

# Statistical Analysis On Management Of Physically Handicapped Children

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**Abstract:**The present study reveals with the reflection on results and justified agreements based on preceding works. The results revealed that all experimental groups differed significantly from the control group in respect of all the psychological variables included in the study.



## Introduction:

It is evident from several studies (Roger, 1968, Torrance, 1980, Katsoomi, 1991 and Torrance et al 1993) that physical handicapped of any degree leads to problems in all dimensions of individual's life. Viz, special, economical, psychological, educational etc.

An impairment refers to structural or functional abnormality an anatomic or physiologic condition that is outside "the range of normal". A handicap occurs when one's personal efficiency in the activated of the daily living in affected by impairment. Impairment may cause functional limitations, which are partial or total inability to perform these activities necessary for meter, sensory or mental functions within the range and manner of which a human being is normally capable such as, walking, lifting loads, seeing, speaking, hearing, reading, writings, counting, taking interest in and making contact with surroundings.

A handicap imposed by orthopedic or mediator impairment may be defined in terms of social, emotional, intellectual and occupational consequence imposed by the functional loss of the organs.

Though various authorities have divided handicapped in different ways but the broad classification of handicapped person is only two.

1. Mental handicapped.
2. Physical handicapped.

The present study is concerned only with persons affected by physical handicap.

The term "Physically handicapped" or "Disabled" has been defined in various ways by various authors. In different countries criterion for consideration of degree of handicap varies. The reason precisely are:-

- (i) There is no clear cut demarcation between the sealed 'able bodied' and the 'disabled'.
- (ii) The title "Disabled" conceals behind it a loosely connected heterogeneous group of many disabilities, which affect different individual in different ways. The range various from a slight and partial disability like the amputation of a finger, which may have no effect at all on the routing life of an individual. But most severe or total disability like complete blindment or the loss of both extremities, which produce pronounced changes in the pattern of life and the work of the individual.

- (iii) Definitions of disability have been introduced for various purpose and as such they have been based on various criteria. No single standard, therefore, exists in order to evaluate disability.

### **Review Of Literature**

Empirical studies on the physically handicapped though are increasing of late, are still not exhaustive. According to past hypothesis in the individual. It may be 'crippling' not only in the literal sense of the word but also as used colloquially. It may cripple a person as much mentally as it may cripple his physically. It may ruin his cognitive functioning, distort his creative processes or render him incapable of coping with reality (Sen A1983). Schoggen (1966) had pointed out that the physically handicapped as a group are not unique or different psychologically (see Ravindren and karunanidhi 1983) and the handicapped have exactly the same kind of basic psychological moods as the non-handicapped.

Projective tests have been quite effective in exploring the social moods of crippled children. Brodia et al (1950) used the Symonds Picture Story test to differentiate three groups of crippled children who varied in the context of feeling of fear. A sub group that had unfulfilled needs to be free of fear, revealed a great need for social acceptance and participation. Such children experienced conflict because their needs for increased social integration were assumed to be counter balanced by fear of entering social situation.

### **Purpose Of The Study**

In the field of psychological and psychiatric problems in management of physically handicapped, some studies have been conducted abroad, but their findings about the physically handicapped may not hold good for our environment on account of obvious cultural differences. In India the number of studies are negligible. In Bihar, although several organizations working for the rehabilitation of the handicapped exist, no study has been made so far on the management in relation to the psychological and psychiatric aspects. Hence the present research will be a contribution to this problem.

In the present study, the purpose is to find out the different psychological and psychiatric problems, which the physically handicapped person face.

### **Hypotheses:**

In the context of above, the hypothesis will be formulated for verification:-

The experimental groups are likely to differ significantly from the control group in respect of psychoticism, extraversion and nouroticism.

### **Methodology:**

The sample of the present research consisted of four groups, three experimental and one controlled. Each group included 30 subjects. The total sample, therefore, consisted of 120 subjects.

In the present research the following tests and tools will be used:

1. Personal data sheet used for collecting particulars from the subjects.
2. An interview schedule used for interviewing management personnel.

### **Analysis:**

The aim of the present research is to investigate the management process employed in respect of the disabled groups, namely, Orthopedic, speech and hearing handicapped person with references to the psychological and psychiatric problems faced by them.

The hypothesis proposed for verification is : the experimental groups are likely to differ significantly from the control group in respect of psychoticism, extraversion and neuroticism. The EPQ was administered for obtaining scores on this personality dimensions, and  $\chi^2$  values were computed to determine if the experimental and control groups differed significantly among themselves on these dimensions. The results have been presented in Table 1 to 6 as presented below: Because an interest has been laid to the researcher to obtain adequate results based on sampled observations, be using with statistical technique. So in light of this study effort has been made to analyze data a relevant statistical technique (recommended  $\chi^2$  statistic) has been considered for making justification of attribution for given subject of the study.

