

Anxiety, Social Adjustment and Psychological well-being of blind Adolescents

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ABSTRACT

Objective: The objective of the study was to assess anxiety as predictor of social adjustment and psychological wellbeing in blind adolescents. The present study examined the level of anxiety, social adjustment and psychological wellbeing of blind adolescents.

Methodology: Cross sectional research design was used in the study. The study was carried out on the sample of 150 blind adolescents between the ages of 12 to 18 years.

Demographic variables were also considered in analyses to examine their influences. The tools related to anxiety, psychological wellbeing and social adjustment were used. Urdu version of beck anxiety inventory (1988), social adjustments scale (Mundt et al., 2002) and psychological wellbeing scale (Ryff, 1989) was used.

Results: Independent t-test, Correlation and multiple Regression analyses were run to test the hypotheses. Independent t-test showed that the level of anxiety is comparatively greater in females than males, $t(148) = -1.15, p = .25$. Correlation analysis showed that there is significant negative correlation among anxiety and psychological well-being of the blind adolescents, $r = -0.21, *p < 0.05$ and there is significant positive correlation among anxiety and social adjustment, $r = 0.283, *p < 0.05$. A regression was calculated to predict the social adjustment from Anxiety, $\beta = .283, t = 18.457, p < .000, R^2 = .080$. Regression was calculated to predict the psychological well-being from Anxiety, $\beta = .214, t = 48.640, p < .000, R^2 = .046$. Regression analysis demonstrated anxiety as a significant predictor of psychological wellbeing and social adjustment in blind adolescents.

Conclusion: The rationale of the research was to observe the level of anxiety, societal adjustment and psychological wellbeing of blind adolescents. The study revealed that anxiety is increased in blind females' adolescent than blind male's adolescent and there is negative relationship among anxiety, social adjustment and psychological well-being of blind adolescents. According to the current research, anxiety can be predictor of social adjustment and psychological well-being of blind adolescents. It can be concluded that anxiety has an impact on the social adjustment of blind adolescents which further leads to impairment in psychological and social functioning especially in adolescence.

INTRODUCTION

Blindness means "lack of illustration capability and lack of insight of illustration spur. Sightlessness is being unable to perceive due to damage, illness, or inherited situation. A person with partial blindness might familiarity dull image, have lack of ability to perceive shape, seeing just gloom, poor nighttime image, and tunnel visualization. Partial sightlessness means you have few visions. Abd-El Sattar Ali mentioned in his research that loss of sight is distressing bodily state by deep arousing and financial implication [1]. The sightlessness leads to change into daily life, behavior of blind people that can create consequence in troubles with physical, psychological and social adjustments. Adolescence, family unit and society can be affected. While consider the mainly distressing sensory harm where visualization is single of the most significant channels throughout adolescent is learned regarding surroundings and it is very important in coordinate experience. Blindness can be inherited so it means that disability may come from parents to the children biologically. If blindness would be genetic, it passes away from all the stages of the person's life but here, adolescent's age of the blindness is chosen. Impaired vision becomes more common with age. Temporary blindness is dissimilar from permanent blindness in base of reasons according to World Health Organization (2004). Adolescence is a transfiguration conjectural phase among infancy and old age so as to characterized most organic, emotional and common changes than whichever other period of life by the exemption of early [2]. Adolescence is a particular phase of life in which self-insight is rising and could be prejudiced with one's existing arousing situation. Adolescent's Guardian and forecaster should have knowledge about the psychological wellbeing and problems related to health of adolescents that must be associated with present and future. In this stage, emotions are developed. Emotions are unable to prevent in the age of adolescence and once adulthood to be achieved several issues can be aroused but these issues can be solved before in the age of adolescence. In this stage, different

