

## 資料

### Vocational Adaptation of Deaf Workers: A Survey on the Secondary Graduates of the Philippine School for the Deaf

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#### Abstract

This article aims to report on the vocational adaptation of deaf workers who were secondary graduates of the Philippine School for Deaf. An author-made questionnaire eliciting some personal, deafness and job-related information was administered to 40 respondents (20 male and 20 female) who were randomly selected by the researcher. Data were analyzed through simple statistics like means, frequency, percentage distribution and the use of graphs and table.

Results reveal that there is a balance between the number of deaf workers who are vocationally adapted and the otherwise as evidenced by their dissatisfaction with some aspects of employment. Knowing that a large number of cases belong to the below poverty income level, insufficient salary has become one major source of discontentment and stress at work.

Findings indicate the need for employer's provision of sign language instruction to hearing workers to foster a better relationship between the deaf and the hearing. Review of vocational curriculum is also sought to make it more relevant to the needs of the deaf. It is likewise suggested that legislators should pay attention regarding salary administration of deaf workers.

**Key Words** : vocational adaptation/job satisfaction, stress at work, below poverty income

#### Introduction

Looking for employment after finishing secondary education is one option that a large number of deaf graduates take into consideration. In the Philippine School for the Deaf, the only government-owned institution for the deaf and the pioneer school for

the handicapped in the country, around 70% of its yearly graduates immediately search for jobs after graduation primarily due to their financial difficulties. It is good that with the Magna Carta for the Disabled Persons (NCWDP, 1992), the deaf and other disadvantaged individuals could assert their rights and privileges like that of employment accessibility. Although not all of the cases who look for jobs are placed in gainful employment due to employer's standards and lack of qualification on the part of the deaf,

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some who were able to be employed share their own experiences of fulfillment and discontentment.

Vocational adaptation in an attribute where deaf people at work achieve some kind of adjustment and satisfaction with their present job. Bolton (1976) believed that it is an area of functioning which is influenced by one's personal background, personality attributes and social development governed by immediate factors such as the availability of jobs, acquired vocational skills and the work environment. To illustrate this a framework shown on Fig. 1 is derived. This indicates that equipped with special skills to perform whatever jobs available, satisfaction would then be a product of the interrelation of the different areas of employment like nice and stable job, favorable relations with superiors and peers, rewarding pay and availability of communication means which facilitate healthy interaction between deaf and hearing workers.

In the Philippines, research on deafness mostly dealt with educational, communication problems and socio-emotional development. While limited studies are conducted on vocational development, the present study is an attempt to investigate the vocational adaptation of deaf workers. It is believed that the findings of this study will aid the researcher in his work as a teacher and reha-

ilitation worker for the deaf.

Moreover, the present undertaking will assist in the identification of deaf workers' needs. Needs that will serve as bases for curriculum planners to design a more relevant curriculum and for employers to give due consideration to deaf at the work site.

**Purpose of the Study**

This study sought to determine the vocational adaptation of deaf workers. Specifically, this aimed to answer the following questions :

1. **What is the profile of deaf workers in terms of the following aspects :**
  - a. identifying factors like sex, age, civil status, birthplace, family income and educational background
  - b. deafness related factors such as onset and degree of impairment and communication mode used in work site
  - c. job related factors like kinds of job, performance evaluation and compensation
2. **What is the perception of deaf workers on the following areas of employment :**
  - a. chances for promotion
  - b. kind of work
  - c. supervisors
  - d. co-workers
  - e. training
  - f. work evaluation
  - g. communication at work
  - h. salary
  - i. working condition
  - j. official meetings
3. **What are the different causes of stress experienced by workers and what coping means do they use?**

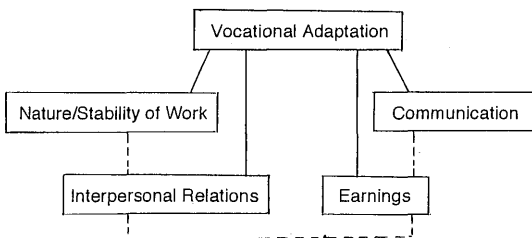


Fig. 1 Framework of Vocational Adaptation

## Methodology

### 1. Participants of the Study

The respondents consisted of 40 deaf workers who were secondary graduates of the Philippine School for the Deaf from 1968-1992. Twenty males and 20 females whose age range from 21 to 46 years old participated in this study.

