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## An Exploration of Psychological Health, Level of Perceived Discrimination with Types of Disability Among Persons with Disability (Divyangjan)

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### Abstract

*Background:* Disabled people suffer a variety of psychological, social, cultural, physical, economic, occupational, and other issues and have long been marginalised from mainstream, in addition to prejudice and abuse.

*Aim:* The aim of the study is to explore that how the level of discriminatory behaviour influences psychological health of the persons with disabilities (PwDs).

*Method:* A cross-sectional study with purposive sampling approach was used, and the heads of various institutions were contacted for selecting the participants, mainly Physically Handicapped, Hearing Impaired, and Visually Impaired were included. A semi-structured personal information sheet, Perceived Discrimination Scale, General Health Questionnaire, Social Health Questionnaire, WHO-Quality of Life Scale, Learned Helplessness Scale and Cognitive Difficulty Scale were administered to record the variables.

*Data analysis:* The data were analysed using descriptive analysis to determine the frequency of perceived discrimination with different types of disability, their level of perceived discrimination with other psychological variables.

*Results:* A total 670 disabled people from Haryana were taken part in this study. The age of the participants varied from 18 to 55 years (mean  $\pm$  SD; 36.23  $\pm$  6.41). The findings show that there

is a difference in Somatic symptoms (high perceived discrimination (HPD)= 9.91 & low perceived discrimination (LPD)= 7.04), anxiety insomnia (HPD= 9.92 & LPD= 7.48), social dysfunction (HPD= 9.74 & LPD= 6.83), severe depression (HPD= 9.85 & LPD= 6.63) and overall general health (HPD= 39.42 & LPD= 27.97). These differences were more pronounced among hearing-impaired respondents than among their visually impaired and physically handicapped counterparts.

*Conclusion:* It was concluded that the disability is not only a personal trait, but also a reflection of different psychological concerns that may be described through the lenses of perceived discrimination experienced by the persons with disability. The current findings may help researchers to design prospective longitudinal studies.

*Keywords:* Disability, perceived discrimination, psychological health, quality of life, health barriers.

## Background:

The World Health Organization (WHO, 1947) has defined health as “a complete physical, mental and social wellbeing and not merely the absence of disease or infirmity.” According to the International classification of impairments, disabilities, and handicap, impairment (ICIDH, 1980) is concerned with physical aspects of health, disability has to do with the loss of functional capacity resulting from impaired organ, and handicap is measure of the social and cultural consequences of an impairment or disability. Physical health, social relationships, life in the spheres of family, friends, and neighbours, psychological state, and degree of independence are all affected by disability. Disability has ramifications on a personal, interpersonal, familial, and societal level (Mehrotra, 2011).

Disabled people are defined by the United Nations Convention on the Rights of Persons with Disabilities (UNCRPD, 2006), as “those who have long-term physical, mental, intellectual or sensory impairments which in interaction with various barriers may hinder their full and effective participation in society on an equal basis with others”. According to the 2011 Census, India has

around 26.8 million persons with disabilities (PwDs), accounting for 2.21% of the population, with 56% of males and 44% of women (Internet accessed). According to the World Health Organization (WHO), over 1 billion people, or 15% of the global population, are disabled, with around 80% of them being in low- and middle-income countries (LMICs), including India.

Also, disability is a condition that limits a person's capacity to carry out instrumental activities of daily living (IADLs), which include different acts like walking up a stairs or handling files in hands (Verbrugge & Jette, 1994). Adults with disabilities may find it difficult to carry out activities, maintain social bonds, and live independently if their requirements are not met. Additionally, if they feel that their independence and autonomy are being endangered, they can stop doing things which used to be enjoyed earlier or quit their jobs (Freedman et al., 2017). Therefore, self-esteem, life satisfaction, exacerbated depressive symptoms as well lower routine mood is associated with impairment (Caputo & Simon 2013; Freedman et al., 2017; Mancini & Bonanno, 2006). Prospective studies have shown that these effects work from disability to distress, rather than vice-versa (Gayman, Turner & Cui, 2008; Yang, 2006). The mental health and disability have consistent relationship with stress paradigm's core concepts (Pearlin et al., 2005). These can be unexpected events like losing a job, prolonged impairment which may have negative impact on mental well-being. Long duration of stresses can also be harmful to mental wellbeing and because of their long duration, it may affect many facets of life. Disability may also reduce a person's capacity for internal coping mechanisms (self-confidence) as well as external coping mechanisms (social support). In the face of persistent stress, maintaining coping mechanisms is very important (Carr, Cornman & Freedman, 2019; Turner & Noh, 1988; Yang, 2006).

