ASSOCIATION BETWEEN RATIONAL THOUGHT AND HUMOR WITH LIFE EXPECTANCY AMONG STUDENTS OF ISLAMIC AZAD UNIVERSITY IN SARI/IRAN 2011

Seyed Hamze Hosseini1, Asgari Nopour2 and *Hamid Reza Eskandari Rad2
1Department of Psychiatry, Psychiatry and Behavioral Sciences Research Center, Mazandaran University of Medical Sciences and Health Services, Imam hospital, Sari, Mazandaran, Iran
2Department of Psychology, Faculty of Psychology and Educational Sciences, Islamic Azad University, Sari, Iran
* Author for Correspondence

ABSTRACT
This study aimed to access the relationship between rational thought and humor with life expectancy among students of Islamic Azad University. This retrospective descriptive study was performed on 362 undergraduate students with both sexes from Islamic Azad University in Sari city northern Iran. Cluster random sampling method was used. Shourky and Whiteman's thought questionnaire, Humor scale questionnaire and life expectancy questionnaire were used for data collection. Data were analyzed using independent T-test, Pearson's correlation and multivariate regression. P value of <0.05 was considered statistical significance. A positive relationship has been shown between humor and rational thought and the relationship between rational thought and life expectancy was negative. There was a positive relationship between humor and life expectancy. A positive relationship was observed between rational thought and humor with life expectancy among male and female students (t = 1.474, -1.334, 1.831). A significant correlation has shown between the rational thought and humor with life expectancy of students (f = 16.470). The present study shows a significant relationship between rational thought, humor, and life expectancy. Thus, strategic training and the use of audio-visual equipment, brochures and various written related to improving quality of life and identifying and correcting of irrational thought among students and the community seems to be necessary.

Keywords: Rational Thought; Humor; Life Expectancy; Student

INTRODUCTION
Thinking is one of mankind's capacities for problem solving and facing obstacles to analyze various aspects of problems. Cognitive psychologists believe thinking style is a strong predictor of behavior and negative biases in thinking is one of harmful consequences of rumination attitudes (Hamidpor, 2006). Instability in thinking and mind disturbance causes interruption in interpersonal communication. Individuals with coherent and rational thought have more advances in their tasks and it facilitates their interpersonal relationship, predictable and normative behavior. Rational thought, humor, and expression of words in the form of delicate are convenient and efficient methods. Normative behavior without false and misplaced emotions originates from a lighthearted spirit and fun. So freshness and vitality organize the thought. The results of interaction between rational thought and humor, joy and fun make a sense of life expectancy in individuals. Theoretical support for this view is the domain of cognitive theorists' thought. One of the major cognitive theories as known as "the reasonable action" refers to the idea that the decision to do a particular behavior is originated from a rational behavior. Baron claims that when deciding on different behavioral options, outcomes and efficiency of each decision being taken specific measures based on can be done or not. Then, the decision is reflected in some plans that are given the most powerful predictor of how someone acts in a specific situation (Baron et al., 2006). Researchers declare that people involve problems coming from their irrational or unwise thought (Ganji, 2005). Also, experts do not know what actually happened to cause confusion, but the perception to the state causes confusion (Letafati, 2010). Thus, the resultant of cognitive theory is that the idea can be evaluated based on being fit with the situation in which it occurs and a good and effective idea is a situation that there is a
balance between emotion, memory, and imagination related to the purpose or problem that is discussed (Clark, 2005). Also, fun and humor which is a component of emotional intelligence have been introduced as a new topic in positive psychology as a multi-dimensional feature (Khoshoei, 2007). Stress makes unhealthy physiological changes. For years, the relationship between stress and hypertension, muscle tension and suppression of the immune system is known. Now, it has been found that laugh and humor have conflicting effects. Laugh is a powerful antidote to stress (Wooten, 1996).

In our religious namely; Islam, not only fun and humor is known as a faithfully character, but also it has admired with some consideration by religious leaders. Proving the claim that is enough as Imam Ali, the first Imam of Muslim, Said in Mostadrak- al- Vasaebk book: "when the Prophet (Mohammad) saw one of his companions who had sad, he made him happy by humor (Nori, 1940). But other than religious factors, association between humor and increased self-esteem (Kuper and Martin), improvement of quality of life, strengthening of immune system, high creativity (Hilgard and Atkinson 1975), stress modulators (Teri, 1991; Falkman and Lazaros, 1984), flexibility (Hughes 2008), honesty, intimacy, empathy, vitality, optimism, satisfaction and social support (Veyer and Gerey, Larson and Palk, 2003), muscular relaxation (Hers, 1993) and decrease pain (Lips, 2008) has been established (Najarian and Ebrahimi, 2005).

