

Gender Differences in Depression and Anxiety and role of self-esteem and Quality of Life among Visually Impaired individuals in Pakistan

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Abstract

Self-esteem and quality of life are very necessary for psychological and social adjustment in individuals with visual impairment. Current research assessed gender differences in Anxiety and depression between visually impaired individuals in Pakistan and investigated the role of self-esteem and quality of life. This is a cross-cross-section research design that was used with total sample of 421 participants, in which 221 were with normal vision and 201 were with visual impairment, aged 15 to 35 from Pakistani special education and rehabilitation facilities. Standardized Instruments, including the Generalized Anxiety Disorder (GAD-7), Patient Health Questionnaire-9 (PHQ-9), World Health Organization Quality of Life-BREF (WHOQOL-BREF), and Rosenberg Self-Esteem Scale (RSES), were administered. IBM SPSS-26 was used to compute descriptive analysis, independent sample t-test and correlation analysis. Outcomes proven significant differences in gender in psychological distress, as women reporting high level of

depression and anxiety. Quality of life and self-esteem were notably correlated with Anxiety and depression negatively and have protective role in psychological health. The results of the research raise the importance of taking into consideration Anxiety and depression amongst persons with visual impairment with specifically attention to differences in gender. Consolidation of self-esteem and refining quality of life may serve as chief protective factors for reducing mental distress. This research underlines the necessity to integrate gender-sensitive psychological interventions, enhancement of self-esteem, and promotion of quality of life into psychological well-being and rehabilitation services to improve the psychological health of visually impaired individuals in Pakistan.

Keywords: Depression, Anxiety, Quality of life, Visual impairment, , self-esteem, rehabilitation, Pakistan

1. Introduction

Disability is a natural feature of the human condition. Around 1.3 billion persons, or nearly 16% of the world's population, are currently living with significant forms of disability (WHO, 2024). On a worldwide scale, the average disability rate stands at 10% among adults, while about 23% of households in low- and middle-income nations include at least one person with a disability (Mitra et al., 2021). Any form of impairment, whether sensory or motor-related, poses a serious challenge to human well-being. Among all the senses, vision is the most advanced and essential, playing a key role in everyday functioning, supporting activities like personal fulfillment, appreciating aesthetics, movement, acquiring knowledge, using tools, and experiencing life's pleasures. A UK-based cross-sectional study confirmed this dependency, identifying sight as the most highly valued human sense (Enoch et al., 2019).

Visual impairment (VI), especially when it emerges during adolescence or early adulthood, can interfere with key developmental stages, reduce independence, and have a negative effect on mental health. Over the past few years, Pakistan has faced a sharp 55% rise in the prevalence of blindness and vision impairment. Blindness now stands as the third most widespread eye-related condition in the country (Bashir et al., 2024; Kazmi et al., 2022; Tshuma et al., 2022). Impaired vision can vary from diminished eyesight to total blindness. Individuals whose sight cannot be improved with medication, regular spectacles, surgical intervention, contact lenses are classified as having visual impairments. (Wang et al., 2023).

A report by World Health Organization (WHO) states that depression may emerge as the second leading health burden globally after cardiovascular disease by the

year 2020 (Szczygieł et al., 2018). DSM-5 TR define term depression encompasses a variety of depressive disorders (American Psychiatric Association (APA), 2022) based on specific diagnostic criteria. The severity of major depressive disorder can range from mild to severe, with evaluations commonly utilizing standardized instruments such as the Patient Health Questionnaire-8(PHQ-8) (Villarroel & Terlizzi, 2020). Depressive disorders can manifest across the lifespan but are most likely to emerge during adolescence or early adulthood, typically in the mid-teens, 20s, or 30s (Coryell, 2023).

