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## "Exploring the Impact of Sign Language Interpretation and Interviewing Techniques on Employment Outcomes for Deaf Individuals"

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### **Abstract**

The employment ecosystem of deaf individuals is significantly influenced by the communication effectiveness and accessibility during job interviews. The competition in job market with hearing individuals makes their journey of seeking employment tough with relatively increased chances of them being left out from gaining employment. In India, this holds true for both the private and public sector. Communication barrier of hearing and speech reflects the major barrier for deaf aspirants which discourages Sign language usage during interviews offers a way forward to reduce the gap of communication at time of interviews. Interviewing techniques used by prospective employers also impacts the outcome of job opportunities for deaf. This study examines the impact of relationship between sign language interpreter and interviewing techniques, focusing on how these factors collectively influence outcome of deaf employment.

India alone accounts for 50,72,914 deaf and hard of hearing. (Census 2011). Deaf face various challenges for seeking a job as communication stands as a major barrier. This study employs a mixed-methods approach, combining quantitative surveys to comprehensively understand this relationship by proving the hypothesis.

**Keywords-** *Deaf, Hard of Hearing, sign language interpreter, deaf employment, interviewing techniques*

### **Introduction**

Deafness is a disability that significantly impacts the communication; educational achievement; and therefore, vocational training and placement options for these individuals. An examination of the jobs that deaf people are able to secure shows that they are often underemployed and underproductive in relation to their abilities.

Deafness refers to profound inability to hear. This inability has a significant impact on communication, educational achievement, upgradation and enhancement by way of vocational learning opportunities and thereby resulting into related job challenges of job placement



(Luft,2000). On further analysis of employment trend of the deaf, the author reveals that they are underutilised and underpaid in comparison to the abilities and skills they possess. Since the disability surrenders the ability to hear and respond, it becomes a hindrance in establishing two-way communication. Nevertheless, this disability has nothing to do with the capability or competence of the person. Being a minority group, various social interactions occur predominately in world of hearing individuals. The employment when it comes to persons with hearing disability tends to take a back seat and order of priority as businesses operate on mindset of profit and productivity maximisation. Various past studies have stated the experiences of deaf.

### **Background of Study**

The adverse impact on attainment of vocational learning and success of deaf is primarily attributed to lack of sufficient information and awareness regarding various options of employment as a consequence of communication barrier (Myers,1990).

The barriers to employment as faced by deaf individuals has been listed by (Scheetz,1996). The author states that presence of significant obstacles has been observed in several studies related to resistive attitude (not wanting deaf employees) and permissive attitude (resistance towards adaptability) that act as barriers to communication.

Further, (Scherich,1996) has expressed importance towards maintenance of employee career and development by identifying adaptations that facilitate smooth communication.

The communication and ability to interact have been a predominant contributor towards poor employment rates. This primary issue acts as a deterrent towards the advancement and progress of deaf (Bolton,1976; Myers .et.al.,1990;Moores,1996; Rusch,1992). Ineffective communication strategies result in serious consequences in jobs of deaf employees.

Further, as stated by (Belknap, Korwin, Long,1995) that non fluent English command, knowledge gap regarding hearing culture and information scarcity are further communication barriers attributed to employment settings.

In the latest report published by (World Health Organisation ,2023), hearing impaired population is projected to increase to 900 million which implies that by 2050, every tenth individual will be hearing impaired some way or the other. Past studies have proven that the population with severe or profound hearing loss are dependent on communication by way of sign language. Language plays an essential role to establish settings of complex communication process. To facilitate



interaction for expressing themselves, people interact with each other in various context by using vocal tones, gestures, words to express queries, words and emotions.

The unique aspect of sign language is its distinct syntax which is uncommon to other spoken language along with associated grammar and structure. This uniqueness is expressed in the multiple representation of single alphabet, word or sentence in a single sign. Like other languages that undergo changes from time to time, sign language also follows the similar rhythm of development and transformation. (NIDCD, 2023).

