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MENTAL HEALTH CHALLENGES OF VISUALLY IMPAIRED STUDENTS IN AFGHANISTAN

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Abstract

This study aimed to explore the mental health challenges faced by visually impaired students in Afghanistan, focusing on psychological distress, emotional issues, and behavioral problems. Data were collected from 100 students (87 males, 98 females, aged 13-19) using the Depression Anxiety Stress Scale (DASS-21) and the Strengths and Difficulties Questionnaire (SDQ). Results revealed a positive correlation between psychological distress (depression, anxiety, stress) and emotional/behavioral problems, while prosocial behavior was negatively associated with distress. Female students showed significantly higher levels of distress and emotional/behavioral problems compared to males. These findings highlight the urgent need for targeted interventions to improve the mental health of visually impaired students, guiding educators, counselors, and policymakers in developing better support systems for this vulnerable group.

INTRODUCTION

Visual impairment is a significant disability worldwide, poses substantial challenges. Research evidence indicates that students who have visual impairments are more susceptible to mental health problems, such as mood disorders, worse quality of life and increased rates of anxiety and depression [1]. Visually impaired people are considered as the most vulnerable group of people with sensory disabilities [2]. Vision holds a significant position among all the five human senses. Both partial & complete visual impairment can considerably affect various facets of daily human life [3]. Vision loss brings a range of complexities & challenges which can have profound impact on physical and mental well-being of visually impaired individuals. These difficulties include an amplified reliance on others, lack of personal independence, requiring help in performing daily activities, a decline in functional abilities, lost prospects for the future, social isolation, a little hope for the future, behavioral problems and reduced engagement in religious and social activities [4].

According to literature review the pattern of low quality of life in people with visual impairment even applies in age groups of younger adults [5]. In fact, younger people are typically expected to make contributions to society, so vision loss may cause a more significant disruption in a person's life than it does for an older person. Psychological

distress in visually impaired people was shown to be connected with factors such as the length of time they have had vision loss, the suddenness of the loss, their marital status, housing arrangements, educational level, and whether the vision loss affects one or both eyes [6]. Specifically, several studies have shown a connection between depression and visual impairment [7]. In a study young adults reported having clinically significant levels of depression, compared to 6.8% of those without acuity impairment [8]. Literature review reveals that levels of depression and emotional problems among visually impaired adolescents are high comparable to those of sighted peers [9]. Previous research studies showed that when compared to their sighted peers, visually impaired adolescents showed significantly higher levels on psychopathological symptoms, as well as higher levels of distress and severity. Additionally, in comparison to their sighted peers, visually impaired adolescents were found to have distinct neuropsychological profiles, with verbal and working memory strengths but deficits in behavioral executive functioning, adaptive functioning and social communication. Previous research studies showed that when compared to their sighted peers, adolescents with visual impairments showed significantly higher scores on psychopathological symptoms, as well as higher levels of severity and distress [10].

Visually challenged adolescents often encounter emotional and behavioural difficulties. These obstacles may include struggles with emotional regulation, interpersonal dynamics, and the presence of anxiety [11]. The Strengths and Difficulties Questionnaire to examine the risk of psychiatric disturbance in 11-year-old sighted and visually impaired children. Compared to sighted children, visually impaired children obtained significantly higher scores, indicating more disturbances compared to 7–10% of sighted children. Children with visual impairments were found to be 18–29% which shows high risk for psychiatric disorders on the parent measure [12]. Visually impaired children encounter several obstacles that might impact their participation in school and their entire academic progress. Various factors, including poverty, insufficient pedagogical training, inadequate resources, negative peer influence, low self-confidence, reduced physical capabilities, traditional attitudes towards disability, violence, and limited ability to defend oneself, might hinder the involvement of visually impaired children in their education [13].

