

Effect of family support on psychological adjustment of physically handicapped adolescents

Madiha Zainab, Mamoona Ismail Loona, Seema Zahid

Abstract

Objective: To assess the effect of family support on psychological adjustment of physically handicapped adolescents, and to assess gender differences in this regard.

Method: The cross-sectional study was conducted in Rawalpindi and Islamabad, Pakistan, from May to July 2023, and comprised male and female physically handicapped adolescents living in joint family systems. Data was collected using standardised tools, including Family Support Scale and Psychological Adjustment Scale. The relationships between perceived family support and psychological adjustment were explored. The relationships between perceived family support and psychological adjustment were analyzed using descriptive statistics, correlation, *t*-test and regression analysis via SPSS version 22.0.

Results: Out of total 150 individuals participants were 56(37%) and male participants were 94 (63%). The age range for the participants was 13 to 18 years (15.5 ± 1.8) Increased family support meant increased psychological adjustment ($p < 0.05$). There was no significant gender difference ($p > 0.01$) in this regard.

Conclusion: Family support was a strong predictor of psychological adjustment among physically handicapped adolescents, while gender difference in this regard was not significant.

Keywords: Physical disability, Family support, Psychological adjustment. (JPMA 75: 383; 2025)

DOI: <https://doi.org/10.47391/JPMA.10737>

Introduction

Physical disability manifests in various forms. It may be present at birth or otherwise acquired during childhood or adolescence as a result of some accident, illness or injury. Individuals who experience disability are affected to varying degrees in the mobility, employability and the capacity to satisfy their different needs.¹ The disability itself is rooted more in social rather than medical aspects in a sense that lack of social support and attention hinders daily life participation of individuals with disability. In any case, the consequences of disability can be pervasive, affecting long-term quality of life.² These consequences become even more devastating in adolescents because the development of self-identity, self-image and self-worth can be affected negatively.³ Moreover, since they lack adult's logic and approach to problem-solving, they may face more distress in dealing with their disability during teenage.^{4,5}

Social support refers to willingness to provide and availability of practical assistance by immediate/extended family members, friends or colleagues⁶. In difficult circumstances, such as facing certain disability of a family

member, family support is conceptualised as family's ability to survive and cope with disability crisis and manage related risks, difficulties and stress. It also involves family's capacity to accept, adapt and manage disability and its consequences in the face of untoward circumstances.^{6,7} Studies reveal that family support can play a powerful role in improving the quality of life of the adolescents with physical disabilities by creating inclusive environments. This can include simple things as maintaining a pleasant and friendly environment in the household, including the disabled in family conversations and discussions. These actions can help such adolescents overcome depression by providing peer and social support in crucial times. Additional support can be made available through community organisations and social work professionals in society.⁸

Chiang et al.⁸ explained that parents and family members have to address a number of factors to ensure healthy and comfortable life of adolescents with physical disability. Considerable evidence suggests that as children with physical disabilities mature, the nature of support required also changes according to the physical and psychological needs of the children. At the same time, the nature of stress experienced by the parents also changes. Therefore, parents need to ensure their own psychological adjustment before they can offer any kind of meaningful support to their adolescents suffering from a disability.⁹ In other words, they need to ensure that they manage their

Department of Psychology, International Islamic University, Islamabad, Pakistan.

Correspondence: Mamoona Ismail Loona. e-mail: mamoona.ismail@iiu.edu.pk
ORCID ID: 0000-0002-1832-8181

Submission complete: 28-08-2023 **1st Revision received:** 16-01-2024

Acceptance: 02-11-2024 **Last Revision received:** 01-11-2024

own emotional responses to the health condition, are able to access adequate resources, and have the necessary social support in order to meet the psychological needs of their children.¹⁰⁻¹²

Similarly, studies reveal that family support should include an understanding of the disability so that parents and siblings can provide the right kind of care to the adolescent.¹³ They also need to have access to the required healthcare resources and facilities in order to improve the quality of life and psychological adjustment of such adolescents. Psychological adjustment is referred to as adaptation to physical disability.^{13,14} Research shows that the adolescents need to acquire new skills, such as role flexibility and understanding of their own cognitive processes. They need to redefine the roles that they may have performed at home. Here, the role of parents, siblings and other members of the family is very crucial in ensuring the wellbeing and better functioning of such adolescents.¹⁵ Family support can enable adolescents with disability to see themselves as valuable and useful members of society, even if they might not have access to the same activities and opportunities as their friends, classmates and peers.¹⁶

The current study was planned to assess the effect of family support on psychological adjustment of physically handicapped adolescents, and to assess gender differences in this regard. It was hypothesised that there was a significant positive relationship between family support and psychological adjustment of the physically handicapped adolescents, and that there were significant gender differences in this regard.

