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**RESEARCH PAPER**

# Current Level of Urdu Reading Skills among Students with Deafness: Test-based Performance

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**ABSTRACT**

It is most important to look at and highlight the existing reading skills of deaf and hard of hearing students during their academics because all of their learning is based on their reading ability and comprehension of any content depends on their reading skills. However, this research was conducted to examine the current Urdu reading abilities of deaf or hard of hearing students to assess their Urdu reading abilities. The literature reviewed covers this topic and also address the current situation of education of hearing impaired students in Pakistan. Based on the literature reviewed, the researchers developed an instrument (Urdu Reading Test) to assess Urdu reading comprehension of deaf or hard of hearing students. This instrument was validated from field experts and Cronbach's alpha was noted 0.93. The sample consisted of 100 students of 3rd grade which was taken from government special education institutions for which simple random sampling technique was used. Descriptive research design of quantitative research was used to conduct this study. Data was analyzed through SPSS and parametric statistics were used to compare the results on the basis of different variables. Recommendations were made according to research findings and conclusion of this study.

**KEYWORDS** Hearing Impaired Students, Reading Test, Special Education, Urdu Reading Skills

## Introduction

Education is a medium that provides people with knowledge, skills, techniques, information, enables them to know their rights and duties towards their family, society and nation. It broadens the vision and perspective to see the world. It builds the capacity in society to fight against injustice, violence, corruption and many other evil elements. A child is getting a suitable education when all of the necessities in the decree and the rules are met. Deaf community is also a major part of this world. World Health Organization (WHO, 2023) reported that more than 5% of the world's population or 430 million people need rehabilitation to cope with their hearing impairment including 432 million adults and 34 million children. The birth of any deaf individual is same like to other children to acquire language and he/she has same chance to get his/her native language. Ever since Pakistan was created 1947, different laws and policies have been made by different governments for the education of disabled children at different times until today. A first full fledge policy for persons with disabilities was came into being in 2002 with the title of "National Policy for the Persons with Disabilities". Under the policy, it is noted that the National Census Report of 1998 shows the reported cases of persons with disabilities at 2.49 percent of the total population while dividing them into different groups based on age and need. As per this policy 23.09% children with age group 5-14 years require some form of special education and 25.15% disabled adults requiring other welfare support and assistance as well as the number of people with hearing loss came to 7.40% in this policy. According to Hameed and Manzoor (2014) that current situation shows that 96% of children with disabilities in Pakistan are deprived of educational facilities and only 4% of children with any type of disability are enrolled in Government and private institutions as well as almost 447 special education institutions are working to provide better education and rehabilitation services

to disabled persons in all over the Pakistan (see Afzaal et al. 2022). Pakistan Economic Survey (2019) unfold that the literacy rate of Pakistan is improved just only 2% and which was recorded 60% in 2018-19 as compare to 2015-2016 which was 58% on that time (The News, 2021).

According to annual report (2022) of Special Education Department Government of Punjab, total 300 special education institutes are working under the Ministry of Special Education Govt. of Punjab to providing the better education to the children with disabilities and 38337 students with different disabilities are enrolled in these institutions out of which 21332 are deaf children who are studying in various government institutions. One of the subjects taught to hearing impaired students in the institutions of Punjab province is Urdu, which is considered as a compulsory subject.

**Literature Review**

According to Hassanzadeh and Nikkhoo (2019), literacy is the right of every human being. Another study conducted by Runnion (2017) that early literacy skills are an important prerequisite for reading success in hearing impaired children and hearing impaired children who use spoken language. Early Literacy Skills Due to the underlying relationship with traditional reading skills, the lack of early literacy skills affects how well children with hearing impairments decode and understands written text. Reading may be considered more important for deaf individuals than for hearing subjects. Access of a hearing impaired individual to the culture depends on his or her reading fluency.

Reading is a difficult cognitive procedure that engages reader's thinking at several levels concurrently (Glasswell et al., 2013). Reading literacy enables people to deal with life more effectively and gives them a better understanding of the world in general. Reading is a wondering procedure; it lets in the reader to apply what she or he can also already understand, additionally known as prior understanding. As children get older, reading plays an increasingly important role in enabling them to access the curriculum (Worsfold et al., 2018). As per SDGs (2015) that reading is also a most key element of quality education. National Early Literacy Panel (NELP, 2008) concluded that one vital road for addressing studying effects is to make certain that everyone preschoolers have foundational early literacy competencies prior to essential school. The NELP located that preschool interventions can improve both types of foundational skills code-based and means-based skills in children who can hear at risk for reading failure, and such improvements bring about higher studying outcomes during elementary school (Shanahan and Lonigan, 2010). According to Marschark (2009) that reading achievements among deaf students typically lags significantly behind hearing peers, a situation that has changed little despite decades of research. This lack of progress and recent findings indicating that deaf students face many of the same challenges in comprehending sign language as they do in comprehending text suggest that difficulties frequently observed in their learning from text may involve more than just reading (Marschark, et al., 2009). Paul (2001) said that children with hearing impairment face problems in phonological development of language and this deficiency affect their reading abilities (Bano, 2007).