### 2. Procedures

Initially, the researcher coordinated with the Job Placement Center of the aforementioned school regarding data on deaf graduates who are working at the time of the study. This center is a service component of the school which provides employment assistance to its secondary graduates. From the list provided by the center, subjects were then randomly selected and an author-made questionnaire was given. The survey questionnaire is consisted of two general parts: background information and employment related data. The first part seeks to determine some personal information about the subject, his educational background and the degree and onset of his deafness while the other one seeks to provide data concerning his perception towards some areas of work. During test administration, registered interpreters for the deaf assisted the researcher in giving instructions and explaining the test items. Afterwards, analyses were made and data on the subjects' profile and judgement of some indices of vocational adaptation were yielded.

### 3. Method of Analysis

Simple statistics such as frequency/percentage distribution and the use of graphs and tables aided in the analyses of data. These were utilized in examining the variables under study. Data on the degree of hearing impairment taken from a 4-item

situational questionnaire were analysed by assigning a value of 1 and 2 to Yes or No responses respectively. This indicates that as the total score increases, the degree of impairment becomes more severe. Table 1 shows hearing ability scale scores as converted to Better-Ear Hearing Level (dB HL) and their corresponding extent of impairment.

Meanwhile, vocational adaptation of the subjects was deduced from the quality of perception they have on the different areas of employment. The higher the frequency of positive perception towards each area, the greater the probability that they are getting used to/or adjusted to their present job.

## Results and Discussions

### 1. Profile of the Subjects in Terms of :

A. Identifying Factors (Sex, Age, Civil Status, Birthplace, Family Income and Educational Background)

The participants of the study included 20 male and 20 female deaf workers whose age ranged from 21- 46 years old. Of these cases, 62.5% belong to 21- 30 age bracket ; 30% are from 31- 40 age group and 7.5% fall into 41- 50 age category. Most of the subjects are single with 60% distribution ; 15% are married and 2.5%, widow. Regarding place of birth, 60% were born in Metro Manila and the remaining 40%, provincial areas. It can be inferred that there are many young workers due to the company's age standard for hiring. Companies in the Philippines, specially those which employ deaf workers, have strong preference for young manpower believing that this group is more energetic and productive although senior workers' experience could not also be underestimated. Senior workers belonging to 41- 50 age group might have established sense of identification

Table 1 Hearing Ability Scale Score

Hearing Ability Scale Score	Better Ear Hearing Level (dB HL)	Extent of Impairment
2-4	Less than 70 dB	Less than Severe
5 and 6	71 to 90 dB	Severe
7 and 8	More than 90 dB	Profound

Table 2 Profile of Subjects by Sex, Age, Civil Status and Place of Birth

Sex	No. of Cases		Age							Civil Status					Place of Birth									
	N	%	21-30	%	31-40	%	41-50	%	Total	%	Single	%	Married	%	Widow	%	Total	%	Met. Mla.	%	Prov.	%	Total	%
Male	20	50	13	65	7	35	0	0	20	100	11	55	8	40	1	5	20	100	14	70	6	30	20	100
Female	20	50	12	60	5	25	3	15	20	100	13	65	7	35	0	0	20	100	10	50	10	50	20	100
Total	40	100	25	62.5	12	30	3	7.5	40	100	24	60	15	37.5	1	2.5	40	100	24	60	16	40	40	100

and loyalty to companies as evidenced by their length of stay in that work site. A large number of workers remain single considering economic stability as an important requisite for entering into marriage. As budding workers, they have to save first for their future. Table 2 gives us the details on these areas. Family incomewise, 82.5% of the subjects belong to below poverty line income setting P8,000 as the poverty level (NEDA, 1995). Parents of the deaf work as either company employee or skilled laborer and most of the mothers just stay at home and do the housekeeping. Fig. 2 shows the income distribution of the respondents.

In terms of educational background, the subjects were all high school graduates since graduation from such level is the minimum educational requirement for employment. A side from this however, 2 cases (5%) were able to finish a university degree; 4 (10%) completed vocational course in dressmaking, graphic arts, metal craft and food preparation while the remaining 65% underwent on the job training prior to their employment. It

is also worthy to mention that there are 2 workers who benefited from the Apprenticeship Program offered by the school. Now on its fourth year, this program has proved to be very functional in preparing the deaf to enter the world of employment. Table 3 shows respondents by year of graduation from high school.