Also laugh and humor can increase lifespan, Structural sense of humor (Lefcourt, 2002) and positive psychological capacities (Luthans, 2002) are of considerable importance in human psychological development. In a research by Nur and Solokakk (2010), a positive correlation has been reported between humor and creativity and a negative correlation found between aggressive humor (offensive) and creativity (Cayirdag and Acar, 2010). Hughes (2008) believes that humor is related to positive experiences of mood (Hughes, 2008). Larsen and Martin (2003) believe that humor has an important role in social relations. Martineau (1972) and Herman (1996) believed that humor facilitates the social interaction and reduce the separation between people in the community (Yildizbas and Cakir, 2009).

Human uses variety of adaptation methods to deal with adversity in life those are sometimes very successful and effective. Plutchik (1996) believed to eight-way of adjustments in stressful situations for a man. One of these adaptation techniques is using inversion mechanism in a stressful situation namely; considering ridiculous aspects of the existing situation (Eskandari and Najarian, 1990).

Rational thought, humor and hope are landmarks of existing of health and emotion among people of a society. Hughes (2008) and Synder et al., (1991), has stated: hope is a positive motivational state that is influenced by the feeling of success (on specific targets) and moving on planned paths. Penson and et al., in 2012 have been expressed that hope is expectation of positive outcome, despite the inconvenient circumstances. Hope is a source of progress and success.

At first, a rational thought person is a legitimate, serious, effective attention and trust person and if there is fun and humor characteristic in someone, the first sense that arises in contact with her/him is intimacy, heat, vitality and the person will probably be health physically and mentally. A question may be asked by reader of this study is what relationship is there between rational thought, humor, and hope? Be it known that this study was not done in order to prove the inevitable relationship between the mentioned characters or displayed the necessarily need to being the characters in someone to show the kind of behavior and personality of his/her. Rather, it is trying to be presented and identified the logical consequences of the behavioral style and humor and their symptoms in order to consolidate normative behavior and transfer it to others. Also, it is investigated that how public attitudes are right about adherence to the principles of funny person or vice versa, is it right that rational thought subjects are always serious and firm and never enter joking? Thus, this study was aimed to access the relationship between rational thought, humor with life expectancy among students of Islamic Azad University.

MATERIALS AND METHODS
This retrospective descriptive study was done on 362 undergraduate students (138 girls and 224 boys) of Islamic Azad University in Sari/ Iran during 2010-2011. From total of 7770 students of both sexes, 362 were selected by cluster random sampling method and Kerjesy and Morgan tables. The variables
including rational thought, humor and life expectancy and their impact on interpersonal and intrapersonal relationships were measured. Collected data was recorded in a questionnaire.

Three questionnaires were used to data collection as follow: A) Shourki and Witeman rational thought questionnaire: due to the lack of validity and reliability of the questionnaire, early of study to determine the reliability of the questionnaire, a group of 30 boys and girls who have participated in the first test, retest was taken again by two weeks interval. Then test results were analyzed statistically and alpha Cronbach's equal to 0.72 were obtained. Validity of the questionnaire was approved by Colleagues and experts confirmation.

B) Humor questionnaire (SHQ): Evaluating validity of the questionnaire using consistency method, the correlation coefficient between 74% to 80% for the size, and 92% for reduction of the questionnaire was obtained (Khoshoei, 2007).

C) Life expectancy questionnaire: measuring internal consistency of the questionnaire, the Cronbach's alpha coefficient was used. Based on the results, the alpha coefficients for the total sample, male and female participants were obtained 89%, 94%, 92 % respectively. To assess test-retest reliability of the scale after 4 to 6 weeks for 95 female participants and 91 male participants who took part in the first stage is performed. Mean and standard deviation of total participants, male and female participants in the retest phase were:

SD=24.35 (X=26.19) SD=39.31 (X=8.15) SD=16.30 (X=22.19)

Correlation coefficients between test and retest scores for all male and female subjects measured on two times were (r = 80%), (r = 82%), (r =79%) respectively (Hallajian, 2009).

Thus in this study, through the three instrument, independent variables (predictor) and dependent variables (criterion) were investigated. Hypotheses and research questions were analyzed using Pearson Moment method, T-independent and multivariate regression.

RESULTS AND DISCUSSION
The demographic data of the participants has shown in Table 1.

<table>
<thead>
<tr>
<th>Variables</th>
<th>Sex</th>
<th>Marital status</th>
<th>Age</th>
<th>Mean±SD</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Girl (38.2%)</td>
<td>Boy (61.8%)</td>
<td>Single (77.9%)</td>
<td>Married (22.1%)</td>
</tr>
<tr>
<td>Number (%)</td>
<td>138</td>
<td>224</td>
<td>282</td>
<td>80</td>
</tr>
<tr>
<td>Total (%)</td>
<td>362 (100%)</td>
<td>362</td>
<td>362</td>
<td>-</td>
</tr>
</tbody>
</table>

With regard to the relationship between humor and rational thought, since the calculated correlation coefficient was (r = 0.156) at 5% significance level with 95% confidence (ά=5%), we can say there is a positive relationship between the two variables.