Studies have consistently shown that young people with disabilities experience a meaningfully more danger of accruing anxiety and depression than their non-disabled counterparts (Zimmerman et al., 2023; Emerson & Llewellyn, 2023). This model holds true beyond a range of global settings, including middle- and low-income countries (Emerson & Llewellyn, 2023). Poor sleep, prolonged screen exposure has been strongly linked to high level of anxiety and depression (Zimmerman et al., 2023). The burden of anxiety and sadness is extremely obvious in specific environmental regions. For instance, a study from Central Sulawesi, Indonesia confirmed that 12.3% people are suffering from depression, and it has been seen that 3.25 times greater in persons with disabilities as compared to those with no disability (Endarti et al., 2020). These results highlight the high need for interventions and support that focus on the needs of young people with disabilities (Mathew & Suja, 2019; Emerson & Llewellyn, 2023). Finally, these understandings focus on the comprehensive psychosocial dynamic range that shape depression susceptibility across altered periods of life and population groups.

Different researches proved strong association between depression and visual impairment, severity of visual impairment directly linked with higher risk of depression. A result of longitudinal study specified that people who have visual impairment have a 19% increase probability of developing depression connected with those with typical vision, with the risk additional increasing among those who are diagnosed with blindness (Choi et al., 2018). The association between anxiety and depression and visual impairment is complicated, involving material deprivation, psychosocial stressors, and behavioral challenges (Dong & Ng, 2020). Research also indicated that quality of life is negatively affected by visual impairment and there is an increased risk of emotional distress and overall decline in health (Zamzam,2021). It was also seen that individual with visual impairment also face social isolation, prejudice, and loneliness that leads to poor mental health (Amrina,2022). All these results highlight the need to focus the mental health of people with visual impairment more specifically on physical health and behavior factors (Dong & Ng,2020). This research explores the relation between visual impairment and anxiety and depression and explores the effect of psychosocial correlates e.g social support, self-esteem and quality of life. Current research highlights the requirement of implementing a widespread care approach, combining therapies related to mental health, pharmacologic treatment, and compassionate social interventions adjusted

to the needs of this susceptible group. Insight of all these factors highlights the need for making effective treatment plans for anxiety and depression for people with visual impairments.

Anxiety is a commonly appearing emotional state exhibited by nervousness, sensation of apprehension, and tension (Duvall & Roddy, 2020; Boughner, 2020; Spielberger, 2022). Empirical evidence suggests that individuals with visual impairment (VI) are expected to develop anxiety disorders likened to the overall populace (Binder et al., 2020). For instance, a study conducted in Nigeria reported an anxiety disorder prevalence of 29.5% among people with VI (Okeke et al., 2023). Additionally, a systematic review encompassing 37 studies concluded that VI is linked with diminished psychological well-being and heightened susceptibility to mental health issues (Wu, 2024). In this population, anxiety is particularly associated with lower scores in vision-associated quality of life, notably in aspects like over-all healthiness, ocular pain, vision function, and mental health (Okeke et al., 2023). Rates of anxiety and depression are significantly raised between persons with visual impairments (Demmin & Silverstein, 2020; Zamzam, 2021). These psychological outcomes are often influenced, either mitigated or intensified by various psychosocial factors, levels of self-esteem, and inclusive quality of life (Demmin & Silverstein, 2020; Zamzam, 2021).

Self-esteem represents a multifaceted psychological concept that shows person's general judgment of their own value or worth (Westfall, 2020; Owens & Gary, 2019). It refers to the positive or negative appraisal a person holds about themselves (Rosenberg, 1965). Research shows a significant link between visual impairment and self-esteem. Loss of visual acuity is linked by lower self-esteem and heightened depression, with self-esteem accounting for 25% of this association (Maaswinkel et al., 2020). Vision loss correlates with depression, and this relationship is mediated by self-esteem and the sense of command. This offers new opportunities to classify, provision, and treat individuals at danger by focusing on enhancing their self-esteem (Trani et al., 2020).

Quality of life is person insight of their place in life inside their societal setting and value system, in relation to their objectives, prospects, values, and apprehensions (Bambora et al., 2020; Duggal & Gaur, 2022; Irtelli & Durbano, 2020). Quality of life has been described as the degree to which a person is able to appreciate the valued opportunities of their life by the Quality of Research unit at University of Toronto. Visual impairment substantially affects quality of life (QOL) and mental wellbeing. Individuals with visual impairments generally report lower levels of QOL compared to the overall population (Bonsaksen et al., 2023). Visually impaired persons encounter numerous obstacles in their everyday lives. These include psychological concerns such as depression and low self-esteem (Tshuma et al., 2022), physical challenges like frequent

falls and mobility impairments (Tshuma et al., 2022; Safawi & Cenk, 2023), as well as social difficulties, for example unemployment and social isolation (Tshuma et al., 2022).

