PRINT: ISSN 0975-1122 ONLINE: 2456-6322
Int J Edu Sci, 12(1): 50-56 (2016)
DOI: 10.31901/24566322.2016/12.01.07

Self-concept among Gifted and Non-gifted Students and its Relationship with Gender Variable in a Jordanian Sample

Nadia Hayel Al-Srour[1] and Alia Mohammed Al-Oweidi[2]

[1]The University of Jordan, Faculty of Educational Sciences, Counseling and Special Education Department, Jordan
[2]The World Islamic Sciences and Education University, Faculty of Educational Sciences, Special Education Department, Jordan
E-mail: alia3bbadi@gmail.com

KEYWORDS Student. Gifted. Self-concept. Social Education

ABSTRACT The purpose of this study is to identify the level of self-concept among gifted and non-gifted students and its relationship with gender among high school students. The sample used in the study consists of 301 students, 105 of them are gifted and 196 are non-gifted. The SDQIII (Self-Description Questionnaire) scale has been administered to measure self-concept. From the findings, it was discovered that the average performance of gifted students is higher than of non-gifted students (self-esteem, mathematics, honesty, parent relationship, problem solving, physical abilities, academic, and physical appearance). For gifted students, the results showed that there are no statistical significant differences in self-concept between the two groups based on the religious aspects, results also showed that there are no statistically significant differences attributed to gender, except in emotions, which is in favour of males as well as the physical appearance in favour of females.

INTRODUCTION

Self-concept is one of the most important psychological terms used in several developmental, clinical, social and educational fields. Attention is focused on the positive self-concept as a means to improve academic achievement, this concept has two elements, one of them is descriptive, while the other is evaluative (Srivastava and Joshi 2014).

Moreover, it is the main aspect of the personality, since its main function is to seek the harmony of the personality, and to enable the individual adapt to his environment. Self-concept is hypothetically formed through the environmental variables that cannot be separated totally, as those variables can be joined in different rates, thus affecting each other, leading to the general self-concept of the individual (Alzaher 2004). The self-concept is developed in individuals through their interaction with others in a certain environment (Scott and Barona 2011).

Shaveslon (1976) defined self-concept as the idea or mental image one has of oneself as well as one's strengths, weaknesses, and status. He distinguished between self-concept developed through an individual's realization to hide behavior and reaction, and the self-concept based on other people's reactions (Bracken 1996).

Smith and Macki (1995) argued that self concept is an individual's whole or entire knowledge of his personal potentials. The core of self-concept for Carlson (2000) is the self-schema, while referring to the cognitive structure of organizing feelings, knowledge and ideas, which form self-concept.

Meanwhile, Salama (2007) mentioned that self-concept is the total degree of an individual's realizations about himself, achievement, characteristics, and other physical traits. However, Samarra (1999) considered self-concept as a way of individuals' considerations for their ideas, feelings, behaviors and reactions to others and to the surrounding environment.

Scholars in this field outlined two types of self-concept, the first is the positive one which refers to the individual's knowledge of the person and his acceptance of this concept, giving him a positive image, while the negative concept is determined by the individual's behavior in life, his expressions which form a negative self-concept about self and others (Zahran 1993).

Self-concept can be distinguished from awareness, based on the fact that self-concept refers to the extent to which knowledge is defined, consistent, and currently applicable to one's attitudes and dispositions. Self-concept also differs from self-esteem, in the sense that

self-concept is a cognitive or descriptive component of one's self (Punithavathi 2001).

In order to achieve the effective functional performance pertaining to individuals' positive image and due to the fact that most of the students' experiences are achieved in school, it can therefore be considered that school and academic achievement are the most influential factors in the individual's perception of himself (Huna 1997).

Self-concept is a multiple one, which interferes in many developmental sides as the individuals' image about self, is affected by his actions and other people's reactions towards him. Although, those images and realizations differ, they are interrelated with each other thus, forming the self-concept (Kezhia 2012). So, there are two types of self-concept, one is academic self-concept referring to the individual's perceptions about mathematics and verbal domains, and the other is non-academic self-concept referring to other life domains (Bracken 1996).

Most of the studies in this field, for example (21), studies about the general self-concept as well as (20) studies about the academic self concept concluded that LD students show low self-concept, especially in the academic field (Chmpan 1980) and this indicates the close relationship that exists between academic achievement and the image about self (West et al. 1980).

