

# Effectiveness of Jacobson's Progressive Muscle Relaxation on Psychosocial Constraints among Visually Impaired Individuals

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**Abstract- Background:** Vision, the most dominant of our senses, plays a critical role in every facet and stage of our lives. We take vision for granted, but without vision, we struggle to learn, to walk, to read, to participate in school and to work. Vision impairment occurs when an eye condition affects the visual system and its vision functions. Globally, at least 2.2 billion people have a near or distance vision impairment. It is estimated that globally only 36% of people with a distance vision impairment due to refractive error and only 17% of people with vision impairment due to cataract have received access to an appropriate intervention<sup>1</sup> **Objective:** The objective of study is to assess the effectiveness of Jacobson's progressive muscle relaxation on psychosocial constraints among visually impaired individuals. **Methodology:** A quantitative research approach with pre-experimental research design was used in the present study. Thirty-eight visually impaired individuals were selected using purposive sampling technique. Demographic tool and self-structured questionnaire on psychosocial constraints were used for data collection. Ethical permission and informed consent were taken from study participants. **Result:** The statistical finding shows that during pre-test most of the visually impaired individuals were having low psychosocial constraints. After providing Jacobson's progressive muscle relaxation, most of the visually impaired individuals were having no psychosocial constraints in post-test. **Conclusion:** Findings of the research study conclude that Jacobson's progressive muscle relaxation was effective in decreasing psychosocial constraints among visually impaired individuals.

**Keywords:** Jacobson's progressive muscle relaxation, Psychosocial constraints, Visually impaired individuals.

## I. Introduction

Vision loss has a significant impact on the lives of those who experience it as well as on their loved ones. The health consequences associated with vision loss extend well beyond the eye and visual system. Vision loss can affect one's quality of life (QOL), psychosocial activities, independence, and mobility and has been linked to falls, injury, and worsened status in domains spanning mental health, cognition, social function, employment, and educational attainment.<sup>2</sup>

Globally, 1.1 billion people were living with vision loss in 2020. Of these, 43 million people are blind. 295 million people have moderate to severe visual impairment. 258 million people have mild visual impairment. 510 million people have near vision problems.<sup>3</sup>

However, vision loss is conceptualized as a physical problem, the psychological sequelae of vision impairment may be under-recognized. The overall psychosocial adjustment of individuals with disabilities has been a topic of much interest but of considerable disagreement. The adjustment to life in a world that is essentially visual is a complex feat. Adjustment is inevitably tied in with issues of independence, sufficiency and control and will vary from person to person influenced by their previous experiences and support network.<sup>4</sup>

Relaxation therapy reduces the impact of stress-related conditions and encourages physiological and psychological equilibrium. Among all anxiety reduction techniques, Jacobson's progressive muscle relaxation technique has received the most experimental support to reduce the perceived stressors and improved outcomes.<sup>5</sup>

## II. Objectives of the study

- To assess the level of psychosocial constraints among visually impaired individuals.
- To determine the effectiveness of Jacobson's progressive muscle relaxation on psychosocial constraints among visually impaired individuals.

### III. Method

Quantitative research with pre-experimental research design was adopted to assess the effectiveness of Jacobson's progressive muscle relaxation on Psychosocial constraints among visually impaired individuals. Sample size was 38 which was selected by purposive sampling technique. Data was collected by administering self- structured questionnaire on psychosocial constraints. The reliability of the tool was checked by using split half and Spearman brown prophecy formula. The data was analysed using descriptive and inferential statistics. Ethical Committee permission was obtained from the concerned institutional authorities. Written consent was obtained from the participants of the study.

