

Relationship of Quality of Life and Achievement Motivation with Under Graduated Student's Anxiety

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Abstract

The present study investigates on the relationship of quality of life and achievement motivation with undergraduate students' anxiety. Hence, 159 BA students (77 female and 82 males) from Psychology and Upbringing Science, Law and Politics, and Social Science colleges of Allameh Tabatabaee University were selected in a multiple stage clustered random manner. They completed the quality of life SF-36, achievement motivation ACMT, and Cattell's anxiety questionnaires. The data was analyzed by multiple-variable regression analysis method. The results showed that quality of life and achievement motivation have a significant relationship with anxiety. Quality of life also negatively predicts the anxiety level in males. However, achievement motivation is not a predictive variable to determine the anxiety level in males. There is also a significant negative relationship among quality of life and achievement motivation and anxiety level in females. These findings may be helpful to the growth and attention to students' mental hygiene.

Keywords: Quality of Life; Achievement Motivation; Anxiety; Student

Introduction

Quality of life (QOL) is one of the topics that have recently taken the attention of psychologists and human science and health researchers. Eysnek has defined QOL as the perceived differences between what the condition of life is and what it should be [1]. Quality of life as defined by the World Health Organization as "the perception of the individual of his position in life in the context of culture and value system in which he lives and in relation to his objectives, expectations, patterns, and worries [2].

Huebner research (2010) has discussed a hierarchy for individuals' mental hygiene. The individual's general quality of life is at the top of this hierarchy. This component and other levels of this hierarchy are effective on the interpersonal relations, confrontation skills, and students' education motive [3]. Furthermore, the students with higher quality of life enjoy a better general health. It should be considered that mental traumas and quality of life affects students' instruction quality. Since the researches (Nayeri and Hajbaqeri, 2011) have indicated, anxiety has a negative effect on students' instruction. In other hand, low quality of life is in relation with low education performance. The findings of this research indicated that this anxiety experience has many effects on students' mental and physical health. Teaching the relaxation techniques to the students, they could lower anxiety average level, quality of life went up in correlation to it. All the tests in this research are female students at the dormitory, and none of them takes anti depression and anti anxiety medicine [4].

Achievement motivation is relatively a new concept in the world of motivation (Mangal, 2000). It is now widely used and heard in the area of education. Sunita Sharma (1998) pointed out that achievement of desired end [5]. The theory of achievements motivation has been related to number of areas including academics and sports. Since it has been shown that all students are influenced by achievements motivation [6]. Achievement motives and goals have been shown to have an influence on achievement outcomes. A person with high need for achievement activity seeks out challenging, competitive situation where there is uncertainty about success or failure. On the other hand, a person with high fear of failure tries to avoid these types of situations. According

to Atkinson and Feather (1966) "Achievement motivation is conceived as a talent disposition which is manifested in overt striving only when the individual perceives performance as instrumental to a sense of personal accomplishment." Individuals high in achievement motivation are at their best when they can maintain a high level of involvement in ensuring the excellence of activities under their coordination or control.

However they do relatively less well when required to manage excessive tasks or to function in highly stressful environments. Nagarathanamma and Rao (2007) designed a study to see the difference between adolescent boys and girls on achievement motivation. They found that there was no significant difference between boys and girls with regard to achievement motivation level. Kaushik and Rani (2005) also confirmed the findings that there was no significant gender difference on achievement motivation in students of four educational streams [7].

In an examination of the relationship of test anxiety, study behaviour, and academic performance in college students, Culler and Holahan (1980) determined that high test-anxious students performed more poorly and had a higher dropout rate than low anxious students. They also observed that highly anxious students had poorer study skills than low anxious students [8].

Academic achievement is an important dimension for students, so the effect of emotional disturbance on academic achievement is an important subject in student coaching [9].

Researches indicate that there is a relationship between achievement motivation and anxiety and educational accomplishment among undergraduates. (19) Furthermore, a negative correlation has been seen between achievement motivation and anxiety levels and depression in

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medical students. In this line, they found a relationship between anxiety and achievement objectives and education abilities [10]. Also Perceived academic competence was related to worry and tension [11] Researchers studying future orientation on academic achievement (Ranor 1970, Entin & Feather 1982, Weitzenkorn 1974), generally found inconsistent evidence that future orientation was related to academic performance. However, Raynor did show that multiple variables of high achievement motivation, low anxiety, and future orientation, resulted in greater academic success. It was also evident that achievement motivation alone could not influence academic performance. Other factors such as anxiety were inversely related to achievement motivation and academic Performance [12]. The results of another research have indicated the significant relationship between achievement motivation, self-concept, self-regulation, self-assessment and anxiety in undergraduates [13].

