

Discrimination in the Life of Physically Disabled Individuals: Moderation Model of Coping Strategies and Social Support

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ABSTRACT

People having physical disabilities experience extensive health inequities due to structural barriers, discrimination, and exclusion from daily life facilities. The present study attempted to study the adverse effects of discrimination on the psychological wellbeing of individuals with physical disabilities and examined the significant contribution of coping skills and social support as moderators. The sample for the study consisted on 163 individuals having various kinds of physical impairments. Four self-report scales were used to gather the information such as the psychological well-being scale, everyday discrimination scale, the brief coping orientation to problems experienced inventory, and multidimensional scale of perceived social support. Analyses were performed using SPSS and PROCESS macro. Results of linear regression ensured that discrimination has a negative impact on psychological wellbeing. Moderation analyses confirmed that coping strategies and social support significantly moderated the association between discrimination and psychological wellbeing. The findings of study offer a comprehensive framework for social interventions and strengthening support systems that will empower individuals with physical disabilities.

Keywords: *Discrimination, psychological wellbeing, coping strategies, social support.*

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Introduction

Disability, particularly physical disability, remains one of the most stigmatized and discriminated conditions across societies. Individuals with physical impairments are often subjected not only to structural barriers (e.g., inaccessible buildings, transportation, and institutions), but also to interpersonal and psychological discrimination. This includes being stereotyped as dependent, pitied, ignored, or excluded from meaningful participation in social, educational, and economic life (WHO, 2023). Studies showed that regardless of their sociodemographic and physical and mental health characteristics, people with disabilities report higher risk of experiencing occupational and service-related discrimination, as well as they frequently experience disrespectful treatment, insults, and being perceived as they are having flaws in character (Namkung & Carr, 2019). Discrimination is the unjust or harsh treatment of an individual or group by others because of certain traits or characteristic that make them different from others (Williams et al., 1997).

As stated in the World Health Organization (WHO) fact sheet on disability (2023), over 1.3 billion people globally live with some form of disability. Disability arises from the complex interaction between health conditions and environmental as well as personal factors and many face daily discrimination that hinders their full societal participation (WHO, 2023). According to Park (2024) 18.5% of people with physical disabilities in Korea reported suicidal thoughts, showing a significantly high incidence in this community. After controlling for demographic variables, depression was identified as a major factor raising the incidence of suicide ideation. The findings highlight the significance of ongoing monitoring and early interventions aimed at preventing depression and encouraging disability acceptance in order to lower suicide risk among people with physical disabilities. Despite legal frameworks promoting inclusion (e.g., the UN Convention on the Rights of Persons with Disabilities), attitudinal discrimination continues to impact disabled individuals' access to services, jobs, education, and healthcare (WHO, 2011).

One of the most harmful effects of discrimination is its negative influence on psychological well-being. Psychological well-being is not simply the absence of mental illness, but refers to positive functioning, including independence, accepting oneself, individual advancement, and satisfaction with life (Ryff, 1989). Psychological wellbeing denotes an individual's subjective experience of positive psychological states, like enjoyment, contentment in life, and a sense of direction. It is a complete theory that consider several aspects of individuals' emotional and psychological wellbeing, such as personal growth,

satisfying relationships, self-acceptance and positive self-esteem, and meaning of ones' life (Dhanabhakyaam & Sarath, 2023). Studies reported significant differences in psychological wellbeing of people with disability and those without disability. Students without disabilities reported high scores on the overall scale of wellbeing than those with disabilities (Alós Cívico, 2021). People with functional limitations are exposed to ongoing discrimination and perceived stigma which are the source of depressive symptoms and poor mental health conditions among them (Brown, 2014; Pan, 2024). A longitudinal study conducted in United Kingdom on individuals with physical, sensory and cognitive disability found significant association of disability discrimination with increased psychological distress and poorer psychological functioning (Hackett et al., 2020). To deal with discrimination and negative societal attitude individuals with disability adopt some coping mechanism to overcome its adverse effects on psychological health. Coping can independently influence the mental and physical health and also work in integration with various personality traits (Carver & Connor-Smith, 2010).

