

## THE IMPACT OF DISABILITY ON VOCATIONAL INTEREST

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**ABSTRACT:** *The aim of this study was to measure the difference of vocational interests of physically disabled students and normal to what extent their professional adaptation resembles and differs. The study is based on cross sectional research design. It makes the assessment between physically disabled student and normal students on vocational interests' scale of Holland. The sample comprised of 200 students (100 physically disabled and 100 normal students) taken from the community of Hazara Division Khyber Puktunkhwa, Pakistan. Holland vocational interests scale (1999) was used for assessing the vocational interests of physically disabled students and normal students. In this study, the significant differences between the scores of vocational interests of physically disabled students ( $M= 135.4$ ,  $SD= 12.1$ ) and normal student ( $M= 161.5$ ,  $SD= 15.5$ ),  $t(198) = 13.27$ ,  $p < .05$  was observed. The significant differences between the scores of vocational interests of physically disabled students and normal students on realistic, investigative, social, enterprising and conventional types was observed and no significant difference between the scores of vocational interests of physically disabled students and normal students on artistic type was observed. This study provided a better understanding of different dimensions related to the vocation of physically disabled persons.*

**Keyword:** Physically disabled students, Normal students, Vocational interests

### INTRODUCTION

Vocational interests of physically disabled students with comparison to normal students are a debatable literature. Vocational interests are complicated orientations connected with behaviors that reflected an individual's choice. Holland's model of vocational interests is most widely accepted and used models in the research literature on vocational interests. Physically disabled people have low social interaction and less vocational interest. Their abilities are overlooked, their capacities are underestimated and their needs are given lower precedence. Yet, the barriers they face are more commonly as a result of the surroundings in which they live than as a result of their impairment. They usually develop a poor self-concept due to isolation which deprives them of social interaction [1]. Integration may be introduced in regular schools in order to assist persons with disabilities to develop towards realization of full participation in social life, development and equity [2]. The present study reveals that colleges and universities need to further explore the vocational development needs of this segment of the student population. The vocational development of the non-physically challenged is salient in relation to the present research topic due to the lack of information about the career development of the physically challenged. The present study also endeavored to discover the vocational interest preferences and vocational aspirations of the physically disabled students and normal students. The social model of disability acknowledges that obstacles to participation in society and its institutions reside in the environment rather than in the individual, and that such barriers can and must be prevented, reduced or eliminated [3].

The study will also add to the understanding of career counselors and policy makers about the vocational aspirations of the physically disabled students and normal students. Persons with disabilities have equal rights to work and gain a living. Countries should not allow discrimination in job-related matters, promote self-employment and starting

one's own business, employ disabilities in both public and private sectors. Persons with disability must be empowered to exercise their right, particularly in the field of employment in both rural and urban areas and must have equal opportunities for productive and gainful employment in the labor market [4].

There are a lot of unemployed disabled people in Pakistan. By our social experience beggar's are on the street begging, as stated people with disabilities also have the right to work and live an independent life just as the able-bodied. The significance of this research was to find out the differences in vocational interests of disabled and abled that is made by cognition of society.

### Objectives

- It measures the difference of vocational interests of normal and physically disabled students that to what extent their professional adaptation resembles and differs.
- To find out the preferences of disabled and normal students about occupational types based on Holland vocational RIASEC types.

### Hypotheses

1. There is a significant difference between vocational interests of physically disabled students and normal students.
2. Normal students will prefer realistic, investigative, social, enterprising and conventional types as compared to physically disabled students.
3. Normal students will prefer artistic type compared to physically disabled students.

### MATERIALS AND METHODS

The study related to the measurement of vocational interests of the physically disabled students and normal students. Holland's model [5], of vocational interests provided the theoretical framework for the present study. Vocational

interests scale measures the vocational interests (i.e. realistic, investigative, artistic, social, enterprising and conventional).

### **Operational definitions**

#### **Physical Disability**

There are different types of disability. The current study is related to physical disability in perspective of the limb disability (upper and lower limbs). Physical disability is a deficiency which restricts the physical work of one or more limbs. In limb disability, somebody cannot walk and have to use a wheelchair, trolley or other mobility tool. A person may walk with trouble and required support from sticks, handrail, or another person to support. A person may walk, but encounter other physical flaw or deficiency of coordination, such as feeble or uneven grip, or imperfect arm/hand activities.

#### **Upper limb disability**

Upper limb disability means the imperfect or no use of the hands and physically imperfect in their capacity to use hands.

#### **Lower limb disability**

Lower limb disability means somebody who has a lower impairment and physically imperfect in their capacity to footing and in which foot, leg, knee works inadequately and needing use of a stick, wheelchair and walker.