changes occur in the human body. It is a complicated life stage. In this phase, self-reflection is important and it is a period of increased interest in romantic relationship and intimates as well [3]. The reasons of blindness are different in every blind person. In our society, blind people face many difficulties such as they have difficulty in social adjustment and when they can't adjust themselves according to norms and values of our society then this situation might lead to anxiety. American Psychological Association (2018) suggested the definition of anxiety that it is "a feeling characterize with thoughts of worry, nervous feelings and bodily changes such as level of blood pressure increased. People who are experience anxiety disorders frequently have chronic disturbing feelings. They can prevent such conditions. Social adjustment is a struggle in which person prepared himself to manage with principle and standards of community in specific way that acceptable. It is the modification of person in their social surroundings. Martin and Newell defined the psychological well-being as a mood, affect, quality of life and skills that occurs from the little moment and few days [4]. In families of blind children has higher significant level of self-esteem. Wong et al. examined the effect of blindness on quality of life [5]. 1249 adolescents were involved in study between the age of 11 years to 18 years showed that psychosocial level or school functionality were significantly decrease in blind adolescents rather than healthy sighted adolescents while the level of universal quality of life was parallel in both groups. Oliveira et al. inspected the Quality of life in adolescents and children with sightlessness and vision loss [6]. The results indicated that the scores of means were high in low vision participants, in males. Moreover, children and adolescents reported high scores about quality of life than their parents. Kemp directed the study of social emotional aspects of sightlessness [7]. It highlights parts of sightlessness in private, societal adjustment and children, behavior to blindness, and conveying information in the unsighted adult. Most of the troubles developed with sightlessness such as in communication among unsighted and sighted people. Ishtiaq found the psychosocial implications of sightlessness and vision loss in blind students of

Bahawalpur institutions [8]. Results revealed that sightlessness or vision loss has psychological implications such as feeling of guiltiness, anxiety, grief and depression. Pinquart and Pfeiffer surveyed on the unsighted and sighted persons to observe level of psychological wellbeing. On average, powerfully decline of visualization particular psychological wellbeing in visually impaired people. Though, declines in visualization unparticular measures were just small. Tunde et al. proposed the study to observe the psychosocial adjustment in a cluster of relatively secluded and completely unsighted people in Ilorin [10]. A cross-sectional descriptive study using 20-item Self-Reporting Questionnaire (SRQ) and a questionnaire planned by the authors to observe the psychosocial problems and risk factors in blind people. Outcome indicated the most of the unsighted people were adjusted in key areas of social contact, married life, and family unit. Majority had difficulty in adjusting the areas of education, vocational training, employment, and mobility. Dodds et al. conveyed widespread cognitive, emotional, behavioral and motivational adjustments are high in person who drops his or her sight [11]. In this study we examine the level of psychological well-being, social adjustment and anxiety in blind adolescents, assess the nature of relationship among psychological well-being, social adjustment and Anxiety of Blind Adolescents, find out the gender difference in level of anxiety in blind adolescent boys and girls and assess the anxiety as a predictor of psychological well-being and social adjustment in Blind Adolescents.

MATERIAL AND METHODS

The research method was cross sectional research design. The data were collected from the Govt sectors and private sectors, (hospitals and Special Education schools) and data were also collected preferred community in which they settled depend on their compliance and permission to contribute in research. In current research the total sample selected is 150 blind adolescents. A sample is representing all the population and a small portion of larger amount of material which is taken for testing. The data were collected by non-probability convenience sampling technique.

In this research, demographic questionnaire was used in which include age, gender, education, family system and occupation. Ryff's psychological well-being scale, Beck anxiety inventory and Work and Social adjustment scale by Mundt et al were used for collecting data [12]. Statistical analysis of the obtained data was analyzed by SPSS (statistical package for the social sciences) using t-test, correlation and regression. Formal permission was taken from the ethical research committee of Sughra Shafi Medical Complex, Narowal. (Reference Number: ERC.2019.364). After taking permission, measuring tools on anxiety, psychological wellbeing and social adjustment were administered on 150 blind adolescents. Before administration, a written informed consent was collected by each participant and informs about the purpose of study, took permission from the participants or their guardian to fill questionnaire with patience and honesty. All participants had free hand to quiet participation at any time. There was no any kind of harm for participants in the study.