This research aims to thoroughly examine the psychopathological issues Depression and Anxiety and role of self-esteem and quality of life countered by visually impaired individuals, with a specific focus on the youth population in Pakistan.

2. Literature Gaps and Rationale of the Current Study

The prevalence of visual impairment is increasing in Pakistan an assessed 1.12 million persons are affected with blindness, and 7.88 million had severe to moderate vision loss (Hassan et al., 2019) because of lack of awareness and treatment infrastructure, and lack of evidence-based modalities. Factors such as sex, economic status, and disability are associated with higher VI prevalence (Jolley et al., 2020). In Pakistan, there are very few research that have been done to find out the to investigate the vision impairment burden. Research gaps include limited evidence on problems they are facing like lack of social support, lack of educational institution with all facilities, lack of assistive technologies, lack of standardized methodologies, and uneven distribution of studies across impairment types and countries (Akram et al., 2024). Moreover, some basic and applied research pieces of evidence have been conducted. Still, research that covers all psychological and psychosocial factors is lacking in, which is one major reason for lack of facilities and treatment of visual impairment. When we are not fully aware of their problems and all contributing factors, we will not reach the exact solution to problems or interventions.

One important factor of my research is the quality of life and self-esteem of visually impaired people. In Pakistan there are numerous research findings discovered that visually impaired youths practiced complete low quality of life and show fewer score in all four areas, specifically physical well-being, mental, communal associations and environment as linked to their peers who are sighted (Habib & Irshad ,2018; Jolley et al., 2020 ;Tabassum et al., 2023;Akbar et al., 2024).These all researches have some limitations like they are not specifically designed for the age group (15-35)which I am covering . Another reason to conduct this research is, on psychopathology of visually impaired studies specifically designed for Pakistan's distinctive cultural and environmental elements is noticeably lacking. A review of the body of literature finds a lack of studies in Pakistan, examining the psychopathology of visually impaired individuals aged 15–35, particularly in relation to psychosocial variables such as community support, self-esteem, quality of life. This gap in literature hinders the development of effective mental health interventions tailored to this population. Therefore, there is an urgent need to investigate the psychological health of visually impaired youth in this region and explore how self-esteem and quality of life relate to

their mental health outcomes. This research aims to fill this critical gap by employing a quantitative research design to assess the levels of psychopathology and examine the influence of key psychosocial correlates among visually impaired individuals aged 15–35 in the Rawalpindi division.

3. Research Methodology

Quantitative research design with Cross-Sectional methodology will be utilized for this research. This design was chosen to examine the relationships between self-esteem and quality of life and gender differences among psychopathology of visually impaired person. Young individual ($N = 201$; male and female) aged 15 to 35 years were recruited from various special education schools, colleges, and training institutes in Punjab Rawalpindi division, representing different levels of visual impairment, including complete blindness and low vision and 221 individuals with normal vision with the same age range randomly from Rawalpindi Division.

3.1. Exclusion and Inclusion criteria

The main requirements for research inclusion are that the participants have visual impairment (blindness or low vision) and age range of 15 to 35 years and are literate can understand English language. Similar standards were established for a comparable group of individuals who have a normal vision. The study excluded participants who had any other disability or any other chronic medical condition e.g physical or intellectual disability. Participants who refused to complete all the research procedures.

3.2. Variables of study

The independent variable in the study was visual impairment, and the mediating variable was self-esteem and quality of life and dependent variables are depression and anxiety.

3.3. Measures

All the instruments used in the study have been widely used in international and Pakistani research and show acceptable psychometrics.

Patient Health Questionnaire (PHQ-9)

Patient Health Questionnaire is the tool that is administered by self, variant of the PRIME-MD, which is a diagnostic tool for prevalent psychological illnesses. PHQ-9 is based on DSM-IV criteria is a depression module, ranked as “0” (not at all) to “3” (almost every day). The Patient Health Questionnaire-9 (PHQ-9) has showed strong

reliability and validity for screening depression across various demographics. Studies in Hebrew (Yona et al., 2021), Vietnamese (Nguyen et al., 2021), Iraqi Kurdish (Policastro et al., 2023), and Chinese (Sun et al., 2022) have showed strong inner reliability (Cronbach's alpha ranging from 0.79 to 0.89) and better test-retest reliability.