Long-held prejudices regarding people with psychosocial disabilities' entitlement to full citizenship and their ability to actively contribute to choices that affect their life have historically kept them out of mainstream society (Basic Needs Report, 2009; Funk et al., 2010). PwDs often experience psychological distress, which may influence their physical morbidity, lower their overall health and wellbeing, and increase their demand for health care services. As a result, it's

critical to investigate the elements that may have an impact on PwDs psychological health in connection to different forms of disabilities and perceived discriminatory behaviour.

*Objective:* The aim of the study was to explore that how the level of discriminatory behaviour influences psychological health of the persons with disability.

## Method:

*Sampling and participants:* The study's overall sample included 670 handicapped people from Haryana's Bhiwani district. The heads of various institutions and organizations were contacted for this purpose, and a purposive sampling approach was used. The inclusion of Physically Handicapped (PH), Hearing Impaired (HI), and Visually Impaired (VI) individuals was based on additional criteria. The participants were categorized into two groups: 450 male participants and 220 female participants. The samples included physically handicapped (n=220), hearing impaired (n=250), and visually impaired (n=200).

*Study tools and measurements:* Subjects and their guardians were first contacted in person, and written consent to participate in the study was obtained. Furthermore, subjects/guardians were provided a semi-structured personal information sheet to collect data on demographic characteristics. The respondents were then given following scales to determine the level of discrimination and psychological health issues they had experienced throughout their lives:

1. *Perceived Discrimination Scale (Yadav et al., 2018):* It consists of 30 items and four subscales. The test-retest reliability of the scale is .73. According to the median criteria (84 median), individuals with scores below the median were classified as having little perceived discrimination against them (scores ranging from 30-84), while those with scores above the median were classified as having severe discrimination (scores ranging from 85-145).
2. *Social Health Questionnaire (Yadav et al., 2018):* Social health measure includes 12 items. The reliability of the measure was 0.76 (product moment correlation between test and re-

test scores). In order to determine the validity of the present test correlations were computed and coefficients of correlation were 0.71 and 0.82 respectively.

3. *Cognitive Difficulty Scale (Yadav et al., 2018)*: It has 47 items with five-point likert scale. The reliability and validity of the scale is 0.82 and .66, respectively. It gives different category of cognitive difficulty based on scores and percentiles.
4. *Learned Helplessness Scale (Hindi version) – Dhar et al., 1987*: Hindi version of Learned Helplessness Scale by Dhar et.al. (1987) was selected to assess helplessness. This scale consisted of 15 items with Likert type scoring. The scale has good psychometric properties e.g., the split-half reliability coefficient was 0.46 and test-retest reliability was 0.77. The validity of the scale was 0.88.
5. *General Health Questionnaire (GHQ- 28 items) – Goldberg & Hiller, 1979*: For measuring general health (mental health) a standardized tool of 28 items with four subscales by Goldberg and Hiller (1979) and Hindi version was used.
6. *WHO QOL-BREF (WHO, 1998)*: It is a self-administered five-point likert scale questionnaire comprising 26 questions on the individual's perceptions of their health and well-being, further sub categorized into four domains viz. physical health, psychological, social relationships, and environment.

### Data analysis:

The scales were manually scored in accordance with the standard procedure and manual. The obtained data were entered in Microsoft Excel 2007 and SPSS 20.0 (IBM SPSS Statistics, New York, US) was used to manage and analyse the results, and descriptive statistics were used for socio-demographic variables and clinical parameters.

### Results:

The total sample of the study consisted of 670 disabled participants. The age range of the sample was 18-55 years with a mean of 36.23 years with SD 6.41, majority of the respondents were from middle aged group. They ranged in education from illiterate to highly educated (Graduation and

Post-Graduation). Most of them were from senior secondary and higher secondary schools. They belong to lower, lower middle and middle/upper class backgrounds. The participants come from a variety of backgrounds, including labourers, farmers, students, teachers, shopkeepers, retired defence personnel, housewives, and clerks, among others. The participants in the three disability groups resided in rural areas (PH=66%, HI=59%, VI=47%). The majority was married, regardless of disability, with the exception of VI, where 98% were unmarried, and the majority (99%) was Hindus, while 1% was Muslim (Table 1).