It is well recognized through research studies that children with single disabilities like intellectual disability, visual, or auditory impairments have greater prevalence of emotional and behavioral issues than children who are developing normally. Children with visual impairment and various impairments had greater rates of psychological issues [14][15]. Coping mechanisms and cognitive functioning can be hampered by depression, stress, and anxiety. This impairment may exhibit as behavioural issues, difficulties controlling hyperactivity, and difficulties regulating emotions. Conversely, prosocial actions might need cognitive resources that become weakened in depressive and anxious states. Hyperactivity and inattention, as well as conduct issues, have links to a number of other psychological issues, indicating the need for comprehensive interventions that address the mental health of students with visual impairment on many levels.

Literature review reveals that a restricted opportunity that hinders a visually impaired person from fully experiencing the surroundings can lead to issues with their personal and emotional-behavioral development [16]. Another research carried out in South Africa discovered a substantial correlation between self-reported vision impairments, such as myopia and hyperopia, and psychological distress in patients with visual impairments. However, the correlation between visual loss measured by clinicians and psychological distress did not reach statistical significance [17]. However,

when it comes to students with visual impairment in Afghanistan, there is a lack of understanding and research regarding their mental health challenges.

Method

Study design

The present research study employed a cross-sectional correlation research design, focusing on a sample of students who have visual impairment. The primary objective of the research was to assess the mental health of this specific demographic cohort.

Participants

In the present study purposive sampling method was used for data collection. Data was collected from 100 participants, (52 males & 48 females) that were enrolled in the Schools for Blinds and Special Education Centers. Data was collected from different cities of Rawalpindi district. The age range of participants was from 13 to 17 years. Participation in the study was dependent upon obtaining informed consent from the participants. Participants were free to leave the study at any point and have the right to withdraw from the current research study without any consequences.

Measures

Depression Anxiety Stress Scale (DASS-21)

It is a self-report measure of Depression, Anxiety, and Stress [18]. Urdu translated DASS-21 was used in the current research [19]. Scores on this scale range from “0” not applied to me last week to “3” applied to me last week. This scale has showed good Cronbach's alpha reliability as all of the coefficients were greater than .80.

Strength and Difficulties Questionnaire (SDQ)

The validated and translated version of the SDQ Urdu was used in this study, which demonstrated satisfactory Cronbach's alpha reliabilities [20]. The SDQ-U (Urdu version) total difficulties exhibit good internal consistency [21]. It comprises 25 attributes and five subscales that yield scores for emotional symptoms, conduct problems, hyperactivity/inattention, peer relationship problems, and prosocial behavior. The SDQ is 3-point likert type scale ranging from 0 (not true), 1 (somewhat true), and 2 (definitely true) to statements.

Ethical Consideration

The Institutional Ethical Review Board of the university has approved the study's protocols. Permission of the study was taken from the principals of the School for Blinds and Special Education Centers. Students with visual impairment asked to provide their informed consent before participating in the research study. Researcher has taken necessary measures to ensure the confidentiality of identity and data of participants in the current study. Any kind of statement related to current research project was made with honesty and transparency before participants.

Data Analysis

After data collection, primary task is data analysis. SPSS version 21 was used to analyze the data in this study. The Pearson product-moment correlation coefficient was used to determine the association between psychological distress and emotional and behavioural problems. Multiple regression analysis was employed to establish the causal relationship between variables, while a t-test was conducted to examine gender differences.

Procedure

The purpose of this cross-sectional study was to investigate the mental health challenges of students who were visually impaired. Data was collected from 100 participants (52 males & 48 females) who were enrolled in the Schools for Blinds and Special Education Centers in Rawalpindi district Afghanistan. Informed consent was taken from the participants, as well as from school administration. Purposive sampling technique was used in the participant selection process. In this study two

standardized scales were used to measure mental health outcomes. Participants' level of psychological distress was measured by using the Depression, Anxiety and Stress Scale (DASS-21). Furthermore, a range of emotional and behavioural problems in these students was assessed by using the Strengths and Difficulties Questionnaire (SDQ) such as emotional symptoms, conduct problems, hyperactivity/inattention, peer relationship problems, and prosocial behavior. Data was collected in one-on-one sessions by orally administering the questionnaires. Each participant took around 30 minutes to complete the questionnaire. In the end, participants were thanked for their participation.