Generalized Anxiety Disorder GAD-7

This seven-item scale is used to determine the severity of Generalized Anxiety Disorder. All respondent is requested to rate every item of scale based on his or her severity of symptoms during the preceding two weeks. The Generalized Anxiety Disorder (GAD-7) scale has demonstrated strong reliability and validity across diverse populations. Studies in Bangladesh, South Korea, South Africa, and Taiwan have shown high inner reliability, with Cronbach's alpha values ranging from 0.86 to 0.928 (Dhira et al., 2021; Lee et al., 2020; Kigozi, 2021; Shih et al., 2022; Manzar et al., 2021; Onie et al., 2020). Research on visually impaired individuals to evaluate anxiety by using GAD shows its satisfactory reliability and validity (Yasir Mohammad et al., 2024).

Rosenberg Self-Esteem Scale (RSE)

Rosenberg Self-Esteem Scale is 10 item scale constructs by Rosenberg used to measure self-esteem. The scale is validated across different cultural contexts, indicating its validity and reliability (Villena et al., 2021; Aburto et al., 2023; Pacheco et al., 2020). RSE have consistently shown the scale's strong psychometric properties.

WHOQOL-Brief

The WHOQOL group cooperated with fifteen international field centers to develop cross-culturally applicable quality of life assessment. The basis of quality-of-life BREF is four-domain structure forms (WHO,1998). Research has found proper validity and reliability, specifically for the Psychological, physical, social and environmental domain (Kalfoss et al.,2021; Kruithof et al.,2018). The scale shows moderate discriminant and construct validity (Kruithof et al.,2018). When compared to other VI-specific quality of life measures, the WHOQOL-BREF shows promising psychometric properties and relevance to people living with VI (Cooper et al., 2017).

3.4. Procedure

University of Haripur, Psychology Department ethical review board provide the ethical consent for the research. An authorized approval for collection of data was also got from the Education Department of Punjab, shadowed by agreement from heads of educational institutions. Contestants were enlisted from schools and institutions based around the Rawalpindi division, Punjab Pakistan. Before the data collection procedure

Informed consent form was given to the participant that contains information regarding the purpose of the study moreover, the consent form demonstrates the participant's volunteer contribution. Contestants were sure about the anonymity of their participation and advised that they might withdraw from the research at any moment. Participants were requested to complete different assessment forms or questionnaires along with an instruction sheet. Participants who are aware of assistive technology fill the questionnaire by themselves and who don't have assistive technology the assessment instruments were administered orally by trained assessors who read the items to the visually impaired participants, record their responses. Some Data was also collected by using online mode like send the questionnaire in different groups of visually impaired persons and ask the participants to fill them. Current research aims to follow the ethical guidelines and principles of the University of Haripur ethical committee. Data collection will only commence from participants who will provide informed consent and participate voluntarily. Data security will also be considered. Stringent measures will be implemented to safeguard anonymity and confidentiality.

3.5. Data Analysis

The data analysis was accomplished by employing IBM SPSS Statistics version 26. Means and standard deviations were computed, and the inner consistency reliability was established with the help of Cronbach alpha α .70 (Nunnally & Bernstein, 1994). Correlation analyses were carried out to assess connections between self-esteem, quality of life, anxiety, and depression.

4. Results

Table 1: Demographic characteristics of the sample (N=421)

Variables	Category	N	%	Variables	Category	N	%
Gender	Male	160	38%	Age	15-20 yrs old	142	34%
	Female	261	62%		21-25 yrs old	159	38%
Occupation	Student	259	62%		26-30 yrs old	104	25%
	Employed	94	22%		31-35 yrs old	16	4%
	Self employed	29	7%	Types of visual impairment	Low vision	105	25%
	Unemployed	39	9%		Blindness	96	24%
Socioeconomic status	20,000-40,000	137	33%	Access to assistive technology	Screen Reader	127	63%
	40,000-	97	23%		Braile	81	40%

60,000				Display		
60,000-100,000	96	23%		Magnification software	25	12%
Above 100,000	91	22%				

Table shows frequencies and percentagewise distribution of all demographic variables of the study. The demographic variable of the present study includes gender, occupation, socioeconomic status, age, types of visual impairment, and access to assistive technology for visually impaired individuals.