**Table -1: Socio-demographic characteristics of the sample**

Variables	Characteristics	Types of disability		
		Physical handicapped (%)	Hearing impaired (%)	Visually impaired (%)
Gender	Male	68.18	66.00	67.50
	Female	31.82	34.00	32.50
Age (in years)	18 – 30	40.00	49.60	22.50
	31 – 40	29.55	19.20	25.50
	41 – 55	30.45	31.20	52.00
Education	0 – 8 <sup>th</sup>	54.54	66.66	82.84
	10 – 12 <sup>th</sup>	37.28	30.32	16.06
	UG/PG	08.18	03.02	00.09
Marital status	Single	38.50	11.00	98.02
	Married	52.20	88.00	01.00
	Widow/Widower	08.30	01.00	00.98
Locality	Rural	66.36	59.20	47.00
	Urban	33.64	40.80	53.00
Socio-economic status	Lower	21.82	24.40	26.00
	Lower middle	26.82	30.00	38.00
	Middle/Upper	51.36	45.60	36.00
Occupation	Service	06.42	02.00	10.08
	Business	16.42	00.00	00.00

	Farmer/Labour	35.68	28.28	34.04
	Student	07.80	20.72	16.08
	Unemployed	1.88	15.00	07.30
	Housewife	31.80	34.00	32.50
<b>Religion</b>	Hindu	99.20	99.10	99.40
	Muslim	00.80	00.90	00.60
<b>Duration of disability (in years)</b>	0 – 5	45.45	47.20	17.50
	6 – 10	26.82	22.00	15.00
	11 and above	27.73	30.80	67.50

Furthermore, the difference between high perceived discrimination and low perceived discrimination groups on all parameters of General Health is revealed by the observation of means (**Table 2**). Somatic symptoms (HPD= 9.91 & LPD= 7.04), anxiety insomnia (HPD= 9.92 & LPD= 7.48), social dysfunction (HPD= 9.74 & LPD= 6.83), severe depression (HPD= 9.85 & LPD= 6.63) and overall general health (HPD= 39.42 & LPD= 27.97) were more pronounced among hearing-impaired respondents than among their visually impaired and physically handicapped counterparts, i.e. visually impaired for somatic symptoms (HPD= 8.96 & LPD= 8.03), anxiety insomnia (HPD= 9.09 & LPD= 8.23), social dysfunction (HPD= 9.30 & LPD= 7.63), severe depression (HPD= 8.88 & LPD= 6.98) and overall general health (HPD= 36.24 & LPD= 30.88) and physically handicapped for somatic symptoms (HPD= 10.36 & LPD= 9.81), anxiety insomnia (HPD= 11.02 & LPD= 9.93), social dysfunction (HPD= 10.88 & LPD= 9.56), severe depression (HPD= 10.86 & LPD= 9.04) and overall general health (HPD= 43.13 & LPD= 38.34). Physically handicapped respondents in the high perceived discrimination group, on the other hand,

experienced low psychological well-being as a result of their higher scores on the general health measure, as seen in figures 1 and 2.

**Table 2: Means and S.D.s as a function of Interactive effects of Types of Disability and Perceived Discrimination for Dependent Measures**

	Types of Disability					
	Physically Handicapped		Hearing Impaired		Visually Impaired	
Perceived Discrimination Level→	LPD Mean (SDs)	HPD Mean (SDs)	LPD Mean (SDs)	HPD Mean (SDs)	LPD Mean (SDs)	HPD Mean (SDs)
Variables↓						
Somatic symptoms	9.81 (2.95)	10.36 (2.07)	7.04 (3.90)	9.91 (2.91)	8.03 (3.24)	8.96 (3.03)
Anxiety/Insomnia	9.93 (2.86)	11.02 (2.41)	7.48 (3.51)	9.92 (2.87)	8.23 (3.58)	9.09 (3.07)
Social dysfunction	9.56 (2.69)	10.88 (2.14)	6.83 (3.69)	9.74 (2.66)	7.63 (3.56)	9.30 (2.83)
Severe depression	9.04 (3.01)	10.86 (2.55)	6.63 (4.32)	9.85 (2.82)	6.98 (3.99)	8.88 (3.00)
Overall General health	38.34 (7.30)	43.13 (6.68)	27.97 (13.73)	39.42 (9.07)	30.88 (12.06)	36.24 (9.35)
QOL Physical domain	57.77 (17.36)	45.00 (6.90)	54.84 (15.63)	46.18 (7.35)	52.01 (18.08)	48.07 (11.43)
QOL Psychological domain	61.96 (16.03)	48.40 (9.79)	56.50 (15.62)	53.10 (31.53)	56.82 (14.00)	52.88 (13.040)
QOL Social domain	61.33 (22.33)	43.42 (9.44)	53.13 (20.74)	44.64 (12.49)	58.06 (22.63)	49.82 (16.06)
QOL Environmental domain	58.31 (20.17)	42.49 (8.45)	54.37 (19.68)	44.92 (8.85)	52.24 (17.77)	44.93 (11.61)
Social health	22.13 (7.34)	16.11 (3.29)	20.77 (7.50)	16.50 (3.71)	20.37 (6.52)	17.94 (4.88)
Cognitive difficulty	88.82 (21.71)	120.14 (12.80)	92.25 (21.34)	119.12 (11.57)	94.53 (22.16)	114.30 (18.39)