### IV. Results

**Table 1: Frequency and percentage distribution of Visually Impaired Individuals socio-demographic characteristics**

S.No.	Socio-Demographic data	Frequency	Percentage(%)
1.	<b>Age in years</b> a)17-24b)25-32c)33-40	21 16 01	55 42 03
2.	<b>Gender</b> a) Male b) Female c) Others	36 02 00	95 05 00
3.	<b>Education</b> a) 8th pass b) 10th pass c) 12th pass d) Undergraduate or above	07 04 10 17	19 11 26 44

4.	<b>Marital status</b>		
	a) Unmarried	38	100
	b) Married	00	00
	c) Divorced	00	00
	d) Widow/Widower	00	00
5.	<b>Onset</b>		
	a) Congenital	18	48
	b) Within last one year	06	16
	c) Within last ten years	07	18
	d) Within last fifteen years	07	18
6.	<b>Previous exposure to any coping technique</b>		
	a) Yes	31	82
	b) No	07	18
7.	<b>Reason for impairment</b>		
	a) Congenital	18	47
	b) Injury	03	08
	c) Disease condition	06	16
	d) Other factors	11	29
8.	<b>Religion</b>		
	a) Hindu	30	78
	b) Muslim	05	13
	c) Sikh	00	00
	d) Christian	03	07
	e) Others	00	00
9.	<b>Residence</b>		
	a) Urban	18	48
	b) Rural	20	52
10.	<b>Socio-economic status</b>		
	a) Low socio-economic strata	06	16
	b) Middle socio-economic strata	32	84
	c) Upper socio-economic strata	00	00
11.	<b>Visual impairment status</b>		
	a) Low vision	12	32
	b) Partial blindness	06	16
	c) Complete Blindness	20	52

Table 1 shows that most of the visually impaired individual 21(55%) were in the age group of 17-24 years. Majority of the them 36 (95%) were male and two (5%) of them were female. Majority of the them (44%) were undergraduate and all of the them 38(100%) were unmarried. Most of the visually impaired individuals 18(48%) onset of visual impairment and 18(47%) reason of impairment was congenital and 31(82%) were previously exposed to coping technique. Majority of the them 30(78%) were Hindu and 20(52%) were living in rural areas. Out of the total, 32(84%) socio-economic status was in the middle socio-economic strata. Most of them 20(52%) status of visual impairment was complete blindness, followed by 12(32%) had low vision and 06(16%) had partial blindness.

**Table 2: Pre-test level of psychosocial constraints n=38**

Score	Pre-test	
	f	%
<b>0-5 (Severe PC)</b>	00	00
<b>6-10 (Moderate PC)</b>	07	18
<b>11-15 (Low PC)</b>	29	77
<b>16-20 (No PC)</b>	02	05

**\*\*f= frequency, %= percentage & PC=psychosocial constraints**

Table 2 shows the assessment of psychosocial constraints among visually impaired individuals that depicts that during pre-test, two (5%) individuals had no psychosocial constraints, 29(77%) had low psychosocial constraints and 07(18%) had moderate psychosocial constraints.