The age of blind participants for sample considered between 12 -18 years were included in this study. Adolescents with other physical disability like hearing impairment, cerebral palsy, autism and adolescents also having chronic illness like hypertension, history of chronic psychological disorder or depression was excluded. People who have under age of 12 and who have up to 18 years were also excluded.

RESULTS

Reliability: Reliability is defined as the extent to which a questionnaire, test, observations or any measurement procedure produces the same results on repeated trials. In short, it is the stability or consistency of scores over time or across raters.

Methods to check Reliability: Cronbach's α (alpha) is a

coefficient of reliability. It is commonly used as a measure of the internal consistency or reliability. Cronbach's α is defined as

$$\alpha = \frac{K}{K-1} \left(1 - \frac{\sum_{i=1}^k \sigma_{y_i}^2}{\sigma_{x}^2} \right)$$

Where K is the number of components (K items). It is the variance of the observed total test scores and is the variance of component i for the current sample of persons.

A commonly accepted rule of thumb for describing internal consistency using Cronbach's alpha is as follows

Cronbach's alpha	Internal consistency
$\alpha \geq .9$	Excellent
$.9 > \alpha \geq .8$	Good
$.8 > \alpha \geq .7$	Acceptable
$.7 > \alpha \geq .6$	Questionable
$.6 > \alpha \geq .5$	Poor

Correlation: Its measure the strength of linear relationship between two variables. To quantify the strength of the relationship, we can calculate the correlation coefficient. then the correlation coefficient is calculated by the following formula;

$$r = \frac{\sum_{i=1}^n (x_i - \bar{x})(y_i - \bar{y})}{\sqrt{\sum_{i=1}^n (x_i - \bar{x})^2 \sum_{i=1}^n (y_i - \bar{y})^2}}$$

This is the product moment correlation coefficient (or Pearson correlation coefficient). The value of r always lies between -1 and +1. A value of the correlation coefficient close to +1 indicates a strong positive linear relationship. A value close to -1 indicates a strong negative linear relationship.

Linear Regression: Regression analysis is a well-known statistical learning technique useful to infer the relationship between a dependent variable Y and independent variable X. The dependent variable Y is also known as response variable or outcome, and the variables as predictors, explanatory variables, or covariate.

Regression Model

$$y = \beta_0 + \beta_1 X + \epsilon$$

- **y** is the predicted value of the dependent variable (**y**) for any given value of the independent variable (**x**).
- **B₀** is the **intercept**, the predicted value of **y** when the **x** is 0.
- **B₁** is the regression coefficient – how much we expect **y** to change as **x** increases.
- **x** is the independent variable (the variable we expect is influencing **y**).
- **e** is the **error** of the estimate, or how much variation there is in our estimate of the regression coefficient.

Independent t-test for two samples: The independent t-test, also called the two sample t-test, independent-samples t-test or student's t-test, is an inferential statistical test that determines whether there is a statistically significant difference between the means in two unrelated groups. To do this, we need to set a significance level (also called alpha) that allows us to either reject or accept the alternative hypothesis. Most commonly, this value is set at 0.05.

Assumptions of independent t-test

Independence of groups

- Data collected follows a continuous or ordinal scale
- Simple random sample
- Normal distribution (Reasonably large sample size)
- Homogeneity of variance

General Procedure of Testing

Formulation of Hypothesis

$$H_0: \mu_1 - \mu_2 = 0$$

H_a: $\mu_1 - \mu_2 \neq 0$

Level of Significance

$\alpha = 0.05$

Test Statistic

$$t = \frac{(\bar{X}_1 - \bar{X}_2) - (\mu_1 - \mu_2)}{sp \sqrt{\frac{1}{n_1} + \frac{1}{n_2}}}$$
 with $v = n_1 + n_2 - 2$

Calculation: Use tables of the t-distribution to compare the value for t to the $t_{\alpha, (n_1+n_2-2)}$ distribution. in order to decide whether to accept or reject the null hypothesis H₀.