Subjects and Methods

The cross-sectional study was conducted in Rawalpindi and Islamabad, Pakistan, from May to July 2023. The ethical approval for the study was sought through Institutional Ethical Review Committee, International Islamic University Islamabad, Letter No.IIUI/ORIC/Bioethics/110. The sample was derived using simple random sampling technique while sample size was determined using Slovin's formula i.e. $n = N / (1 + Ne2)$.¹⁷ The sample was raised from among the students in different special schools and vocational centres meant for the physically handicapped in the twin cities that are adjacent as well as socially and economically intertwined. The participants were enrolled after taking written, informed consent. Those included were male and female physically handicapped adolescents living in joint family systems who belonged to intact families. Adolescents with any other disability/multiple disabilities, healthy adolescents, children and adults were excluded.

Data were collected using the Family Support Scale (FSS) for the physically handicapped¹⁸ and the Psychological

Table-1: Descriptive data related to family support and psychological adjustment scales used.

Scales and their subscales	n	Mean±SD	A	Range		Skewness
				Potential	Actual	
APR	4	14.34±3.66	0.56	4-20	4-20	-0.60
SA	6	20.60±4.74	0.51	6-30	6-30	-0.46
PSI	7	25.41±5.57	0.65	11-35	7-35	-0.59
FE	6	21.23±4.39	0.48	8-30	6-30	-0.77
IR	4	14.65±3.89	0.58	4-20	4-20	-0.61
FSS	30	86.77±17.01	0.87	30-143	30-120	-0.37
PAS	27	96.25±18.26	0.87	40-126	27-135	-0.90

FSS: Family support scale, PAS: Psychological adjustment scale, APR: Accurate perception of reality, SA: Ability to cope with stress and anxiety, PSI: Positive self-image, FE: Ability to express full range of emotions, IR: Good interpersonal relationships, M: Mean, SD: Standard deviation.

Adjustment Scale (PAS).¹⁹ FSS is 18-item scale designed to measure perceived family support towards children with disabilities. It is based on likert type scale having response range from 'not at all helpful' to 'extremely helpful'. The higher score on the scale reflects higher amount of family support. The alpha reliability of the scale was reported to be 0.77.

The PAS is a 27-item scale that measures psychological adjustment along five subscales A: an accurate perception of reality (APR) (items 3, 6, 23 and 27), B: ability to cope with stress and anxiety (SA) (items 2, 4, 7, 8, 25 and 26), C: a positive self-image (PSI) (items 5, 10, 13, 15, 16, 17, 21), D: ability to express the full range of emotions (FE) (items 1, 11, 14, 18, 22 and 24), and E: good interpersonal relationships (IR) (items 9, 12, 19 and 20). The scale has high reliability at 0.83 while the split half reliability is 0.85. It is scored on a 5-point rating scale, ranging from 5 = strongly agree to 1 = strongly disagree. Items 1, 4, 5, 7, 11, 14, 18, 19, 22, 23, 24 and 25 are negatively phrased. A total score is computed with a cut-off point of 81. Students scoring >81 are considered to have better psychological adjustment and those scoring <81 are considered to have poor psychological adjustment.¹⁸

Cronbach alpha value of FSS, and PAS and its subscale showed good reliability in the current study (Table 1). The data were analyzed using SPSS version 22.0.

Results

Of the 150 subjects, 94(63%) were males and 56(37%) were females. The age range for the participants was 13 to 18 mean 15.5 ± 1.8 years (Table 2).

There was a significant positive correlation between family support and psychological adjustment of physically handicapped adolescents (Table 3).

Linear regression analysis revealed that family support was a significant predictor of psychological adjustment ($p < 0.001$). The R² value of 0.37 indicated that 37% variance

was caused by the predictor variable towards outcome variable (Table 4).

There was no significant difference on psychological adjustment and family support among males and females (Table 5).

Table-2: Demographic variables.

Variables	n (%)
Age (years)	
13-14	051 (34)
15-16	050 (33)
17-18	049 (33)
Gender	
Male	094 (63)
Female	056 (37)

Table-3: Inter-scale correlation between psychological adjustment and family support scales.

	1	2	3	4	5	6	7
APR	-	0.59**	0.66**	0.46**	0.54**	0.52**	0.78**
SA		-	0.65**	0.61**	0.59**	0.45**	0.85**
PSI			-	0.54**	0.59**	0.59**	0.86**
FE				-	0.55**	0.42**	0.77**
IR					-	0.49**	0.79**
Total FS						-	0.61**
Total PA							-

PA: Psychological adjustment, FS: Family support, APR: Accurate perception of reality, SA: Ability to cope with stress and anxiety, PSI: Positive self-image, FE: Ability to express full range of emotions, IR: Good interpersonal relationships. ***p* < 0.01

Table-4: Linear regression analysis.

Predictor Variable	B	Psychological Adjustment 95% CI	
		LL	UL
Constant	39.28***	22.07	51.47
Total FS	0.657***	0.519	0.795]
R2	0.37		
F	88.40***		

CI: Confidence interval, LL: Lower limit, UL: Upper limit, FS: Family support. ****p* < .001

Table-5: The *t*- values for psychological adjustment and family support scales.