The authors (Elakkiya, Vijayakumar, & Kumar, 2021; Koller, Zargaran, Ney, & Bowden, 2016, 2018; Kumar, Roy, & Dogra, 2018; Yang & Lee, 2011) in their study on signals have reflected on the manual and non-manual signals that serve as a vital component of sign language. Conveying meaning by way of involving shape, position, location and movement are categorised as manual signs. It is primarily used to communicate words and phrases. Several other non-manual signals are expressed by body reflexes of eye gaze and movement, lip pattern, head orientation and body movement while the emotional and grammatical message is conveyed by using non manual signal. Both the signals are used by the signers for conveying message as expressed by (Neiva & Zanchettin, 2018) . The author further expresses that non manual signs support and compliments the manual signs for building accuracy and meaning to the context of communication and therefore build the character of uniqueness in sign language. Both manual and non-manual signals highly interdependent and complement each other. (Adaloglou et al.,2021; Kelly, Reilly Delannoy, Mc Donald, & Markham, 2009).

### **Complex nature of sign language interpreters**

Another perspective has been brought forward by (Davis,2005) in his work on human service settings related to sign language interpreters, has stated that the assumption cannot be made to generalise that all deaf individuals opt for sign language or is inclined towards working along with sign language interpreters. (Davis,2005) has further reflected on the human services aspect of interpretation in which he states that the harmonical coordination and relationship of sign language interpreter as professional practise towards human service which is deep-rooted in human beings and the subsequent bridge with various organisations and establishments demand a system of defined protocols and ethics which are extremely important to enhance cross syntactic relationship thereby appreciating the cultural relationship between both the parties . The above relationship cuts across various services from educational to reformative scope.



While expressing views on the role of interpreter, David further states that function of interpreter is devoid of closed definition that identifies a specific role related outcome as it touches on various undefined characters of cultural and linguistic settings involving two or more human beings. The ever unending and dynamic role has emergence of expectations expressed to the kind of role being performed in various demographic settings . This flexible role has interchangeability from being a bridge to further metaphors like facilitator or consultant or communication broker and hence the wider role necessitates adherence to ten nets of Code of conduct. The necessity of code of conduct can be explained as a crucial aspect during interpretation as the clients enter into “act of trust”. Trust is self-driven faith and assurance driven by various internal, cognitive and cultural factors that cannot be generalised for all. Few features are defined by the American organisation (RID)- The Registry of Interpreters for the Deaf along with the National Association of the Deaf like balanced emotional quotient, accuracy of interpretation, confidentiality, impartiality, as a part of code of conduct of interpreters.

According to (Brill,1986), sign languages in different countries are evolved independently. This means that there are similarities between signed and spoken languages by way of language contact. This has been explained by works of (Braem.et.all,2001) that states the similarity between the movement of mouth which resembles words pronounced in surroundings by the hearing and therefore this relationship stands out as crucial aspect of various sign languages

Sign language (Brnill,1986) is visual, gestural or manual expression and form of language (Skelton & Valentine, 2003; Temple & Young, 2004) associated with absence of written or print form ((Anderson et al., 2018; Temple & Young, 2004). Sign language requires aesthetics of establishing comprehensive contact with sign language users to perceive, understand and decipher (Porter, 1999). Accuracy, precision and the concern regarding presentation of data and studies of deaf expresses that it should be accurate and factual presentation of deaf moments and challenges that influence deaf lives. (Benedict & Sass-Lehrer, 2007).

Daily experiences of deaf built on unrealistic and forced upon efforts would not only be irrelevant but also disadvantageous of knowing reality about deaf. And therefore, in situation in which sign language interpreters are used, utmost care has to be taken to ensure that sign language interpreters are careful regarding cultural and linguistic considerations that convey equivalent meaning. Also, as suggested by authors (Napier, 2004; Young & Hunt, 2011), utmost care must be taken to allow



deaf to access new terminologies to understand the access and context of the subject matter in which the words are used.