The other concept of this research is anxiety, which includes physiologic stimulation, uncertainty feeling, and helplessness. Generally, anxiety includes spread excitation, very unpleasant and often vague and anxious which is accompanied with one or two physical sense such as emptying feeling of stomach, chest stricture, heartbeat, perspiration, headache, and vomit [14].

Anxiety was defined by Freud (1924) as "something felt", a specific unpleasant emotional state or condition that included apprehension, tension, worry, and physiological arousal. Freud (1936) equated objective anxiety with fear, which he considered to be an emotional reaction that was proportional in its intensity to a real danger in the external world. consistent with Darwin's evolutionary perspective, Freud's "danger signal" theory emphasized the adaptive utility of anxiety for motivating behaviour that helped a person cope more effectively with potentially harmful situations. Aggression was considered by Freud (1933/1959) to be an instinctual drive that motivated anger and aggressive behaviour. When aggression cannot be directly expressed against external objects, it is turned back into the self, resulting in depression and other psychosomatic manifestations [15].

Anxiety is one of the most common emotions and responses to stress. Studying itself can be stressful; however, several aspects of students' life and living in dormitories also anxiety provoking. The students encounter different anxiety producing factors such as financial burdens, working while studying, getting along with roommates, excessive study load, performing assignment, fulfilling family expectation, and concerning for finding a job or for higher education after graduation. Moreover, frequent course evaluation and the necessity for being ready for these tests with add the student's stress and anxiety. excessive anxiety has various demanding effects on the students' mind and body. It not only would decrease their physical health, but also decrease the student's health related quality of life, learning ability, retention of material, interpersonal relationship. Some students try to cope with anxiety by self destructive behaviours like smoking, drinking alcohol [4]. Some evidence indicate that nearly 66 to 80 percent of the students experience a high level of statistics anxiety when facing statistics' concepts and subjects and also evaluations related to this course [16]. Some researchers believe that many students describe statistics as the most distressing course in their academic studies [17].

Research objectives

1. Is there a relationship among life, achievement motivation, and anxiety of male undergraduate students?
2. Is there a relationship among life, achievement motivation, and anxiety of female undergraduate students?

Methods

Statistic society, sample, and sampling method

This is a descriptive-correlation research. Its statistic society includes 9803 undergraduates of Allameh Tabatabaai University. They are studying at 8 colleges. 159 students of them (82 males and 77 females) were selected from three colleges of Law and Politics, Psychology and Upbringing Science, and Social Science through clustered random sampling and answered the questionnaires. They were given to the students individually at their break-time. They included the quality of life, achievement motivation, and anxiety questionnaires respectively. In alignment with inferential analyses and research hypothesis test, regarding the correctness of the hypotheses, multiple variables regression tests were used.

Expression

Quality of life SF-36 questionnaire

Mental and physical health questionnaire SF-36(V2); Vir, 1996: this 36-question questionnaire measures mental and physical health through 8 scales (physical function, physical role, body pain, general health, liveliness, social function, excitation role, and mental health). Octal small scales themselves are reduced into two components. Physical component includes role, pain, and physical function, and mental health component includes mental health, excitation role, and social function. The necessary time period to answer is 5 minutes. Measurement pattern of this test is in three levels: questions, 8 scales and 2 physical components (PCS), and mental components summary (MCS). For each scale, questions scores in each scale should be encoded, collected, and converted into a 0-100 continuum by Likert (depending on the number of options in each question). Then standard t score for each person is computed based on mean of 50 and standard deviation of 10[18]. Many researches has been conducted to investigate the psychometric characteristics of this questionnaire in the US, England, Hungary, and Canada [19].

The studies has indicated that reliability coefficient of mental and physical health in the general population and the patients in Sweden, England, and the US has been 0.80-0.85, and content validity SF-36 has been investigated by many health scales, and the result was that SF-36 measures most of the health components. Content validity SF-36 in the studies related to mental and physical health criterion has been 0.80-0.90[21]. Fooladvand et al research (2009) about reliability case of this questionnaire in Iran indicated that reliability coefficient Cronbach α for mental health and physical health components was 0.92 and 0.89 respectively. The results of internal similarity were also in line with a coefficient in components and scales about 0.71 [20]

Cattell's Anxiety Scale

Cattell's anxiety scale has been codified as a short questionnaire with 40 articles which the testee can answer in 15 minutes. This test can be used for both males and females in all ages after 14-15, and from most cultures [21].