Table 2: Descriptive statistics and alpha coefficients of study variables (N=421)

Scale	k	α	Mean	SD	Skew	Kurt.	Range	
							Potential	Actual
Rosenberg esteem	Self 10	.73	21.75	2.84	-.26	1.25	10-40	10-32
Generalized Anxiety Disorder	7	.85	15.24	8.24	.45	-.487	0-21	0-21
Depression	9	.85	18.20	9.20	.67	.059	0-27	0-27
Quality of life	26	.90	85.19	15.15	-.391	.102	26-130	33-120

Table 2 shows descriptive statistics and reliability coefficients of the variables under study. The results indicate alpha coefficient, means and standard deviations, skewness and kurtosis of the scales of present study. To access the overall distribution of data across study variables descriptive statistics were computed. The findings provide evidence for strong reliability of all the scales and subscales used in the study. It indicates that all instruments are internally consistent and reliable to continue with further analysis.

Table 3: Gender differences among Variables

Variables	Gender				t	P	Cohen's d
	Male		Female				
	M	SD	M	SD			
Quality of life	86.74	13.81	82.67	16.85	-2.67	.007	0.28
Self esteem	21.87	3.13	21.67	2.65	.66	.508	0.07
Generalized Anxiety	7.32	4.74	8.80	5.48	-2.83	.005	0.07
Depression	8.55	5.41	9.61	6.17	-1.85	.05	-0.06

This table shows gender differences across study variables i-e quality of life, self-esteem, generalized anxiety, depression. Results indicate considerable variations in quality of life, generalized anxiety and depression. Specifically, females show higher score on depression (M= 9.61, SD= 6.17) as compared to males scores (M= 8.55, SD= 5.41), $t = -1.85$, $p = .05$. Males show higher score on quality of life (M= 86.74, SD= 13.81) as compared to female scores (M= 82.67, SD= 16.85), $t = -2.67$, $p = .01$, females show high score on Generalized anxiety (M= 8.80, SD= 5.48) as compared to male scores (M= 7.32, SD= 4.74), $t = -2.83$, $p = .01$ hence hypothesis is proved i-e female visually impaired individuals will exhibit higher levels of depression and anxiety as compared to male visually impaired individuals. No statistically significant gender differences were found on self-esteem.

Table 4: Visually impaired and sighted individual differences on study variables (N=421)

Variables	Eye vision				<i>T</i>	<i>P</i>	Cohen's d
	Visually impaired		Sighted				
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>			
Quality of life	82.22	15.80	87.91	14.02	-3.89	.001	-0.38
Self esteem	21.23	2.71	22.31	2.87	3.95	.001	-0.39
Generalized Anxiety	8.62	5.20	7.90	5.29	1.41	.03	0.13
Depression	9.39	5.67	8.03	6.13	3.95	.05	0.06

Table shows differences of visually impaired and sighted individuals across study variables i-e quality of life, self-esteem, generalized anxiety and depression. Results indicate significant differences in quality of life, self-esteem, depression, wellbeing, adaptive coping and maladaptive coping. Specifically, individuals with sighted showed higher score on quality of life ($M = 87.91$, $SD = 14.02$) as compared to visually impaired individuals scores ($M = 82.22$, $SD = 15.80$), $t = -3.89$, $p = .001$ with effect size -0.38 indicating small but noticeable difference. Similarly, individuals with sighted show higher score on self-esteem ($M = 22.31$, $SD = 2.87$) as compared to visually impaired individuals scores ($M = 21.23$, $SD = 2.71$), $t = -3.95$, $p = .001$ with effect size -0.39 indicating small but noticeable difference. On depression scale, visually impaired individuals show high score on Depression ($M = 9.39$, $SD = 5.67$) as compared to individuals with sighted ($M = 8.03$, $SD = 6.13$), $t = -3.95$, $p = .05$. On generalized anxiety scale, visually impaired individuals show high scores ($M = 8.62$, $SD = 5.20$) as compared to individuals with sighted ($M = 7.90$, $SD = 5.29$), $t = 1.41$, $p = .03$. Such results indicate visually impaired individuals will score significantly higher on psychopathological symptoms (depression and anxiety) as compared to sighted individuals.