Sanchez and Roda (1995) observed a close relationship between academic self-concept and measures of academic performance. Additionally, they demonstrated that total self-concept and academic self-concept are good predictors of general performance.

On their part, Ishak and Chaw (2010) investigated the students' self-concept between (1168) 16 and 17 year old adolescents in Malaysian secondary schools. This study utilized the CoPs instrument to measure self-concept. This study confirmed that students perceived certain internal context factors, and revealed that external context factors also have an impact on their self-concept.

Cross et al. (2015) studied the exploration of social coping and self-concept among Irish (115) and (134) American students from grades 3 to 8. Denying ones giftedness or the impact it has on peer relationships was associated with poor self-concept in both samples. Among Irish students, denying giftedness was associated with more positive predictors of academic self-concept. Findings suggest that young gifted students may benefit from learning more through their exceptional abilities and their impact on peers, and they should also be encouraged to engage in extracurricular activities.

Wenglinsky (2009) studied self-concept and its relationship with academic achievement while applying SDQII on both, (1130) male and female students. From the study, it can be concluded that there is a close relationship between academic achievement and self-concept. Moreover, self-concept is a strong predictor of the motivation for academic achievement.

In another study, Kaur and Kaur (2009) evaluated academic achievement and home environment as correlates of self-concept using 300 adolescents as sample. The results of the study revealed self-concept to be positively correlated with academic achievement. However, the correlation between social isolation, deprivation of privileges and rejection components of home environment is significantly negative with self-concept among adolescents, indicating that for positive self-concept development among adolescents.

Al-faouri (1993) studied self-concept among gifted and non-gifted students at the secondary stage. The sample of the study consist of 320 gifted and non-gifted students. The researcher administered (Jebree 1983) the scale for self-concept. The findings of the study showed that there were significant statistical differences in self-concept between both categories in favor of gifted students.

Ano and Shinan (2011) studied the differences between gifted and normal fourth graders in Al-jazeera province. In addition, the locus of control and self-concept between both categories was studied. The study adopted the descriptive method using correlative, comparative and causal approaches. The study used a control center scale and self-concept scale, as well as the Stanford Binet scale on 200 students, 100 of them are gifted and 100 are normal. The findings from the study showed significant differences between the gifted and normal students in locus of control and self-concept in favor of gifted students, while there is a negative correlation between the locus of control and self-concept in both gifted and normal students.

Hawkins (1993) compared a sample of 125 gifted students with high and low achievement within the level of self-concept. The results from

the findings showed that there were no significant statistical differences in self-concept between all students.

Cornell (1992) compared over 1100 elementary school children receiving different types of gifted services or regular classrooms. The results indicated that students selected for all types of gifted services were well above grade level in academic achievement. There were significant differences in the achievement levels, self-concepts, and teacher ratings of students selected for the different types of gifted services.

Meanwhile, Hassaneen (2008) investigated some adjustment problems faced by the gifted child and its relationship with self-concept. The sample of the study consisted of 162 male and female students (81 gifted and 81 non-gifted). The findings showed that there was no difference in self-concept between males and females.

Purpose of Study

Taking care of gifted students is an absolute need imposed by scientific and technological challenges. Therefore, educators and scholars pay special attention to those students since they have special and very unique abilities. The special talents they possess make them different from other students and in turn make them require special educational programs that match up with their abilities.

Therefore, the current study is aimed at exploring the differences in self-concept between gifted and non-gifted students at the secondary stage in a Jordanian sample as well as exploring the differences in self-concept according to gender. This may help specialists in identifying those differences in their educational programs and other educational implications.

Questions of the Study

1. Are there any significant statistical differences at the level of á $\geq$ 0.05 for self-concept among gifted and non-gifted students at the secondary stage in a Jordanian sample?
2. Are there any significant statistical differences at the level of á $\geq$ 0.05 for self-concept among gifted and non-gifted students at the secondary stage that was attributed to gender variable?

Significance of the Study

1. Providing a Jordanian form of the SDQIII scale for the secondary stage with Jordanian reliability and validity rates.
2. Providing the literature with the levels of self-concept among gifted and non-gifted secondary students.
3. Investigating the level differences between self-concepts according to the gender variable (male, female).
4. Providing teachers and school counselors with a Jordanian form that is easy to use in exploring the levels of self-concept among secondary stage students.