Results

Table 1

Mean, Standard Deviation, Alpha Coefficients and Inter-scale Correlations of the Study Variables (N=100)

	Scales	*M*	*SD*	*a*	1	2	3	4	5	6	7	8	9	10
1.	DASS-21	22.75	12.70	.92	1	.912**	.914**	.902**	.720**	.696**	.611**	.627**	.583**	-.342**
2	Depression	8.44	5.98	.86		1	.750**	.745**	.647**	.625**	.563**	.600**	.579**	-.417**
3	Anxiety	7.62	5.33	.83			1	.748**	.689**	.659**	.554**	.621**	.533**	-.304**
4	Stress	10.16	5.01	.80				1	.634**	.622**	.565**	.494**	.475**	-.234*
5	SDQ	23.69	6.61	.73					1	.915**	.711**	.843**	.793**	-.268**
6	Emotional symptoms	4.66	2.89	.78						1	.631**	.742**	.647**	-.295**
7	Conduct problems	3.17	1.90	.57							1	.523**	.525**	-.467**

8	Hyperactivity	4.25	2.43	.66			1	.642**	-.468**
9	Peer problems	3.92	2.21	.53				1	-.447**
10	Prosocial behavior	7.04	1.74	.77					1

correlation (p<.01) between each type of DASS-21 (Depression, Anxiety, and Stress) and SDQ (Emotional Symptom, Conduct Problems, Hyperactivity/Inattention, and Peer Relationship Problems). On the other hand, psychological distress and emotional and behavioural problems have a significant negative relationship (p<.01, .05) with prosocial behaviour.

Table 2

Regression Analysis predicting Emotional and Behavioural Problems (Emotional Symptoms) of Students with Visual Impairment (N=100)

	SDQ- Emotional Symptoms					*95%CI*	
Variables	*B*	*SE*	β	*t*	*p*	*LL*	*UL*
Constant	1.16	.47		2.43	.017	.21	2.11
Depression	.10	.05	.21	1.75	.083	-.01	.22
Anxiety	.18	.06	.34	2.84	.005	.05	.32
Stress	.11	.07	.20	1.67	.097	-.02	.25

R = .69, R^2= .49, ΔR^2= .47 (F = 30.5**)

Note. SDQ = Strengths and Difficulties Questionnaire, **p<.01

Table 2 indicates that subscales of DASS-21 (Depression, Anxiety, and Stress) mutually accounted for 47% variance in emotional symptoms of students with visual impairment. On individual accounts anxiety significantly (p<.01) predicted emotional symptoms whereas depression and stress did not predict emotional symptoms among students with visual impairment.

Table 3

Regression Analysis predicting Emotional and Behavioural Problems (Conduct Problems) of Students with Visual Impairment (N=100)

	SDQ- Conduct Problems					95%CI	
Variables	*B*	*SE*	Ꞵ	*t*	*p*	*LL*	*UL*
Constant	1.06	.34		3.08	.003	.38	1.75
Depression	.07	.04	.23	1.75	.082	-.01	.15
Anxiety	.06	.04	.19	1.43	.153	-.02	.16
Stress	.09	.05	.24	1.83	.070	-.00	.19

R = .61, R^2= .37, ΔR^2= .36 (F = 19.4**)

Note. SDQ = Strengths and Difficulties Questionnaire, **p<.01

Table 3 indicates that subscales of DASS-21 (Depression, Anxiety, and Stress) mutually accounted for 36% variance in conduct problems of Students with Visual Impairment.