Interactions occurring between hearing and Deaf with sign language interpreter that acts as communication bridge, may be both beneficial and challenging to hearing and Deaf people. These forms of access may serve as positive form of access to communication as suggested by (Young et al., 2019), and also add to increase the confidence in facilitating a two-way interaction between persons who are deaf and hearing people that are unable to sign. Simultaneously, the positive side is that an impression gets created with deaf that their mode of communication which is sign language is being accepted (Napier, 2011).

Perspective of using sign language interpreter has been brought out as being both beneficial and challenging for deaf and hearing groups. It is advantageous to both the hearing and deaf as it establishes two-way communications communication (Young et al., 2019). Acceptance of using the language of deaf by hearing community fosters confidence in deaf and hearing people who are not skilled in using and understanding sign language and consequently the perception the deaf develops is the social acceptance of deaf mode of communication. Such progressive impression is a major step in breaking the barrier of communication (Napier,2011)

On the other hand, uniqueness of sign language and interactional settings mediated by sign language interpreters may unconsciously generate power equations on day-to-day basis with an assumption of understanding deaf as weaker minority segment and hearing as string majority (Levinger, 2020; Temple & Young, 2004; Young et al., 2019). And therefore, there is a risk of loss of self and agency likely to be faced by interpreters as situations may lead them to protect their identity as the person for whom the interpreter is interpreting has to make choices about how they would like to be represented (Young et al., 2019, p. 91). Understanding the existence of non-standardised sign language and variations in the world related to syntax and grammar much different from the spoken language, though construed as distinct and independent language (Luey et al., 1995), interviewing deaf is a challenging task for hearing (Napier, 2004). Further, the author points out the omissions in interpreting the way it is intended to by hearing despite presence of sign language interpreter. These omissions are also unavoidable in case of non-signing interviewers or oral/source language to participants. Further, this is unescapable from participants' sign language to the hearing interviewer



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### **Techniques of interviews for deaf**

Interview is a process that facilitates meeting of two individuals for a common purpose of exchanging ideas and information way to speaker and listener changing states of questioning and answering. The reciprocal conversation leads to arrive at a common understanding regarding the subject under discussion.

A study on Interviewing Respondent interaction by (Williams,1964) reflects various known, unknown and partially influencing sources resulting towards bias. The interplay of the above factors results in determining the quality of interviewing process and thereby the quality of information obtained.

A fair understanding and knowledge about factors leading to bias can be proactively arrested by acquiring knowledge about these factors which will assist to build a qualitative two-way interaction approach. The two-way interaction system as explained by (Newcomb,1955; Heider,1946; Cartwright.et.all,1956) in their various works have reflected on a causal relationship existing between the attitude for the topic of interest and mutual attraction between the interacting parties.

Further studies conducted by (Emery.et.all,1957) have established through their research by hypothesising the positive attraction between interacting parties contributing a positive outcome and better chances of success rather than repulsive attraction existing between interacting parties.

Further, the author states that equation of attraction is not the only determinant of positive outcome. The norms of role of interacting parties have an important role to play in determining the success of an interaction.

The outcome of studies done on respondents interviewed by white and Negros (Williams,1964) establishes the social distance between interacting parties, race of respondents and threat exuberated by the interview questions are linked to the extent of bias that is produces in an interview setting.



The impact of social context on perceiving interviewers differently has been explained by (Katz,1942; Stouffer. et.all,1950). The author states that various social context settings influence the perceptual behaviour and thereby the consequence of the communication between two parties resulting in recording of the outcome by the interviewer.