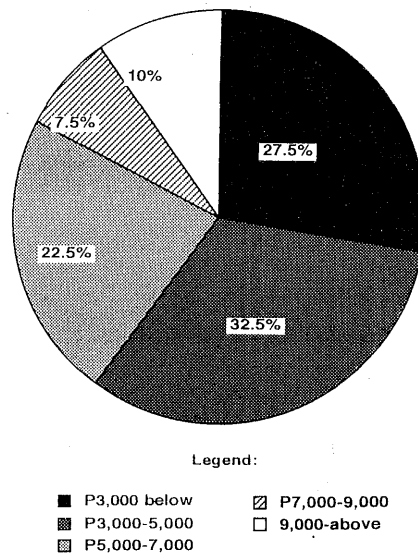


Fig. 2 Income Distribution of Respondents

**Table 3** Respondents by Year of Graduation from High School

Year of Graduation	Number of Cases	Percentage
1965-1969	1	2.5
1970-1974	2	5
1975-1979	1	2.5
1980-1984	5	12.5
1985-1989	19	47.5
1990-1994	11	27.5
Total	39	99

No Response-1 case

**B. Deafness Related Factors (Onset and Degree of Impairment and Communication Mode Used in Work Site)**

It was found out that 19 (47.5%) of the subjects became deaf since birth. Noted cause of impairment was largely due to maternal infections and traumatic experience during delivery. Eight cases (20%) became deaf during babyhood (1- 2 years) ; 7 (17.5%), during early childhood (3- 6 years) and 5 (12.5%) became deaf during late childhood (7- 11 years). Adventitious impairment was mainly due to accidents, trauma and diseases. From these cases, 90% have profound degree of impairment while 10% have severe extent of hearing loss.

Expectedly, the deaf would want to deal with fellow deaf workers at the work site. This was made evident by 37 (92.5%) respondents who disclosed that they want to interact with the same group rather than with their hearing counterpart, of which only 3 cases (7.5%) expressed their interest. As regards expressive mode of communication, most deaf persons relate with hearing through writing (67.5%) ; sign language with speech (20%) ; sign language without speech (7.5%) ; fingerspelling and talking with 2.5%

distribution for each mode. This shows that deaf are more confident that they would be understood well by means of interactive writing. Despite this, it was noted that only 15% believe that their message is fully understood. More than half of them (52.5%) feel that the message relayed is partially understood while the rest (32.5%) revealed that they are not understood at all by their hearing co-workers.

The same mode holds true with the hearing as they communicate with the deaf co-workers. It was found out that 26 (65%) also employ interactive writing ; 5 cases each (12.5%) make use of sign language with the presence or absence of speech respectively ; 4 (10%) use talking while nobody uses fingerspelling. As to the message comprehension, a great number of 31 respondents (77.5%) believe that they just partly understood what is being relayed ; 13 cases (32.5%) do not understand at all and only 6 (15%) revealed that they understood well what is being talked about.

The present findings are in contrast with that of Crammate (1987) in United States of America. He found out that sign language (with or without speech) was the most frequently used means of communication and almost half of his subjects use this mode both for expression and reception. The reason for such difference could probably be attributed to the company's provision of sign language instruction to hearing workers so that this group could relate well with the deaf counterpart. Since the present study surveyed workers who are mostly from companies where interaction between the deaf and hearing is not given much emphasis, both groups just settle themselves to interactive writing.

However, when dealing with fellow deaf, 29

subjects (72.5%) use sign language without speech; 9 cases (22.5%), sign language with speech, and writing, 2 cases (5%), Fig. 3 shows the communication mode used at the work site.

The school will always be the important institution in the language development of a deaf child. This has been proven once again as 32 respondents (80%) disclosed that they first learned the language of signs from school; 4 cases (10%) revealed that their family initially taught them while 3 of them (7.5%) learned it from friends. Crammate (1987) share the same findings.

Equally significant, communication aids are gaining popularity in industries/companies as these facilitate interaction between deaf and hearing and supervision of hearing impaired workers. This study revealed a total of 36 subjects (90%) who recognized the strong need for sign language interpreters at

the work site. Crammate (1987) also yielded the same result.

