

## Attitude of General Population Towards People with Physical Disability

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### ABSTRACT

**Objectives:** To find out the attitude of the general population towards disabled individuals.

**Study Design:** Cross-sectional study design.

**Place and Duration of Study:** Rawalpindi/Islamabad, from Nov 2021 to Apr 2022.

**Methodology:** The attitude towards physical disability was assessed by including 2 separate standardised scales and was divided into 3 parts; i) the Demographics, ii) the ATDP scale, and iii) CDP scale. The data was collected through google forms because of the pandemic. The sample size was 166. The data analysis was performed on SPSS 25.0.

**Result:** Out of 166(100%) participants in the study, 137(82.5%) lived in urban areas and the mean age was 22 years. Out of which 38(22.9%) participants reported to have higher education. People from various professions participated in the research. The CDP scale showed 104(62.7%) participants had low contact, 45(27.5%) had no contact and 17(10.2%) had a high contact. The mean ATDP score was 72.12% showing a positive attitude overall. The attitude was not significantly associated with contact ( $p=0.405$ ), education ( $p=0.342$ ), gender ( $p=0.870$ ), income ( $p=0.605$ ), and presence of doctor in the family ( $p=0.893$ ).

**Conclusion:** This research concluded that the attitude towards the disabled of the general population of twin cities was positive. Contact, presence of doctors within the family and demographic factors; income, education, and gender had no association in determining the attitude of the general population towards the disabled. Thus, inferring that our education and doctors are not making enough of a difference and moral education should be further stressed upon.

**Keywords:** ATPD scale, Attitudes, Contact, Contact scale, Disabled, Hindrance.

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### INTRODUCTION

We generally describe disability as functional limitations or broadly as a condition judged to be significantly impaired relative to the usual standard of a group or an individual. Disabilities have a variable range from inability to perform minor tasks to depending entirely on others for basic needs. There are three dimensions of disability: i) Impairment in a person body structure or functioning, ii) Activity limitation such as difficulty in hearing, seeing, walking or problem solving, and iii) Participant's restrictions in normal daily activities.

Disabilities are increasing day by day because of the poor lifestyles and accidents. Over 1 billion people live with some sort of disability, 80% of which live in middle and low-income countries according to WHO.<sup>1</sup> According to world report of disability, the regional prevalence rate for disability in South Pacific region is 16%.<sup>2</sup> Disability can create a variety of barriers that can be physical or communication, because of which the disabled face a number of problems.<sup>3</sup> Disabled people lack in having a normal life. For a physical disabled

person there are thousands of hurdles waiting for them outside. A child with some physical disability when joins a school of normal kids, he has to face a number of issues. This may include bullying, inability to participate in sports or any other normal activities sometimes even mere jumping around or climbing stairs.

Not to ignore the mental stress that the child might be having. Sometimes making the disabled do something the healthy individuals can do to make them feel equal has the opposite effect. But it doesn't mean that the attitude of the people around them start getting negative. It is a wrong approach to the situation. Attitude of both the disabled and the healthy population towards each other is very important. Even if we move out into the society, the people feel disgust when they have to deal with these physically disabled people. Instead of showing sympathy, generally the trends in the attitude of the people are mostly negative. This is something that makes the already difficult life of the physically difficult even more difficult. Barriers are sometimes created because of this attitude of the people. The general healthy population usually have a negative attitude towards the disabled population of the society as found out in different studies conducted world-wide.<sup>4</sup>

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This attitude pushes the disabled population to live a miserable life. They are abused in the form of seeking employment, institutional discrimination, and stigmatization. It also affects their mental health, sometimes pushing them to extremes.<sup>5</sup> For this reason, the constitution has given following fundamental rights which are right of justice, liberty of thought, expression, belief, faith, and worship, equality of status and of opportunity and for promotion of fraternity.<sup>6</sup> In the world of today the policies are made for the disabled to make them socially accepted and promoting their inclusion in the community.<sup>7</sup>

However positive attitude towards the disabled can resolve a lot of problems. Sometimes the negative attitude towards a disabled because he is seen as a burden. If he learns a skill that can help him earn his livelihood, he feels more useful. It can help the disabled individuals to move in the society with a sense of security. Positive attitude towards the disabled, allow them to procure the basic facilities easily. However, attitude is multidimensional concept, involving affection, behaviour and cognition, it is susceptible to change and variation. Many factors can shape it. These factors can be age, gender, contact with the disabled, education, income, etc.<sup>8</sup>

Researches has been carried out to explore the reason for such attitudes towards the disabled in different genders, age groups and occupations. Attempts are being made to remove these aspects so that the attitude towards the disabled can be improved and they are not mistreated and get their basic rights.