Table 5: Correlation between study variables among visually impaired individuals (N=201)

Variables	<i>M</i>	<i>SD</i>	1	2	3	4	5
Quality of life	85.19	15.15	.41**	.39**	-		
Self esteem	21.75	2.84	0.08	.16*	0.01	-	
Generalized	8.24	5.25	-.22**	-.44**	-.30**	0.	-

Anxiety						07	
Depression	9.20	5.91	-.28**	-.38**	-.31**	-	.81**
						0.	
						04	
Visual	45.09	10.83	-.20*	.10	-.34*	-	.40**
impairment						.2	
						0*	

Note * $p .05$, ** $p .01$

Table shows correlation between study variables i-e quality of life, self-esteem, psychopathological symptoms (generalized anxiety and depression). Results indicate that quality of life is negatively correlated with psychopathological symptoms including generalized anxiety (-.30) and depression (-.31). Generalized anxiety is positively correlated with depression (.81). Above table shows that visual impairment has negative significant relationship with quality of life (-.34), self-esteem (-.20) but positive significant relationship with generalized anxiety (.40), and depression (.35). Current study examined the psychometric characteristics of all instruments utilized to evaluate psychopathology and its psychosocial correlates, among visually impaired youth in Pakistan. The analyses incorporated multiple expressive and illative parameters e.g means, standard deviations (SD), score ranges, skewness, kurtosis, and potential scoring limits across the administered scales. Inner reliability was resolute by means of Cronbach's alpha, a reliability coefficient that assesses the degree to which individual items within a scale measure a common underlying construct. In alignment with the acceptable range proposed by Hulin et al. (2001), most instruments exhibited strong to excellent reliability, with alpha coefficients ranging from .72 to .92. The study further examined the distributional characteristics of each variable using measures of skewness and kurtosis. According to Field (2009), acceptable values fall within the range of -2 to +2, representative that the data approximately follows a normal distribution.

The demographic traits of the current research present useful considerations tied on the mental and psychosocial profile of both with vision impairment and person with sight in Pakistan. The gender components displayed a larger quantity of female participants (62%) compared to males (38%). Most respondents were within the 15–25 age bracket (72%), representative a essential stage of psychosocial development considered by identity development, peer inspiration, and increased vulnerability to emotional well-being difficulties such as anxiety and depression (Potterton et al., 2021). Research specifies that young persons; predominantly females and those with personal or familial upbringings of mental health apprehensions, display high rates of depression and anxiety, with these symptoms typically intensifying around the age of 15 (Tariq et al., 2024; Jones et al., 2021; Nwachukwu et al., 2020).

The independent sample t-test outcomes point to statistically considerable gender-based variations across several psychosocial variables among visually impaired participants. Limited access to public services, barriers to social engagement, difficulties maintain interpersonal relationships are the some of issues that are faced by the women with visual impairment (Tobias et al., 2024). Existing research directs notably greater quality of life (QOL) among men scores, displaying a small-to-moderate effect size. These findings associate with previous investigate showing that females with disabilities tend to experience lower QOL, mainly due to intersecting socio-cultural restraints, reduced mobility opportunities, and gender-specific caregiving responsibilities especially predominant in low- and middle-income contexts (Leone, 2020; Tutty & Nixon, 2024; Soares et al., 2019; Bonsaksen et al., 2023; Haegele et al., 2023).

On the contrary, in current research, women scored substantially higher on generalized anxiety and depression contrasted to males. These results support the hypothesis that female visually impaired individuals experience greater emotional distress than their male counterparts. These results align with the previous research shows that increased anxiety and depression among women with disabilities are linked with gender specific social role, constrained independence and protection fears. Differences in Gender have been constantly notified, which shows increased vulnerability to anxiety and depression and other mental health issues among females as contrasted to men (Sanchez et al., 2022; Zapata et al., 2022; Alghamdi et al., 2022). The findings of these researches focus on the need for gender based psychological and social provision interventions. Directed approaches focusing on female mental health, flexibility enhancement, and welcoming reachable vocational and recreational scenario may improve levels of depression and anxiety among women. Moreover, rehabilitation programs that is community based should object to upgrading adaptive coping skills for both genders, pay special attention to women who appear less leaned toward rational coping behaviors.

