



## A Comparison on Psychological Well-Being in Gifted and Normal Students

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### **ABSTRACT**

The objective in this research is to compare psychological well-being in gifted and normal students. The research method in this study is ex post facto and of casual-comparative type. The statistical population in this research includes all male and female junior high school students of NODET and normal schools of Ardabil County during 2011-2012 school year. The research sample included 40 gifted students who were chosen through systematic random sampling, since the list of all gifted students was available to the researcher and also, 40 normal students who were chosen through matching method. In order to collect data in this research three questionnaires of 1. Positive-Negative Affect Scale, 2. Short Depression-Happiness Scale and 3. Satisfaction with Life Scale were used. To analyze the data, MANOVA method is used. Research results suggested that there is a significant difference between gifted and normal student based on psychological well-being. Also, results indicated that there is a significant difference between female and male students based on component of positive affect and interest.

### **Keyword:**

psychological well-being, gifted students, normal students

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## Introduction

The society and especially the education system are concerned about the fate of individuals, their growth and development and their status in the society and they expect the individuals to improve in various aspects such as cognitive aspects and developing skills and also personality, emotional and behavioral aspects, as it is supposed to be. (Farahani, 2001) Generally, education systems are formed based on the opinions of scientists, and opinions of experts and the ideas governing the society and the final destination of scholars, policymakers and rulers of the society is to provide proper educational opportunities so that the new generation of the society could attain attitude and knowledge and learning required skills, so that with them, they can found their lives realistically with awareness and insight. Since one of the functions of education system in Iran is to link knowledge, awareness and insight of society individuals with goals which are prescribed by the rulers and policymakers of the society in order to reach social stability and sustainable development, curriculum planners and education experts should constantly be prepared to determine and choose educational goals compatible with fundamental changes which are happening in the society. (Chegini, 1999) In the education system of many countries, including Iran, gifted students are identified through various tests and special education is planned for them. The majority of these individuals obtain high degrees in higher education and get key positions in society. Identification of psychological differences between these two types of students and considering them in education plans could lead to higher growth and prosperity among these two types of students.

WTF?

Although the word health is known to human and it has a clear concept, its definition is not easy and it has various meanings for various people. The literal meaning of health is to be complete, to be flawless and to be scared. In the past scientists defined health as the lack of illness in patients, until in 1948 that WHO defined health as: a state of social, mental, physical health, and not lack of illness alone. All said, there is a wide range of definitions reported in health, some of which indicate the lack of illness and the other end of the spectrum is the complete physical, mental and social welfare. Often times, psychological well-being refers to a mental well-being, while it could be different from it. Well-being is defined based on quality and quantity of components based on which an individual sees their life enjoyable; that is, the way the individuals assess their lives is related to well-being.

Studies suggest that well-being include some components and the majority of researchers consider it a component and to assess it, they use several components. (Denier, 2000) These components are related to satisfaction and happiness. (Riff, 1989 and 1995) Assessing these components is general (such as life satisfaction), specific (job satisfaction) and multidimensional (such as positive affect against negative affect). (Denier, 2000) although the terms mental and psychological are interchangeable when used with well-being, Case et al. (2002) stated that these two terms refer to two different facts. Firstly, they stated that mental well-being includes this traditional view that well-being in life

assessment is based on satisfaction and balance between positive and negative affect. Secondly, mental well-being is defined based on happiness, pleasant success and avoidance of pain. (Ryan and Deci, 2001) Case et al. (2002) expressed that psychological well-being is the perception of positive engagement with challenges of life. In this context, psychological well-being is determined as sense, self-realization and performance level. (Ryan and Deci, 2001)

Reef's (1991) aspects of psychological well-being provide a better view of psychological well-being and they determine the way individuals are different from each other in these aspects. The aspect of sense of independence determines how an individual manages social pressures and assess themselves. An individual who is assessed high in this aspect has self-decision and sense of independence. While individuals who are assessed low in this aspect are concerned about the opinions of others about them. The aspect of domination on environment is determined by the capability of the individual in managing their environment. (Denver, 2010)

According to Levinson (1962), psychological well-being refers to the feelings an individual has towards themselves, their surroundings, people, especially considering the responsibility they have towards others, the method of accepting their income and identification of local and temporal position of self. (Milanifar, 2003)