#### **Normality**

In the current study normality means a person having the capacity to take part in all activity of life with appropriate functioning of upper and lower limbs. It is operationalized by the high score on vocational test.

#### **Vocational Interests**

The ability of the individual to select or commit himself to a particular course of action which will eventuate in his preparing for and entering a specific occupation and having high levels of vocational development.

#### **Realistic type**

People having good skills in working with tools, mechanical or electrical drawings, machines, or plants and animals are called realistic. In the present study Armstrong and James Round vocational interests scale [6] was used to measure personality traits among students. Students scored high on eight items of realistic on the vocational interests scale are called realistic type.

#### **Investigative type**

Individual likes to study and solve math or science problems generally avoids leading, selling, or persuading people. Students scored high on eight items of investigative on the vocational interests scale have been considered as investigative type.

#### **Artistic type**

It is defined as a person having good artistic abilities in creative writing, drama, crafts, music. Students scored high on eight items of artistic on the vocational interests scale have been considered as artistic type.

#### **Social type**

Individuals like to do things, to help people, teaching, nursing, or giving first aid, providing information generally avoids using machines, tools, or animals to achieve a goal. Students scored high on eight items of social on the

vocational interests scale have been considered as a social type.

#### **Enterprising type**

It is defined as individual likes to lead and persuade people, and to sell things and ideas and avoids activities that require careful observation and scientific and have analytical thinking. Students scored high on eight items of enterprising on the vocational interests scale have been considered as enterprising type.

#### **Conventional Type**

Liking to work with numbers, records, or machines in a set, orderly way; generally avoids ambiguous, unstructured activities. Students scored high on eight items of conventional on the vocational interests scale have been considered as conventional type.

#### **Research design**

The present study is based on cross sectional research design.

#### **Sample**

The sample of the present study was contained about 200 students assimilated from the different inclusive education system, public schools and community of Hazara division, Khyber Puktunkhwa, Pakistan. Normal students (n=100) were acquired from Public schools of Hazara Division while physically disabled students (n=100) having upper and lower limb disability was assimilated from the community and inclusive education systems of Hazara division.

Normal students were selected by means of purposive sampling technique and physically disabled students were access through snowball sampling of the community. The age of students were 13-25 years. The names of the inclusive education schools, from where the physically disabled students were taken as, Al-Munir Foundation Mansehra Kingston inclusive education system Abottabad, Mashal special education system Haripur, Hera Special Education System Haripur and the names of the public school are British English language academy, Falcon Public School, sir Syed model school Haripur.

#### **Instrument**

##### **Vocational Interests scale**

The study pertained to the measurement of vocational interests of physically disabled and normal students. Holland model based vocational scale developed by Armstrong and James Round [6] consisting of 48 items has been used. It gives a detailed assessment of vocation and can be used in human resource development, organizational psychology, as well as vocational counseling in education.

The vocational interests scale is an outgrowth of a theory of vocational choices [5,7,8,9,10] which has undergone extensive investigation and has worldwide acceptance. It measures six types of occupational interests: Realistic (R), Investigative (I), Artistic (A), Social (S), Enterprising (E), and Conventional (C), collectively called RIASEC. The realistic types are predisposed to activities that entail working with objects, perceive themselves as having mechanical and athletic abilities, and value the tangibles. They prefer activities involving the systematic manipulation of machinery, tools, or animals.

The investigative types prefer to engage in activities involving observational, symbolic and creative inquiry, see themselves as being scholarly and intellectual, and value science. They tend to be analytical, curious, methodical, and precise. The artistic types like ambiguous, free, and unsystematic activities, perceived themselves as expressive, original, intuitive, introspective, non-conforming, and value aesthetic qualities.

The social type like working with others to inform, train, cure, and enlighten, see themselves as liking to help others, understanding others, and having teaching ability, and value social and ethical concerns and activities. The enterprising types show preference for activities that involve manipulation of others to achieve organizational goals or economic gain, perceive them as aggressive, self-confident, and sociable, and value political and economic achievement. The conventional types tend to like activities that entail ordered manipulation of data and records; perceive themselves as conforming and orderly, and value business and economic achievement.

Item no 1, 7, 13, 19, 25, 31, 37 and 43 measures realistic types. Item no 2, 8, 14, 20, 26, 32, 38 and 44 measures investigative types. Item no 3, 9, 15, 21, 27, 33, 39 and 45 measures artistic types. Item no 4, 10, 16, 22, 28, 34, 40 and 46 measures social types. Item no 5, 11, 17, 23, 29, 35, 41 and 47 measures enterprising type. Item no 6, 12, 18, 24, 30, 36, 42 and 48 measures conventional type.