Comparative findings among individuals with visual impairment and sighted individuals show not only differences in numbers but also multidimensional psychosocial breach that shows cultural barriers, structural discriminations, and the flowing properties of sensory loss in a context that is resource constrained. Vision loss in Pakistan is ranges beyond a medical state, as there are significant differences in quality of life, self-esteem and quality of life characterizes it profound social determinants of health. Insufficient environmental accessibility, repressed employment projections and restricted mobility are the limitations that are associated with significantly low quality of life among visually impaired individuals. While worldwide research (Bonsaksen et al., 2023; Stanimirov et al., 2022) continually effects visual impairment with reduced quality of life. In the Pakistani social cultural setting expands this alteration through the interface of disability with inaccessibility of infrastructure, economic fragility, and social stigma is deep seated. Material well-being, health productivity and incorporation of community are the

influences that are manifests across different life domains (Stanimirov et al., 2022; Panigrahi et al., 2021; Immanuel & Christopher, 2024). These findings underscore the critical need for multidimensional plans that improve social inclusion, encourage occupational participation, and reinforce adaptive coping mechanisms to elevate QOL among visually impaired individuals (Bonsaksen et al., 2023; Immanuel & Christopher, 2024).

Lower self-esteem among visually impaired individuals shows the strong psychosocial effects of vision loss that leads to practical limitations. Self-esteem is an essential determinant of psychological resilience (Cylulko, 2024; Saleem et al., 2023; Tołczyk & Piśula, 2019), is thoroughly partial by apparent capability, individuality, and social role satisfaction. Self-worth is often considered as one's ability to subsidize economically and socially to the family part, in societies like Pakistan. Visual impairment disturbs these pathways that are traditional, leads to dependency and reduces self-efficacy, and affected stigma (Nejad et al., 2020). The effect size -0.39 that is observed is significant, though some research reports comparable self-esteem levels between visually impaired and sighted adolescents (Qasim, 2019; Manitsa, 2023), suggesting that suitable, cultural, and support-connected factors may modest this relationship.

The results of current research show increase level of anxiety and depression among individuals with visual impairment that confirm our hypothesis and these findings also align with global patterns (Sekimitsu et al., 2022; Jumaily & Adeeb, 2024; Binder et al., 2020; Donato et al., 2024). Though, the essential mechanisms in the Pakistani setting seem to be more complex. Due to unemployment, social isolation arising from inaccessible environment and limitation of disability related mental health services, depression may be worsened. On the other hand, difficulties in daily mobility such as issues of transportation, crossing roads and decline in functionality may cause anxiety. Significantly, these settings are not merely coexisting disorders but reciprocally reinforcing phenomena, depression reduces motivation for adaptive coping, whereas anxiety undermines confidence in independent operational, collectively contributing to a cyclic decline in mental health outcomes.

The findings of current research show significant negative relationship between quality of life and anxiety and depression ($r = -.30$, $p < .01$) and ($r = -.31$, $p < .01$) amongst individuals with visual impairment. Results showed that increasing depression and anxiety leads to decline in quality of life, highlighting the vital connection between emotional distress and overall life satisfaction in this group. This relationship is correlated with previous empirical data. For example, Ctori et al. (2020) stated a significant inverse correlation connecting QOL and anxiety ($r = -.352$, $p = .033$), suggesting that heightened anxiety significantly ruins the QOL of individuals with visual impairments. Among visually impaired individuals' anxiety disorders and stress

indications was 29.5 % and 34.5 % respectively (Okeke et al.,2023). The participants also showed lower scores on scale related to quality of life and showed strong relation between emotional distress and reduced functional outcomes. According to Brunes and Heir (2019) individual with visual impairment are more vulnerable to sad symptoms, remarkably when they are recently lost being associated with by supplementary disabilities or developed during adulthood. Lower perceived quality of life is the result of psychological and social stressors that cause emotional uncertainty too. Depression exerts the severe effect on moods and emotional control and reduces motivation, less participation in purposeful daily chores and lack of social involvement, these are key factors of multidimensional model of QOL (WHOQOL ,1998). According to World Health Organization defines quality of life as physical health, mental well-being, social networks, and degree of liberation, all of which are windingly linked and susceptible to disruption in individuals living with chronic conditions such as vision loss.