Learned helplessness	16.07 (3.48)	17.04 (4.15)	15.99 (3.28)	16.51 (3.53)	16.97 (3.31)	16.80 (3.94)
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LPD= Low Perceived Discrimination, HPD=High Perceived Discrimination

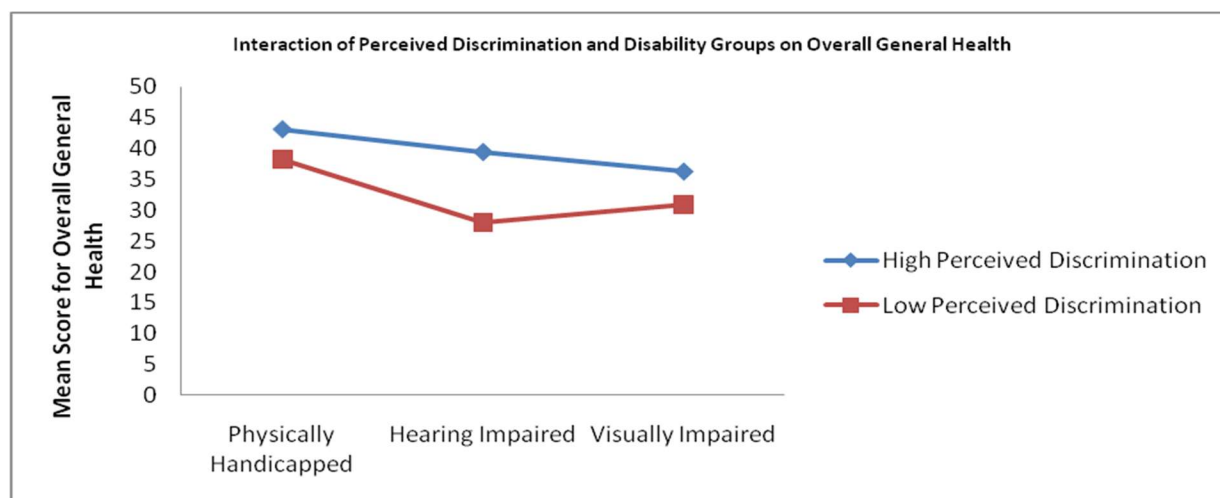


Fig. 1

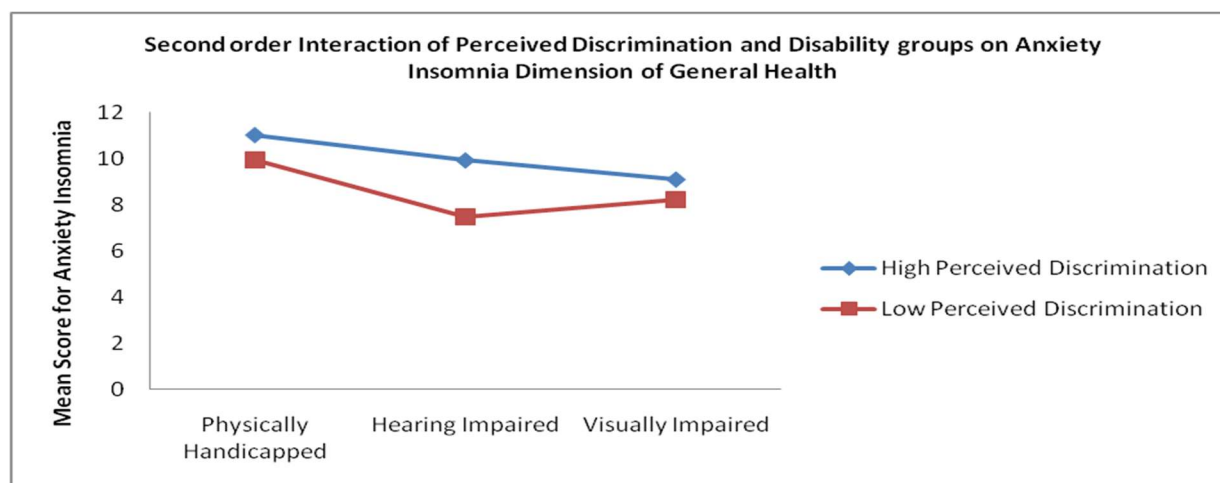


Fig. 2

As a result, the findings revealed how perceived discrimination, whether low or high has a substantial impact on one's psychological health, including social and cognitive health.

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## Discussion:

Disability is not just a characteristic of people, but it also represents the difficulties they have in interacting with others in society. The quality of a person's life is reflected in their social connections, behavioral, cultural, psychological, and biological factors all have an impact on one's quality of life (Brewer et al., 1981). The purpose of this study was to see how the level of discriminatory behaviour affects the psychological health of PwDs. Overall, 670 participants with inclusion criteria were enrolled (Male= 450, and Female= 220), and majority of the participants were from middle aged group (Mean= 36.2 years).

Discrimination against disabled people in the general public or in the sample was an important subject to address for the current study. This study's findings reveal that respondents encounter discrimination in their everyday lives, both individually and collectively. In the real world, social, cultural, and environmental influences shape a person's identity, ideas, feelings, and behaviours. In general, one's culture, the neighbourhood in which one lives, the demographic structure of one's community, others' actions, and opportunities all have a significant impact on one's well-being, social health, quality of life, cognitive difficulties, and sense of helplessness. It is commonly assumed that socioeconomic factors, rather than disability itself, determine well-being and related metrics. Discrimination against people with disabilities is common in society, according to narrative, anecdotal, and experimental study literature from both Western and Indian cultures. Discriminatory conduct appears to be influenced by cultural factors (Balsura, 2014; Addalakha et al., 2009).

Perceived discrimination has a significant influence on every aspect of quality of life and social health (Brondolo et.al. 2005). The group with the lowest degree of perceived discrimination had better social, environmental, physical, and psychological health, as well as social health, than the group with the highest level of reported discrimination. The simplest interpretation for the current findings may be that they had a higher quality of life due to a lower degree of perceived discrimination. Furthermore, the interaction impact of disability type and perceived discrimination