The Holland vocational scale consisting of 48 items helps individuals to identify their work related interests, and is available in multiple formats, e.g., paper-pencil, personal computer, internet, mail-in scoring. Numerous studies have been conducted to establish the reliability and validity of Holland scale.

The cross cultural researches also provided evidence that Holland scale is a reliable and valid instrument. The scale having the Cronbach's alpha reliability of .88 was used for measuring vocational interests.

Holland scale is thorough and gives a comprehensive assessment for vocational interests. The scale has been taken from the world of public domain is that nothing is a problem. The researcher is free to use the vocational scale in any way they want. Researchers don't have to ask permission.

For the present study Urdu translation of Vocational Interests scale is used and it has a Cronbach's alpha reliability of .88. Participants were asked to rate each item on a 5 point rating scale ranging from 1 = strongly dislike, 2 = dislike, 3 = unsure, 4 = like, and 5 =strongly like. All the items are unidirectional and have positive keyed items.

### Procedure

The sample was come up to individuals from different, inclusive education systems, private schools in their academic times; Consent was taken from management by explaining the overall purpose of the study. The physically disabled students were approached from the community by snowball technique of sampling, the inclusion criteria for physically disabled students was only those individuals having the age of 13-25 and disability is limited to upper and lower limbs.

## RESULTS

The difference between normal students and physically disabled students was measured by using SPSS 20 version (statistical package for the social sciences) software. The table shows the comparison between vocational interests of physically disabled students and normal students.

**Table 1**  
**Differences between vocational interests of physically Disabled students and normal students (N=200)**

| Physically disabled students |           | Normal students |           | <i>t</i> | <i>P</i> |
|------------------------------|-----------|-----------------|-----------|----------|----------|
| <i>M</i>                     | <i>SD</i> | <i>M</i>        | <i>SD</i> |          |          |
| 135.4                        | 12.1      | 161.5           | 15.5      | 13.27    | .000     |

*df*=198, *p* < .05

The results mentioned in table 1 showed there are significant mean differences between the scores of vocational interests of physically disabled students (*M*=135.4, *SD*=12.1) and normal students (*M*=161.5, *SD*=15.5) on the vocational interests scale.

Mean scores of normal students are higher than scores of physically disabled students.

**Table 2**  
**Differences between six RIASEC types of physically disabled students and normal students on vocational interests scale (N=200)**

|   | Physically disabled students |           | Normal students |           | <i>t</i> | <i>P</i> |
|---|------------------------------|-----------|-----------------|-----------|----------|----------|
|   | <i>M</i>                     | <i>SD</i> | <i>M</i>        | <i>SD</i> |          |          |
| R | 23.3                         | 4.93      | 29.1            | 6.39      | 7.19     | .000     |
| I | 21.7                         | 4.58      | 31.4            | 4.82      | 14.59    | .000     |
| A | 27.4                         | 5.33      | 27.5            | 6.47      | 0.12     | .90      |
| S | 23.9                         | 3.82      | 30.7            | 3.53      | 13.07    | .000     |
| E | 22.3                         | 5.08      | 28.4            | 4.70      | 8.81     | .000     |
| C | 21.2                         | 3.17      | 31.0            | 3.33      | 21.31    | .000     |

*df*= 198, *p*< .05

Note. R=Realistic; I=Investigative; A=Artistic; S=Social; E=Enterprising, C=Convention.

The results mentioned in table 2 showed there are significant mean differences between the scores of vocational interests of physically disabled students and normal students on realistic, investigative, social, enterprising and conventional types. There is no mean difference between the scores of vocational interests of physically disabled students and normal students on artistic type.

## DISCUSSION

Holland model and disability model provide a theoretical framework for the present study. Person with disabilities often encounter difficulty forming a secure vocational identity because of self-identity issues rather than decision-making problems. Hypothesis 1 assumes the difference between vocational interests of physically disabled students and normal students. The result in table 1 shows that there is a significant difference between vocational interests of physically disabled students and normal students. In literature

these findings were supported by study of Mitra [11] provides evidence that people suffered in disability are less discriminated and significantly less vocational oriented. Similar findings were revealed by [12] physically challenged student were less vocationally mature than the non-physically challenged. Borgen [13] a person may be able to work, but because of appearance people socially rejects him and the person feels this rejection.

After a few interactions where he feels rejections, he expects to be rejected, and with this type of cyclical reaction, the person has a social limitation. The hypothesis 2 states as there is differences between vocational interests of physically disabled students and normal students on realistic, investigative, social, enterprising and conventional types. The results mentioned in table 2 showed the difference between physically disabled students and normal students on vocational scale. Normal students were found more realistic, investigative, social, enterprising and conventional as compare to physically disabled students. WHO [14] disabled people are not promoted for vocation either in Government or private sectors.