Related to relationship between rational thought and life expectancy, the calculated correlation coefficient was (r = -0.198) at a significance level of 5% with a confidence interval of 95% (ά=5%), we can say that there is a significant positive relationship between the two variables. There is a relationship between humor and life expectancy. There is no difference between male and female students regarding rational thought, humor and life expectancy.

As shown in Table 2, the rational thought, humor and life expectancy were differences between male and female students based on t=1.334, 1.474, 1.831 at 5% significance level with 95% confidence (ά=5%), that was smaller than critical- t table (t=1.96). so at the 95% confidence and á=5%, we can say that there is significant differences related to the three variables between male and female students.
Table 2: The relationship between rational thought, humor and life expectancy

<table>
<thead>
<tr>
<th>Variable</th>
<th>Statistical indices</th>
<th>N</th>
<th>M</th>
<th>SD</th>
<th>t</th>
<th>df</th>
<th>t</th>
<th>α</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rational thought</td>
<td>girl</td>
<td>138</td>
<td>24.325</td>
<td>5.078</td>
<td>1.334</td>
<td>360</td>
<td>1.96</td>
<td>0.05</td>
</tr>
<tr>
<td></td>
<td>boy</td>
<td>224</td>
<td>25.094</td>
<td>5.695</td>
<td>2.094</td>
<td>360</td>
<td>1.90</td>
<td>0.05</td>
</tr>
<tr>
<td>Humor</td>
<td>girl</td>
<td>138</td>
<td>102.18</td>
<td>18.77</td>
<td>1.347</td>
<td>360</td>
<td>1.96</td>
<td>0.05</td>
</tr>
<tr>
<td></td>
<td>boy</td>
<td>224</td>
<td>101.78</td>
<td>20.09</td>
<td>1.96</td>
<td>360</td>
<td>0.05</td>
<td></td>
</tr>
<tr>
<td>Life expectancy</td>
<td>girl</td>
<td>138</td>
<td>77.482</td>
<td>91.59</td>
<td>1.831</td>
<td>360</td>
<td>1.96</td>
<td>0.05</td>
</tr>
<tr>
<td></td>
<td>boy</td>
<td>224</td>
<td>75.630</td>
<td>96.39</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

As shown in Table 3 and 4, a significant difference was observed regarding rational thought, humor, and life expectancies between males and females students.

Regression analysis has shown that rational thought and humor can predict the life expectancy in girls and boys students.

Table 3: Characteristics of statistical regression to predict the life expectancy, rational thought and humor

<table>
<thead>
<tr>
<th>Variables</th>
<th>Raw coefficients</th>
<th>Standard indices</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant humor</td>
<td>15.857</td>
<td>3.468</td>
</tr>
<tr>
<td>Rational thought</td>
<td>-0.081</td>
<td>0.025</td>
</tr>
<tr>
<td></td>
<td>-0.017</td>
<td>0.090</td>
</tr>
</tbody>
</table>

Table 4: Regression coefficients

<table>
<thead>
<tr>
<th>Model</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>F</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>266.96</td>
<td>2</td>
<td>133.348</td>
<td>16.470</td>
<td>0.002</td>
</tr>
<tr>
<td>Residual</td>
<td>290.659.1</td>
<td>359</td>
<td>80.96</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>31732.87</td>
<td>361</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The recent study has confirmed the relationship between rational thought and humor. It means that whatever a person has higher rational thought skills, he or she is more humor. It can be concluded that people with highly rational thought skills can use humor skill effectively. This relationship was true and similar in both sexes. Similarly results have been reported by Abdi and et al., (2007), Cayirdag and Acar, (2010). Humor is related to positive personal and psychological functions such as self-motivation, openness, creativity and farce (simplicity). The results of Proyer and Ruch showed that humor is the best predictor of Spirit of gratitude, virtue, audacity, creativity, hope and team works (Proyer and Ruch, 2011). Our finding showed a positive relationship between humor and life expectancy. This finding was confirmed by Abdi and et al., (2007) that have shown happiness increases the life expectancy. Also, it has shown that humor is a compatible way to deal with problems. In addition, we found a sex related difference in rational thought, humor and life expectancy between male and female participants. The present study was also showed that gender can be effective on positive or negative attitudes, humor and life expectancy. As reported by Noris and Wiman, women have been used humor coping strategies more than men. Also, the life expectancy of women is more than men.

In this study, the relationship between rational thought, humor and life expectancy, was significant among the students. The results showed that rational thought and humor are predicting of life expectancy in the students. Proyer and Ruch had reported similar results (Proyer and Ruch, 2011). In general, the results of this study have shown a significant relationship between the mentioned variables; rational thought,
humor, and life expectancy. It is worth noting that the teaching strategies and the use of audiovisual materials, brochures and all literatures related to improve of quality of life and recognizing irrational thoughts and correcting them among students and other community members is needed.

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