

**ATTITUDES OF DEAF AND HEARING ADULTS IN ISRAEL
TOWARD DEAF PEOPLE'S CAREER SUITABILITY**

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Abstract

This study investigated the expressed attitudes of deaf adults as well as hearing parents and teachers of deaf children in Israel toward career choices for deaf and hearing people by asking the participants to rate the suitability of 14 professions for deaf and hearing people. The results, in general, were consistent with those of other studies in the United States, England, Italy, South Africa and India with hearing teachers and parents of deaf children, which indicated that the hearing status of imagined advisees selectively influenced attitudes toward the suitability of certain professions. Deaf adults in Israel gave significantly lower ratings for deaf advisees on 10 out of 14 professions and did not find any of the professions to be more suitable for a deaf advisee when compared to a hearing advisee. These results are in contrast to those found by Parasnis, Samar and Mandke (1996) with deaf adults in India. Implications of these findings are discussed.

An attitude survey questionnaire developed originally by DeCaro, Evans and Dowaliby (1982) has been used to study the expressed attitudes of hearing people toward career choices for deaf and hearing people in several countries such as the US (Naidoo, 1989), England (DeCaro et al., 1982), Italy (DeCaro, Dowaliby & Maruggi, 1983), South Africa (Naidoo, 1985), and India (Parasnis, DeCaro & Raman, 1996). These studies found that the imagined advisee's hearing status had a significant selective effect on the ratings given by hearing participants, even when they were explicitly told to imagine deaf and hearing persons to be appropriately and equally qualified for those professions. In general, professions that relied on precise or extensive communication and professions where safety was critical were considered less suitable for deaf people than for hearing people by the hearing respondents. The results of these studies suggested that despite major differences in culture, language, and economical and technological advances, hearing people from different countries tend to hold similar attitudes toward what deaf people can do. In general, they have selectively lower expectations regarding the suitability of professions for deaf people than they do for hearing people.

Do deaf people also have selectively lower expectations regarding career choices for deaf people? As Parasnis et al. (1996) stated, on the one hand, it seems possible that the attitudes of teachers and parents, who are authority figures for children and who represent the larger hearing society, would be internalized and reflected by those who grow up to be deaf adults. On the other hand, Parasnis, Samar and Mandke argued that if deaf people are regarded as an oppressed minority group living within the dominant hearing culture, it is quite possible that their own perception of their competence and self worth would differ significantly from hearing people,

and thus would influence the attitudes they hold toward career choices appropriate for deaf people.

In fact, Parasnis, Samar and Mandke (1996) found some evidence to support their hypothesis in the study they conducted in India with deaf people. Specifically, they found some differences in the attitudes toward career choices between deaf and hearing people. For example, the career of an architect was considered by deaf people to be more suitable and that of a doctor less suitable for a deaf advisee than for a hearing advisee. In studies with hearing people including one conducted in India (Parasnis, DeCaro & Raman, 1996), both professions were considered less suitable for deaf people than for hearing people. Deaf people similar to hearing people were influenced negatively but selectively by the imagined hearing status of the advisees. How attitudes towards deafness influence career choices is a complex issue, so is the issue of bringing about a positive change in the attitudes held by deaf and hearing people. However, these results clearly suggested that the attitudes of hearing and deaf people toward career choices available for deaf people need to be documented so that students, parents, teachers, and counselors can become aware of and work toward changing negative aspects of those attitudes. Documenting the attitudes of a society has to occur within each country because cross-cultural generalizations often do not take into account the socio-economic, political, and historical factors that may constrain such generalizations.

The present study was conducted in Israel to investigate further whether the expressed attitudes of deaf people toward career choices for deaf and hearing people are different from those expressed by hearing parents and teachers. In Israel only 7% of deaf people have had some postsecondary education compared to 27% of the general hearing population, and in general deaf people tend to have lower professional ranks compared to hearing people (Sela & Weisel, 1992). The availability of career and educational opportunities and the existing attitudes of the society are some of the factors that need to be investigated in connection with the issue of how to increase the number of deaf people receiving the postsecondary education.