### METHODOLOGY

This research was conducted in the twin cities of Rawalpindi and Islamabad, from November 2021 to April 2022. The study design was cross-sectional. The sample size was calculated to be 166, according to WHO sample size calculator. Convenient sampling technique was used.

**Inclusion Criteria:** People included were from both rural and urban areas, and both genders were included. People from different occupations and educational levels were included.

**Exclusion Criteria:** All the people not belonging to Rawalpindi/Islamabad and were non-consenting and mentally unfit were excluded.

A validated questionnaire was used for assessment of attitude of the general population towards the disabled, consisting of three parts: i) Demographics, ii) Contact with Disabled People (CDP) Scale,<sup>9</sup> a

standardized questionnaire, iii) Attitude Towards Physically Disabled (ATPD) Scale,<sup>10</sup> a standardized questionnaire. Participants in the study were sent the validated questionnaires online through emails and other social media platforms. They were explained the purpose of the ongoing study and instructed about the filling of questionnaire. Next a consent form was filled from the respondents. Data thus collected was systemized for further analysis.

Data collected was entered and analysed using the Statistical Package for the Social Sciences (SPSS) version 25.0. Relevant frequency and percentages were calculated for qualitative variables whereas Means $\pm$  SD were calculated for quantitative variables. The participants filled the Contact with Disabled Person (CDP) form and scores were graded as 1,2,3,4,5 and individual scoring was done. Three groups were identified through scoring: i) 1-12 (Almost No Contact), ii) 13-23 (Low Contact) and iii) 24-35 (High Contact).

The participants filled out the standardized Attitude Towards Physically Disabled (ATPD) Form-O, developed by Yuker and colleagues. The scores were graded from +3(Strongly Agree) to -3(Strongly Disagree). Three groups were identified through scoring: i) 0-39 (Negative Attitude), ii) 40-79 (Neutral Attitude) and iii) 80-120 (Positive Attitude).

### RESULTS

Out of 166(100%) participants in the study, 137 (82.5%) lived in urban areas and the mean age was 22 years. Out of which 38(22.9%) of the participants reported to have higher education. People from various professions participated in the research. The CDP scale showed 104(62.7%) of the participants had low contact 45(27.5%) had no contact and 17(10.2%) had a high level of contact. The mean ATPD score was 72.12% showing a neutral attitude overall. The attitude was not significantly associated with contact ( $p=0.405$ ), education ( $p=0.342$ ), gender ( $p=0.870$ ), income ( $p=0.605$ ), and presence of doctor in the family ( $p=0.893$ ).