As per Allen, Letteri, Choi, and Dang (2014) that Paul, Wang, and Williams (2013) developed Qualitative Similarity Hypothesis in order for children to become good readers, they need to understand, from an early age, English language and literacy fundamentals and skills, such as phonological processing, phonemic awareness, decoding, and print conventions. It should be noted, however, that there is a debate as to whether it is necessary for children with severe to profound hearing loss to acquire and learn certain fundamental skills of a sound phonology (phonological awareness, phonemic awareness, and phonics) as a part of the reading process, due to the fact that these children have limited access to auditory information (see Allen et al., 2014). Teaching reading to deaf children challenge for teachers, as teachers often do not understand the unique language, culture and needs of deaf

and hard of hearing students (Hull, 2018). As noted in Hassanzadeh and Nikkhoo (2019) that the children with deafness determine the poor word reading and it is assumed that their reading comprehension abilities will also be weak. Herman, Roy and Kyle (2017) pointed in their study that reading is always a challenge for deaf students. Hearing students learn to read by trial by sound which is missing in deaf readers, deaf students cannot describe reading difficulties. Phonological awareness and sound knowledge are constructive barriers to reading, and academic and psychological research suggests and supports this evidence. Deaf students rely on weaknesses while studying and the visual senses play an important role in the formation of sentences for them (Harris and Moreno, 2006). A study was conducted by Thakur Pant and Kumar (2020) on 60 students to check the reading difference between the hearing and hearing impaired students. The outcomes of this study was exposed that hearing impaired students do have problems about reading comprehension and the reading speed was also decreasing. Another study was conducted by Bickham (2015) that deaf students do fight in reading comprehension as compare to hearing students.

Children with mild to moderate hearing loss gain largely variable results in reading abilities, especially phonetic awareness and language abilities (Nittrouer and CaldwellTarr, 2016; Park, Lombardino and Ritter, 2013). Without age appropriate language skills, the development of literacy in deaf children will be difficult and slow (Musselman, 2000). Many other studies on the reading abilities in students with hearing deficiency point out a substantial delay in comparison with their hearing peers (Dillon, Jong and Pisoni, 2011; Wauters, van Bon and Tellings, 2006; Musselman, 2000; Traxler, 2000). These delays conclude in deaf children leaving school with reading comprehension levels equivalent to those of 9 year old hearing children (Allen, 1986; Conrad, 1979; Qi and Mitchell, 2011). Kyle and Cain (2015) founded, deaf children are weaker in reading abilities as compare to the hearing children which ultimately effect on their achievements. Thakur, Pant and Kumar (2020) mentioned in their study that Perfetti and Sandak (2000) marked, deaf students don't have the facility about phonological awareness; they have incomplete or zero excess to verbal language; which make effect on their reading skills. Staden (2013) reported that many deaf children lag behind their reading skills many years, and there is a need to identify reading difficulties in this population and implement effective reading strategies. The difference in reading skills between deaf and hard of hearing children has not diminished in the last three decades. Deaf students' low level of reading skills is associated with delays in their language (Kotowicz, 2020).

When deaf children start their schooling, they are often still struggling to learn sign language. Since they haven't even learned their native language, it's much tough to start reading in English, a completely dissimilar language (Hull, 2018). It has been reported that deaf students do not achieve results in reading according to age; this performance is often highlighted in terms of fourth grade (Mayer, Trezek and Hancock, 2021). However, the problem of how to teach reading effectively needs to be addressed, since the curriculum only contains details of what is to be taught-how reading is taught is ultimately determined by the classroom teacher (Paatsch, Hutchison and Cloonan, 2019).

## Material and Methods

### Research Design

This study was based on quantitative type of research and descriptive research design of quantitative research paradigms was used to conduct this study.

**Population of the Study**

Population of this study was encompassed to hearing impaired students of class 3rd, who were studying in Government special education centers and schools of Punjab province.