Method

Participants

Deaf adults, hearing teachers of deaf students, and hearing parents of deaf children from a large metropolitan area in Israel were invited to participate in the study. A total of 225 questionnaires were distributed with 75 for each of the three groups of participants. One hundred and fifty-nine questionnaires were returned resulting in an overall return rate of 70.6%. Sixty-nine deaf adults, 34 hearing parents of deaf children, and 56 hearing teachers of deaf children returned the questionnaires. The return rate for each of the three groups was thus 92%, 45.3%, and 74.6% respectively.

Among the 69 deaf adults, 31 (44.9%) were females. The mean age of the deaf group was 39.51 years ($sd=15.83$) with a range of 17-78. The average number of years of education was 11.9 ($sd=3.27$). About 90% of deaf people knew and used Israeli Sign Language (ISL). Their ISL skills ranged from very good to fair according to their self ratings on a five-point scale ranging from not at all (1) to very good (5).

Among the 34 hearing parents 25 were females (73.5%). The mean age of this group was 38.81 years ($sd=6.12$) with a range of 27-54. The average number of years of education was 12.7 ($sd= 2.09$). Fourteen parents (41.2%) reported that their knowledge of ISL was very good, good, or fair, using the five-point scale.

All the 56 teachers were female and hearing. The average age of the hearing teachers' group was 35.14 years ($sd=8.6$) with a range of 19-60. All teachers knew ISL well. Their experience in the teaching profession ranged from 1-30 year with a mean of 8.87 ($sd=7.72$). Forty-nine of the teachers (87.5%) reported that they used total communication in their classes and seven others used ISL.

Instrument

A 28 items Likert-type questionnaire which was originally developed by DeCaro et al. (1982) and modified by Naidoo (1989) was used in this study. This questionnaire consisted of instructions, a reference list of 14 careers, with a brief description of each, a few demographic questions, space for comments on the survey, and 28 statements that the respondents rated on a five-point Likert scale which ranged from Strongly Agree (5) to Strongly Disagree (1).

All the questionnaire's items were phrased in a similar fashion. Each occupation was represented twice, once for hearing people and once for deaf people. For example: "I would advise a deaf person with the right qualifications to train to be a lathe operator" and "I would advise a hearing person with the right qualifications to train to be a lathe operator." The 28 sentences were randomized to construct the questionnaire with the constraint that the same occupation was not described twice in a row. The statements were translated from English to Hebrew by two native speakers of Hebrew who resided in Israel and had very good knowledge of English. Differences in the translations were discussed until an agreement was reached about the best translation. One occupation in the original scale, "miner," was changed to "oil driller," because mines are rare in Israel.

Procedure

Deaf adults were approached in two clubs for deaf people, both in the metropolitan area of a large city in Israel, and were asked to fill in the questionnaire. Most of the deaf adults filled out the questionnaires by themselves and some were assisted by their colleagues or by the co-author. This person, who is a supervisor of sign language instruction in the Ministry

of Education in Israel is fluent in both Israeli Sign Language (ISL) and Hebrew. Parents of deaf children were contacted through the elementary schools and the self-contained classes for deaf students with the assistance of the educational personnel. Questionnaires were distributed to the teachers in schools for deaf children and they were asked to return the completed questionnaires by mail. All participants were assured that their answers would be kept confidential and that there was no need to write their names on the questionnaires.

Results and Discussion

An analyses of variance with repeated measures using a multivariate approach was performed in which group (Deaf Adults, Parents, and Teachers) was a between-factor, the hearing status of the imagined advisees (Deaf or Hearing) was the second (repeated) factor. Ratings of the 14 careers was the dependent variable. The results of these analyses revealed significant main effects for Group ($F(2, 156) = 3.00; p = .053$), Hearing Status ($F(1, 156) = 129.22; p < .001$), Career ($F(13, 2028) = 30.70; p < .001$) and significant interactions including Group by Career ($F(26, 2028) = 6.65; p < .001$), Group by Hearing Status ($F(2, 156) = 9.12; p < .001$), Career by Hearing Status ($F(13, 2028) = 29.50; p < .001$), as well as Group by Career by Hearing Status ($F(26, 2028) = 2.87, p < .001$).

The results of this ANOVA were followed up with post-hoc *t* tests as is the standard practice to isolate the source of the interactions. Forty-two *t* tests were conducted to examine on which of the 14 careers each group of participants differentiated between deaf and hearing advisees. Given a conventional significance level of .05, and the total number of tests which were conducted (14×3), the adjusted significance level, following Bonferroni formula (Edwards, 1993; Pedhazur, 1982) is $p < .0012$. Therefore, only those results which reached this level were considered here as statistically significant. The group means and the results of these analyses are reported in Table 1.