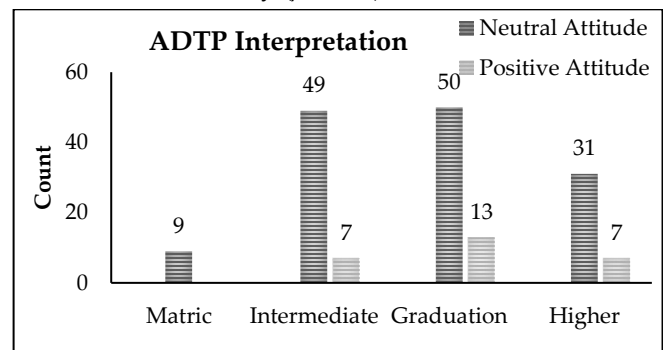


Figure-1: Education versus ATPD

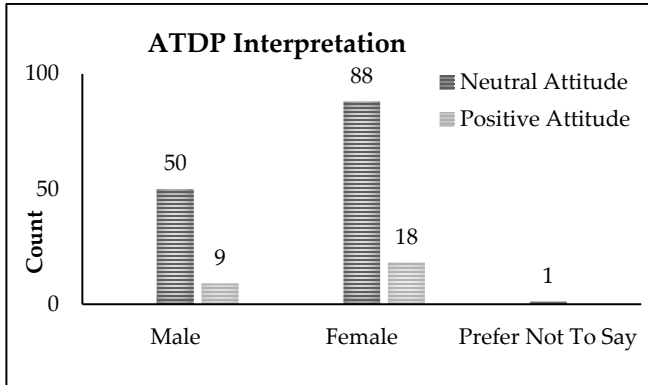


Figure-2: Gender versus ATPD

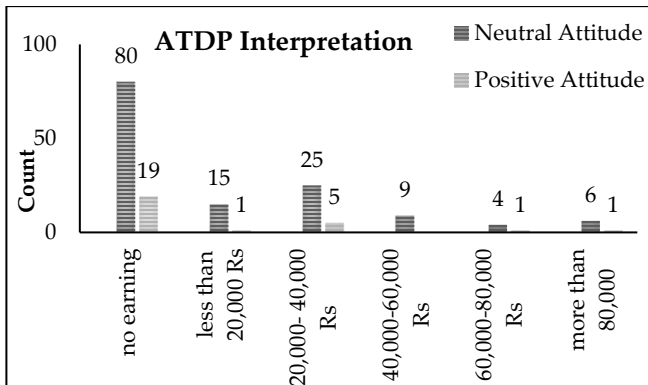


Figure-3: Income versus ATPD

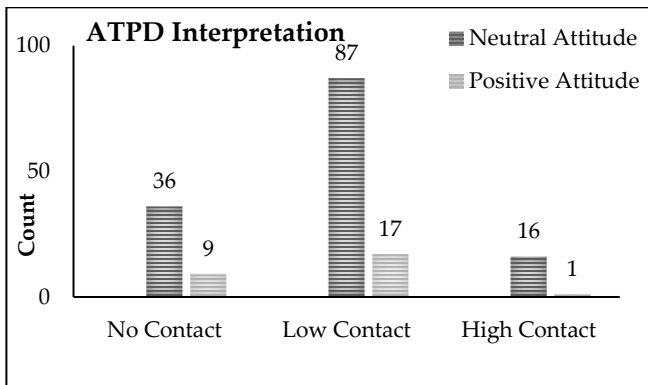


Figure-4: Attitude in Different Levels of Contact

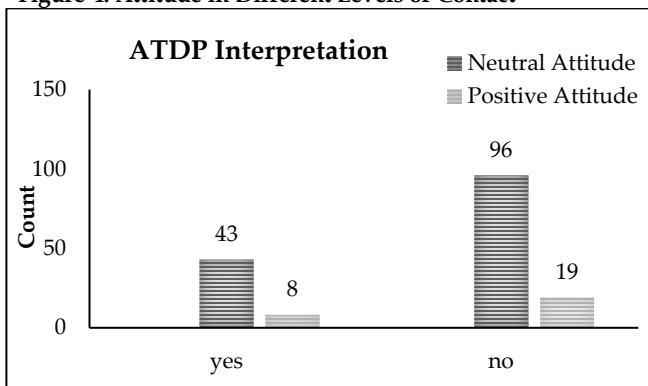


Figure-5: Doctors in the Family versus ATPD

**DISCUSSION**

This study concluded that the attitude of the general population of Rawalpindi and Islamabad was neutral with several factors such as contact, presence of doctors within the family and demographic factors; income, education, and gender playing no statistically significant role in making a difference in the attitude towards physically disabled individuals.

Whereas several studies have been conducted on the attitudes of healthcare providers towards disabled individuals, it is crucial to study these attitudes in the general population as well in order to provide and insight to the barriers faced by the disabled from fitting into society on a day-to-day basis. WHO defines these barriers as any factors which may be physical, attitudinal, communication, policy, programmatic, social or transportation related which with their presence or absence may hinder a disabled individual from functioning.<sup>11,12</sup>

This study analysed the attitudinal hindrances and compared them to several variables which may have caused them. When compared to a study conducted at the Children's Hospital in Lahore, the ATDP scores in this study conducted in the twin cities showed to be neutral whereas in Lahore the scores turned out to be poor and not favourable.<sup>13</sup> Their study was consistent with this as gender proved to be an insignificant factor. This meant that biological factors proved to not play any significant role when it came to determining whether an individual had a negative or positive attitude.