**Sample and Sampling Technique**

Sample of the study was consisted of 100 students with hearing impairment of class 3rd which was selected from Government Special Education Centers and Schools of eight districts (Bahawalpur, Bahawalnagar, Kasur, Sahiwal, Chiniot, Gujrat, Hafizabad and Lahore) of Punjab province. Random sampling technique was used to select the sample from whole province on the basis of odd and even numbers. Each district was assigned a number in the form of odd or even and randomly 8 districts were selected for this study.

**Instrument of the Study**

Self-made instrument (Urdu Reading Test) was developed by the researchers for hearing impaired students of class three to check their current level of Urdu reading skills, this tool was consist of 80 items regarding different type of questions based on reading comprehension and the content of this instrument was taken from Urdu text book of class three published by Punjab Curriculum and Textbook Board, Lahore. Instrument was validated by five field experts and some necessary changings were made as per their instructions and reliability of the test was noted as Cronbach's Alpha value α=.93 through SPSS whereas total number of respondents were 100.

**Data Collection**

Data was collected for this study through self-made instrument. With the prior permission got from the head office of Government Special Education Department Government of Punjab, the researchers went to various institutions of above mentioned districts of Punjab province and met the heads or principals to administer the Urdu reading test to check the current level of Urdu reading skills of students with hearing impairment. All necessary instructions were given to the students by the researchers to conduct a reading test and time was allocated 1 hour and 30 minutes for complete the test

**Results and Discussion**

**Data Analysis**

After data collection, data was analyzed through SPSS by applying parametric tests to identify current level of reading skills. Difference on the basis of age group and gender was measured of the respondents as well as difference between the mean score and cut of value was also founded. Effect size was checked through Cohen's *d* to check the relationship or difference between the variables. As per Bhandari (2022) that effect size guides us that how much significant relationship between variables or the difference between groups exists. McLeod (2019) mentioned in his study that Cohen (1988, 1992) proposed the ranges of effect size that *d* = 0.2 be considered a "small" effect size, *d*=0.5 considered a "medium" effect size and *d*= 0.8 will be consider a "large" effect size.

**Table 1**
**Frequency and Percentage of Sample Distribution on the Basis of Demographics**

| Name of | Respondents | | Male | | female | | Age 9 | | Age 10 | | Age 11 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Institute | f | % | f | % | f | % | F | % | f | % | f | % |

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Govt. Special Education Schools | 50 | 50 | 40 | 80 | 10 | 20 | 15 | 30 | 19 | 38 | 16 | 32 |
| Govt. Special Education Centers | 50 | 50 | 21 | 42 | 29 | 58 | 29 | 58 | 13 | 26 | 8 | 16 |
| Total | 100 | | 61 | | 39 | | 44 | | 32 | | 24 | |

Table 1 indicated the sample distribution the basis of different demographics. It revealed that the fifty (50%) of the respondents belonged to Govt. Special Education Schools and remaining fifty (50%) were belonged to Govt. Special Education Centers. Majorities (61%) of the respondents were male from both institutes and remaining (39%) were female. This table also indicated that majority (44%) of the respondents were belonged to 9 years age group, (32%) respondents were belonged to 10 years and (24%) of the respondents were belonged to 11 years age group.

**Table 2**
**Mean Comparison between Urdu Reading Skill and Value (passing marks=33%)**

| | H.I Students | | | | |
|---|---|---|---|---|---|
| Variable | *M* | *SD* | *t*(99) | *p* | Cohen's *d* |
| Reading Scores | 53.41 | 14.77 | 13.81 | .00 | 1.38 |

Table 2 revealed the scores of Urdu reading skills of hearing impaired students (*M*=3.41, *SD*=14.77) and *t*((99)=13.81, *p*<.05 which means that there is a statistical significance difference among the results about reading skills and cut of value (passing marks=33) of students with hearing impairment. However, the value of Cohens's *d* was also reported (*d*=1.38) which indicated large effect size (>.80)

**Table 3**
**Compare the Results on the Basis of Gender about Urdu Reading Skills**

| | Female | | Male | | | | |
|---|---|---|---|---|---|---|---|
| Variable | M | SD | M | SD | t(98) | p | Cohen's d |
| Gender | 57.52 | 15.40 | 51.57 | 14.21 | 1.88 | .06 | 0.40 |

Table 3 revealed that female group unveiled higher scores on reading test (*M*=57.52, *SD*=15.40) as compare to male group which revealed (*M*=51.57, *SD*= 14.21) and *t*(98)=1.88, *p*>.05. The value of Cohen's is noted *d*=.40 which indicates medium effect size. So, there is no statistical significance difference was noted among the Urdu reading skills on gender basis. However, the findings of this table show that the score of male and female students are almost equal in Urdu reading skills and there is no significance difference in their scores.

