



A Comparison between Anxiety and Self-esteem amongst High School Freshman Students(Male and Female) with Amblyopia in Gachsaran in 2015

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ABSTRACT

The present research intends to investigate and compare the relationship between anxiety and self-esteem amongst high school freshman students (male and female) with Amblyopia in Gachsaran city. To this end, all the male and female freshman students (1st Grade) in high school suffering from Amblyopia in Gachsaran participated in the study as the research statistical population among which 80 students, including 40 girls and 40 boys, were selected based on Simple Random Sampling Method. Materials and tools used in this research included Beck Anxiety Inventory (BAI), Cooper-smith Self-esteem Inventory (CSEI) and Snellen chart. In order to analyze results obtained from the present research, t-student test and correlation coefficient were used to investigate the relationship between the variables. Accordingly, the results indicated that: there is a statistically significant relationship between anxiety and self-esteem in students with Amblyopia ($P < 0.000$). Statistically significant difference in anxiety between male and female students with Amblyopia ($P < 0.05$) was observed. The results also showed that there is no any statistically significant difference in self-esteem between male and female students with Amblyopia ($P < 0.66$).

Keywords: Anxiety; Self-esteem; Amblyopia; Students.

INTRODUCTION

Defects in the sensory system are one of the differences that make a person exceptional in community in comparison to other individuals of the same society. One of these defects is vision impairment which can occur as a result of many factors during any period of life [1]. Refractive Error, Amblyopia and Strabismus are the most important problems of vision impairment amongst students. The significance of these problems is to extent that many specific protocols are presented in some reports to investigate these vision problems in students [2].

Amblyopia refers to unilateral or bilateral decreased visual acuity without any certain physical cause or pathological factor. Amblyopia can be defined as a refractive error in eyesight as the result of abnormal visual development or abnormal visual experience in early childhood [3]. It is estimated that %2-5 of children and teenagers in most communities suffer from this visual defect communities [4]. However, with regard to various definitions and criteria provided to determine Amblyopia, this rate has been reported to vary from 0.2% to 4.3% in elementary school [3].

Considering the fact that diagnosing Amblyopia in children under 5 years old is very difficult, the most ideal age to diagnose this visual defect has been reported to be between the ages 5 to 10 [5]. Therefore, it is necessary to create and promote self-esteem in these children in order to help them develop the skills needed for an effective life while dealing with problems in life [6]. Self-esteem is the self-evaluation of one's self and one's worth or one's judgment about their value [7].

The lack of social acceptance felt by individuals with vision impairment influences their sense of self-worth in society. Much of the sense of individuality in a person with vision problems is dependent on the extent of their social acceptance and, indeed, social competence. A person with vision problems is often subject to fake compassion and caring behaviors. When a person with impaired vision does not have sufficient competence, their confidence and self-worth are severely affected. Therefore, whenever their self-esteem is hurt, they lose their ability to express themselves and, their serenity is lost [8].

Sharon Z. et al (2011) studied the relationship between self-esteem and vision impairment including Amblyopia [9]. Sacks S. Z. and Wollfe K. E (2006) stressed the significance of high self-esteem in students suffering from vision impairment or students who need special treatment and training. They found that, low self-esteem in students with vision problems results in sense of inferiority, emotional problems, isolation and conflict more than their peers [10]. According to Gresham (2001), Teenagers with vision impairment deal with more problems in building self-esteem, mental and emotional health and making friends than their peers [11]. Hurre, et al (2000) studied the state of psychological welfare of teenagers on 115 girls and boys suffering from impaired vision, 44 teenagers with chronic impairment condition and 607 teenagers with normal condition in Finland. They found that teenagers with vision impairment, particularly the blind ones, dealt with more problems in their interpersonal relationships and social interactions with friends as well as low self-esteem in comparison with the other two groups; however, they showed having fewer problems in terms of their psychological welfare than teenagers with chronic conditions [12].

Students with vision impairment suffer from low self-esteem [13, 14], social acceptance and rejection by others [8]. Self-esteem is considered as a cultural buffer against anxiety [15]. As long as a person fails to build self-esteem, they are subject to anxiety, mental instability, suspicion about one-self, escape from truth and a sense of insufficiency in life. On the other hand, a person with high self-worth can readily deal with threats and stressful life events without experiencing negative arousal and mental disintegration [16].

Masood Nia (2010) studied the relationship between self-esteem and social anxiety in bachelor students. He found that there is a negative and reverse relationship between self-esteem and social anxiety. That is, the higher the self-esteem, the lower the social anxiety would be [15]. According to Chang, et al (2012), high self-esteem is associated with lower levels of anxiety [17]. Reich and Hofmann (2008) investigated the negative relationship between self-esteem and social anxiety; they found that self-esteem is indicative of confirmation and acceptance of one-self as well as self-worth. Consequently, a person with high self-esteem is more assertive and does not allow the senses of anxiety and lack of security ruin themselves while interacting with others. As a result, the person with a positive view about one-self will act more decisively and effectively in different situations of life, especially in interacting with others [18].

