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The comparison of the mental health and self-esteem in the gifted and normal adolescents of high schools in Jiroft City in the year 2012-2013

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A B S T R A C T

Environments of talents schools are quite different from ordinary schools, therefore this study compared the mental health and self esteem of adolescents, in talented and ordinary students of Jiroft. In this descriptive and analytical study mental health and self esteem of 131 gifted high school students with 262 ordinary high school students compared. Data were gathered by: Mental health questionnaire (GHQ-28) and Coopersmith self esteem inventory. Data was analyzed by using SPSS v.18 (t test and pearson correlation coefficient). The results revealed that 56/4% of the ordinary school students and 45/5% of gifted students acquired scores above the cutoff in mental health questionnaire. Gifted students' self-esteem was more favorable than students in ordinary schools ($p=0$), However, significant differences was not found between mental health scores in gifted and others ($p=0/25$), Also significant positive relationship between the mental health scores and self esteem scores of the students in both schools were seen ($p=0/000$). Since it seems the high self-esteem and less depression in gifted students is related to feel more successful in these students, therefore recommended that usual schools create opportunities for students to experience a sense of success in the students.

Introduction

Adolescence is a critical period of life which is associated with extensive changes in cognition and structure. In recent years, it has

been pointed that a large number of teenagers are suffering from emotional and mental issues. Researches have shown that the onset

of mental illness of 50 percent of the adults was during the adolescence. Mental health is related to the human being's emotions, thoughts and behaviors. A person with a good mental health can usually deal with the events and daily problems and pursue his/her own goals in life and function effectively in the society. Indeed, the mental health provide a field to improve intellectual and communication skills and leads to emotional growth, resilience and self-esteem (1). On the other, having self-worth and self-esteem are considered as an asset, critical value and are major factors for creativity and talents to flourish. "Self" as the core of personality is formed in cooperation with others and the person will gain a picture of himself in appropriate to his "own received" and will improve his self-esteem with the judgments and valuation relative to the own receiving. This process is not innate, but learned. Its quality plays a decisive role in all tractions and actions and various aspects of life that affects his academic performance (2).

Adolescence is the last step of growing up during which parents and educators can actively help them to find their life path. One of the most effective ways to help our children is to maintain their self-esteem. Self-esteem is one of the most valuable resources that an adolescent and a young can have. Researches have shown that a teenager with a great sense of self-esteem will learn more effectively, will establish more profitable relationships, can better take the advantage of opportunities and will be self-sufficient and productive. He also has a clear vision to his life path than an adolescent with low self-esteem (3). Special schools for gifted students have specific conditions to accept their students. These students have a different learning environment compared to the students in regular schools. Such factors could possibly cause a difference between the two groups in terms of personality characteristics and mental health

(4). In this case, Jenaabadi reports that the educational environments related to gifted and normal students can make a difference in creating psychological characteristics that is independent of gender (5). In the case of the mental health of young gifted, Louri quoted from Lowry et al. that in the past, a change is created in the perception of educators, researchers and the general public about the mental health of young gifted.

Generally, in the late 18th century, it was thought that high intelligence increases the susceptibility to the mental health problems and was told that a high intelligence may be associated with stupidity (6). Although evidences obtained over the past decade suggest that the intelligent young people are not vulnerable as what was previously thought (7). Becker believes that the gifted have a deeper understanding about themselves and others due to the cognitive abilities and can be better adapted to the psychological stresses and conflicts (8). On the other hands, some others believe that the gifted are more likely involved with the emotional and psychological problems, since these people are more sensitive to interpersonal conflicts due to their cognitive abilities and experience more sense of alienation and stress (9). The studies on the mental health of gifted and normal people have been inconsistent. In a study by Haghshenas et al, 97 gifted and 103 normal junior high school students in Tehran were studied. The results showed that the gifted students have relatively higher scores in the index of Openness to experience and lower scores in the index of Agreement than the normal students. In addition, the gifted students had better mental health (10). In a cohort study conducted by Koenen et al, in New Zealand on 1037 women, it was identified that low IQ in childhood predicts disease risk in the range of schizophrenia disorders, depression and anxiety in adulthood