According to Carl Menninger, psychological well-being refers to the individual coping with their surrounding with the maximum possibility, so that it leads to complete happiness and useful perception. (Chegini, 2007)

Psychologists and scientists working on behavioral sciences use the term mental well-being to refer to efficacy of human and their proper performance. (Khodarahimi, 1995)

During recent years, Canadian Mental Health Association has defined mental health in the following three parts: (Ganji, 2006)

First part: feedbacks related to self, including:

- a. Mastering one's emotions
- b. Awareness about the weaknesses of self
- c. Satisfaction about happiness of self

Second part: feedbacks related to others, including:

- a. Interest in long and intimate friendships
- b. The sense of belonging to a group
- c. Sense of responsibility towards human and material environment

Third part: feedbacks related to life, including:

- a. Accepting responsibilities
- b. The enthusiasm in developing facilities and interests of self
- c. The capability in personal decision-making
- d. The interest in working well

Hence, the main research question is if there is a difference between gifted and normal students on psychological well-being.

## Methodology

The research method in this research is ex post facto and of casual-comparative type. In this method, the researcher tries to study the relationship between special factors and conditions or behavior type which was present or occurred before, through studying the results derived from them.

(Delavar, 2001) Two groups of students (gifted and normal) were compared based on the psychological well-being variable. In this research, the variables of being gifted and normal in students was considered as the independent variable and the variable of psychological well-being was considered as the dependent variable.

**Statistical Population**

The statistical population in this research included all female and male students of NODET and normal schools of Ardabil County during 2011-2012 school year. Based on the rough estimations, 11,000 female students and around 12,000 male students are studying in junior high schools in Ardabil County and in both female and male NODET junior high school, around 360 students are studying.

**Sample Size and Sampling Method**

The sample in this research included 40 gifted students who were chosen through systematic random sampling, since the list of all gifted students was available to the researcher and also, 40 normal students were chosen through matching method. In estimating the sample size, Delavar (2005) research method is used and for causal-comparative studies, 15 individuals in each group is enough, but in order to increase the external validity of the study, 40 individuals were chosen.

**Data Collection Method**

Questionnaire was used to collect the data in this study. After preparing the list of the names normal and gifted students and choosing them, initially the research objective was presented to them and research tests were presented to them, subsequently. They were asked to express their ideas accurately. The data was collected in groups and in the classrooms and the data was analyzed via SPSS.

**Data Collection Instrument**

In this research, to collect the data, the following instruments were used:

1. Positive-Negative Affect Schedule: This 20-item scale was invented and validated by Watson et al. (1988) and it assesses two subscales of positive affect (ten affects) and negative affect (ten affects). The participant responds to each item in the five degree Likert scale from “Not at all” to “Very much” and the scores of each scale is in the range of 10 to 50. Both negative affect and positive affect have a good internal reliability and the Cronbach’s alpha for positive affect subscale is reported to be in the range of 0.56 to 0.90 and the Cronbach’s alpha for negative subscale is reported to be in the range of 0.84 to 0.87. positive and negative affect list has a high construct validity and negative affect scale is positively and positive affect negatively are in correlation with Beck depression questionnaire. Also, negative affect scale has a positive correlation with public distress. (Bakhshipur and Dezhkam, 2005) Using factor analysis, Bakhshipur and Dezhkam (2005) showed that two-factor positive and negative affect pattern is the most elegant pattern for this scale and based on validity also, using this instrument the patients with depression could be differentiated from patients with anxiety. Also, it is shown that reliability coefficient of these two subscales is 0.87.

2. Short Depression-Happiness Scale: This scale was invented by Josef et al. (2004) and includes six items which are adapted from the 25-item Depression-Happiness Scale of Joseph and Luis (1998) and it assesses the positive affect in the individuals. The questions in this scale are answered through a four-point Likert scale from “never” to “often” and the score range is from 6 to 24. The high scores in the scale show the positive thoughts, feelings and behaviors and in fact it shows the happiness in the individuals is higher than their depression symptoms. Cronbach’s alpha for this scale is reported to be 0.80. The consistency validity of this scale with the Oxford happiness scale was 0.69 and the discriminant validity of the scale with Beck depression scale was -0.63.