suggests that handicapped people who face a lot of discrimination have a lower quality of life. It indicates that when disability is combined with a high degree of discrimination, the level of poor quality of life is perpetuated; on the other hand, a lower level of discrimination might act as a buffer (Brondolo et al., 2005; Ramaswamy, 2013). Visual function affects physical, emotional, and social well-being and is necessary for optimal functioning and social life. Visual impairment limits many aspects of everyday life and has a negative impact on quality of life. The quality of life may be poor, particularly for people who believe they have significant vision impairment, which limits their ability to operate and connect socially. Our subjects, on the other hand, were perfectly capable of taking care of themselves. As a result, they demonstrated a higher quality of life.

### **Conclusion:**

The conclusion that disability is multifaced including personal and societal interaction. Social connections, behavioural, cultural, psychological, and biological factors have an impact on one's quality of life. It is essential for disabled persons to have a good self-perception and to be regarded favourably by society. As a result of social prejudice, marginalisation, and economic dependency, they are frequently seen negatively by society and are more vulnerable. The goal of this study was to see how the amount of discriminatory behaviour affects the psychological health of people with disabilities. The findings revealed that perceived discriminating behaviour, as well as its low or high degree, is related to the quality of life and psychological health measures. These findings might aid researchers to develop prospective longitudinal or pan-India multi-centric studies to assess various aspects and services linked to persons with disability.

**Funding statement:** This research has received grant/financial support from the Indian Council of Medical Research, New Delhi (Grant Ref. No. 5/11/146/2015-SBR).

**Acknowledgement:** The first author gratefully acknowledges support from the Government Hospital, Bhiwani, Haryana, Kishan Lal Jalani Govt. Eye Hospital, Bhiwani, District

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Rehabilitation Centres and Nursing Centres of district Bhiwani, Haryana, India, for support for data collection and necessary permission.

**Conflict of interest:** None declared.

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