It should be noted that in all comparisons which were statistically significant, ratings for deaf advisees were lower than those for hearing advisees for all the three groups. Differences between deaf and hearing advisees were most pronounced among the deaf adults and least among the teachers.

Deaf adults gave significantly lower ratings for deaf advisees in 10 careers which included white collar careers (e.g., bookkeeper), blue collar careers (e.g., foundry worker), careers which require communication skills (e.g., manager), careers which do not rely primarily on communication (e.g., lorry driver), careers which may involve safety considerations and those which do not (e.g., oil driller and bookkeeper). The very few careers in which deaf adults did not distinguish between deaf and hearing advisees were

Table 1. Ratings of Deaf Adults, Parents and Teachers for Deaf and Hearing People in each career (Means, Standard Deviations and *t* tests Results)

		Deaf	Parents	Teachers
Bookkeeper	D	4.20 (.99)	4.59 (.82)	4.59 (.76)
	H	4.65 (.72)	4.85 (.36)	4.73 (.45)
	t	*		
Cook	D	4.35 (.97)	4.62 (.89)	4.46 (.78)
	H	4.56 (.79)	4.85 (.36)	4.27 (1.04)
	t			
Foundry worker	D	3.74 (1.24)	4.23 (1.21)	3.98 (1.15)
	H	4.62 (.64)	4.68 (.64)	4.20 (1.00)
	t	*		
Shop assistant	D	3.90 (1.06)	4.03 (1.22)	3.80 (1.13)
	H	4.43 (.90)	4.76 (.55)	4.14 (1.12)
	t	*	*	
Construction worker	D	3.91 (1.27)	3.82 (1.42)	3.50 (1.26)
	H	4.59 (.65)	4.71 (.63)	4.14 (.98)
	t	*	*	*
Manager	D	3.40 (1.28)	3.47 (1.35)	4.02 (1.12)
	H	4.48 (.95)	4.88 (.33)	4.70 (.50)
	t	*	*	*
Jeweler	D	4.20 (1.06)	4.50 (.86)	4.66 (.51)
	H	4.56 (.65)	4.88 (.33)	4.54 (.60)
	t			
Lathe operator	D	4.42 (.88)	4.41 (.89)	4.12 (.99)
	H	4.42 (.81)	4.88 (.33)	4.25 (.92)
	t			
Draughtsman	D	4.58 (.60)	4.65 (.54)	4.59 (.56)
	H	4.68 (.56)	4.82 (.39)	4.61 (.56)
	t			
Lorry driver	D	3.29 (1.27)	3.12 (1.61)	3.56 (1.31)
	H	4.53 (.85)	4.71 (.76)	4.41 (.89)
	t	*	*	*
Doctor	D	2.70 (1.37)	3.21 (1.39)	3.89 (1.15)
	H	4.30 (1.19)	4.68 (.88)	4.64 (.62)
	t	*	*	0

Table 1 (cont'd).

Farm worker	D	4.33 (.76)	4.59 (.70)	4.27 (.92)
	H	4.71 (.54)	4.82 (.39)	4.12 (1.11)
	t	*	*	
Oil driller	D	2.72 (1.10)	3.88 (1.25)	3.91 (1.13)
	H	4.35 (1.07)	4.85 (.36)	4.18 (1.01)
	t	*	*	
Architect	D	3.98 (1.10)	4.38 (1.01)	4.61 (.56)
	H	4.58 (.75)	4.73 (.57)	4.71 (.46)
	t	*		

* $p < .0012$

Note: D=deaf advisees, H=hearing advisees

jeweler, cook, lathe operator and draughtsman. The latter is a traditional "deaf-occupation" and the three others have relatively low socio-economic status.

Parents had significantly lower ratings for deaf advisees when compared with hearing advisees with regard to six careers, namely shop assistant, construction worker, lorry driver, manager, doctor, and oil driller. Teachers distinguished between deaf and hearing advisees only on four careers: construction worker, lorry driver, manager, and doctor. There was a general agreement among the three groups that these four careers were less suitable for deaf advisees than for hearing advisees. Similar findings, with regard to these four careers were reported by DeCaro et al. (1982), and DeCaro et al. (1983). The eight careers for which both hearing parents and hearing teachers did not distinguish between deaf and hearing people were: bookkeeper, cook, foundry worker, jeweler, lathe operator, draughtsman, farm worker and architect. Similar findings with regard to four of these careers - bookkeeper, cook, draughtsman, and farm worker - were reported by DeCaro et al. (1982, 1983) based on their data from Italy and England.

