

STUDY OF SELF-PERCEPTION IN RELATION TO ACADEMIC ACHIEVEMENT OF GIFTED UNDERACHIEVERS

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Abstract

A nation's strength depends upon the intellect of its citizens because the significant discoveries in the field of art, science, literature, technology, social organization, law, agriculture, music, medicines, industry and politics are the results of human intelligence. The growth of our society is mainly in the hands of individuals who have the exceptional abilities. In India, gifted students are neglected in the normal classroom and teacher cannot take care of them along with mediocre and dull ones. As Baker, Bridger and Evans (1998) expounded the roots concerning underachievement, of which school and family factors were held responsible but they stressed that major roots lie within a child. Therefore, self-perception has been considered a significant variable in context of gifted underachievers for present research. Multistage random sampling was adopted to select secondary school students from Doaba region of Punjab. 807 students were nominated by teachers of which 176 were identified as gifted in both Hoshiarpur and Jalandhar districts. Then, by applying regression analysis the 34 gifted underachievers were identified. Likewise, out of total 34 students, 16 were male and 18 were female gifted underachievers. Standard Progressive Matrices (SPM) by Raven, Raven and Court (2000), Teacher's Nomination Form (Parke, 1989) and Regression equation was applied for the identification of gifted underachievers. Self-perception inventory was developed by the investigator with five dimensions. Total sample of gifted underachievers in this study had high self-perception. There was no enough evidence to conclude that mean self-perception was differed by gender. So, there exists no significant gender difference among gifted underachievers on self-perception. A moderate positive and significant relationship was found between self-perception and academic achievement. Positive relationship indicated that high self-perception leads to high academic achievement. It also pointed out that, low self-perception leads to low academic achievement of gifted underachievers.

Keywords: *Gifted Underachievers, Self-perception and Academic achievement*

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Gifted Students

Defining giftedness mostly depends upon the school system, educational culture and context of particular country which generally varies a lot so it is not possible to have universally acceptable definition. According to Marland (1972) gifted and talented students are those who are recognized by experts and have the ability for high performance. They require distinguished educational services or programs which are not normally provided in regular classes so that they can realize their potential for self and society.

Stanford–Binet Intelligence Scales: The grouping of students by Terman and Merrill from original Stanford-Binet scale in 1937 (2nd edition) was as follows:

Table 1

Classification of Students from 1937 Revision of Stanford-Binet Scale

Classification	IQ
Brilliant	139 and above
Very superior	128-138
Superior	117-127
Bright	106-116
Average	95-105

Note. Adapted from “The Interpretation of IQ’s Derived from the 1937 Revision of the Stanford-Binet scales,” by F. B. Davis, 1940, *Journal of Applied Psychology*, 24, 595-604.

Gifted Underachievers

One of the biggest issues today in both gifted and regular education is underachievement. Most of the time these students in the regular classroom go unnoticed by their teachers resulting into suppressed potential (Purohit & Aggarwal, 2014). Gowan (1964) used the term intellectual delinquent for the gifted underachievers. They show high levels of withdrawal tendencies from all sort of social activities thus fail to achieve their goal. According to Khatena (1992) there is inconsistency between expected and actual levels of attainment in any definition of bright underachievers. This inconsistency does not exist only when achievement falls below expected ability in various school subjects but also when students are not able to express their productivity, talent and ability.

Self-perception

To acquire the knowledge of external objects by the act of interpreting sensation is perception. Experts defined of our self as our identity. Thus, self-perception can be defined as a process of identity formation using sensory perception. “Classic theories in social psychology regard self-perception as an individual’s self-knowledge or views of the self (Bem, 1972).” According to Saleebey (2009) all

individual's have some kind of self perception. Also, they have different image of their personality. Some perceived themselves as below average, average or superior in intelligence; handsome or ugly; extrovert or introvert; difficult or easy going and powerful or weak. We may perceive us as tenacious while others might consider ourselves as stubborn. This concept of self-schema or perception is concerned with each aspect of individual personality. So, any type of opinion an individual has regarding their personality is considered as self-perception (Teraiya, 1979). In the earliest years, social environment of the child decides about whether the child develops positive or negative self-perception (Teraiya, 1979). Our thinking about our self depends upon the care of our parents and caregivers (Hybels & Weaver II, 2004). The positive self-perception of the child can be developed by the positive feedback, motivation and encouragement from their teachers, parents and friends. It will ultimately affect the academic performance of the child. This idea can be explained by an example: if the significant persons show the confidence regarding child's abilities and encourage them for good performance in academics, will lead the child to put extra efforts to obtain good marks. The experience associated with achievement and success will develop their positive self-perception. Conversely, child can perceive themselves negatively if he/she gets constant criticism and punishment by their teachers and parents (Teraiya, 1979).