3. Life Satisfaction Scale: This scale was invented by Diener et al. (1985) and it includes five items. The participants answer the items on a seven-point Likert scale from “extremely satisfied” to “extremely unsatisfied”. The score range for this scale is from 5 to 35. Diener et al. (1985) reported the Cronbach’s alpha of this questionnaire to be 0.87 and the test-retest reliability of the questionnaire was reported to be 0.82. Reliability and validity of this scale was calculated by Bayani et al. (2007). In their study, it was indicated that the reliability of this scale through Cronbach’s alpha was 0.83 and it was 0.69 through test-retest. The construct validity of this scale was measured through consistency validity using Oxford happiness questionnaire (Argyle, 2001) and Beck depression questionnaire (Beck at al., 1961) and results suggested that the scale has a positive correlation with Oxford happiness questionnaire and a negative correlation with Beck depression questionnaire.

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**Data Analysis Method**

Considering the fact that the main objective in this research is to compare the psychological well-being in gifted and normal students, the data was analyzed through MANOVA and step-by-step Regression was used for the research questions.

**Research Findings**

- a. Descriptive Findings:

*Table 1. Mean and Standard Deviation of Psychological*

Variables		Groups	Mean	Standard Deviation
Psychological Well-Being	Positive Affect	Normal Students	19.35	1.81
		Gifted Students	47.10	3.23
	Negative Affect	Normal Students	37.25	2.87
		Gifted Students	15.25	2.16
	Happiness	Normal Students	9.57	1.39
		Gifted Students	20.82	2.54
	Life Satisfaction	Normal Students	8.62	1.58
		Gifted Students	24.60	4.24

As it could be observed in Table 1, considering these values, it could be expressed that in all components of

psychological well-being, gifted students are higher than normal students.

Table 2. Mean and Standard Deviation of Psychological Well-Being Components among Gifted Male and Female Students

Variables		Groups	Mean	Standard Deviation
Psychological Well-Being	Positive Affect	Male	48.80	2.26
		Female	46.40	3.91
	Negative Affect	Male	15.30	2.25
		Female	13.20	2.14
	Happiness	Male	20.20	2.04
		Female	21.45	2.87
	Life Satisfaction	Male	23.45	4.37
		Female	25.75	3.87

Table 3. Mean and Standard Deviation of Psychological Well-Being Components among Normal Male and Female Students

Variables		Groups	Mean	Standard Deviation
Psychological Well-Being	Positive Affect	Male	18.65	1.78
		Female	20.05	1.60
	Negative Affect	Male	37.60	2.96
		Female	36.90	2.80
	Happiness	Male	9.35	1.59
		Female	9.80	1.15
	Life Satisfaction	Male	8.35	1.49
		Female	8.90	1.65

- There is a significant difference between gifted and normal students in psychological well-being.

#### b. Findings Related to the Hypotheses Hypotheses:

Table 4. Levene's Test to Assess the Equality of Variances of Psychological Well-Being Components in Two Groups of Gifted and Normal Students

Variables	F	Degrees of Freedom 1	Degrees of Freedom 2	Sig. Level
Positive Affect	12.04	1	78	0.13
Negative Affect	2.79	1	78	0.99
Happiness	14.70	1	78	0.12
Life Satisfaction	6.87	1	78	0.15

As it could be seen in Table 4, F static error level is not significant for variables of positive affect, negative affect, happiness and life satisfaction, and this indicates that error

variance of these variables is not different between participants (gifted and normal students) and variances are equal.

Table 5. Data Related to Validity Indices of Psychological Well-Being Components Variance Test

Effect	Value	F	Degrees of Freedom	Degrees of Freedom of Error	Sig. Level
Pylayy Effect	0.99	685.20	10	69	P<0.01
Wilks Lambda	0.01	685.20	10	69	P<0.01
Hotelling Effect	99.30	685.20	10	69	P<0.01
Ray's Largest Root	99.30	685.20	10	69	P<0.01

As it could be observed from Table 5, Wilks Lambda value is equal to 0.01 which is significant at  $p \leq 0.01$ ; that is, there is a significant difference between gifted and normal

students based on positive affect, negative affect, happiness and life satisfaction.