Disabled persons dependent on family have low progress, slower achievement, feeling of insecurity, faced public transport related problem, and they are less communicative. According to Borgen [13] it is important to measure vocational types of disable individuals as it reflects their work and life success. It was also noted that disable students have a poor self concept. They remain isolated from society and do not have social interaction. Kleck [15] suggested that physically disable have fewer and less frequent social experiences and consequently less social competence. Borgen [13] disability reduces the degree of freedom in vocational choice and forces the disable person to a restricted range of jobs. However, vocational counseling and guidance can overcome this restriction. Studies have shown lower participation in occupations and significant inequality between people with disabilities and others in a wide range of areas [16]. Disability also reduces the degree of limitations of the function simply reduce one's employment options [17] Hughes [18]. Society sometimes thinks disabled people can't do much of anything. But that misconception has been blown out of the water by successful people who have disabilities. The hypothesis 3 is normal students will prefer artistic interests as compared to physically disabled students. The results in table 2 reveals that there is no significant difference between the artistic type of physically disabled students and normal students. Previous study revealed the similar results [19] all individuals are categorized into normal and abnormal on the bases of biological and psychological makeup. Both have same motivation, abilities, skills and psychological characteristics. Their vocational interest is influenced by the socio-cultural and economic status. Moe [2] stated similar findings, such as Physically challenged people are categorized by society like the rest of people these people also have needs, interests, abilities, traits, and potential for work. It doesn't mean they are not able of doing something. Society mis-perceived disable people, and considers them breed apart, so they are

facing great challenge during vocation. According to Sutherland [20] Physically disabled expresses their abilities within various arts disciplines of inclusive practices involving disability, and manifests itself in the output and mission of some stage and modern dance performing-arts companies, as well as the subject matter of individuals works of art, such as the work of specific painters and those who draw. The present study is a comparative study on vocational interests of physically disabled students and normal students.

## CONCLUSION

Result of present study shows that there is a difference between vocational interests of physically disabled students and normal students. Along with differences there exists a relationship between artistic abilities of physically disabled students and normal students. Results show that physically disabled are less in mechanical, athletic abilities, analytical, curious, methodical, precise, organizational goals, and economic gain but they have artistic abilities. They are expressive, original, intuitive, introspective, non-conforming, and gives value to aesthetic qualities.

## Recommendations

This study revealed opposing to popular belief; disabled are not primarily isolated from society by their physical limitation. The present study provides open-mindedness and direction for law making agencies physically disable people can't compete with same work criteria of normal people. The larger factor is barrier by the law making agencies for these individuals. The findings from this study are, enhancing such programs which enable disabled individual's healthy persons of society. Educational and work environments may be essential to understanding how personality traits and abilities are linked to interests. It is environmental conditions that place demands on individuals, and these demands are clearly articulated in school and work settings. Education plays an important role in this regard.

Many of the needs concluded in this study, the positive attitude of society, promoting vocational training, support from their family and equal opportunities. Only in this way disabled people can reduce the difficulty in adaptive adjustment in environmental context. It is expected that as these needs are met disable people will experience self-efficacy, their well-being will increase and they will contribute to the livelihood of their communities.

This study enables educational psychologist for applied setting when working in vocational and educational counseling. For a counselor it is important to be able to link relevant occupational information to individuals' career choices that matches with their potentials. Most of the students have no future direction and awareness of their potentials. So by applying personality test and vocational test in combinations, helps in selection of subjects in particular fields. In Pakistan physically disabled people are not supported for vocations most of them seem as beggars. There should also such inclusive programs that make physically disabled people highly motivated in their life that they never feel themselves a separate member of society.

Physically disabled people have problem in adopting vocation. The reason is that they do not have an education that gives them insight for vocations. So there should be such type of education system that can meet the needs of physically disabled people and also leads them for healthy vocation. Physically disabled are artistic. They are expressive, original, intuitive, introspective, non-conforming, and gives value to aesthetic qualities. They should give opportunities that enhance them in creativity. In Pakistan to allow young people with a disability to reach their full potential in the school of their choice, schools need to create an inclusive environment where every pupil is valued. A team approach, appropriate training and advice from education, occupational therapist, and personality psychologist will provide a holistic approach to the inclusion of the disabled children. Consider that it is often the environment and attitudes of others that disable young people more than their disability; a positive approach to their disability helps the young person reach their full potential. There is a need to adapt the layout, equipment to enable the young person to maximize their independence in Pakistan.

#### Declaration of Interest

All the authors have no conflict of interests.

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