C. Job Related actors (Kinds of Job, Performance Evaluation and Compensation)

It is worth mentioning that all the respondents underscored their school's noble role of being not only an educational institution but as a functional service center as well. This means that the school has not only engaged itself in the traditional teaching-learning process but has also provided other services such as interpreting, hearing evaluation, research and job placement. To cite a concrete contribution, 25 (62.5%) were assisted by the Job Placement Center in looking for their present job. Other job finding methods which include family, friends and through oneself, were all shared by 5 cases each (12.5%). On the contrary, as surveyed by Crammate (1987), getting job leads from personal contacts was by far the most often used job

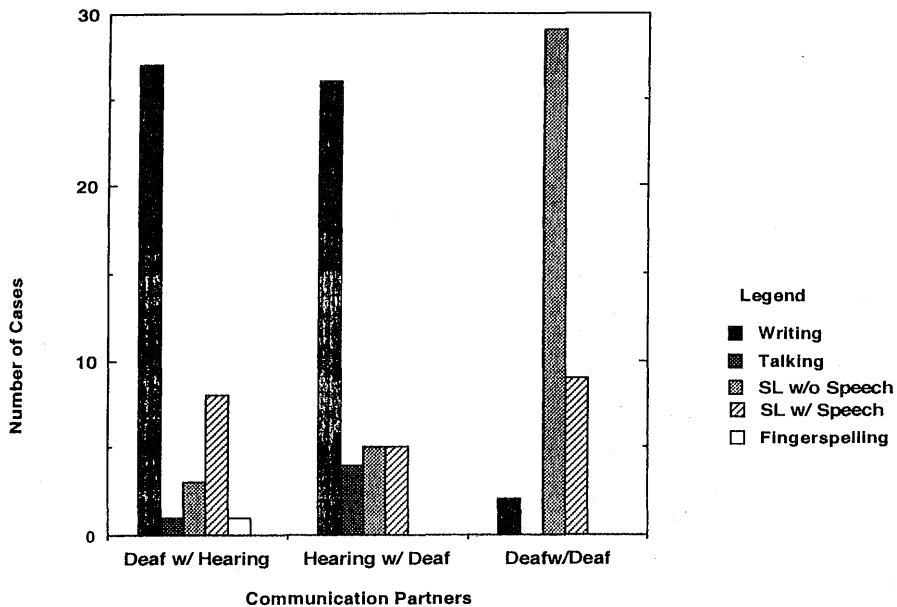


Fig. 3 Communication Method Used

finding method. This method was utilized successfully by 51% of his respondents.

More than one half of the respondents (57.5%) seem to be working in area not related to their high school vocational specialization. To mention an instance, there are cases of workers whose specialization were electricity and woodworking yet they work as production/factory workers.

Packaging/production topped the kinds of job performed by deaf workers with 12 cases (30%). This was followed by food preparation and serving, with a total of 9 cases (22.5%). Thirdly, there were 5 respondents (12.5%) who were working in office and other clerical related jobs. Results somehow relate to that of the 1980 Census of the Population Occupational Classification System as noted by Mac Leod- Gallinger (1995). Examination of the data revealed that 35% of deaf men also worked in semi- skilled or unskilled jobs as laborers. Interestingly, a higher percentage of women (10%) relative to men (7%) were employed in managerial and profes-

sional specialty occupations. The same thing holds true to Bolton's review of vocational research relating to deaf persons in 1976. He reported that over 20% of young adult males and women are working in unskilled roles. It is sad to note that most deaf settle only to these kinds of job. However if given the opportunity and appropriate training they would aslo excel and prove their worth in performing more complex jobs. It seems that in Japan considerable attention is given to deaf workers and those with other handicapping conditions. Both hearing and deaf have been given equal access to job opportunities. Appropriate training and commensurate pay are also well administered. Zahn and Kelly (1995) were also optimistic about the deaf's capability in proving themselves. It is implied then that given some time the hearing impaired could be productive workers. Refer to Fig. 4 regarding jobs performed by deaf workers.

In terms of performance at work, 25 cases (62.5%) believed that the quality of work they