Table 6. MANOVA of Psychological Well-Being Components among Gifted and Normal Students

Source	Scales	Sum of Squares	Degrees of Freedom	Mean of Squares	F	Sig. Level
Group	Positive Affect	15401.25	1	1234.25	2238.30	0.00
	Negative Affect	9680.00	1	2345.99	1495.12	0.00
	Happiness	2531.25	1	1243.25	602.77	0.00
	Life Satisfaction	5104.01	1	2345.56	498.28	0.00

As it could be observed from Table 6, hypothesis one that "there is a significant difference between gifted and normal students in psychological well-being" is approved at  $p \leq 0.01$  and that shows that hypothesis zero is refuted and the counter hypothesis is approved; that is, there is a significant

difference between gifted and normal students in psychological well-being.

- There is a significant difference between gifted female and male students in psychological well-being.

Table 7. Levene's Test to Assess the Equality of Variances of Psychological Well-Being Components in Gifted Female and Male Students

Variables	F	Degrees of Freedom 1	Degrees of Freedom 2	Sig. Level
Positive Affect		1	38	0.29
Negative Affect		1	38	0.64
Happiness		1	38	0.35
Life Satisfaction		1	38	0.22

As it could be seen in Table 7, F static error level is not significant for variables of positive affect, negative affect, happiness and life satisfaction, and this indicates that error variance of these variables is not different between gifted female and male students and variances are equal.

Table 8. Data Related to Validity Indices of Psychological Well-Being Components Variance Test for Gifted Female and Male Students

Effect	Value	F	Degrees of Freedom	Degrees of Freedom of Error	Sig. Level
Pylayy Effect	0.52	3.22	10	29	P<0.01
Wilks Lambda	0.47	3.22	10	29	P<0.01
Hotelling Effect	1.11	3.22	10	29	P<0.01
Ray's Largest Root	1.11	3.22	10	29	P<0.01

As it could be observed from Table 8, Wilks Lambda value is equal to 0.47 which is significant at  $p \leq 0.01$ ; that is, there is a significant difference between gifted female and male

students based on positive affect, negative affect, happiness and life satisfaction.

Table 9. MANOVA of Psychological Well-Being Components among Gifted Female and Male Students

Source	Scales	Sum of Squares	Degrees of Freedom	Mean of Squares	F	Sig. Level
Group	Positive Affect	19.60	1	19.60	1.92	0.17
	Negative Affect	0.10	1	0.10	0.02	0.05
	Happiness	15.62	1	15.62	2.51	0.12
	Life Satisfaction	52.90	1	52.90	3.09	0.08

As it could be observed from Table 9, hypothesis number 3 "there is a significant difference between gifted female and male students in psychological well-being" is approved at  $p \leq 0.05$  based only in negative affect component and that

shows that there is a significant difference between gifted female and male students in negative affect component.

- There is a significant difference between normal female and male students in psychological well-being.

Table 10. Levene's Test to Assess the Equality of Variances of Psychological Well-Being Components in Normal Female and Male Students

Variables	F	Degrees of Freedom 1	Degrees of Freedom 2	Sig. Level
Positive Affect	0.10	1	38	0.75
Negative Affect	0.25	1	38	0.61
Happiness	2.05	1	38	0.16
Life Satisfaction	0.01	1	38	0.91

As it could be seen in Table 10, F static error level is not significant for variables of positive affect, negative affect, happiness and life satisfaction, and this indicates that error

variance of these variables is not different between normal female and male students and variances are equal.

Table 11. Data Related to Validity Indices of Psychological Well-Being Components Variance Test for Normal Female and Male Students

Effect	Value	F	Degrees of Freedom	Degrees of Freedom of Error	Sig. Level
Pylayy Effect	0.70	6.81	10	29	P<0.01
Wilks Lambda	0.29	6.81	10	29	P<0.01
Hotelling Effect	2.35	6.81	10	29	P<0.01
Ray's Largest Root	2.35	6.81	10	29	P<0.01

As it could be observed from Table 11, Wilks Lambda value is equal to 0.29 which is significant at  $p \leq 0.01$ ; that is, there is a significant difference between gifted female and male students based on positive affect, negative affect, happiness and life satisfaction.