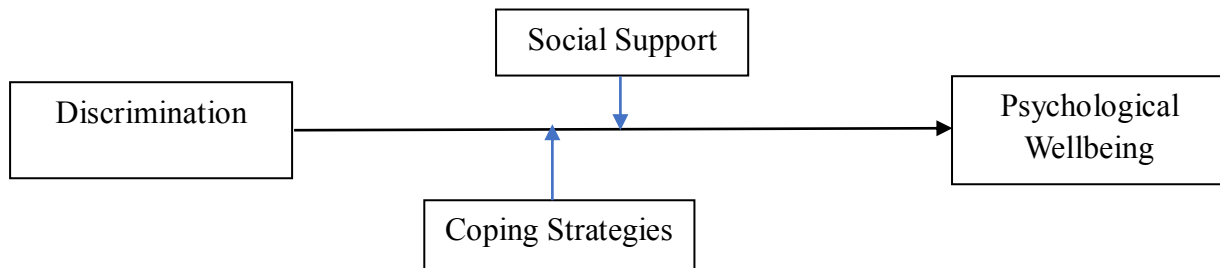
People respond to external stressors, threats and harm in many different ways which is collectively regarded as coping. Coping is the attempt to lessen the discomfort brought on by unpleasant life events (Carver & Connor-Smith, 2010). Individuals use various kinds of coping strategies in their efforts to reduce psychological discomfort that includes seeking social support, engaging in physical exercise, avoidance, problem solving and emotion focused coping, using social media or watching movies, and strengthening relationship with others (Deasy et al., 2014; Kim & McKenzie, 2014). Among these emotional focused coping strategies such as spirituality is found to be used most frequently by participants with physical disabilities (Desalegn et al., 2023). Various other coping strategies such as isolation, ignoring, engaging in intellectual and leisure activities, humor, increasing cohesion with others have been identified effective in dealing with perceived discrimination (Gabarrell-Pascuet et al., 2023). Positive coping styles not only serve a significant mediating role between perceived discrimination and subjective wellbeing of students with disabilities but also act as a chain mediator along with psychological resilience between discrimination and subjective wellbeing (Zhou & Chen, 2024). Studies also supported the significant role of problem focused and social support coping strategies in enhancing the personal growth and overall life satisfaction among physically impaired individuals (Kim et al., 2020). The findings indicate that coping strategies play a significant role in the psychosocial adjustment of physically disabled people and ultimately improve their quality of life (Miller et al., 2010).

Social support is the perception and experience of care from others as well as the presence of a trustworthy support system to rely on in daily life or during the periods of stress (Taylor, 2011). It is the help or support that someone gets from other people (Findler, 2000). Social support whether received from family, peers, or institutions has been found to provide emotional, informational, and practical assistance during adversity. Both the nature and amount of social support are important in reducing the depressive symptoms among disabled individuals (Park et al., 2024). Studies reported that individuals who actively refrained from social, familial, or economic engagements due to their disability experienced greater psychological distress compared to those who did not avoid such situations (Temple & Kelaher, 2018). Previous studies indicated the significance of social support for psychological health in response to the discrimination. According to the buffering hypothesis by Cohen and Wills (1985) social support "buffers" the negative effects of stressors such as stigma and exclusion. Social support acts as both a moderator and a mediator between wellbeing and discrimination thus buffering the adverse effects of discrimination while also contributing to the explanation of their negative relationship (Park & Joshanloo, 2022).

Rationale of the Study

Discrimination appear to be a risk factor for people with disabilities in different domains of life such as medical care, transportation, professional life, interpersonal relationships and education (Milacic Vidojevic et al., 2017). According to the social model of disability persons' surroundings have an equal influence on their quality of life and social involvement as their physical or mental attributes. The model contends that disability is not caused by personal constraints. Instead, it is the inability of society to offer suitable services and ensure that the requirements of individuals with disabilities are considered in the structure of society (Traci et al., 2024). The inequalities disabled individuals face due to exclusion contribute to increased risk behaviors, poorer access to quality health care, and worse mental health outcomes. In this study we explored the harmful effects of discrimination on psychological health further it highlighted that coping mechanism and availability of social support serve the moderating role in the relation of discrimination with psychological well-being among individuals with physical disabilities. The findings will offer a valuable input in understanding the psychological health of persons with physical disabilities and thus will allow the health professionals, families and social activist to focus

on the coping mechanism and participation of such people in various social and recreational activities, and support them in obtaining health care and preventive services. It will provide input toward policy recommendations for inclusion, empowerment and reducing discrimination.