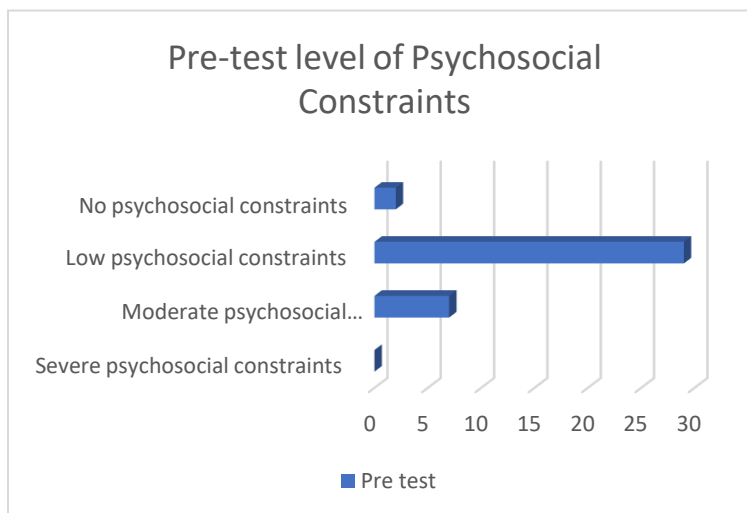


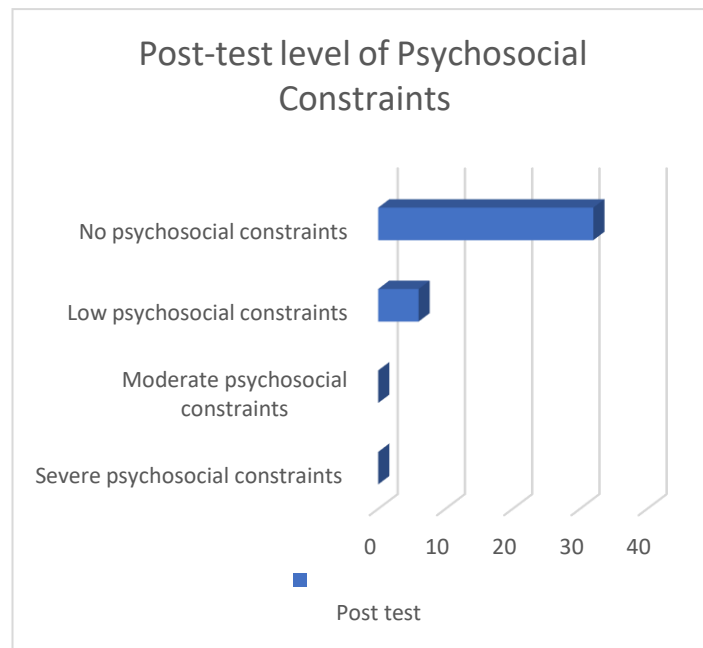
Figure 1: Bar diagram showing pre-test level of Psychosocial Constraints among Visually impaired individuals

**Table 3: Post-test level of psychosocial constraints n=38**

Score	Pre-test	
	f	%
<b>0-5 (Severe PC)</b>	00	00
<b>6-10 (Moderate PC)</b>	00	00
<b>11-15 (Low PC)</b>	06	16
<b>16-20 (No PC)</b>	32	84

**\*\*f= frequency, %= percentage & PC=psychosocial constraints**

Table 3 shows the assessment of psychosocial constraints among visually impaired individuals that depicts that during post-test, 32(84%) had no psychosocial constraints and 06(16%) had low psychosocial constraints.



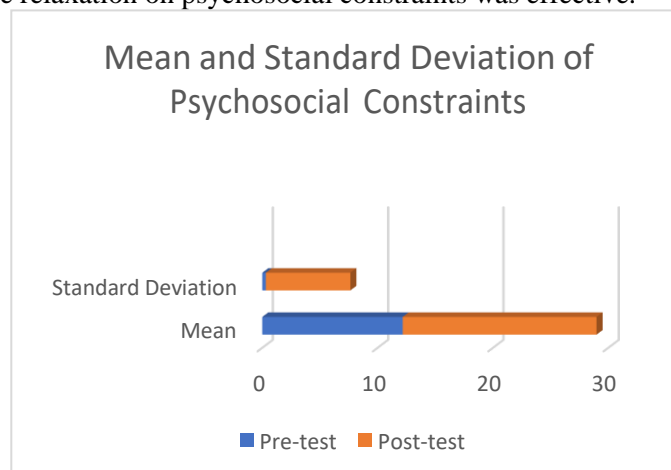
**Figure 2:** Bar diagram showing post-test level of Psychosocial Constraints among Visually impaired individuals

**Table 4:** Effectiveness of Jacobson’s Progressive Muscle Relaxation Technique on psychosocial constraints among Visually impaired individuals

Variables	Pre-test	Post-test	t value(df)	p value
	Mean ± SD	Mean ± SD		
PC	12.18±0.3170	16.81±1.143	13.61(37)	0.05

\*\*PC=psychosocial constraints, t=effectiveness, p=probability & df=degree of freedom

Table 4 shows the mean and standard deviation of psychosocial constraints where the pretest score is 12.18±0.3170 followed by post-test score of 16.81±1.143 and t value of 2.02 at 0.05 more than significant level which proves that the Jacobson’s progressive muscle relaxation on psychosocial constraints was effective.



**Figure 3:** Bar representation of mean and standard deviation of psychosocial constraints among visually impaired individuals

## V. Discussion

In the present study it was found that the intervention of Jacobson's progressive muscle relaxation was effective in reducing psychosocial constraints among visually impaired individuals.

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