Objectives of the Study

1. Exploring the differences in self-concept between gifted and non-gifted students at the secondary stage
2. Exploring the differences in self-concept according to gender.

Definition of Terms

Self-concept: The scores obtained by the respondent on the eleventh sub-scales of SDQIII are mathematics, spiritual, academic, self-worth, verbal, emotions, relationships with friends, problem-solving, external appearance and physical abilities.

Gifted Students: Students enrolled in the King Abdullah II schools for excellence are nominated and selected by the ministry based on special scales and nominations.

Non-gifted Students: Students enrolled in general education schools in private and public schools with averages that ranged from 60-85.

METHODOLOGY

Study Population

The population of the study area consisted of all non-gifted secondary stage students in Amman city, totaling 751,250 male and female students as well as all gifted students in King Abdullah II schools for excellence totaling 1,082 male and female students in the second semester of the schooling year 2012-2013 (www.moe.gov.jo.).

Study Sample

The sample used in the study consisted of 301 male and female students, among them there are 105 gifted students (60 males, 45 females) selected from King Abdullah II schools in Zarqa and Balqa cities for excellence and 196 non-gifted students (113 males, 83 females) selected randomly from eight public and private schools in the middle region of Jordan.

Study Scale

The researchers adopted the Self Description Questionnaire (SDQIII) developed in March, 1992 and directed to adults aged between 16-25 years, measuring self-concept within 11 domains, namely, mathematics, faith, academic, self-esteem, fidelity, verbal, emotions, relationships with friends, problem-solving, appearance and physical abilities. To achieve the aim of this study, the scale was translated and validity as well as reliability was calculated.

Scale Validity

After translating the scale, it was presented to five raters specialized in educational psychology who provided the researchers with suggestions that are suitable for the Arab and Islamic culture. The agreement rate among referees was 0.80 and the final copy of the scale consisted of 121 items within 11 domains.

Scale Reliability

The researchers used test-re-test to check reliability, as it was administered twice on 50 students within a time frame of two weeks. The correlation coefficients between both applications were as follows: mathematics (0.80), faith (0.93), academic (0.71), self-esteem (0.56), fidelity (0.65), verbal (0.81), emotions (0.66), relationships with friends (0.77), problem solving (0.68), appearance (0.71) and physical abilities (0.77). The Cronbach alpha coefficient totaled to 0.75 for the sale as a whole.

RESULTS

In answering the first question, that is, *are there any significant statistical differences at the level of* $\propto \geq 0.05$ *for self-concept, among gifted and non-gifted students at the secondary stage in a Jordanian sample*, the means, standard deviations and (t) values were used to explore the differences in both groups as seen in the Table 1.

Table 1: Means, Standard deviations and (T) value for the sub-domains of the scale according to the group

Domain	*Category*	*No.*	*M*	*SD*	*Sig*	*F*
Mathematics	Gifted	105	3.46	0.53	0.006	7.729
	Non-gifted	196	2.73	0.67		
Faith	Gifted	105	3.57	0.33	0.00	24.33
	Non-gifted	196	3.14	0.49		
Self-esteem	Gifted	105	3.77	0.20	0.00	88.549
	Non-gifted	196	3.15	0.52		
Fidelity	Gifted	105	3.49	0.33	0.001	11.083
	Non-gifted	196	2.94	0.44		
Verbal	Gifted	105	3.44	0.33	0.001	11.578
	Non-gifted	196	2.83	0.46		
Emotions	Gifted	105	3.32	0.66	0.885	0.021
	Non-gifted	196	2.65	0.54		
Relationships with Friends	Gifted	105	3.48	0.32	0.00	28.101
	Non-gifted	196	2.80	0.55		
Academic	Gifted	105	3.28	0.46	0.008	11.523
	Non-gifted	196	2.66	0.45		
Problem Solving	Gifted	105	3.40	0.32	0.005	8.137
	Non-gifted	196	2.94	0.42		
Appearance	Gifted	105	3.49	0.35	0.003	9.162
	Non-gifted	196	3.09	0.45		
Physical Abilities	Gifted	105	3.35	0.37	0.001	11.795
	Non-gifted	196	2.82	0.48		

Table 1 shows that there are significant statistical differences between gifted and non-gifted students in all domains (mathematics, academic, self-esteem, fidelity, verbal, relationships with friends, problem solving, appearance and physical abilities) in favor of gifted students, while there were no differences on both religious and emotions domains.