Conceptual model:

Objectives of Study

1. To ascertain the influence of discrimination on psychological wellbeing of physically disabled individuals.
2. To explore the moderating role of coping strategies and social support in the relation between discrimination and psychological wellbeing.

Hypotheses

1. Discrimination will negatively affect psychological wellbeing of physically disabled individuals.
2. Coping strategies will play a moderating role between discrimination and psychological wellbeing.
3. Social support will moderate the relation of discrimination with psychological wellbeing.

Methodology

Sample

The sample for the present study was based on individuals with physical impairment either congenital or caused by a condition such as infections, injuries or severe accidents and disease.

A total of 163 participants living in Peshawar district were chosen through purposive sampling strategy. The sample size is estimated through Raosoft formula for sample size

(Raosoft, 2004). The research strategy was based on quantitative design with the aim of finding out the association between study variables. Participant from both genders with an age range from 18 to 50 years were considered for the present study.

Exclusion criteria: Individual having psychological disorders were excluded from the sample selection.

Instruments

Following instruments were utilized for the purpose of data collection.

Demographic information sheet

Following information were gathered on demographic sheet.

Gender, age, qualification, cause of physical disability, type of physical disability, employment status, family type, marital status.

Everyday Discrimination Scale (EDS)

The 9-item everyday discrimination scale developed by Williams et al. (1997) measures how frequently people believe that they are discriminated due to their physical appearance, sexual orientation, gender, age, race, religion or ethnicity in their day-to-day lives. The response format for all items is 1 for often, 2 for sometimes, 3 stands for rarely and 4 denotes never. Responses to each item are reversed scored and total score (0-36) is calculated by adding all responses where higher scores indicate more frequent experiences of discrimination. The scale has a good alpha reliability value such as $\alpha=.88$ (Williams et al., 1997).

Ryff's Scale of Psychological Well-Being (PWB)

Ryff's (1989) Psychological Well-Being Scale contains multiple modifications with varying numbers of items, including 18, 42, 54 and 84 items. In this study the 42-item version was employed. The measure includes six subscales with strong internal consistency such as autonomy ($\alpha=.83$), environmental mastery ($\alpha=.86$), positive relationships with others ($\alpha=.88$), purpose in life ($\alpha=.88$), personal growth ($\alpha=.85$) and acceptance of oneself ($\alpha=.91$). Each subscale has seven questions with a six-point answer format ranging from strongly disagree denoted with 1 to strongly agree denoted with 6 (Ryff, 1989).

Brief Coping Orientation to Problems Experienced Inventory (COPE)

Carver (1997) developed a brief COPE self-report assessment tool with 28 items aiming to assess the efficacy and failures of coping strategies utilized during stressful and challenging life experiences. The scale includes 14 factors each with sufficient Cronbach alpha value such as denial ($\alpha=.54$), positive reframing ($\alpha=.64$), active coping ($\alpha=.68$),

instrumental support ($\alpha=.64$), substance use ($\alpha=.90$), behavioural disengagement ($\alpha=.65$), venting ($\alpha=.50$), emotional support ($\alpha=.71$), humor ($\alpha=.73$), self-blame ($\alpha=.69$), acceptance ($\alpha=.57$), planning ($\alpha=.73$), religion ($\alpha=.82$), and self-distraction ($\alpha=.71$). The response type for each item varied from 1 to 4 indicating how frequently respondents adopted each coping strategy (Carver 1997).

Multidimensional Scale of Perceived Social Support (MSPSS)

This scale is comprised of 12 items that measure people's subjective perceptions of social support from three major sources such as significant others, family and friends. The scale is made up of three subscales, each with four items and a 7-point Likert scale for ratings. The total score of the scale is obtained by adding the scores across the 12 items, with scores ranging from 12 to 35 meaning low social support, 36 to 60 representing medium perceived support, and 61 to 84 showing high social support. The scale has a strong Cronbach alpha and test-and-retest reliability as .88 and .85 respectively.