Studies Related to Self-perception and Academic Achievement of Gifted Underachievers

Öpengin and Sak (2012) took the sample of gifted students to find out their self-perception. Main aim of the present study was to see the effect on self-perception when gifted students were labeled as gifted. What their friends' and parents' have attitude towards them was also investigated in this study. Comparison between gifted and normal students' perceptions after labeling indicated that gifted students had low positive perceptions regarding their friends' attitudes towards them. Lahijanian, Amiri, Moghtadaie and Malekpour (2012) conducted a study to check the effectiveness of cognitive-behavioral therapy on self-perception when applied to gifted with learning disable students. Study was experimental in nature with pretest-post test control design. After administering Cattle intelligence test 150 students were selected initially. Wechsler intelligence scale and learning disorders recognition tests was applied and 28 students' were identified having learning disorders. 20 students were selected randomly and divided them into control and experimental groups. Cognitive-behavioral therapy was applied on experimental group and self-perception test was administered to both groups. Significant difference between pre and post test was found in case of control and experimental group. Results of the study revealed that this therapy improved the self-perception of gifted students with learning disorders. Agarwal, Dhillon and Babbar (2013) found the relationship between academic achievement and self-concept among 17-19 years old Indian adolescents. Both male and female who joined reputed coaching centers in Delhi for preparation of All India Pre Medical Test (AIPMT) were taken for this study. Self Description Questionnaire III was administered twice in a year to measure their self-concept. Marks of students who qualified this test were considered as their academic

achievement. Findings showed no significant differences on self-concept before and after qualifying this test. Similar results were found in case of those students who could not qualify the mentioned test. Before appearing for All India Pre Medical Test those students who eventually qualified showed significant high scores on Self Description Questionnaire III. It was also suggested that prior self-concept had strong influence on students' academic achievement. Neither failure declined nor academic achievement improved prior self-concept. Çakir (2014) conducted this study to find out the reasons and factors of gifted underachievers. Twenty four gifted underachievers and thirty five high ability achievers were selected from primary schools. School Attitude Assessment Survey-R was used in this study. t-test was applied to check the significant of differences and results indicated the significant differences among gifted achievers and underachievers on the variables of attitude towards school and teachers, academic self-perception, goal valuation and motivation. Gifted underachievers scored lower on these variables than gifted achievers. Results also indicated that mean scores of above stated factors decreases as students' grade level increases. Study pointed out that when gifted students were at their small ages then they possessed maximum self-perception, motivation, goal valuation and attitude toward school and teacher. Doss and Nathan (2015) conducted the exploratory study with the purpose to investigate what will be the influence of academic self-concept on students' academic achievement. A sample of 180 students from higher secondary schools from Dindigul, Tamil Nadu was taken. Student's current year marks were considered as their academic achievement and standardized tool of self-concept was administered in order to access their self-concept. Positive correlation was found between academic achievement and student's self-concept. Domicile and gender was found to be the factors which influenced the correlation between stated variables. Findings suggested that there is need to adapt academic self-concept to achieve academic achievement of students instead of applying traditional methods. Hofer and Stern (2016) purposed this study to examine and identify gender specific underachievers in Physics who performed below their abilities in this subject. Total 316 students (182 females and 134 males) were selected from higher secondary schools of Switzerland. Student's gender-specific profiles were determined using intellectual potential and their physics grades by multiple group latent profile analysis. A profile of gifted female underachievers in physics having below average grades in this particular subject was identified. Domain-specific underachievement of these students was conformed as they secured better grades in mathematics. It was found that female students who underachieve in physics exhibited lower self-concept and possessed low interest in physics than other students. Castejon, Gilar, Veas and Minano (2016) formulated the research problem with the aim to identify and establish characteristics of underachievers, normal achievers and high achievers related to self-concept, goal orientation and learning strategies. Sample comprised of 1400 Spanish high school students of 1st and 2nd year. Three groups were formed namely underachievers, normal achievers and overachievers. Results from one way ANOVA indicated that underachievers had significantly lower punctuations for variables like learning goals and strategies, for all academic and personal self-concept, honesty, parental relationship and

personal stability factors. Contrary to this, overachievers were higher than underachievers on same variables and were also higher than normal achievers in most of variables. Mathew and Prema (2017) followed the exploratory design in this study to see the relationship and difference among students' perception regarding their teachers' feelings towards them and other variables like academic achievement, socio-economic status, self-perception, gender, type of school and stream. 450 adolescents in which 230 were female and 220 were male of 11th grade were selected randomly from nine schools of Chennai. Research tools namely "My teacher thinks I am" and "I think I am" which were both in Tamil and English language were administered to these students. Significant gender differences were observed among what student's perceived about their teacher's feeling towards them. Significant differences were also found in case of self-perception of students related to their educational board. Socio economic status of students was independent of self-perception and their perception of teachers' feeling towards them. No significant difference was observed in case of boys and girls belonging to socially advantaged and disadvantage groups on variable of self-perception. Researchers provided the suggestions that if proper support and equal opportunities were given to students then they will perceive themselves as competent, academically capable and will work hard to achieve more. Gordon (2017) tried to focus attention towards role of father's involvement in child's life and in their education which is less explored area in literature. The present study investigated two different mediators which were related to quality of father-children relationship and their self-perception. Findings of study indicated that how well a child achieves academically depends upon how adolescents perceived about their abilities and quality of the relationship maintained by father. So, father-child relationship was found to be a significant factor to improve self-perception of child.