In answering the second question, that is, *are there any significant statistical differences at the level of ($\propto \geq 0.05$) for self-concept among gifted and non-gifted students at the secondary stage attributed to gender variable?*, the means, standard deviations and (t) values were used to explore the differences between gender as seen in the Table 2.

Table 2 shows that there were no significant statistical differences attributed to gender on any domain except for emotions and appearance, in favor of males for the emotions domain and in favor of females for the appearance domain.

DISCUSSION

The purpose of this study is to explore the differences in self-concept between gifted and non-gifted students at the secondary stage. Moreover, investigating the differences in self-concept according to gender. The result of the findings for the first question showed that there are significant statistical differences between gifted and non-gifted students in all domains (mathematics, academic, self-esteem, fidelity, verbal, and relationships with friends, problem solving, appearance and physical abilities) in favor of gifted students, while there were no differences on both religious and emotions domains. This can be explained based on the duties imposed by Islam on all people, regardless of their category. The religious rules, faith of fate and all aspects of religion are focused on issues related to the Islamic culture and the type of life in Jordan, so all beliefs and practices are the same, regardless the category of the student. With regard to the emotions domain, it is noted that all the times in this domain are related to sadness, happiness, anger and self control, and all these traits are related to adolescence, so there are no differences between the students. Furthermore, the differences that exist in favor of gifted students on the rest of the domains can be explained through the special characteristics exhibited by those students, as they can achieve more than non-gifted students in all academic and non-academic fields. Even in their relationship with friends, they showed special and leadership traits that enable them to easily make friends unlike their non-gifted peers.

The result of the findings for the second question showed that there were no significant

Table 2: Means, Standard deviations and (T) value for the sub-domains of the scale according to gender

Domain	*Category*	*No.*	*M*	*SD*	*Sig*	*F*
Mathematics	Male	173	2.95	0.70	0.832	0.045
	Female	128	3.04	0.73		
Faith	Male	173	3.31	0.49	0.522	0.411
	Female	128	3.27	0.47		
Self-esteem	Male	173	3.35	0.52	0.412	0.676
	Female	128	3.39	0.54		
Fidelity	Male	173	3.12	0.51	0.081	3.071
	Female	128	3.15	0.46		
Verbal	Male	173	3.02	0.49	0.274	1.202
	Female	128	3.08	0.53		
Emotions	Male	173	2.90	0.55	0.012	6.358
	Female	128	2.86	0.80		
Relationships with Friends	Male	173	3.08	0.56	0.369	0.81
	Female	128	2.98	0.61		
Academic	Male	173	2.88	0.55	0.867	0.028
	Female	128	2.89	0.53		
Problem Solving	Male	173	3.10	0.46	0.185	1.769
	Female	128	3.09	0.42		
Appearance	Male	173	3.19	0.50	0.003	9.263
	Female	128	3.28	0.40		
Physical Abilities	Male	173	3.04	0.50	0.421	0.648
	Female	128	2.96	0.53		

statistical differences attributed to gender on any domain, except for emotions and appearance in favor of males for the emotions domain and in favor of females for the appearance domain, respectively. It is known that females pay special attention to their appearance more than males, especially in clothes and weight in order to appear more attractive, while males are more capable of expressing their emotions due to the nature of Jordanian traditions and cultures and partly due to the type of family raring adopted for boys and girls.

The above findings are consistent with Isjak and Chaw's (2010) study, which concluded that achievement, appearance, abilities and social relations are important factors in self-concept. Moreover, the findings are consistent with Alfaouri (1994), Ano and Shinan (2011), and Cornell (1992), showing that gifted students have higher self-concept than the other students. The findings are consistent with Hassaneen (2008), who concluded that there were no differences observed in self concept between males and females. Meanwhile, the findings disagreed with Hawkins (1993), which showed that there are no significant differences between gifted and non-gifted students in the level of self concept.