Variables	Male (n = 94)	Female (n=56)	<i>t</i> -test(148)	<i>p</i> -value	95% CI		Cohen's d
	Mean±SD	Mean±SD			LL	UL	
APR	14.22±3.65	14.55±3.70	0.249	0.80	-1.79	1.39	0.09
SA	20.53±4.72	20.73±4.82	0.29	0.76	-2.15	1.59	0.04
PSI	25.30±5.73	25.58±5.34	1.19	0.23	-2.34	0.583	0.05
FE	20.90±4.52	21.79±4.16	0.84	0.40	-1.85	0.75	0.20
IR	14.44±4.30	15.00±3.10	0.72	0.46	-8.35	3.86	0.15
PAS	95.41±18.86	97.66±17.29	0.53	0.59	-1.56	0.895	0.12
FSS	86.07±17.52	87.95±16.19	0.65	0.51	-7.56	3.81	0.11

CI: Confidence interval, LL: Lower limit, UL: Upper limit, M: Mean, SD: Standard deviation, PAS: Psychological adjustment scale, FSS: Family support scale, APR: Accurate perception of reality, SA: Ability to cope with stress and anxiety, PSI: Positive self-image, FE: Ability to express full range of emotions, IR: Good interpersonal relationships.

Discussion

The present study aimed at finding the effect of family support on psychological adjustment of physically handicapped adolescents. The initial hypothesis was that there was a significant positive relationship between family support and psychological adjustment of the physically handicapped adolescents, and that there were significant gender differences in this regard. While the first part of the hypothesis was proved, gender difference was no significant. The current findings suggested that female adolescents with disabilities were not reported to the centres, and their needs were not addressed in the formal schools for the physically handicapped adolescents as male representation in the sample was almost 63% compared to 37% for females.

Family support can play a powerful role in improving the quality of life of the adolescents with physical disabilities by creating more inclusive environments.^{15,16} Psychological adjustment is not a state to be arrived at. In fact, it is a process that needs to be designed and guided along its course so that the individual can attain the desired outcome, i.e. better quality of life or better health.

Moreover, the results showed that moderate to strong correlations between various aspects of family support and psychological adjustment. These findings offered support to the initial hypotheses. The correlation between PAS and FSS values was 0.86 which suggested a strong relationship between the variables. Interpersonal relationships and psychological adjustment also had a high correlation of 0.79, which was also supported by previous findings.^{13,14} A study¹⁵ also stressed the importance of relationships with friends and other peers for regaining independence and autonomy. On the other hand, the weakest correlations were found between family support and FE. The correlation value 0.491 was considerably lower than the other correlations. This was a surprise when viewed in the light of a study¹⁶ which suggested that adolescents with visual disability could learn to cope with depression by accepting their emotions.

The findings further suggested that causation existed between family support and psychological adjustment. The relationship was not only causal in nature, but was also statistically significant (R2=0.37). Therefore, 37% of the variation in psychological adjustment was the result of the presence of family support. Literature supported this finding.³ Researchers²⁰ have also explained that quality of life improves when parents offer support to adolescents in regaining

Table is not aligned?

inclusion in social circles, such as their peer groups and friends. While these studies^{3,20} did not discuss a causal relationship, they did offer support to the findings by identifying that such a relationship could have pervasive effects by extending psychological adjustment of the adolescents to beyond the household, and into the community.

With respect to gender differences on the outcomes of psychological adjustment and family support, the present study showed non-significant differences. The results were consistent with literature.^{19,20} However, some studies^{14,15} revealed that anxiety due to physical disability was more common in female than in male adolescents.

Researchers^{21,22} have reported differences between adolescent boys and girls with developmental disabilities in terms of psychological adjustment and mental health. They further suggest that boys are supposed to suffer less than girls in this regard, whereas female adolescents with disabilities report lower quality of life than adolescent boys. This is contrary to the current findings.²³

The current has limitations as it focussed only on physical disability. Due to diverse nature and wide range of disabilities, it was not possible to take all types of disabilities into consideration. Moreover, the study was restricted to adolescent age group. In future other types of disabilities targeting other age groups should be designed. Cross-cultural and longitudinal studies will be helpful in exploring the deeper aspects and consequences of disability on a family. More research is required to devise support programmes in order to educate and facilitate adolescents with disability and their families.

Conclusion

Family support was a strong predictor of psychological adjustment among physically handicapped adolescents. No significant gender differences were found on family support and psychological adjustment of such adolescents.

Acknowledgement: We are grateful to the heads of special education and vocational centres and the subjects for facilitating the study.

Disclaimer: None.

Conflict of Interest: None.

Source of Funding: None.

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Author Contribution:

MZ: Concept, reviewed of related literature, methodology and data analysis.

MIL: Supervision and final approval.

SZ: Preparation and critical revision.