Castello, et al (2005) pointed out that anxiety associated with other complications including low self-esteem, the sense of insufficiency, depression, distress etc [19]. According to the findings of Izzic, et al (2004) on college students, anxiety is more prevalent in people with low self-esteem while it is less prevalent in people with high self-esteem [20].

Considering the aforementioned discussed issues and the limited number of research about the degree of anxiety in people with vision problems as well as the effect of anxiety on the process of Amblyopia prompted the researcher for the present study to investigate whether there is any statistically significant relationship between Amblyopia and anxiety on self-esteem in students.

MATERIALS AND METHODS

The present research intends to investigate and compare the relationship between anxiety and self-esteem amongst high school freshman students (male and female) with Amblyopia in Gachsaran in 2015. All the male and female freshman students (1st Grade) in high school suffering from Amblyopia in Gachsaran participated in the study as the research statistical population among which 80 students including 40 girls and 40 boys were selected equally based on Simple Random Sampling Method. The materials used in this study include Beck Anxiety Inventory (BAI) and Cooper-smith Self-esteem Inventory (CSEI).

Beck Anxiety Inventory (1990)

Beck Anxiety Inventory was developed by Beck, et al in 1990. BAI is a self-reporting questionnaire/inventory used to measure the severity of anxiety in teenagers (children) and adults. This questionnaire is a 21-item scale in which the subjects select one of the four options which identify severity of anxiety. BAI has an Internal Consistency Coefficient of 0.92% and a reliability of 0.75 with test-retest method within a week interval; nevertheless, the correlation of the items varies from 0.30 to 0.76 [21]. According to the study of Qaraei (1993) about the

psychometric properties, this inventory has a reliability of 0.80 using test-retest method within a two-week interval. Kaviani and Mousavi (1999) found that this inventory has a reliability coefficient of 0.72 using test-retest method within a month interval as well as a Cronbach's Alpha Coefficient of 0.92 [22].

Cooper-smith Self-esteem Inventory (CSEI) (1967)

Cooper-smith (1967) developed his self-esteem scale based on the revision of the scale developed by Roger & Diamond. (1954). Cooper-smith Self-esteem Inventory (CSEI) consists of 58 items 8 of which are lie detector/lie scale. The total of 50 items of the inventory is divided into four sub-scales namely Public Self-esteem, Social Self-esteem (peers), Family Self-esteem (Parents) and Educational Self-esteem (School). The items of CSEI are literally written for children 8-10 years old. The test-retest reliability of this inventory has been reported to be 0.88 after five weeks while it yielded a coefficient of 0.77 after three years. Studies done in Iran have reported reliability coefficients of CSEI as 0.85 and 0.80 respectively using Cronbach's Alpha and Guttman Methods [23].

RESULTS

Based on the results of research data analysis, the frequency distribution of the subjects (girls and boys) is of equal proportion, each 50%. Subjects without anxiety or with low anxiety including 34 students (42%), as well as the subjects with high self-esteem including 60 students (75%), encompass the largest number of students. The results showed that the mean of the anxiety score in female subjects was higher than male subjects; nonetheless, the mean of the overall self-esteem in girls was a little higher than boys; that is, male subjects had higher "Public self-esteem" than female subjects while female students showed a little high score in "Family, Social and Educational self-esteem" in comparison to male students (Table 1).

Table 1: The Mean and SD of Research Variables according to Sex (Female/Male)

Variable		Mean	SD	Min.	Max.
Anxiety	Female	15.2	10.88	2	45
	Male	11.17	10.5	0	36
Overall Self-esteem	Female	32.57	7.2	20	50
	Male	31.87	6.96	20	44
Public Self-esteem	Female	16.95	4.31	7	26
	Male	17.10	3.56	9	23
Educational Self-esteem	Female	5.4	1.86	1	8
	Male	5.32	1.87	0	8
Social Self-esteem	Female	4.9	1.51	2	8
	Male	4.25	1.67	1	7
Family Self-esteem	Female	5.32	1.92	1	8
	Male	5.2	1.74	0	8

Table 2: Correlation Coefficient between Self-esteem and Anxiety in Students with Amblyopia

Variables		r	Sig.
Anxiety	Overall Self-esteem	-0.43	0.001
	Public Self-esteem	-0.34	0.001
	Educational and Occupational Self-esteem	-0.33	0.001
	Social Self-esteem	-0.27	0.01
	Family Self-esteem	0.33	0.001

As presented in Table 2, with regard to the observed r and the sig. level (r. 0.43 & Sig. 0.000), there is a statistically significant relationship between self-esteem and anxiety in students with Amblyopia. Regarding the fact that there is a negative and reverse relationship between these two variables, it can be concluded that the higher the self-esteem, the lower the anxiety; whereas, the higher the anxiety, the lower the self-esteem will be in students with Amblyopia.