For the Cattell's anxiety scales the coefficients ranged from 0.65 to 0.86. Correlations are presented in the manual between this scale and other measures of anxiety: the Taylor Manifest Anxiety Scale, the Cattell's Anxiety Scale, and the Multiple Affect Adjective Check List. These correlations are .80, .75, and .52, respectively [22].

This scale has been used in many researches in Iran, and the questionnaire validity and reliability has been confirmed. Additionally,

it was used in the Iranian norm choosing by Mansur and Dadsetan in 1367 by 16342 males and 8532 females, and the reliability of this tool has been confirmed for anxiety recognition [23].

Achievement Motivation Test (ACMT)

Achievement Motivation Test was developed by V.P. Bhargava (1994). It is a sentence completion test and it has 50 incomplete sentences. Each item has three alternatives and respondents have to select one alternative by putting tick mark. Test-retest reliability is 0.91 and validity index of this test is 0.85. The score on the scale range from above 23 which mean high achievement motivation and from below 11 which mean low achievement motivation [7].

Test – retest reliability with 1 month interval was 0.87. Reliability index for the English copy was 0.91 and 0.81. This test agreement with education achievement (general) and achievement need test criterion was 0.75. Regarding the English copy, content validity value with education achievement test was 0.85. Its reliability in Iran was obtained by Cronbach α method as 0.76. Furthermore, the reliability computed through describing by Guttman and Spearman Brown method is 0.63[24].

Findings

Table 1 is the descriptive statistic indexes related to the scores of quality of life and achievement motivation on male students anxiety. Table 2 shows the descriptive statistic indexes related to the scores of quality of life and achievement motivation on female students anxiety, which includes mode, median, and mean indexes as central tendency, variables range, variance, and standard deviation as dispersion indexes.

| Research variables | Central tendency indexes | | | | Scatter indexes | | | |
|------------------------|--------------------------|-------|--------|-------|-----------------|-------|----------|-------|
| | number | mode | median | mean | min. | max. | variance | SD |
| Quality of life | 82 | 71.77 | 68.51 | 65.72 | 17.75 | 94.62 | 274.57 | 16.57 |
| Achievement motivation | 82 | 18 | 19 | 20.41 | 8 | 35 | 34.64 | 5.88 |
| Anxiety | 82 | 40 | 36 | 35.48 | 10 | 61 | 101.93 | 10.09 |

Table 1: Statistic indexes related to the scores of quality of life and achievement motivation on male students anxiety

| Research variables | Central tendency indexes | | | | Scatter indexes | | | |
|------------------------|--------------------------|-------|--------|-------|-----------------|-------|----------|-------|
| | number | mode | median | mean | min. | max. | variance | SD |
| Quality of life | 77 | 40.81 | 65.56 | 68.07 | 40.81 | 97.12 | 183.37 | 13.54 |
| Achievement motivation | 77 | 11 | 11 | 10.31 | 4 | 23 | 11.34 | 3.36 |
| Anxiety | 77 | 37 | 38 | 37.62 | 11 | 63 | 103.6 | 10.17 |

Table 2: Statistic indexes related to the scores of quality of life and achievement motivation on female students anxiety

| Change sources | Sum of squares | Degree of freedom | Mean of squares | Amount of F | Meaningfulness level |
|----------------|----------------|-------------------|-----------------|-------------|----------------------|
| Regression | 0.210 | 2 | 1610.94 | 25.278 | 0.00 |
| Remainder | 5034.56 | 79 | 63.72 | | |
| Total | 8256.45 | 81 | - | | |

Regarding the above table and emphasizing on the obtained amount of F, it can be discussed that "anxiety level" has a meaningful relationship with "quality of life" and "achievement motivation" in the level $\alpha=0.001$. In other words, "anxiety level" can be predicted through "quality of life" and "achievement motivation". Hence, to identify and clarify the regression coefficients, it is necessary to present the regression coefficients table.

Table 3: Multiple-variable of predicting "anxiety level" through "quality of life" and "achievement motivation" in male students of Psychology and Upbringing Science, Law and Social Science Colleges of Allameh Tabatabaai University

| Criterion variable | Predictive variables | Amount of B | Criterion error | B coefficient | Amount of t | Meaningfulness level |
|--------------------|-------------------------------|-------------|-----------------|---------------|-------------|----------------------|
| Anxiety | Width from the starting point | 64.228 | 4.886 | - | 13.145 | 0.001 |
| | Quality of life | -0.378 | 0.054 | -0.621 | -7.056 | 0.001 |
| | Achievement motivation | -0.191 | 0.151 | -0.111 | -1.263 | 0.210 |

The results obtained from carrying out the regression through simultaneous entry on the data in Table 4 shows that β coefficient and the amount of t indicate that quality of life and achievement motivation have a negative relationship with anxiety level, which is only meaningful for the quality of life variable in level ($\alpha=0.01$). In other words, anxiety level increases with reduction of life quality. However, achievement motivation variable can not be used to predict the anxiety level. Regarding the Beta regression results, it is determined that quality of life variable has allocated the highest effect in clarifying the anxiety level to itself.