**Table 4**
**Comparison among the Results of Urdu Reading Skills on the Basis of Age Groups**

| | Age (7 Years) | | Age (8 Years) | | Age (9 Years) | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Variables | *M* | *SD* | *M* | *SD* | *M* | *SD* | *F (2,97)* | $\eta^2$ | Post-Hoc |
| Urdu Reading Scores | 54.23 | 15.48 | 55.06 | 15.12 | 49.71 | 12.80 | 1.02*** | .02 | 1<2>3 |

****p*>.05

Table 4 reveals the mean value, stander deviation and *F* value of Urdu reading of students with hearing impairment. Results of this table indicated not significance mean differences across age groups with *F* (2, 97) =1.02 and *p*>.05. Findings of this table revealed that age group (7 years) exhibited lower level of reading skills as compare to age groups of (8 years) and age group of (8 years) exhibited high level as compare to age group of (9

years). The value of Eta Square ($\eta^2$ =.02) which is (< .20) indicated small effect size. The Post-Hoc comparison indicated no significant difference between group mean differences of each group with other two groups.

## Findings

1. Data set was gathered from Govt. Special Education Centers and School on equal basis 50% respectively.

2. Majority (61%) of the respondent of data set was male and remaining data (39%) was consisting on female.

3. It is founded that current score of Urdu reading skills of students with hearing impairment (*M*=3.41, *SD*=14.77) and *t*((99)=13.81, *p*<.05 which means that there is a statistical significance difference among the results about reading skills and cut of value of students with hearing impairment. The value of Cohens's *d*=1.38 indicated large effect size (>.80).

4. Female respondents unveiled higher scores on Urdu reading abilities (*M*=57.52, *SD*=15.40) as compare to male respondents (*M*=51.57, *SD*= 14.21) and *t*(98)=1.88, *p*>.05. The value of Cohen's is noted *d*=.40 which indicates medium effect size. So, there is no statistical significance difference among the Urdu reading skills on gender basis.

5. It is founded that age group of (7 years) exhibited lower level of reading skills as compare to age groups of (8 years) and age group of (8 years) exhibited high level as compare to age group of (9 years). The value of Eta Square ($\eta^2$ =.02) which is (< .20) indicated small effect size. The Post-Hoc comparison indicated no significant difference between group mean differences of each group with other two groups.

## Discussion

The major focus of this study was to identify the current level of Urdu reading skills of students with hearing impairment of class third. According to Keyser (2021) that anything can be learn of everything through reading and it helps you discover new things and educate you in any area of life that interests you. Repeatedly students with hearing impairment struggling with literacy skills and especially with the comprehension of composed text (Bickham, 2015). Mich, Pianta and Mana (2013) also reported that hearing impaired students have significant problems in comprehension the written text and this is mostly due to type of educational treatment and hearing loss that prevent them from being exposed to oral language when they were and infant. Staden (2013) that many deaf children lag behind their reading skills many years, and there is a need to identify reading difficulties in this population and implement effective reading strategies

## Conclusions

This study was conducted to know the current level of Urdu reading abilities of hearing impaired students. A self-made valid and reliable instrument was used to conduct this study for knowing the current reading skills of Urdu subject of hearing impaired students. When the Urdu reading scores of students with hearing impairment was calculated through SPSS, no significance difference was noted on the basis of gender and Cohen's *d* value reported medium effect size. There is a significance difference between the current scores of Urdu reading test and cut of value (passing marks=33%) and large effect size was noted by Cohen's *d*. Students with 7 & 9 years age group secure low reading score as compare to 8 years age group rather than 8 years age group got higher reading scores as compare to 7 age group as well as the value of Eta Square indicated small effect size. The

Post-Hoc comparison on age groups indicated no significant difference between group mean differences of each group with other two groups.

**Recommendations**

The following recommendations were made by the researchers on the basis of findings:

1. The Special Education Department should use this Urdu reading test to assess the current Urdu reading skills of deaf or hard of hearing students of class three.

2. Based on this test, Special Education Department should focus to make tests of other subjects to check the current reading abilities of hearing impaired students.

3. The Special Education Department Govt. Punjab should conduct trainings for special education teachers in making tests on different subjects of different class levels of students with hearing impairment.

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