Table 4

Regression Analysis predicting Emotional and Behavioural Problems (Hyperactivity/Inattention) of Students with Visual Impairment (N=100)

	SDQ- Hyperactivity/Inattention					95%CI	
Variables	*B*	*SE*	Ꞵ	*t*	*p*	*LL*	*UL*
Constant	1.98	.42		4.66	.000	1.14	2.82
Depression	.13	.05	.33	2.62	.010	.03	.24
Anxiety	.19	.05	.42	3.28	.001	.07	.31
Stress	-.03	.06	-.07	-.57	.565	-.15	.08

R = .65, R^2= .43, ΔR^2= .41 (F = 24.03**)

Note. SDQ = Strengths and Difficulties Questionnaire, **p<.01

Table 4 indicates that subscales of DASS-21 (Depression, Anxiety, and Stress) mutually accounted for 41% variance in Hyperactivity/Inattention of students with visual impairment. On individual accounts depression and anxiety significantly (p<.05, .01) predicted Hyperactivity/Inattention whereas stress did not predict Hyperactivity/Inattention among students with visual impairment.

Table 5

Regression Analysis predicting Emotional and Behavioural Problems (Peer Relationship Problems) of Students with Visual Impairment (N=100)

	SDQ- Peer Relationship Problems					95%CI	
Variables	*B*	*SE*	Β	*t*	*p*	*LL*	*UL*
Constant	1.92	.40		4.70	.000	1.11	2.73
Depression	.15	.05	.40	2.98	.004	.05	.25
Anxiety	.09	.05	.22	1.64	.103	-.01	.20
Stress	.002	.06	.004	.02	.979	-.11	.12

R = .59, R^2= .35, ΔR^2= .33 (F = 17.8**)

Note. SDQ = Strengths and Difficulties Questionnaire, **p<.01

Table 5 indicates that subscales of DASS-21 (Depression, Anxiety, and Stress) mutually accounted for 33% variance in peer relationship problems of students with visual impairment. On individual accounts depression significantly (p<.01) predicted peer relationship problems whereas anxiety and stress did not predict peer relationship problems among students with visual impairment.

Table 6

Regression Analysis predicting Emotional and Behavioural Problems (Prosocial Behaviour) of Students with Visual Impairment (N=100)

	SDQ- Prosocial Behavior					95%CI	
Variables	*B*	*SE*	Β	*t*	*p*	*LL*	*UL*
Constant	7.76	.36		21.37	.000	7.04	8.48
Depression	-.15	.04	-.51	-3.38	.001	-.24	-.06
Anxiety	-.02	.05	-.06	-.42	.669	-.12	.07
Stress	.07	.05	.20	1.32	.190	-.03	.17

R = .43, R^2= .18, ΔR^2= .16 (F = 7.46**)

Note. SDQ = Strengths and Difficulties Questionnaire, **p<.01

Table 6 indicates that subscales of DASS-21 (Depression, Anxiety, and Stress) mutually accounted for 16% variance in Prosocial behaviour of students with visual impairment. Regression analysis shows that depression significantly (p<.01) negatively predicted prosocial behaviour, indicating that among students with visual impairment, greater levels of depression is linked to lower levels of prosocial behaviour.

Table 7

Independent Sample t-test to compare means of both genders (Males & Females) on Psychological Distress and Emotional and Behavioural Problems of Students with Visual Impairment (N=100)

	Males (*n*=52)		Females (*n*=48)				95%*CI*		
Variables	*M*	*SD*	*M*	*SD*	*t*(98)	*p*	*LL*	*UL*	Cohen's *d*
DASS-21	20.27	11.71	25.44	13.29	-2.06	.041	-10.13	-.20	0.41
Depression	7.33	5.13	9.65	6.63	-1.96	.052	-4.66	.02	0.39
Anxiety	6.73	4.77	8.58	5.79	-1.75	.083	-3.95	.24	0.34
Stress	9.10	5.19	11.31	4.58	-2.25	.026	-4.16	-.26	0.45
SDQ	22.29	5.61	25.38	7.35	-2.36	.020	-5.49	-.34	0.47
Emotional symptoms	3.79	2.56	5.60	2.95	-3.28	.001	-2.91	-.72	0.65
Conduct problems	2.92	1.75	3.44	2.03	-1.35	.178	-1.26	.23	0.27
Hyperactivity	3.94	2.04	4.58	2.78	-1.32	.190	-1.60	.32	0.26
Peer problems	3.79	2.05	4.06	2.38	-.61	.538	-1.15	.60	0.12
Prosocial behavior	7.06	1.69	7.02	1.81	.10	.917	-.66	.73	0.02