Further studies have looked at various ways in which the various interviewing techniques can be applied depending on the purpose and situation. One such intervention explained by Anderson et al. (2018) in which the author has mentioned visual recording interview technique. In this technique, considering the visual nature of sign language, the visual cues capture would be useful. Apart from the above, the technique could be leveraged for qualitative data collection and analysis that will support to reduce bias related to translation and omissions related to interpretation. This will aid in presenting the realistic data related to deaf. Further extension could be of video taping interviews followed by subsequent analysis, at first level by interpreter and thus will impose certain quality and correctness checks that will increase the credibility of the data and reliability on sign language interpreters.

The second aspect of the interview is the preparedness of the interviewer. In special situations like interviewing a deaf, the interviewer needs to be well prepared before entering into the setting on an interview environment.

We can visualise from the above that every kind of interview has substantial communication required between the interviewer and interviewee. This situation imposes maximum challenges for a deaf job aspirant when competing with the hearing candidates as the measurables of performance are equated with those of hearing. Closed fixed response interviewing technique somewhat is relatively soft imposer on the deaf candidates to be interviewed. However, interviewing a deaf warrant more focus on facial expressions, body language, sign language, deaf friendly environment and special efforts to capture the message the deaf is trying to pass on rather than the disability per se.

So to put together the challenges of sign language as mediating agency on one hand where the research has proven that sign language itself is subject to interpretation omissions, gap in understanding of hearing and the deaf and on the other hand, the bias factors generated in a interview setting owing to various reasons of communication related challenges, skills and knowledge required for the job, accommodative practises of the company, non-inclusive policy,





legislative applicable laws of the state, job requirements and many other factors beyond the scope of this research .

### **Deaf Employment**

Deaf employment is a challenge as it requires approach of sensitivity and adaptability at each level of economic forums. At the same time, not enough opportunities come to deaf as communication is construed as barrier for communication which brings in reluctance in minds of interviewer to select deaf job aspirant. Business is a profit-making entity and hence all decisions are viewed from that perspective. As a result of deviated perspective, not much opportunities exist for deaf to enter job market. In addition, the social framework and the wide gap between the recruiters and the agencies which facilitates employment of deaf is wide. Then there are challenges of deaf equated with hearing at the tie of interview are further points that needs consideration while making efforts to promote deaf employment.

Wide experiences of audism in various contexts have been captured by various researchers from time to time. The word “audism “is commonly used to explain the inequalities towards the deaf on basis of hearing (dis)ability. In study by (O’Connell,2021) on “Opportunities Blocked” has expressed his views on three levels of audism i.e individual level, institutional level and internalised level that act as hindrances in deaf employment.

Enormous studies have reflected employment discrimination as a result of audism. The level of degree of social acceptance and its impact on employer perception to perceive deaf as being potential employees is accredited as major barrier to deaf employment by (Stokar and Orwat 2018). The authors further draw the understanding of pre conceived notions as barrier towards employment of deaf.

In studies conducted by (Lempka,2019) , the author finds stigma as another influential factor towards considering deaf candidates as employees by prospective employers .

In all, the subject of deaf employment and the challenges faced subsequently centres around the disability of speech and communication with deaf community. Communication is the first step towards any two-human being to develop a level of knowing each other. Deaf employment is impacted by first level of interaction which in case of deaf emerges as deterrent. Whenever a child





is born, the first language that the child starts absorbing is the mother tongue. In case of deaf, owing to this disability of hearing, the crucial development of language is missing. While being a skill development advisor to a deaf school in Haryana, I learnt that one can teach alphabets by using sign language and using visual aids. For an example, a deaf student is being taught to understand and write the word “Green”. The child can only grasp words and the colour associated but in totality not the word “Green” and therefore the way words are written and the child learning to write the words and then linking the word with an object is the probable learning that happens. The grammatical expressions are further difficult to understand since converting them is possible only with the facial expressions and sign language. Another dilemma that adds to the education qualifications is qualifying the examination in English language wherein the language that deaf communicate in is the sign language.