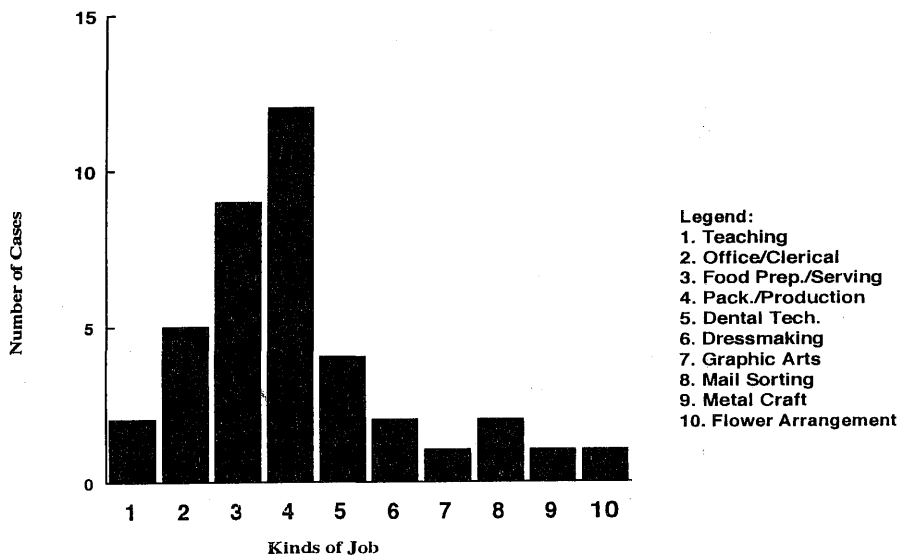


Fig. 4 Jobs Performed by Deaf Workers

are rendering falls within the average level. This means that although they think they do not perform very well, they do not perform not too bad neither. Meanwhile, 15 (37.5%) took pride in disclosing that they have been rendering a good performance. Of course it is important to elicit the performance evaluation of the workers from their immediate supervisors for purposes of objectivity and comparison. It is depressing to note that a large number of respondents (82.5%) work for more than 8 hours but receiving only an average salary of P2,350. This amount is almost 1/3 only of the income of those belonging to the poverty level. It can be inferred that deaf workers' salary is not commensurate to the quantity of work they rendered.

## **2. Perception of the Different Employment Areas**

This section presents how the subjects perceive the different areas of work. The quality of perception reflects certain degree of satisfaction or dissatisfaction towards that aspect of work. In this study it was found out that training, work evaluation and the kind of work are three top areas which receive positive perception from the respondents. This indicates that respondents agree with the idea of conducting training prior to employment (82.5%); 60% recognize the importance of performance evaluation while 52.5% expressed satisfaction with the kind of work they are doing. Negative feedbacks were received by the following areas; salary (77.5%), working condition and supervisors with 62.5% distribution for each area. This shows workers' dissatisfaction with the compensation they are receiving and with the different provisions for work. Moreover, subjects seem to have established unfavor-

able relationship with their superiors that is why they see them as a negative figure. The findings seem to contradict what Bolton reported in 1976. According to him, salary and working conditions are indicated most often as reasons for the expressed satisfaction. It can be said that in America and other progressive countries, both the deaf and the hearing workers receive pay commensurate to the quantity of work they rendered. Unlike in developing countries like Philippines, labor manpower still complains for the meager amount they receive as compensation for their work. Table 4 shows respondents rating of job satisfaction.

Since happiness is an important attribute for a person to continue his undertaking, subjects were asked if they are satisfied with their present job. It turned out that half of them (50%) were not satisfied with their work. As stated above, dissatisfaction could be due to different areas of employment which the respondents perceived to be unfavorable. Another thing that speak for dissatisfaction could also be the fact that more than a half of the subjects (57.5%) have changed their jobs more than three times. While discontentment resides with these subjects, it is worth mentioning that there are workers who are also satisfied and very satisfied with their work. These cases were shared by 40% and 10% of the respondents respectively. On the contrary, it was indicated that on the average, over 60% of deaf workers were well satisfied with their work (Bolton, 1976).

## **3. Causes of Stress and Coping Means Used**

Stress at work if not properly handled would have negative effects in the performance of job. This study once again yielded



Table 4 Respondents' Rating of Job Satisfaction

Employment Areas	Extent of Liking			
	Good	(%)	Not Good	(%)
Chances for Promotion	20	(50)	20	(50)
Kind of Work	21	(52.5)	19	(47.5)
Supervisors	15	(37.5)	25	(62.5)
Co-workers	16	(40)	24	(60)
Training	33	(82.5)	7	(17.5)
Work Evaluation	24	(60)	16	(40)
Communication at Work	16	(40)	24	(60)
Salary	9	(22.5)	31	(77.5)
Working Condition	15	(37.5)	25	(62.5)
Official Meetings	11	(27.5)	19	(47.5)

that insufficient salary is the number one source of stress among deaf workers (50%). The reason for this could be the depressing socio-economic status of workers that they really desire for sufficient amount in exchange for the work output. This was followed by the nature of work (20%). Perhaps deaf workers who considered this as stressful have not been used to the routine of the jobs that is why they find it difficult to deal with. Another stress-causing situations are the unfavorable relationships with superiors and peers and the inavailability of communication means in which 15% of the respondents shared each opinion respectively. It is truly hard to perform one's tasks well if you are not in speaking terms with the people whom you work with. Moreover, the case is even twice as difficult for the hearing impaired workers who have communication problems. As Doggett (1989) suggested that employer attitudes could be improved with increased contact with the deaf workers, initiative should of course come from them. Healthy interaction should always be taken into account and breaking the barriers should be considered by them. For this the