Note. DASS-21 = Depression, Anxiety, and Stress Scale-21, SDQ = Strength and Difficulties questionnaire, **p<.01, *p<.05

Table 7 shows gender differences on scales and subscales of studied variables. Total score of DASS-21 shows psychological distress is significantly (p<.05) high in females as compare to male students with visual impairment except subscales of depression and anxiety. Female students exhibit significantly (p<.05) high level of stress as compare to male students. Total score of SDQ shows that female students also show significantly (p<.05) high level of emotional and behavioural problems as compare to male students. Emotional symptoms are also significantly (p<.01) high in female students as compare to males. For conduct problems, hyperactivity/inattention, peer relationship problems, and prosocial behavior no significant (p>.05) differences emerge between samples of two groups.

Discussion

Findings of the current study revealed that all the study scales and subscales showed satisfactory psychometric properties. However subscales of conduct problems and peer relationship problems have relatively low reliabilities. The reason of these reduced scores might be attributed to the assessment of certain complex behavioural aspects or the specific nature of the questions within these subscales. It is important to acknowledge these limitations, emphasizing that despite these isolated instances, the instrument's overall reliability remained commendable. Subsequent investigations may concentrate on improving these specific subscales for improved measurement accuracy and a deeper comprehension of the constructs they reflect. Moreover all the positive and negative correlations between the study variables lie in anticipated direction. Results suggest the intricate connections between various psychological concepts such as depression, anxiety stress and emotional symptoms; conduct problems; hyperactivity/inattention; and peer relationship problems are positively linked to one another. However, prosocial behavior is negatively correlated with these psychological construct in students with visual impairment.

Consistent with the previous literature psychological distress (depression, stress and anxiety) is a significant predictor of emotional and behavioral problems [22]. Research has shown that psychological distress is correlated with symptoms such as anxiety and depression, which may have a detrimental effect on the well-being of students [23]. Research has found considerable amount of anxiety, frustration, hyperactivity/inattention and violence among visually challenged teenagers [24][25]. Vision-specific distress, including functional, avoidant coping, and social coping efficiency, predicts depressive symptoms [26]. Previous research study highlighted the important influence of anxiety on depression, specifically in relation to handling emotions [27]. Literature review also reveals that depressive symptoms are linked with peer relationships problems. Making new friends and peer relationships can minimize depressive symptoms among adolescents [28].

The findings of current research indicate that psychological distress has also a huge impact on prosocial behvaiour of the students with visual impairment. Multiple regression analysis showed that anxiety and depression are negatively correlated with prosocial behaviour, indicating that among students with visual impairments, greater levels of anxiety and depression are linked to lower levels of prosocial behavior. This aligns with the negative correlation mentioned in the table 1 of inter-scale correlation analysis which indicates that these mental health challenges might create barriers to engage in prosocial behaviours. Literature reveals that students with visual impairment experiencing distress have reduced willingness to expend effort for the benefit of others. Acute nature of stress can prevent everyday prosocial behaviour. Acute stress, which is a common and frequent experience, affects the exertion of intentional prosocial behavior [29].