$p \leq 0.05$  based on only positive affect and that shows that there is a significant difference between normal female and male students in component of positive affect.

As it could be observed from Table 12, hypothesis number 6 "there is a significant difference between normal female and male students in psychological well-being" is approved at

Table 12. MANOVA of Psychological Well-Being Components among Gifted Female and Male Students

Source	Scales	Sum of Squares	Degrees of Freedom	Mean of Squares	F	Sig. Level
Group	Positive Affect	19.60	1	19.60	6.80	0.01
	Negative Affect	4.90	1	4.90	0.58	0.44
	Happiness	2.02	1	2.02	1.04	0.31
	Life Satisfaction	3.02	1	3.02	1.21	0.27

### Discussion and Conclusion

Based on derived research results, hypothesis of “there is a significant difference between gifted and normal students in psychological well-being” was approved which is in accordance with Qolamrezai, Purshafe'i and Dastjerdi (2009), Rottmann and Christine (2003), Antoneli and Kokoni (1998), Marcus et al. (2004), Mirin (1999), Ashtiyani (1995), Neff (2003), and there is a significant difference between gifted and normal students based on components of psychological well-being. Reef et al. mental psychological well-being pattern was presented to emphasize positive mental health. Based on this pattern, psychological well-being includes six aspects of: self-acceptance, positive relationship with others, self-autonomy, purpose in life, personal growth and dominance over environment. Individuals diagnosed with migraine lose their control on environment and also self-control due to their frequent headaches, and have problems in accepting themselves and these problems get together and decrease their general health and psychological well-being. Component of self-acceptance is defined as having a positive attitude towards self and past life. If the individual has a general sense of satisfaction in assessing their talents, capacities and activities and be satisfied about their past life, they have a desirable psychological performance. Component of self-autonomy is referred to the sense of independence, self-sufficiency and freedom from norms. An individual who can make decisions based on their personal thoughts, feelings and beliefs, has the feature of self-autonomy. In fact, the capacity of the individual in interacting with the social pressures is related to this component. Having a positive relationship with others is another component of this model and this refers to having a qualitative and satisfactory relationship with others. Individuals with trait are generally desirable, altruistic and powerful in loving others and they try to form a warm relationship based on the mutual trust with others and normal people have problems in this component. Component of purpose in life refers to having a long-term and short-term purpose in life and having a meaning in life. This sense enable the individual to show interest towards life activities and events and have an effective interaction with them. Dominance over environment is another component of this model and refers to the capability of the individuals in managing life and its requirements. Based on this, an individual who has the sense of dominance over environment could manipulate, change and improve various aspects of environment and its circumstances. Discomforts in life, such as the sense of failure in education could create symptoms like anxiety and depression for normal individuals and disrupt the aspect of psychological well-being through this. Also, there is a significant difference

between gifted and normal students based on happiness, life satisfaction, positive and negative affect. Since normal students can't enjoy most situations in their lives, these individuals have a lower happiness in their lives and are more anxious and depressed. Also, normal students experience ore negative affects due to their academic failures their life satisfaction is highly lower than gifted students. Also, based on derived results, the hypothesis of “there is a significant difference between gifted female and male students in psychological well-being” was approved which is in accordance with the studies of Marcus et al. (2004), Mirin (1999), Asjtiyani (1995) and Neff (2003) and there is a significant difference between gifted female and male students in the component of negative affect of psychological well-being. This could be explained through saying negative affect considering the fourth chapter is higher among male gifted students comparing to the female students. One of the reasons is the fact that emotional issues are related to the gender. Females show a higher flexibility when they confront failure in emotions and emotional issues, and therefore, when they face failure, they show lower negative affects. However, males are more determined on their gals and educational achievement, show negative affect when they fail. Also, based on derived results, hypothesis of “there is a significant difference between normal female and male students in psychological well-being” was approved which is in accordance with the studies of Marcus et al. (2004), Mirin (1999), Ashtiyani (1995) and Neff (2003) and there is a significant difference between normal female and male students in compassionate positive affect of psychological well-being. This could be explained through the fact that normal male students consider emotional issues lesser in their lives, while normal female students see issues more positively.

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