Table 4: Regression coefficients related to Table 3

| Change sources | Sum of squares | Degree of freedom | Mean of squares | Amount of F | Meaningfulness level |
|----------------|----------------|-------------------|-----------------|-------------|----------------------|
| Regression | 2221.76 | 2 | 1110.88 | 14.544 | 0.001 |
| Remainder | 5652.30 | 74 | 76.383 | | |
| Total | 7874.04 | 76 | - | | |

According to the above table and emphasizing on the obtained amount of F, it can be discussed that "anxiety level" has a meaningful relationship with "quality of life" and "achievement motivation" in the level $\alpha=0.001$. In other words, "anxiety level" can be predicted through "quality of life" and "achievement motivation". Hence, to identify and clarify the regression coefficients, it is necessary to present the regression coefficients table.

Hence, the above regression equation is clarified as:
Anxiety level = $-0.375(\text{quality of life}) + 63.062$

Regarding the second hypothesis, "quality of life and achievement motivation have relationship with anxiety female undergraduate students". The multiple-variable regression test was used. Its results can be seen in Table 5.

Table 5: Multiple-variable regression Predicting "anxiety level" through "quality of life" and "achievement motivation" in female students of Psychology and Upbringing and Law and Social Science Colleges of Allameh Tabatabaai University

| Criterion variable | Predictive variables | Amount of B | Criterion error | B coefficient | Amount of t | Meaningfulness level |
|--------------------|-------------------------------|-------------|-----------------|---------------|-------------|----------------------|
| Anxiety | Width from the starting point | 68.858 | 5.898 | - | 11.675 | 0.001 |
| | Quality of life | -0.32 | 0.074 | -0.425 | -4.316 | 0.001 |
| | Achievement motivation | -0.918 | 0.298 | -0.304 | -3.083 | 0.003 |

The results obtained from carrying out the regression through simultaneous entry on the data in Table 4 shows that β coefficient and the amount of t indicate that quality of life and achievement motivation have a negative relationship with anxiety level, which is meaningful at the level ($\alpha=0.01$). In other words, anxiety level increases with reduction of life quality and achievement motivation. Regarding the Beta regression results, it is determined that quality of life variable has allocated the highest effect in clarifying the anxiety level to itself.

Hence, the above regression equation is clarified as:
Anxiety level = $-0.32(\text{quality of life}) + 0.91(\text{achievement motivation}) + 689.858$

Table 6: Regression coefficients related to Table 5

Investigating the first research hypothesis, "there is a relationship among quality of life, achievement motivation, and anxiety of males." Multiple-variable regression test was used. Its results are seen in Table 3.

Discussion and Conclusion

The objective of this research is investigation the relationship of quality of life and achievement motivation with students' anxiety according to their sex. Hence, two hypotheses were presented. The first finding of this research showed that quality of life predicts the male undergraduate student anxiety level. Achievement motivation is not

a predictive capability for anxiety level among male undergraduates, though.

The second finding of this research indicated that quality of life and achievement motivation predict the anxiety level among female undergraduates. That is to say that both variables, quality of life and achievement motivation, predict the anxiety level. However, quality of life variable is the most effective one.

The findings of this research were in agreement with Nayeri and Hajbaqeri research. There is a negative relationship between quality of life and anxiety level [4].

The other finding was the meaningful relationship between achievement motivation and anxiety which there was a negative relationship between them in the females. This relationship was not meaningful in the males. The first finding in accordance with the research results of McEwan which showed the negative relationship among achievement motivation and anxiety and education accomplishments among undergraduates [25] Furthermore, Yeh et al research showed a negative meaningful relationship among achievement motivation and anxiety and depression in medical students[10].

One of the findings is that sex difference was observed in achievement motivation variable. Achievement motivation had a correlative role with females' anxiety. However, this significant relationship was not observed among males. Perhaps, it was due to the research limitations which some of them are explained as the following. It is also possible, though, that there is a difference between two sexes which can be explained and investigated more precisely through more researches and considering sex as a variable.

Despite the findings of this research, sample volume and controlling the students ages are some of the limitations which can be effective. Working on the other age groups, university levels, and comparing their results are suggested for further research.

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