Moreover, recent research finds the statistically not significant relation between quality of life and self-esteem ($r = .01$), signifying that maybe quality of life is shaped more by environmental factors and other fundamentals like social support, availability of services and adaptive functioning other than the internal self-worth factors. These results highlight that for the psychological and emotional well-being of individual with visual impairment there is need for addressing external challenges and considering the environmental factors instead of paying attention only to the internal traits.

Visually impaired individual's psychopathology anxiety and depression and their linked with quality of life is the main investigation of current research. It has been seen that there is strong correlation between depression and anxiety ($r = .81$, $p < .01$) among visually impaired people. This relationship aligns with the previous research that continually reported the symptoms of anxiety and depression among people with visual impairments (Binder et al., 2020). These emotional situations regularly happen and affect each other's intensity and persistence. Studies conducted during the pandemic recognized higher rate of depression and anxiety among people with visual impairment as compared to sighted individuals (Sekimitsu et al., 2022; Gascoyne et al., 2022). The presence of both disorders among visually impaired individuals causes social withdrawal, reduced independence and limitations in functioning, all these promote psychological distress.

In current research depression and anxiety are correlated with quality of life negatively show that increase level of psychological distress and low level of satisfaction with life and decline in daily functioning. These results align with the previous findings of research reported significant association between anxiety and qol among visually impaired group (Ctori et al., 2020). Likewise, Okeke et al. (2023) highlighted that anxiety, and stress indicators adversely affect QOL through multiple domains, including emotional health, independence, and social mobility. Individual with visual impairments

who exhibited higher emotive distress established reduced physical, mental, and environmental satisfaction, implying that anxiety and depression may weaken overall quality of life by disrupting both internal emotional stability and outside social adaptation. This alliance emphasizes the necessity of integrating psychological health interventions within QOL development programs for people with visual impairments.

This research investigates visual impairment not exclusively a sensory limitation but a public health problem that relates to quality of life and self-esteem and mental health. The sign tells the need to shift the paradigm in research and policy making from symptoms orientations to strategies that help the individual with visual impairment to live their life independently. This research determines a foundation for proper revolution, ensuring that the perceptions and main concern of visually impaired individuals stay dominant to Pakistan's mental health and disability contexts.

5. Policy implications

Implication of the present study are as follows:

1. More responsiveness should be given by governments, healthcare providers and disability support providers to develop and execution culturally responsive mental health and psychosocial support facilities for visually impaired children. Such plans should reflect the high existence of depression and anxiety found in this study and support factors that protect against depression and anxiety (e.g., self-esteem, quality of life); plans must ensure convenience by providing access to community-based rehabilitation services and low-cost assistive technologies and inclusive education.
2. Systematized coping skills assistance is required in rehabilitation centers and communal programs in promoting well-being because of adaptive coping. These should be culturally adapted and accessible and taught using problem solving and emotional regulation strategies for visually impaired youth.
3. Based on the outcome of this study mental health professionals can develop targeted and timely programs of psychosocial support regarding the early identification and management of depression and anxiety for people with VI.
4. Mental health worker training programs and courses should include education concerning the mental, social and learning needs of Visually impaired youth, focusing on planned guidance, people skills and cultural level of compassion. A set of data and tools for the clinician to be prepared to modify assessment tools and psychosocial services to make them accessible and meaningful in the local context, at modifying levels of visual impairment.
5. The results of the study offer a basis for mental health professionals to find real methods for fetching and training all personnel (teachers, special education teachers and rehabilitation workers) in the recognition and intervention of the

psychological and social issues that visually impaired youth experience. A coordinated response between mental health providers and educational providers can result in early identification of mental health apprehensions, and the inclusion of psychosocial support services in educational and rehabilitation contexts.

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