**TABLE 1**

**Showing the  $\chi^2$  value on psychoticism of each of three experimental (disabled) group and the control (normal) one.  
Between Orthopaedic And Normal Groups**

C – I	Orthopaedic	Normal	Total
11 – 15	3 (3.5)	4 (3.5)	7
6 – 10	21 (16)	11 (16)	32
1 – 5	6 (10.5)	15 (10.6)	21
Total	30	30	60

Figures in bracket showed expected values of given distribution.

$\chi^2 = 7.12$ , df = 2 Sig..06 level

the difference between orthopaedic handicapped and normal on psychoticism is significant at .8s6 level of significance.

**TABLE 2**

**Between Hearing Disability And Normal Groups**

C – I	HEARING	Normal	Total
13-16	5 (3)	1 (3)	6
9 – 12	14 (10)	6 (10)	20
5 – 8	10 (10)	10 (10)	20
Total	30	30	60

Figure in bracket showed expected values of given distribution.

$\chi^2 = 16.08$ , df = 3 Sig. .01 level.

The difference between the two groups, hearing handicapped and normal subjects, on psychoticism is highly significant at .01 level.

**TABLE 3**

**“Between Speech Handicapped And Normal”**

C – I	Speech	Normal	Total
11-15	1 (2.5)	4 (2.5)	5
6 – 10	21 (16)	11 (13)	32
1 – 5	8 (11.5)	15 (11.5)	23
Total	30	30	60

Figure in bracket showed expected values of given distribution.

$$\chi^2 = 7.06, \quad DF = 2, \quad \text{Sig. .05 level.}$$

The difference between the two groups – speech handicapped and normal on psychoticism is sig. at .05 level of significance.

Further, an approach of analyzing sampled observations concerned with extra version among each of the three experimental (disabled) and control (normal) groups.

**Table 4**  
**Showing the  $\chi^2$  values on extraversion among each of the three experimental (disabled) and control (normal) groups. “Between Normal And Orthopaedic”**

C – I	Orthopaedic	Normal	Total
13-17	5 (9.5)	14 (9.5)	19
8 – 12	20 (16)	12 (16)	32
3 – 7	5 (4.5)	4 (4.5)	9
Total	30	30	60

Figure in bracket showed expected values of given distribution.

$$\chi^2 = 6.37, \quad df = 2, \quad \text{Sig. .06 level.}$$

The differences, between two groups, normal and orthopaedic on extraversion is significance at .06 level, although not very high, is significant.

**Table 5**  
**“Between Normal And Hearing Handicapped Group”**

C – I	Hearing	Normal	Total
15 – 17	2 (4)	6 (4)	8
12 – 14	8 (10.5)	13 (10.5)	21
9 – 11	15 (10)	5 (10)	20
6 – 8	4 (4)	4 (4)	8
3 – 5	1 (1.5)	2 (1.5)	3
Total	30	30	60

Figure in bracket showed expected values of given distribution.

$$\chi^2 = 7.52, \quad df = 4, \quad \text{N.S.}$$

The differences, between normal and hearing handicapped groups is regard to extraversion is not significant even at .05 level of significance.

**Table 6**  
**“Between Speech Handicapped And Normal Groups”**

C – I	Speech	Normal	Total
14 – 17	0 (5.5)	11 (5.5)	11
10 – 13	12 (11)	10 (11)	22
6 – 9	14 (10)	6 (10)	20

2-5	4 (3.5)	3 (3.5)	7
Total	30	30	60

Figure in bracket showed expected values of given distribution.

$$\chi^2 = 14.52, \text{ df} = 3 \text{ Sig. .01 level}$$

The differences, between normal and speech handicapped group in regard to extraversion is highly significant at .01 level of significance.

### **Discussion And Conclusions**

The present study gives reflection on results and justified agreements based on preceding works. The results revealed that all experimental groups differed significantly from the control group in respect of all the psychological variables included in the study. On inspection of the Tables Nos. 1 to 6, it is clear that the orthopedic, hearing and speech handicapped groups differed significantly from the normal groups on psychoticism, neuroticism and extraversion. Bandopadhyay, Roy, Basu and Chattopadhyay (1967) have also found that the orthopaedically handicapped subjects scored higher on anxiety and introversion as measured by the Personality Questionnaire and Trait Anxiety Inventory. Thomas, Bax, Matric and Smith (1988) found that subjects with physical disabilities experienced more severe difficulties in social situations. Prasad et al (1971) found that majority of the subjects were hypochondrical, narcissistic and self-centred, having poor interest in human subjects, low adaptability to surroundings, poor emotional warmth, low age, poor imagination and limited range of interests in comparison to the normal able bodied subjects.

It was observed and reported by the management personnel that different psychological problem like depression, anxiety and emotional problems is more prevalent than psychiatric problems like hallucination and delusion. However, the intensity of these problems is not so high, which would hinder the normal functioning of family or society.

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