Table 3: The Comparison between the Mean of Anxiety amongst Female and Male Students with Amblyopia

Variable	Sex	Number	Mean	SD	Degree of Freedom	t-test	Sig.
Anxiety	Female	40	11.17	10.50	78	2.16	0.03
	Male	40	16.15	10.09			

In order to test the hypothesis about the difference in the anxiety between female and male students with Amblyopia, independent t-students test was used. Based on the results presented in the table 3, the values of t-test and sig. level (t. 7.81 & Sig. 0.05) indicate that the hypothesis is confirmed that there is a statistically significant difference in anxiety between female and male students with Amblyopia. Therefore, with regard to the observed Mean and SD

amongst girls (M. 11.17 & SD. 10.50) and boys (M. 16.15 & SD. 10.09), it can be concluded that the Mean of girls is higher than boys that is girls have higher anxiety than boys.

Table 4: The Comparison between the Mean of Self-esteem amongst Female and Male Students with Amblyopia

Variable	Sex	Number	Mean	SD	Degree of Freedom	t-test	Sig.
Self-esteem	Female	40	32.57	7.2	78	0.44	0.66
	Male	40	31.87	6.96			

In order to test the hypothesis about the difference in the self-esteem between female and male students with Amblyopia, independent t-students test was used. Based on the results presented in the table 4, the values of t-test and sig. level (t. 0.44& Sig. 0.66) indicate that the hypothesis is rejected that is there is not any statistically significant difference in self-esteem between female and male students with Amblyopia. Therefore, with regard to the observed Mean and SD amongst girls (M. 32.57& SD. 7.2) and boys (M. 31.87& SD. 6.96) as well as the fact that the mean of both subjects is almost close, it can be concluded that there is not any statistically significant difference in self-esteem between female and male students with Amblyopia.

DISCUSSION

One of the main problems amongst students in schools is visual/vision impairment which can, in turn, influence their learning and lead to many emotional mental problems. The results of this study showed that there is a statistically significant relationship between self-esteem and anxiety in students with Amblyopia. With regard to the observed results, there is a negative and reverse relationship between self-esteem and social anxiety. That is, the higher the self-esteem, the lower the social the anxiety; whereas, the higher the anxiety, the lower the self-esteem would be in students with Amblyopia. This result of the present research is consistent with the findings of Reich and Hofmann (2008), Kheirkhah, et al (2012), Chang, et al (2012), Masoud Nia (2010), Izgic, et al (2004) and Catello (2005) all of which are in line with the negative and reverse significant relationship between self-esteem and anxiety.

On the other hand; Kheirkhah, et al (2012), also, propose that educational interventions about self-esteem and assertiveness would promote mental health. Izgic, et al (2004) found that anxiety is more prevalent in people with low self-esteem while it is less prevalent in people with high self-esteem. Masoud Nia (2010) concluded that there is a reverse relationship between self-esteem and social anxiety. According to Reich and Hofmann (2008) there is a significant negative relationship between self-esteem and anxiety. Chang, et al (2012) found that high self-esteem is associated with lower levels of anxiety. According to Castello, et al (2005), anxiety is associated with other complications including low self-esteem, the sense of insufficiency, depression, distress etc. This signifies the fact that self-esteem protects human against anxiety and that self-esteem is indicative of confirmation and acceptance of one-self as well as self-worth.

Furthermore, there is a statistically significant difference in anxiety between female and male students with Amblyopia. Regarding the percentage of female and male students with low anxiety and high anxiety, it can be concluded that the number of Amblyopic male students with low anxiety is less than girls.

Nevertheless, based on the results of the present research, there is not any statistically significant difference in self-esteem between female and male students with Amblyopia. This finding is not consistent with the findings of Sharon, et al (2011) who studied the relationship between self-esteem and vision impairment including Amblyopia. Sacks and Wollfe (2006) stressed the significance of high self-esteem in students suffering from vision impairment or students who need special treatment and training. According to Gresham (2001), Teenagers with vision impairment deal with more problems in building self-esteem, mental and emotional health and making friends than their peers. Hurre, et al (2000) found that teenagers with vision impairment, particularly the blind ones, dealt with more problems in their interpersonal relationships and social interactions with friends as well as low self-esteem in comparison with the other two groups.

RESEARCH RECOMMENDATION

- ✓ Sufficient training for establishing effective communication with students suffering from Amblyopia in order to timely encourage them to have active participation in classroom.
- ✓ Sufficient training to teachers and parents about the relationship between self-esteem and anxiety in students with Amblyopia in order to promote self-esteem in these students, using consulting and psychological techniques, to reduce anxiety.

CONCLUSION

Self-esteem is rooted and shaped in the family and the relationship with family. Considering the fact that families have almost the same standpoint towards Amblyopia as well as the quite equal conditions they provide for both sexes (boys and girls), it can be concluded that there is not any statistically significant difference in self-esteem between both sexes.

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