As stated by (Sutton-Spence & Woll,1999) has explained that sign language is grammatically ad complete living language and the vocal element is missing.

Another unique feature that binds together the deaf transnationally is the deaf culture they associate with and identify it as DEAF DEAF-SAME (Friedner & Kusters, 2014)

The challenge of communication is far more increasing when a deaf interacts with hearing individual. While the language is a barrier but there are socio cultural reasons that make the deaf alienated in the world of hearing. Not denying that fact that deafness is an invisible disability and therefore requires a different treatment than the other disabilities and the accommodative practises associated with it.

And therefore, it brings us to a level of defining the objective of study.

### **Objective of Study**

The objective of the study is to examine relationship impact Between Sign Language Interpreter and “Interviewing techniques on Defa Employment” and by way of statistical findings interpret the existing relationship between the two variables. The ultimate goal is to make inferences from the study results and provide employers, legislators, to interviewer who are interviewing deaf or likely to be interviewing deaf with useful advice on how to improve the effectiveness of interview and create interventions and develop techniques that are deaf friendly and allows the deaf to



compete at a level of their best competence and capability knowing their limitation to express in spoken language is a big hindrance to make themselves marketable in the employment market .

Accordingly, following are the objectives:

- To understand the relationship between Deaf Employment and Interviewing Techniques
- To understand the relationship between Deaf Employment and sign language interpreter
- To examine the relationship between sign language interpreter and Interviewing Techniques

By focusing on these goals, the study hopes to provide insightful information and supporting data that will help shape tactics for encouraging practises for deaf employment.

### **3. Research Methodology**

Under research methodology employed in this study, a brief description of the procedures and techniques used to collect, analyse, and interpret data is presented.

#### **3.1 Hypothesis**

In a research project, hypotheses offer claims that may be verified and offer a structure for examining the connection between variables. Several theories can be developed in the context of how sign language interpreters and interviewing techniques impacts deaf employment.

The following hypothetical claims are provided for the consideration of the study:

1. **Null Hypothesis (H<sub>0</sub>):** There is no significant relationship between Sign language interpreter and interviewing techniques.
2. **Null Hypothesis (H<sub>0</sub>):** There is no significant relationship between Sign language interpreter and Deaf Employment.
3. **Null Hypothesis (H<sub>0</sub>):** There is no significant relationship between Deaf Employment and interviewing techniques.

#### **3.2 Nature of Research**

For the purpose of the study, descriptive research was conducted. This study utilizes a quantitative approach to collect and analyse primary data based on the perception of deaf job aspirants towards the sign language interpreters and then person taking the interview. The descriptive research has been used in the study for understanding the variables related to sign language interpreter and interviewing techniques that have a subsequent impact on deaf employment.



### **3.2 Unit of Analysis**

The primary entity being researched in the study is Deaf Job Aspirants Individuals who are actively seeking employment are labelled as “Deaf Job Aspirants”

### **3.3 Sampling Procedure**

The sampling frame consists of male and female deaf aspirants who are in age bracket of 18-25 years and are aspiring to gain employment.

The sample size taken is 120 Nos for more reliable data analysis.

3.4 Questionnaire has been designed by picking up indicating variables from the review of literature. The statements relate to the items of sign language interpreter, interviewing techniques and deaf employment.

### **4. Data Collection, Analysis and Interpretation**

Primary data was collected from deaf job aspirants from around 8 deaf centres and schools in State of Haryana using a schedule in which the set of questions were prepared and using the sign language interpreter the responses information was collected

The no of respondents selected was 140 Nos out of which 120 respondents. Hence, the current study has used the sample size of 120 no's for drawing results and interpretation.

To check the reliability of the instrument, Cronbach Alpha value comes out to be 0.750 that confirms that the instrument is reliable to be used for further analysis.

Further in order to check the relationship between sign language interpreters and interviewing techniques on deaf employment, correlation analysis was done using SPSS.