In this study, both genders proved to be inherently neutral in their attitudes towards the disabled. Another study done on the attitudes of medical students towards the disabled in universities of the United States and Canada contradicted these results as their study resulted in gender being a statistically significant factor with  $p < 0.05$ .<sup>14</sup> Their study showed an average female ATDP of  $80.75 \pm 9.71$  and a lower male average of  $73.95 \pm 12.06$ . The study was conducted in the University of South Dakota and the University of Saskatchewan with a mean positive value on the ATDP scale as a score of  $76.72 \pm 11.60$  with no differences in groups from the United States and Canada. Yet another study conducted on the youth in India 2021 supported this and provided similar results showing that gender had no significant relation with attitude  $p = 0.645$ .<sup>15</sup>

This study reached results of a  $p = 0.405$  with contact that shows that leaving attitudes to be improved by contact alone will cause no significant change and

interventions need to be implemented in order to improve attitudes. One study that went in line with these results about contact was conducted in the San Francisco Bay area on the attitudes of medical students and healthcare professionals analysed the effect of contact on attitudes which resulted in a generally higher ATDP score with more contact but that difference was still not statistically significant ( $p=0.08$ ).<sup>16</sup>

Furthermore, this study's results show that the education in our country is not playing a significant enough role in changing attitudes for the better as participants of matriculation level education had similar attitudes to those of graduation and higher-level educations ( $p=0.342$ ). Which leads to the conclusion that the quantity of education will not make a change and it's the quality that makes a difference and moral education should be implemented. When compared to other international studies conducted in Nigeria, their scores showed to be overall positive but with discriminatory tendencies.<sup>17</sup> Their recommendations were also in line with this research as they recommend new educational strategies. Age turned out to be a statistically significant factor after grouping ages in their study with a  $p$ -value  $<0.05$ . This shows that external factors play a role on the attitudes of an individual as they may change with age and thus time.

When a study was conducted on those in the nursing field, their attitudes towards disabled children turned out to be significantly poor with a mean ATDP score of  $61.7 \pm 14.2$ .<sup>18</sup> Yet another similar study conducted using the ATDP and DAHC (disability attitudes in healthcare) scales on doctor of physical therapy students at the University of Michigan concluded that having a close family member who was disabled showed to have a significantly better attitude with a  $p$ -value of 0.035 which may lead to show how personal emotions may play a role in attitudes.<sup>19</sup>

One study that showed how attitudes can affect the quality of life of disabled women was conducted in 2019 on the attitude of society towards disabled women in Nepal.<sup>20</sup> This study highlighted in their results the stigma around disability in women considering them as a burden leading them to be undervalued. Additionally, the negative attitudes of society lead to a limit in their sexual as well as reproductive rights.

An interventional study was conducted in the United States by providing an educational module which was catered to eliciting feelings of empathy taught at a Midwestern university and local college.<sup>21</sup> The results were in line with the conclusions as when

ATPD scores were compared from before and after the training module, the results were significantly more positive.

These various studies suggest and go with the conclusion that quality education is crucial in breaking the attitudinal barrier that individuals with disability face in their lives in order for them to fit into society.

There were some limitations to this study. The study sample was taken in Rawalpindi/Islamabad. Therefore, result cannot be generalized to the whole population of Pakistan. Additionally, we used the ATDP-form O scale to directly measure attitudes towards disability groups. The ATDP Scale has been criticized by researchers because of the one-dimensionality of the measure and the ability of respondents to fake answers to appear in a favourable light to the researcher.

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### CONCLUSION

Our study depicts that the attitude of the general population of the twin cities was neutral with contact, presence of doctors within the family and demographic factors; income, education, and gender having no statistically significant role in making a difference in the attitude towards the disabled. The results concluded that education and doctors are not playing a significant enough role to change attitudes for the better and thus the quality of education should be stressed upon with importance of moral education.

**Conflict of Interest:** None.

### Author's Contribution

Following authors have made substantial contributions to the manuscript as under:

AH: Supervision, Conception, Study design, analysis and Interpretation of data, Critically reviewed manuscript & approval for the final version to be published.

SFM: Co-supervision, Data entry, analysis and interpretation, manuscript writing & approval for the final version to be published.

ZF: Critically reviewed, Drafted manuscript & approval for the final version to be published.

RC: Data collection, Entry and analysis of data, preparation of rough draft & approval for the final version to be published.

OM, MA, MA, AA: Data collection and entry & approval for the final version to be published.

Authors agree to be accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved.



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