Sociodemographic Profile: According to the table 1.1 results showed that the ratio of blindness is greater in males than the females. There is significant increase blindness of adolescents in males (58.7%) as compare to females (41.3%). Most of the blind adolescents are illiterate (78.7%) and the ratio of illiterate is greater in males' adolescents than females. Most of blind adolescents are unemployed (80.7%) and theratio of unemployed adolescents is greater in males than females. Mostly blind adolescents are live within separate family unit (61.3%) than joint family system.

Cronbach Alpha Reliability of scales: According to table 1.2, there is internal consistency between the ranges from ".82 to .69". The reliability of the beck Inventory of anxiety, work and social adjustment inventory and psychological well-being inventory are tested with calculate Cronbach's alpha coefficient.

Independent t-test for Beck Anxiety (N=150): According to the table 1.3, the level of anxiety is comparatively greater in females than males, $t(148) = -1.15, p = .25$." Results showed to non-significant gender dissimilarity in level of anxiety in blind adolescence.

Pearson correlation on Beck Anxiety, social adjustment and psychological well- being (N=150): Table 1.4 conveyed that there is significant negative correlation among anxiety and psychological well-being of the blindadolescents, $r = -0.21, *p < 0.05$ and there is significant positive correlation among anxiety and social adjustment, $r = 0.283, *p < 0.05$.

Regression analysis with Beck Anxiety as predictor of psychological well-being inblind adolescents (N=150): In Table 1.5 Regression was calculated to predict the psychological well-being fromAnxiety, $\beta = .214, t = 48.640, p < .000, R^2 = .046$. Anxiety appears to be a significant predictor of psychological well-being in blind adolescents.

$$\hat{Y} = 1.6 + 0.214X$$

Regression analysis with Beck Anxiety as predictor of social Adjustment in blind adolescents (N=150): In Table 1.6 regression was calculated to predict the social adjustment from Anxiety), $\beta = .283, t = 18.457, p < .000, R^2 = .080$. A significant regression was found. Anxiety appears to be a significant predictor of socialadjustment in blind adolescents.

$$\hat{Y} = 1.32 + 0.283X$$

Table 1: Frequency and percentage of the demographic characteristics of the participants (N=150)

Variables	Percentage %	Total f	Mean	SD
Ages				
12	2.0			
13	8.7			
14	6.7	150	15.89	1.69
15	26.0			
16	10.0			
17	31.3			
18	15.3			
Gender				
Male	58.7	150	1.41	4.94
Female	41.3			
Education				
Illiterate	78.7			
KG	4.7			
Prep	4.7			
1 st class	2.0	150	0.73	1.67

2 nd class	2.7			
4 th class	1.3			
Quranic education	6.0			
Occupation				
Unemployed	80.7			
Student	16.7	150	0.22	0.47
Employed	2.7			
Family setup				
Joint	38.7			
Nuclear	61.3	150	1.61	0.48

Table 2: Reliability of the Beck inventory of Anxiety, Social Adjustment scale and psychological well-being

Variables	N of items	Mean	SD	Cronbach's Alpha
Beck Anxiety	21	24.26	7.47	0.82
Social Adjustment	5	26.65	4.55	0.44
Psychological Well-being	54	181.25	14.42	0.69

Table 3: Independent t-test for Beck Anxiety (N=150)

Variables	Male	Female	df	T	P
Beck Anxiety	88	62	148	-1.15	0.25
Mean	23.67	25.10			
SD	7.50	7.41			

Table 4: Pearson correlation on Beck Anxiety, social adjustment and psychological well-being (N=150)