Procedure

The sample of persons with physical impairments was drawn from various rehabilitation centers and educational and employment institutions in Peshawar, with prior authorization from the administrations of the relevant institutes. After describing the purpose of the study and obtaining informed consent from participants, the demographic information sheet and the four scales stated above were distributed to them. Participants received adequate questionnaire instructions. Following the end of the data gathering procedure the essential analyses were performed on the obtained information.

Results

Table 1

Demographic Characteristics of Sample

Characteristics	<i>n</i>	%
Gender		
Male	81	49.7
Female	82	50.3
Age (Years)		
18-33	113	69.3
34-50	50	30.7
Qualification		
Matric	20	12.3
Intermediate	60	36.8
Bachelors	62	38.0
Masters and above	21	12.9
Employment status		
Employed	42	25.8
Unemployed	121	74.2
Cause of physical disability		
Inborn/congenital	71	39.7
Acquired	92	60.3

Note. *N*= 163. Participants were on average 30.03 years old (SD= 7.58).

Table 2

Psychometric Properties for EDS, PWB, COPE and MSPSS Scales (N=163)

Scale	M	SD	Range	Cronbach's α
EDS	30.80	9.14	13-45	.96
PWB	104.14	13.63	68-133	.89
COPE	83.88	15.20	46-112	.96
MSPSS	52.92	19.82	12-83	.99

Note. M=Mean; SD= Standard Deviation; EDS= Everyday Discrimination Scale; PWB= Psychological Wellbeing; COPE= Coping Orientation to Problems Experienced; MSPSS= Multidimensional Scale of Perceived Social Support.

Table 2 shows mean, standard deviation and alpha reliability coefficients of the scales that were utilized in the present study. The alpha value of the four scales is high demonstrating that the all of the scales are internally consistent and appropriate for the current study.

Table 3

Linear Regression Analysis Predicting Psychological Wellbeing from Discrimination

Variable	B	SE	95% CI		β	p
			LL	UL		
Constant	129.73	3.13	123.54	135.92	--	< .001
Discrimination	-.83	.09	-1.023	-.638	-.55	< .001

Note: CI=confidence interval; LL= lower limit; UL= upper limit;

The table 3 shows linear regression analysis in which discrimination significantly predicted psychological wellbeing, $F(1, 161) = 72.50, p < .001$, explaining for 31% of the variance in psychological wellbeing ($R^2 = .310$). Increased level of discrimination is related with poor psychological wellbeing ($\beta = -.55, p < .001$).

Table 4

Moderation of Coping Strategies between Discrimination and Psychological Wellbeing

Variable	B	SE	95% CI		p
			LL	UL	
Constant	102.41	.882	100.67	104.15	.000
Discrimination (A)	-.429	.100	-.6273	-.232	.000
Coping Strategies (B)	.399	.059	.283	.516	.000
Interaction (A*B)	-.025	.006	-.037	-.013	.000

Note: CI=confidence interval; LL= lower limit; UL= upper limit

Moderation analysis was carried out through centered variables using PROCESS macro. Altogether, all variables explained 49% of change in psychological wellbeing, $R^2 = .49$, $F(3, 159) = 51.03$, $p < .001$. As shown in Table 4 discrimination ($B = -.429$, $p < .001$) and coping strategies ($B = .399$, $p < .001$) both appeared as significant predictors of psychological wellbeing. There was a significant interaction between discrimination and coping strategies, $B = -.025$, $p < .001$ indicative of the moderating effect of coping strategies

Table 5

Moderation of Social Support between Discrimination and Psychological Wellbeing

Variable	B	SE	95% CI		p
			LL	UL	
Constant	102.95	.981	101.02	104.89	.000
Discrimination (A)	-.363	.113	-.585	-.140	.001
Social support (B)	.331	.052	.229	.432	.000
Interaction (A*B)	-.011	.005	-.021	-.001	.041

Note: CI=confidence interval; LL= lower limit; UL= upper limit.