These results suggested that the effect of the hearing status of the imagined advisees selectively influenced the ratings even when the deaf and hearing advisees were defined in the questionnaire as equally qualified for each career. It should be noted that in the present study none of the 14 careers were viewed by parents, teachers or deaf people as more suitable for a deaf advisee than for a hearing advisee, in contrast to the results of Parasnis, Samar and Mandke (1996). These results suggest that there appears to be an overall negative bias toward deaf people among all participants in this study in rating the suitability of a career for deaf people.

The lower ratings given by the deaf adults when considering the careers for a deaf advisee could be the result of two possible causes: First, it is possible that the deaf adults have already internalized society's negative attitudes toward their group (Bat-Chava, 1994; Parasnis, Samar & Mandke, 1996).

Second, while completing the questionnaire deaf adults may have imagined other deaf adults whereas parents and teachers may have imagined young deaf children. The older generation of the deaf community in Israel is comprised mostly of immigrants from other European countries. It is possible that they had limited educational opportunities and did not have the various career options available to deaf children who grow up in Israel. It appears to be the case that oral communication skills are an important factor in determining deaf students' educational and professional development in Israel (Sela & Weisel, 1992). According to Sela and Weisel, most of the students in the Israeli education system for deaf students who have succeeded academically have had oral orientation. Furthermore, Sela and Weisel have noted that they appear to have minimal contact with other deaf people or the Association of the Deaf. One consequence of this situation is that many members of the Association of the Deaf may have jobs with relatively low prestige and may primarily be familiar with other deaf people with similar jobs. It is possible, therefore, that the ratings by the deaf participants in the present study may be influenced by their experience with the jobs they and their friends have had. In contrast, parents and teachers of deaf children may have given ratings in response to what is presently available or what will be available in the future to the deaf children in the educational environment.

These speculations are supported by the findings of Sela and Weisel (1992) who reported that only 12.2% of a national sample of deaf adults in the Jewish sector had jobs which required post-secondary education compared with 23.8% in the Israeli hearing population. Only 1.3% of deaf people had jobs which required advanced secondary degrees. A recent study by Weisel (1998) of the attitudes of deaf and hearing people in Israel toward careers also supports these speculations because the findings suggest that low social prestige jobs that require low communication skills are seen to be appropriate for deaf people by both deaf and hearing people.

In summary, the results of our research suggest that the attitudes of deaf people in Israel regarding the career suitability of deaf people may not be similar to those of the hearing people involved in their education. They are also not similar to those reported in the literature for deaf people in India (Parasnis, Samar & Mandke, 1996). These findings could not have been extrapolated from the findings of studies in other countries. Thus they add significantly to the research literature on deafness, and they increase our global understanding of how the impact of deafness is perceived by people in different countries.

It should be noted here that the exploratory nature of this study and the limitations of a survey instrument constrain the general conclusions that may be drawn regarding the attitudes of people in Israel. The deaf people were recruited from the Jewish sector. This selection limits generalization of the findings to the larger Israeli society, which includes both Jewish and Arab sectors. Furthermore, a strong relationship between the expressed attitudes collected through a survey instrument and actual behavior is difficult to demonstrate.

One general conclusion that can be drawn from this study given these constraints and that has implications for deaf education in Israel as well as in other countries is that a negative bias toward deafness may exist among both deaf and hearing people in rating deaf peoples' career suitability. Such a bias can negatively influence the career options and career advancement of deaf people even when they are equal to hearing people in their academic qualifications. We suggest that professionals involved in the education of deaf children regard these findings as underscoring the need to work on changing prevalent attitudes toward deafness. It is necessary but not sufficient for educational programs to focus on the development of strong academic skills in deaf children. These programs must concomitantly develop strategies for increasing the awareness of deaf people, educators, and parents regarding career choices for deaf children (see Parasnis, 1996, 1999). These strategies could include infusion of career information for teachers, parents, and deaf students in school programs, field trips, and dialogue with deaf role models who are successful in their professional and technical careers.

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