CONCLUSION

Based on the results, the researchers suggest the designing of training programs to improve positive self-concept among gifted and non-gifted students. These programs may be through the curriculum or extracurricular activities, as the development of this concept cannot be separated from positive thinking and authentic personality. Also, proposing a counseling program to develop self-concept at the secondary stage, since the positive idea of the individual about self, will lead to the alignment of all personality aspects thereby, giving the self a distinguished nature.

LIMITATIONS

Time Limitations: The study was conducted in the second semester of the 2012-2013 academic year.

Place Limitations: The study was conducted in the middle region of Jordan (Amman, salt and Zarqa).

Subject Limitations: The study was applied on the secondary stage students only (first secondary and second secondary in all academic streams).

RECOMMENDATIONS

This paper recommends the design of training programs to improve the positive self-concept among gifted and non-gifted students, as well as proposing a counseling program to develop self-concept at the secondary stage.

REFERENCES

Al-faouri K 1993. *Self- concept among Gifted and Non-gifted Students in the Secondary Stage at Jerash.* Master Thesis, Unpublished. Amman: The University of Jordan.

Al-Harbi M 2005. *Family Raising: Social Study of a Sample of Gifted and Non- gifted Students Mothers.* Master Thesis, Unpublished. Saudi Arabia: King Saud University.

Ano F, Shinan A 2011. Differences in control level between gifted and non-gifted in basic public education. *Arabic Journal to Develop Giftedness,* 3: 299.

Braken B 1996. *Handbook of Self Concept: Developmental, Social and Clinical Considerations.* Canada, Oha Wiley and Sous, Inc.

Carlson E 2000. *Psychology*. New York: Allyn and Bacon.

Cornell D 1992. Characteristic of Elementary Students Entering Gifted Programme, the Leading Outcomes at University of Victoria. *Eric Document* No E.

Cross J, Reily O, Kim M, Mamadon S, Tracy C 2015. Social coping and self concept among young gifted students in Ireland and United States: A cross-culture study. *High Ability Studies*, 26: 39-61.

Hassaneen E 2008. *Adjustment Problems of the Gifted Child and its Relationship to Self-Concept.* Master Thesis, Unpublished. Egypt: Cairo University.

Hawkins D 1993. *Personality Factors Affecting Achievement in Achieving Gifted, Under-achieving Gifted and Non-gifted Elementary Students.* Dissertation Abstract. British Columbia: University of Victoria.

Hunt T 1997. *Self- concept, Hope and Achievement: A Look at the Relationship Between Achievement Self-concept, Level of Hope and Academic Achievement.* Missouri: Missouri Western State College.

Ishak Z, Jamaluddin S, Chew FP 2010. Factors influencing students' self-concept among Malaysian students. *World Academy of Science, Engineering and Technology*, 66: 800-803.

Kaur J, Kaur R 2009. Home environment and academic achievement as correlates of self concept among adolescents. *Stud Home Comm Sci,* 3: 13-17.

Kezhia T 2012. *Self-concept, Study Habits, School Environment, Socio-economic Status and Academic Achievement of Students at the Secondary Level.* MPhil Thesis. Chennai: Tamil Nadu Teachers Education University.

Punithavathi, P 2011. *Creativity, Self-concept and Academic Achievement among Students at the Secondary Level.* MEd Thesis. Chennai: Tamil Nadu Teachers Education University.

Salama A 2007. *Social Psychology.* Amman: Al-Yazouri Publishers.

Samarra A 1999. *Childhood Psychology*. Amman: Dar Al-Fikr Publishers.

Sanchez F, Roda M 1995. Relationships between self – concept and academic achievement in primary students. *Journal of Research in Educational Psychology and Psycho Pedagogy*, 1: 95-120.

Scheirer M, Kraut R 1979. Increasing educational achievement via self concept change. *Review of Educational Research*, 49: 131-150.

Smith E 1995. *Social Psychology.* New York: Wroth Publisher.

Srivastava R, Joshi s. 2014. Relationship between self-concept and self-esteem in adolescent. *International Journal of Advanced Research*, 2: 36-43.

Wenglinsky Harld 1996. *Measuring Self Concept and Relating it to Academic Achievement: Statistical Analysis of Marsh Self Description Questionnaire*. Princeton, New Jersey: Educational Testing Service.

Zahran H 1997. *Psychological Health and Psychological Treatment.* Cairo: Books world Publishers.

Paper received for publication on June 2015
Paper accepted for publication on January 2016