employers should find ways on how communication can be made accessible to deaf workers. In the Philippines, one company which caters to large number of deaf workers has continuously conducted seminars and other related activities to promote staff development, loyalty and dedication to work and hires interpreters for this purpose. Stress at work will always be there. A psychologically healthy individual must learn how to deal with it so that he can go on with life and grow as a fully functioning individual. It is worth mentioning that the respondents of the study showed favorable coping mechanism with stress. A remarkable 37 cases (92.5%) revealed that they don't allow stress causing situations affect them. Instead they just continue their work and relax afterwards, an indication of a being mentally healthy individual. However, there are 3 instances (7.5%) who revealed a work-disturbing mechanism. This group disclosed that to avoid stress at work, they would just neglect the assigned tasks.

## Conclusions and Recommendations

1. The present study revealed more than a half of deaf workers are young, single and were born in Metro Manila. Most of them belong to below poverty level income. In relation to educational qualifications, all the respondents were high school graduates but there are some cases who had further academic and vocational excellence.
2. Almost half of the respondents are congenitally deaf and 90% of the total number of cases have profound degree of impairment. Interactive writing was oftentimes used as expressive and receptive mode of communication even though it is not so successful in conveying the intended message. Sign language without speech however, is frequently used with fellow deaf workers.
3. More than a half of deaf workers work in an area not related to their vocational specialization. It was noted that most of them work in semi-skilled jobs with meager salary. Despite this, they managed to render a favorable job performance.
4. It can be said that vocational adaptation is not successfully experienced by deaf workers as there is a balance between those who are satisfied and not satisfied with their present job.
5. Workers' insufficient salary was pointed out to be the main source of stress. However, they don't allow this stress to ruin them, instead, they continue with their work and relax afterwards.

With these the following recommendations are suggested :

1. Conduct a similar study utilizing big sample to establish a more representative description of the factors under study since this research is just first in the Philippines in terms of the surveyed respondents (hearing impaired)
2. Companies employing deaf workers should provide sign language instruction to hearing workers for a better interaction between the

deaf and the hearing ; they should also consider the needs of the deaf like access to communication and try to act with them accordingly

3. Review the vocational curriculum to make it more relevant to the needs of the present times
4. Legislators should pay attention to the salary administration of deaf workers so that the deaf may find working a rewarding experience.

## References

- 1) Bolton, Brian. Psychology of Deafness for Rehabilitation Counselors. University Park Press : Maryland, 1976.
- 2) Compton, Christy. Status of Deaf Employees in the Federal Government. The Volta Review, 95 (4), 1993, pp. 379- 390.
- 3) Connolly, R. Perry. A Descriptive Study of Vocational Programs in Residential Schools for the Deaf, American Annals for the Deaf, 133 (3), 1988, pp. 204- 206.
- 4) Crammatte, Alan B. Meeting the Challenge : Hearing-Impaired Professionals in the Workplace. Gallaudet University Press : Washington D. C., 1987.
- 5) Doggett, Gina. Employer's Attitudes Toward Hearing Impaired People : A Comparative Study, The Volta Review, 91 (6), 1989, pp. 269- 281.
- 6) Hurlock, Elizabeth. Developmental Psychology (4th ed.) MacMillan : New York 1992.
- 7) MacLeod-Gallinger, Janet. The Career Status of Deaf Women : A Comparative Look. American Annals of the Deaf, 137 (5), 1992, pp. 315- 325.
- 8) Mowry, Randolph and Glenn Anderson. Deaf Adults Tell Their Stories : Perspectives on Barriers to Job Advancement and On-the-Job Accommodations. The Volta Review, 95 (4), 1993, pp. 367- 377.
- 9) National Commission for the Welfare of Disabled Persons (NCWDP). Magna Carta for Disabled Persons. 1992.

Vocational Adaptation of Deaf Workers :

- 10) Vernon, Mc Cay and Jean Andrews. The Psychology of Deafness : Understanding Deaf and Hard of Hearing People. Longman : New York, 1990.
- 11) Zahn, Susan Brown and Laura Kelly. Changing Attitudes About the Employability of the Deaf and Hard of Hearing. American Annals of the Deaf, 140 (5), 1995, pp. 381-385.