and higher IQ in childhood predicts an increased risk of mania in adults (11). In Liu's study on two groups of 20 gifted teenagers and a control group of 21 students with average intelligence was found that gifted children have significantly better performance and speed to control the conflicts (12), but in a study by Benony et al, the children with IQ above 130 in Wechsler Intelligence Scale showed more self confident and depressive symptoms than the control group (13). In a study, the depression was reported more in gifted students than those with normal intelligence, as the prevalence of depression among gifted students of high school in pre-university and female students in ordinary schools were 42.9 % and 13%, respectively (14). Another research in this area revealed that there is no significant differences in the prevalence of depression in the normal and the giftedness students (15). According to the importance of mental health and self-esteem in teenagers that are the future-making of the country, given that the special schools for gifted children has an environment quite different from normal schools and the differences between these educational environments can cause changes in personality and psychological characteristics. This study evaluates and compares the mental health and self esteem of the students of normal and gifted high schools in Jiroft city.

Methods

This is a cross-sectional study (descriptive-analytical) conducted on the gifted and normal students of Jiroft city in the academic year 91-92. 131 gifted students from Girl's and Boy's high schools were compared in terms of mental health and self-esteem with 262 students from normal high schools in Jiroft city. Followed by permission from the Ministry of Education of Jiroft and receiving the address and phone list of the regular and gifted schools

of Jiroft city, the coordination with the schools managers was performed to collect the samples needed for the study.

Since Malanti River is divided Jiroft into two parts, East and West, in order to achieve more accurate results and to avoid focusing on one area and also considering the economic- social base, researcher has divided the city into two parts, Old City Texture (the West of Malanti River) and New City Texture (the East of Malanti River). Then all girl's or boy's high schools were separately encoded as a list in each area. To select the students from normal high school, 2 girl's and 2 boy's high school were selected from each area (a total of 8 high school for both West and East areas) using a table of random numbers. Followed by selecting the eight schools, in order to select the students of normal high schools, 2 research assistants performed the necessary coordinations and randomly selected a class based on the field. Among the student's of chosen classes in the schools, the students were chosen according to the attendance list by systematic sampling method to complete the questionnaire containing questions on mental health and self-selected.

For example, in a school with two first grade, one class was randomly selected, then according to the class attendance list, No 1, 5, 10, ... were selected, then they were provided with the questionnaire. This process was continued until the completion of 262 questionnaires. Willingness to participate in the research was the insertion criteria into the study. The same way was performed to complete the questionnaires in 2 girl's and 2 boy's gifted high schools. According to the attendance list by systematic sampling method students were selected from each grade and questionnaires were completed.

Sample size

The minimum sample size was estimated in two groups with 393 individuals (between mean = 4.8 Expected population sd= 15.99, Alpha= 0.05, power= 0.8). Considering the ratio of 2 to 1, 262 students attended in the normal high schools of city and 131 students from the boy's and girl's gifted high school of Jiroft were selected.

Data collecting tools

Data collecting tools in this study include: Mental health questionnaire (28GHQ-), which consists of 28 questions to assess the general health status in last month. The questions in this section are on four areas: depression, anxiety, social dysfunction and Hypothyroidism.

Likert scoring method was used to test options. The cut-off point on the questionnaire is 23 (higher scores indicate mental health problems). In a study by Besharati in 1388, the sensitivity and specificity of questionnaire were 74.5 ± 2.4 and 92.3 ± 2.4 , respectively (16). Ebrahimi and colleagues reported the validity of questionnaire, 0.78 and the reliability by bisection method, 0.9, and by Cronbach's alpha method 0.97 (17).