Conclusion of Reviews

Studies conducted by some researchers (Mohanty, 1998; McGregor, 2004; Stringer & Heath, 2008) indicated the non significant relationship/non statistically significant difference between self-perception and academic achievement. Besides it, literature contributed positive relationship between self-perception/ components of self-perception and academic achievement in case of average ability students (Shen & Pedulla, 2000; Agarwal, Dhillon, & Babbar, 2013; Doss & Nathan, 2015; Mucherah et al., 2010) and same results were obtained for gifted sample (McCoach & Siegle, 2003; Tirri & Nokelainen, 2011).

Some studies were focused to find out self perception of underachievers and gifted underachievers which was found to be low than achievers/normal students (Ziv, Ramon, & Doni, 1977; Lea, 1990; Mohanty, 1998; Baslanti & McCoach, 2006; Rudasill et al., 2009). On the other side, some studies revealed higher self-perception of these students than average ones (Ablard, 1997; McCoach & Siegle, 2003; Rinn, 2007; Figg et al., 2012). Gender related aspects threw light on findings that self-perception of boys was higher than that of girls (Troxclair, 1997; Mucherah et al., 2010). In addition to it, some studies were

contributing in literature by emphasizing that both males and females have same self-perception (Dean, 1977; Rowand, 1989; Mathew & Prema, 2017)

Identification of gifted underachievers

For identification of gifted students intelligence and teacher rating scores of student's were obtained. In present study students having rank at or above 95th percentile on intelligence scores of Standard Progressive Matrices (SPM) developed by Raven, Raven and Court (2000) and whose scores on teacher nomination form (Parke, 1989) fall in between 19-27 were considered as gifted students.

Achievement was taken as one year academic performance of students. The marks secured by students in all subjects, in previous 8th class annual examination were considered as a measure of academic achievement. The underachievers were identified from gifted students by regression equation and standard error of estimate. An underachiever was one whose actual achievement score was below his/her predicted score by one standard error of estimate of predicted score.

Objectives

The specific objectives of the study are:

1. To study gender differences among gifted underachievers on the variables of self-perception.
2. To study the relationship between academic achievement and the variables of self-perception in gifted underachievers.

Hypotheses

Corresponding to objectives following hypotheses are formulated:

1. There exists no significant gender difference between gifted underachievers on the variable of self-perception.
2. There exists no significant relationship between self-perception and academic achievement of gifted underachievers.

Sampling

For present research work, multistage random sampling was adopted to select secondary school students from Doaba region of Punjab. This region of Punjab has four districts namely Hoshiarpur, Jalandhar, Kapurthala and Nawanshahar. The names of four districts were written on slips, folded and put in a box, shuffled and drew two districts which came out to be Hoshiarpur and Jalandhar. So, two districts of Doaba region were selected randomly from four districts.

Tools

The investigator has selected following tools for identifying gifted students

1. The Standard Progressive Matrices (SPM) by Raven, Raven and Court (2000) was used to measure the intelligence levels of the students.
2. Teacher's Nomination Form (Parke, 1989) was used to identify gifted students.

Identification of the gifted underachiever:

3. Regression equation was applied to obtain a predicted score of achievement from the known score on intelligence. To identify the gifted underachievers the regressed scores were predicted from intelligence scores. An underachiever was one whose actual achievement score was below his/her predicted score by one standard error of estimate of predicted score.

(B) Assessment tools

1. Self-perception inventory was developed by the investigator with the dimensions of:

- Academic perceived competence
- Self-esteem
- Perfectionism(positive and negative)
- Physical appearance
- Emotional stability

Findings

Self-Perception and Gender

t-test was calculated using SPSS 17.0. The mean, S.D. and standard error of mean for male and female on the variable of self-perception was given in the table 1.

Table 1

Independent Sample t-test: Difference between Gender for Self-perception

Variable	Gender	Mean	S.D	S.E of mean	t-value	p-value
Self-perception	Male	288.87	28.66	7.16	0.556	0.583
	Female	296.05	45.62	10.75		

Table 1, represents mean scores on self-perception of male and female gifted underachievers. The entries made in table showed that the mean score of male gifted underachiever in self-perception was 288.87 and their standard deviation of score was 28.66. The mean scores of female gifted underachievers in self-perception was 296.05 and their S.D. was 45.62. t-value between mean scores of male and female was found to be 0.556 which was statistically not significant. Corresponding p-value was 0.583 (>0.05) greater than

0.05 level of significance, thus there was no enough evidence to conclude that mean self-perception differed by gender. So, there exists no significant gender difference among gifted underachievers on self-perception.

Self-Perception and Academic Achievement

Statistical results of the Pearson's product moment correlation had been presented in above table 2. Present data didn't support the null hypothesis that there exists no significant relationship between self-perception and academic achievement of gifted underachievers ($r= 0.538$). A moderate positive and significant relationship was found between these two variables. Positive relationship indicated that high self-perception leads to high academic achievement. It also pointed out that, low self-perception leads to low academic achievement of gifted underachievers. The results of this study was found to be in tuned with findings of McCoach and Siegle (2003), Tirri and Nokelainen (2011); Doss and Nathan (2015).

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