### **5. Findings**

The result of correlation between Sign language interpreter and Interviewing technique is depicted in table No 1 below.

**Table-1 Correlation sign language interpreter and Interviewing technique**

Correlations			
		Summated value sign lang interpreter	summated value interviewing technique
Summated value sign lang interpreter	Pearson Correlation	1	.569**
	Sig. (2-tailed)		.000
	N	120	120
summated value interviewing technique	Pearson Correlation	.569**	1
	Sig. (2-tailed)	.000	
	N	120	120

\*\* . Correlation is significant at the 0.01 level (2-tailed).

The result depicts a moderate correlation of 0.569 at p value of 0 and hence the significant relationship exists between sign language interpreter and interviewing techniques.

Since there exists a relationship and hence null hypothesis-1 is rejected.

**The result of correlation between Deaf Employment and Interviewing technique is depicted in table No 2 below.**

**Table-2 Correlation statistics between Deaf Employment and Interviewing technique**  
**Correlations**

		summated value interviewing technique	Summated deaf employment
summated value interviewing technique	Pearson Correlation	1	.292**
	Sig. (2-tailed)		.001
	N	120	120
Summated deaf employment	Pearson Correlation	.292**	1
	Sig. (2-tailed)	.001	
	N	120	120

\*\* . Correlation is significant at the 0.01 level (2-tailed).

The result shows a weak correlation of 0.292 at p value of 01 and hence the relationship exists between sign language interpreter and interviewing techniques. Since there exists a significant relationship and hence null hypothesis-2 is rejected.

**The result of correlation between Sign language interpreter and Deaf employment is depicted in table No 3 below**

**Table 3-Correlation statistics between Sign Language Interpreter and deaf employment**

**Correlations**

		Summated value sign lang interpreter	Summated deaf employment
Summated value sign lang interpreter	Pearson Correlation	1	.170
	Sig. (2-tailed)		.063
	N	120	120
Summated deaf employment	Pearson Correlation	.170	1
	Sig. (2-tailed)	.063	
	N	120	120

\*\*. Correlation is significant at the 0.01 level (2-tailed).

The result shows a weak correlation of 0.170 at p value of .063 which is greater than qualifying value of  $<0.05$ , hence it can be established that significant relationship is not present between two variables and hence the null hypothesis is proven and we reject the alternate hypothesis.

## 6. Recommendations

To promote deaf employment, the policies should be accommodative and inclusive so that more and more deaf can apply for jobs. At the same time, it is important that there are minimum omissions at the time of interpretation so that the messages is passed on as it was intended it. For promoting deaf employment, organisations should initiate sensitisation sessions in companies for the abled to get familiarised with sign language and this to an extent will support in building accommodative practises for deaf inclusion

## 7. Practical and Theoretical implications

Deafness can be understood as a disability or special ability depending on the context and the perception of the receiver. While it cannot be denied that communication is a basic level phenomenon of conveying a message. Practically, the hearing disabled exhibit better focus, concentration, precision and productivity while on job as they are away from distractions. Many conscious organisations have started ti look at this workforce and improve productivity. This requires an appropriate environment back at workplace and facilities to reduce communication barrier. Higher education especially in India and the seeking a job is a challenge though. Persons



with hearing impairment tend to take a turn towards seeking government support for the jobs. Its high time that the government and society is motivated to build inclusion programs to build a world of fairness.

### **8. Limitations of study**

The study limits itself to age group of 18-25 years of age. There must be more age groups included in study with short interval of years for a focused study.

The perceptions of deaf who are already employed should be taken to learn from their experiences and make the study more analytical.

### **Acknowledgement**

I would like to sincerely extend my Thanks to my guide Dr Karamvir Sheokand, Maharishi Dayanand University , Rohtak who has been a guide and motivator to do a meaningful research and Dr. Sharanjeet Kaur for granting permission to be associated with the deaf across all the 8 centres of Haryana.

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