2. Coopersmith Self-Esteem Inventory, this questionnaire was made in 1967 by Cooper Smith in order to assess the level of self-worth in pupils and students in social and academic backgrounds. He assumed that the self-esteem is a relatively stable attribute and provided it based on a revise on Rogers Diamond scale 2. The questionnaire included five categories including doing educational homework, Social relationships, family, your own and your future, and has four subscales, which are listed below:

Questions of each Subscale	Subscales
16, 15, 10, 9, 8, 2, 1, 36, 31, 29, 24, 21, 17, 57, 50, 51, 43	.1Overall self-esteem
23, 22, 18, 11, 4, 3, 39, 38, 37, 32, 30, 25, 58, 53, 52, 46, 45, 44	.2Social self esteem (peers)
40, 32, 26, 19, 12, 5, 54, 47	.3Family Self-esteem (Parent)
56, 49, 35, 28, 14, 7	.4Academic self esteem (Education)

The test contains 58 two options questions with the options "Yes" and "No" that individuals choose one of the options according to their situation. Since the test contains the school personality subscales, this test can only be used on pupils and students. This list refers to two aspects of the mental and the obvious behaviors of self-esteem.

Scoring Method: Since this test involves two option questions with options "Yes" and "No", the scoring method is as zero and one, 8 questions are polygraphs that are not considered in scoring. The numbers of polygraph questions are 6, 13, 20, 27, 34, 41, 48 and 55. If the respondent gains a score above 4 from the above eight questions, it means that the validity of the test is low and the participants has tried to show himself better, but about the scoring of the other questions, if the participant answers Yes to 2, 4, 5, 10, 11 F. 18, 19, 21, 23, 24, 28, 30, 32, 35, 36, 47, 45, will gain 1 and if the participant answers No will gain Zero. Other questions are reverse, the No answer is considered 1 and Yes answer is considered Zero. Thus, the total score has a minimum score of zero and a maximum of 50. The minimum score of overall self-esteem scale is zero and the maximum is 17, the score of individual self-esteem is zero and 18, the academic self-esteem is

Zero and 7, and family self-esteem is zero and 8.

Commentary: People who score more than average have high self-esteem and those who score below average have low self-esteem. Reliability and validity coefficients have been achieved in acceptable ways inside and outside the country in numerous studies (18). In order to data analysis, statistical software SPSS, t-test and Pearson correlation coefficient were applied and ($p < 0.05$) was chosen as the significance.

Results and Discussion

51.6% of participants in the study from normal school were female and 48.4 were male, but the gifted students participating in the same study was 50% female and 50% males. The self-esteem scores in the students of normal schools obtained from the questionnaire showed that 32% had a score less than 25 which indicates a low self-esteem and 65% had a score higher than 25 which shows a high or desirable self-esteem. Self-esteem scores among the gifted students also indicated that 23.5% had a score less than 25 which indicates a low self-esteem and 76.5% had a score higher than 25 which indicates a high or desirable self-esteem. In terms of mental health in the students in normal schools, 43.6% had a score less than 23 that indicates a desirable mental health, and 56.4% had a score higher than 23 which shows a poor mental health. The scores of mental health in the students of gifted schools showed 54.5% with a score less than 23 that indicates a desirable mental health, and 45.5% with a score higher than 23 which shows an undesirable mental health.

No statistically significant difference was observed by T-test between the total score

of the mental health of normal and gifted students. The evaluation of score differences in mental health in both normal and gifted students was only significant in the depression dimension. Also, a significant difference was observed $p < 0.001$ by t-tests between the average scores of self-esteem in the normal and gifted students, in other words, the self-esteem of gifted students had significantly higher (Table 1).

Pearson correlation analysis showed a significant relationship between the students' self-esteem scores and mental health scores ($P = 0$, $R = 0.49$). For the gifted students, the correlation between two variables of mental health and self-esteem was 9.38 ($P = 0.000$). In contrast, the score for the students of normal school was 0.63 ($P = 0.000$). The T test revealed that the mean score of mental health is more desirable than girls ($P = 0.000$). The difference was significant in the four dimensions of mental health score. There were no significant differences in the mean score of self-esteem according to the gender. Among students enrolled in the gifted schools, the mean of mental health score of girls was more than boys (9.5) and ($P = 0.001$).

Analysis of the findings showed that the mental health scores of the students of gifted and normal schools has no significant difference which is in consistent with the findings by Shark colleague et al (19) and in contrast with the findings by Haghshenas and colleagues (10). Both had applied a similar survey questionnaire used in this study. This discrepancy may be due to the different environmental conditions of schools or the location of students.