Variables	1	2	3
Beck Anxiety	---	0.283*	-0.214*
Work and Social Adjustment	---	---	-0.433**
Psychological well-being	---	---	---
Mean	24.26	26.65	181.25
SD	7.47	4.54	14.41

Note: SD = standard deviation, * $p < .05, **p < .01$

Table 5: Regression analysis with Beck Anxiety as predictor of psychological well-being in blindadolescents (N=150)

Variables	R	R ²	F	β	T	P
Beck Anxiety	0.214	0.046	7.07	-0.214	48.64	0.000***

Note: Dependent variable= psychological well-being, t=test statistics, *** $p < .000, \beta = \text{beta}, R^2 = \text{R square}$

Table 6: Regression analysis with Beck Anxiety as predictor of social Adjustment in blind adolescents(N=150)

Variables	R	R ²	F	β	T	P
Beck Anxiety	0.283	0.080	12.85	0.283	18.45	0.000***

Note=Dependent variable= social adjustment, $\beta = \text{beta}, t = \text{test statistics}, ***p < .000, R^2 = \text{R square}$

DISCUSSION

This study observes the Anxiety level, social adjustment and psychological well-being of blind adolescents. The results of this research have shown effects on the blind adolescents that are Anxiety, Social adjustment and psychological well-being in the blind adolescents In this study it was observed that the ratio of blindness was greater in males (58.7%) than female (41.3%). It was also observed that most of blind male adolescents were illiterate and unemployed rather than females' blind adolescents. Blindness is higher in males may be due to genetic reason like X-chromosome. The findings explored the gender differences in level of anxiety of blind adolescents. Result showed that anxiety was greater in female than males. Anxiety is higher in females may be due to parental stress, attribution style, hormone fluctuations because reproductive event across women's life are associated with hormonal changes which have been linked to anxiety and furthermore girls tend to become more dissatisfied with their bodies than boys.

This is proved by Jalnapurkar that Anxiety is more common in women than men. Study revealed that negative relationships among anxiety and psychological well-being [13,14]. There is positive relationship among anxiety and social adjustment of blind adolescent. Blind adolescents who experience the severe anxiety,

in these blind adolescents, level of psychological well-being and social adjustment in society were low furthermore; those had low anxiety so there was higher level of psychological well-being and social adjustment [15]. Results indicate that there was

0.219 R value and value of R square was 0.048 ($p < 0.05$) which indicated that 4.8% of the variance in adjustment can be explained by a change in anxiety. The results thus point out to significant positive correlation among anxiety and adjustment in an individual [16]. Carmona found the negative relationship among psychological well-being and anxiety and scores of anxiety were higher and psychological well-being scores were low [16]. Current research estimated that anxiety was predictor of psychological well-being in blind adolescents.

Varaee also agreed that psychological well-being is the predictor of anxiety [17]. Current research also indicated that anxiety was also predictor of social adjustment in blind adolescents. Adolescence is a critical period, during which individuals undergo various drastic changes which can affect their life. They face certain stressors such as peer pressure, environmental demands; social and emotional difficulties and these problems directly affect their wellbeing [18]. If they are unable to cope up with these stressors then they are most likely to experience anxiety and suffer from mental issues (i.e., interpersonal problems, aggression, low confidence and less self-esteem), which may cause more deterioration in their overall adjustment [15,19].

CONCLUSION

The rationale of the research was to observe the level of anxiety, societal adjustment and psychological wellbeing of blind adolescents. The study revealed that anxiety is increased in blind females' adolescent than blind male's adolescent and there is negative relationship among anxiety, social adjustment and psychological wellbeing of blind adolescents. The prevalence of the blindness is greater in males than females. According to the current research, anxiety can be predictor of social adjustment and psychological wellbeing of blind adolescents. It can be concluded that anxiety has an impact on the social adjustment of blind adolescents which further leads to impairment in psychological and social functioning especially in adolescence.

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