=278, p<0.001); meaning that the level of students anxiety at Payam Nour university is significantly more that of students in Azad university students.

**DISCUSSIONS**

The results show that there is positive and significant relationship between students’ irrational beliefs with anxiety and we may conclude that the more the irrational beliefs, the more anxiety there is. This relationship was also significant separately between two groups of boy and girl college students. In the first place; these findings supported the rational, emotive. And behavioral theory of Ellis (1973), because he holds that a person’s beliefs may influence his or her behavior and these very beliefs of a person determine his behaviors and not an activating event [9]. From this viewpoint, anxiety is a behavior that is the consequence of irrational beliefs of a person; such that the more a person has irrational beliefs, the more anxious he would be. the findings , that is,- being positive relationship between irrational beliefs and anxiety – are consistent with Aghakhani (2007) ,Vesoghi et al(2010), Ostadian et al(2009), Smith and Zoaski (1987), Calvet & Lokga (2002), Harris & Driaden (2006), Lindhammer (2007), and Norton(2008) [11 - 18]. May be the possible support and explanation of this hypo thesis is the rational-emotive-behavioral theory of Ellis(1969), Because he asserts that when an activating event (A)happens ,the persons behavior or reaction does not directly arise from this activating event , but between persons behavior and the activating event the persons beliefs(B) exist . The system of beliefs influences his or her behavior (C) therefore a trait like anxiety can be a consequence of a person’s irrational beliefs[29]. Score mean of Azad student's irrational beliefs was significantly higher than score mean of Payam Nour students. The possible reason is that the former students pay higher tuition fees. Score mean of anxiety among Payam Nour students was significantly higher than score mean of anxiety among Azad students. The possible reason is that based on the interviews done with these students, they presented this problem by saying that Payam Nour classes are held in the form of problem – solving sessions a student's access to the professors or educators is faily limited; therefore students are not so sure of their own learning especially when it comes to learning the whole material contained in a text book and this brings about more anxiety in the students.

In this field, there has been no research in Ghorveh, so because of the Kurdish culture and language of the people in this city, this research can provide a means for future researches, in this way the students can make a sense of importance and we can be familiar with the irrational beliefs and the anxiety rates in this city. Thus, we can identify the methods to decrease these variables and lead them to obtain the ability to use the capacity of understanding, expressing, rational beliefs application, self- satisfaction and value. As a result they can make a way to the academic achievement. As the city has a different culture and there are many students from other cultures in it, the present position of the university and in general the city can be explained to the new students, so it helps them. Note that they can be familiar with the rational beliefs and the anxiety of the native masters and students, so that they can be lead to a specific purpose. If the expected result achieves, it can conduct masters and students and all the academic society of the city to bring the academic achievement. It is recommended that the university authorities can produce some workshop and classes to decrease the student irrational beliefs and the anxiety via their consultants and psychologists.
This result can be a useful tool for clinical psychologists, consulting psychologists, students, Undersecretary of the student affairs in universities, the students' undersecretary of the ministry of science, research and technology. So the following solutions are suggested for above – mentioned problems:

- It is suggested that college officials and administrators hold works hops to reduce irrational beliefs and anxiety of the students.
- Given the volume of emotional problems (anxiety and depression) it is essential that experienced and knowledgeable counselor should be hired.
- Making continuing attempts to make students aware of negative impact of irrational beliefs on anxiety by using new methods and group counseling in an emotional – rational way.

**Research Limitations**

An undeniable and evident fact about the results of scientific research is their limitation and inadequacy; meaning that to plan educational projects and counseling just relying one or a few previous studies is not reasonable. The present research is not an exception.

- Lack of research in this regard and in Iran made the researcher to interpret and justify the results personally and with less confirmation.
- Lack of access to intelligence quotient and economical and cultural status of the students and their effect on students' irrational beliefs and anxiety.
- Being unaware of the student's access to proper and essential training.
- Lack of sufficient and documented access to amount (level) of emotional problems of the students.
- By searching in research – scientific bases and other sites and searching in authorities.

**REFERENCES**