Table.1 The mean and the standard deviation scores of students in normal and gifted students in the dimension of mental health and self-esteem questionnaire

Significant level	Average score gifted student	Average score normal student	Questionnaire
6/22±4/36	5/76±4/52	./336p=	Physical like disorders
p=/.738	7/07±5/09	7/25±4/96	Anxiety Disorders
8/05±3/84	8/09±4/27	./921p=	Disorders in Social function
6/16±0/14	4/66±5/33	./018p=	Depression
27/64±0/15	25/65±0/16	./252p=	Total mental health score
30/68±0/1	36/28±0/18	0/00p=	Self-esteem scores

Table.2 The mean and the standard deviation scores of girls and boys students in each dimension of mental health and self-esteem questionnaire

Significant level	Boy students	Girl students	Questionnaire
0p=	5/09±3/86	6/97±4/72	Physical like disorders
./001p=	6/36±4/34	7/98±5/42	Anxiety Disorders
0/013p=	7/55±3/91	8/56±4	Disorders in Social function
./004p=	4/7±5/44	6/5±6/22	Depression
0/00p=	23/68±14/27	30/9±17/06	Total mental health score
./37p=	31/57±10/3	34/66±8/58	Self-esteem scores

In the present study, the only difference was in the score of depression dimension of mental health questionnaire, so that the gifted students had lower depression score. The gifted students also had significantly less scores in the anxiety and depression dimensions in a study by Haghshenas and colleagues (14).

However, our findings in this case is in contrary with the findings by Turakitwanakan in Thailand (15) and Raeisi and Boroojerdi (20). In this case there are two different perspectives, some believe that the gifted people have better cognitive abilities and can deal better with the psychological stresses and conflicts. Some other believe that the gifted people are more sensitive to the interpersonal conflicts and experience more stress. But

the current study indicates that 56.4% of the students in normal schools and 45.5% of the students in the gifted schools had score more than 23 in mental health questionnaire and are at risk of mental problems. It was reported 60.2 in a research by Sadeghian et al (21) in Hamadan on the students of girl's schools that is near to the scores reported in the current study. The high levels of the poor mental health of students is concerning and emphasizes the need for more attention to the mental health of students. In addition, this study showed that the self-esteem of gifted students was significantly higher than normal, which is in consistent findings by Benony and colleagues (13). The gifted students receive more positive reinforcements and social approvals. On the other hand, the positive learning experiences lead to a greater

confidence in their capabilities and ability that can enhance their self-esteem. Saif writes in this regard: People who have a history of consistent success have a frequent of the expectations of success, since the sufficiency is an important part of self-esteem, these individuals have high levels of in -esteem and self-concept (22). A positive and significant relationship between the mental health and the self-esteem scores of students in both schools were observed. Hargie in 2010 (23) and Tavakoli in 2009 (24) found that a person who has low self esteem is weak and not brave and generally suffers from the poor mental health. Both of them refer direct relation between self-esteem and mental health.

The findings also showed that the male students have a better mental health than female students which is in consistent with the findings of Motaghipour and colleagues (25), but in the study by Sepehrmanesh and colleagues, the mental health scores of girls and boys students showed no significant difference (26). This issue may be related to the social and the cultural pressures on the girls across the country.

Our finding about the high prevalence of depression in the girls is also in consistent with the findings by Monirpour (27) and Raeisi (20). Some resources declare that the high prevalence of depression in the girls might be due to hormonal factors or social pressures (31).

Limitations of Research

This study was performed regardless of the IQ measurement of students and just the study in the gifted schools was considered as higher IQ, but the environmental and educational opportunities have a large impact on the entrance to the gifted

schools, which many students in normal schools may be deprived of it, therefore, it is recommended that the students to be separated according to the IQ score obtained by a valid instrument.

Conclusion and Recommendations

Since it seems that high self-esteem and low depression in the gifted students relates to their more success sense, therefore, it is recommended that normal schools to create some opportunities for the students to make them feel more successful experiences. On the other hand, according to the fact that the mental health scores of nearly half of both groups of students were over the cut-off point and represents their mental disorder, it is suggested to spread the psychological counseling centers for students and training the families to improve their information about the mental health and how to deal with the psychological needs of students from the relevant authorities.

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