The Table 5 portrays the moderation analysis where in psychological wellbeing 45.7% of the variance ($R^2 = .46$) is significantly predicted by all of the variables entered $F(3, 159) = 44.59$, $p < .001$. Discrimination ($B = -.36$, $p = .001$), and social support ($B = .33$, $p < .001$) both significantly predicted psychological wellbeing. The interaction effect discrimination and social support was also significant ($B = -.011$, $p = .041$), suggesting that social support moderated the relation between psychological wellbeing and discrimination.

Discussion

Findings of the previous studies have established sufficient evidence of the negative consequences of perceived discrimination on the physical, psychological and emotional wellbeing in diverse groups (Gabarrell-Pascuet et al., 2023; Scholaske, L. (2024). The current research work focused on the impact of discrimination faced by disabled people on their psychological wellbeing and emphasized on the significance of coping skills and support network in the life of physically impaired individuals. To test the study hypotheses linear regression and moderation analyses were performed on the data after the preliminary analyses of descriptive statistics.

In the first hypothesis it was assumed that discrimination will negatively affect the psychological health and the results accepted the stated assumption as indicated in table 3 it explained 31% of the variance in psychological wellbeing. The findings of the study are consistent with previous studies as reported by Temple and Kelaher (2018) that individuals who experienced both discrimination and avoidance were 3.7 times more likely to have psychological distress compared to those experiencing neither. Perceptions of discrimination affect the subjective wellbeing both directly and indirectly through the mediated effects of positive coping styles and psychological resilience among students having disabilities (Zhou & Chen, 2024). Studies supported that individuals diverse coping skills influence their subjective wellbeing however discrimination appeared as the most important negative predictor of wellbeing thus suggesting the strong connection of discrimination with mental wellbeing (Park & Joshanloo, 2022). Findings of a study conducted in the United States on 5115 adults having physical disabilities revealed that experiencing higher level of discrimination associated with disability in the prior year predicts higher anxiety and depression and this relationship was more common among people with temporary disabilities compared to those having permanent disability (Rubin-McGregor & Hunger, 2025).

The effectiveness of coping strategies for psychological wellbeing was tested in the second hypothesis and findings of the study accepted the hypothesis as denoted in table 4 the interaction is significant ($B = -.025, p < .001$). Studies supported the significance of coping skills in enhancing the psychological health more specifically positive coping strategies are found to positively influence subjective wellbeing by improving feelings of positive self-worth among individuals with disabilities (Smedema et al., 2010). Students with disability experience diverse degree of anxiety, depression and stress with majority of them engage in

emotion-focused coping followed by problem focused and avoidance strategies to overcome the effects of disability induced stress (Owusu-Ansah et al., 2024). Perceived discrimination is found to be positively associated with psychological problems such as depression and anxiety, however, individuals who used mainly problem focused coping strategies report fewer internalizing problems (Forster et al., 2022). These findings suggested the effectiveness of coping mechanism in response to discriminatory stress.

In the third hypothesis it was predicted that support provided by others will moderate the negative effects of discrimination on psychological wellbeing and results confirmed the stated role of social support as shown in table 5 the interaction is significant ($B = -.011, p < .05$). The results of the study are consistent with previous findings. Studies supported that individuals with low and moderate levels of social support exhibited adverse association between discrimination and their subjective wellbeing whereas individuals with high levels of perceived social support showed no such association (Itzick et al., 2018). Besides minimizing the harmful effects of discrimination on wellbeing perceived social support also accounts for the negative relationship between them (Park & Joshanloo, 2022). Kondrat, et al., (2018) also confirmed that the sense of social support mediates the association of psychological health with perceived discrimination.

Conclusion

The present study offers useful information on the impact of discrimination on physically impaired individuals and also highlighted the significance of support system and coping mechanisms in the life of physically disabled individuals. The results can guide policy makers and psychologists to empower inclusive policies, reinforce support systems, and develop interventions that encourage social inclusion and enhance psychological wellbeing of people with physical disabilities.

Limitations and Suggestion

The study was restricted to 163 participants having physical disability which may limit the generalization of the findings. The use of self-reported instrument for data collection may introduce response bias. Moreover, the non-experimental nature of the study restricts the ability to establish causal relationships among discrimination, coping strategies and social support. The future studies may include other forms of disability with larger sample size to provide a more complete understanding of discrimination and adaptive processes.

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