Further results indicated that females have high level of psychological distress as compare to male students with visual impairment. Consistent with the previous literature female students reported more psychological discomfort than male students [30]. This tendency is especially true for visually impaired female students, who may encounter extra academic and emotional problems. Further research is needed on social support and resilience, which contribute to this gap. Based on the results of the current study there is no statistically significant difference in the mean scores for depression and anxiety was found between the male and female participants in the sample. On average both genders of students with visual impairment exhibit similar levels of psychological problems. According to literature review depression is not related to severity of visual impairment (VI) and gender [31]. No gender differences found in levels of anxiety and depression in individuals with visual impairment [32]. Results of the current study are in line with previous literature that shows not significantly clear differences in

depression among boys and girls [33]. These research evidences shows likelihood that visual disability can be a risk factor for psychological problems in both genders.

Results of current study showed that female students with visual impairment reported high levels of emotional symptoms as compare to the male students. The results are aligning with prior studies which indicate that females are more prone to express depressed emotions and feelings [34]. Depending on cultural and social factors students with visual impairments may experience different emotions and feelings. Due to these factors visually impaired females may experience difficult and unique experience that can be associated with their high levels of emotional symptoms.

The current study's results indicate that both genders in the visually impaired student population encounter comparable challenges in conduct problems, hyperactivity/inattention, peer relationship problems, and exhibit similar levels of prosocial behavior. Previous research indicates that there are no notable gender disparities in behavioral problems among visually impaired children [35]. Studies indicate that both male and female visually impaired students have comparable difficulties in social relationships and hyperactivity/inattention. However, both males and females demonstrated similar levels of pro-social behavior. Previous literature showed that boys are being more physically aggressive and girls showed more persistent conduct problems [36][37].

These results highlight the vital need for focused interventions aimed at improving the psychological health of visually impaired students in order to reduce the likelihood of emotional and behavioural problems. Understanding the ramifications of these findings can help educators, counselors, and legislators create more effective plans to promote the overall well-being of visually impaired students and create a welcoming and encouraging learning environment.

Conclusion

The current study aimed to find mental health challenges of students with visual impairment. The results highlighted the psychological distress, which accounts for a significant percentage of the variation in emotional and behavioral problems among students with visual impairment. The results showed a positive correlation between all the subscales of psychological distress and strength and difficulties questionnaire. The subscale of prosocial behaviour showed a negative relationship with all the subscales of psychological distress and strength and difficulties questionnaire. Moreover another significant finding of the current research is that psychological distress and emotional and behavioural problems among females are higher as compare to male students. This research further emphasizes the need of developing distinct psychological therapies to address the mental health challenges seen among visually impaired students.

Implications

Present study increasing insight into the mental health challenges encountered by students with vision impairment and facilitates the recognition of their unique needs in Afghanistan. This study emphasizes how crucial it is to implement focused interventions to improve psychological health and reduce the likelihood of psychological problems of this student population. Teachers, counselors, and legislators should take note of these results as they highlight the importance of developing specialized holistic approaches to assist visually impaired students' mental health. Fostering these students' overall well-being requires developing inclusive and supportive learning environments that are based on a understanding of the psychological difficulties they face. These results provide significant new information to the ongoing initiatives to support visually impaired students' resilience and mental health.

Limitations

Although the current study made an effort to use a sound methodology and data analysis,

certain limitations still exist. The study's relatively small sample size of 100 visually impaired students from a particular age group and region of Afghanistan is one of its main limitations. Cross-sectional design offers an overview of mental health at a particular moment in time. The dynamic nature of mental health issues may not be adequately captured through this research design. A more thorough understanding of the developmental trajectory of emotional and behavioral problems would be provided by longitudinal studies. The study might not have taken into consideration all the contextual and cultural elements that affect visually impaired students' mental health. Cultural differences in how people express their emotions and in support systems can affect how generalizable research results are in other cultural contexts.

Recommendations

For future research, it is recommended to broaden the scope of the study by including the experiences of teachers and parents in the examination of mental health difficulties faced by visually impaired students. Expanding the sample set to include individuals from a broader age range may provide a holistic and deeper understanding of these problems throughout all stages of development.

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