



## **Research on issues to improve the access to jobs for persons with Visual Disabilities**

### **(Research Report No.138) Summary**

#### **[Keywords]**

Visual Disabilities, access to work, development of job opportunities, assistive devices, skills development, removal of barriers in the legal system

#### **[Usage of this report]**

- It has been turned out that even people with severe disabilities engage not only “sanryo” (massage, acupuncture and moxibustion therapies) which are conventional occupations but also a variety of occupations such as works which people without disabilities work for, those which require professional knowledge and experience and so on.
- In order to extend the jobs to be in charge, there are many demands to improve functions of assistive devices such as screen reading software and to provide various training opportunities for skill up.
- It is noted that professional supports are required such as allocating supporters who are familiar with PC and network and with characteristics of persons with visual disabilities and assistive devices.
- It is suggested that a person with visual disabilities can continue to work and increase jobs to be in charge regardless of his/her disabilities if the person aspires to work under the reasonably accommodated work environment.

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## 2. Survey Period

FY2015 to FY2017

## 3. Composition of the research report

Chapter 1: Purpose and method of research

Chapter 2: Historic development of efforts to enhance the vocational independence of persons with  
visual disabilities

Chapter 3: Present situation of persons with visual disabilities who have been employed

Chapter 4: Providing supporting devices in the United States: supporting systems and training  
professionals

Chapter 5: Conclusion

Appendices

## 4. Background and Purpose of Research

It is observed that a variety of efforts, such as developing job opportunities other than “sanryo” (massage, acupuncture and moxibustion therapies), have been done to try to extend jobs to be in charge of persons with visual disabilities. Especially accessibility to taking examinations for various occupational certificates/licenses have been widened and improved through reviewing of disqualifying clauses because of disabilities in the laws. A variety of employment cases have been noticed for clerical jobs utilizing development result of ICT (information and communication technology). Especially in clerical jobs utilizing ICT, efforts to have persons with acquired Visual Disability utilize their experience before acquisition in their reinstatement cases.

This research shows the historical changes of past efforts to improve “access to jobs” including developing occupations and expanding work fields in each area of the social system, technical development and employment support services. This research also aims to examine the direction and necessary measures to improve access to jobs for persons with Visual Disability.

## 5. Research Methodology

### (1) Research of literature and collecting information

#### A. Research of literature and collecting information in Japan

We have collected information which government offices and companies disclose through related literature and the internet. We have also attended various seminars and workshops and have visited related institutions for the purpose of collecting information on education, vocational training, support service for employment, social work service, accessibility to information, and so on. We have also exchanged opinions with professionals of the related fields in conferences and workshops.

#### B. Research of literature and collecting information outside of Japan

We have collected information in the United States on the development status of supporting devices for persons with Visual Disability, training for utilizing supporting devices, financial support status, etc. through the internet.

Moreover, we have contacted and have obtained information from the persons with Visual Disability in the United States whom we have been introduced by related institutions in Japan.

### (2) Hearing with experts

We have held hearing with experts; in FY 2015, about changes in the social system of rehabilitation for persons with Visual Disability and of support for employment, and about development-utilization status of assistive devices for persons with Visual Disability to use in jobs, in FY 2016, about history, current status, issues of the future, etc. of rehabilitation, vocational assessment, vocational training, vocational guidance for persons with Visual Disability, in FY 2017, about changes of support services for employment of persons with Visual Disability, about employment of them at small-to-medium-sized enterprises and about trends of policies of support for employment in the recent reform of welfare programs.

### (3) Research on the current status of persons with Visual Disability who work at companies (Research by questionnaire surveys)

For the purpose of grasping the situation of persons with Visual Disability who work for private companies, we have asked cooperation for questionnaire surveys to about 2,000 people (Some of the replies by respondents are overlapped.) by mailing lists or the like of institutions and organizations which provide vocational training and support service for employment, federation of the blind , organizations of professional of rehabilitation, etc. We have asked 36 questions in total as survey items in 7 areas. (A. the attribute of the respondent, B. circumstance when employed, C. workplace and jobs, D. status of assistive devices deployed, E. status of human support, F. attendance etc. to study and training, G. career development)

### (4) Survey by interviewing (supplement to questionnaire surveys)

For the purpose of supplementing above mentioned questionnaire surveys, we have made surveys by interviewing (Table 1).

Table 1 List of interviewees

Case	Gender	Age	Visual Disability Degree	Industries (Employers)	Assigned Job	Employment condition
1	Female	30s	1	Finance, insurance	Clerical Work	Full-time
2	Male	40s	1	Information and Communications	IT Engineer	Self-employment
3	Male	30s	1	Information and Communications	Type out the audio record for monitoring	Full-time (limited term)
4	Male	30s	2	Government, except elsewhere	Clerical Work	Full-time
5	Male	40s	1	Medical Health Care and Welfare	Medical Doctor	Full-time
6	Male	40s	1	Manufacturing	Researcher	Full-time
7	Male	50s	2	Compound Services	Sales Manager	Full-time
8	Male	50s	2	Manufacturing	Repair, Examination	Full-time

## 6. Summarized Results of the Study

### (1) Knowledge obtained by the survey of efforts for employment of persons with Visual Disability, history of the development of assistive devices, etc.

- In Japan, we see the signs of rehabilitation for persons with Visual Disability and vocational rehabilitation in early modern times. It may be said; however, that establishment of laws and service systems based on rights of persons with Disability has been improved after the post-war years of recovery.
- The undermentioned people who have developed new work fields for persons with Visual Disability have established their position trying to compensate for the disability and having them compete with sighted persons; Kazuichi Sugiyama who has discovered KANSHIN acupuncture (tube acupuncture) and has made acupuncture as vocation of persons with Visual Disability, Hideyuki Iwasaki who has developed new work fields other than 3 therapies by systematic rehabilitation and vocational training, Shinjiro Matsui who has introduced KATAKANA typewriter and voice word processor, etc.
- As to the directions of efforts for vocational independence of persons with Visual Disability in Japan, there are 2 opinions, i.e. that, as long as overviewing the development in modern history, “3 therapies are best”, and that they should explore many types jobs as a sighted person does.
- Government measures for persons with disabilities have been very much affected by international trends such as in the United Nations, especially by trends and philosophies of Western developed countries.
- Incorporation of new technologies including the development of assistive devices and establishment of systems such as support system at place of work and as barrier-free qualification examination, have contributed to the expansion of employment opportunity for persons with Visual Disability to clerical works.

### (2) Knowledge obtained through questionnaire surveys and surveys by interviewing

#### A. Characteristics of respondents of questionnaire surveys

#### a. Number of responses

We have asked cooperation to members in the mailing lists and have received positive answers from 144 people. We have received 123 responses and have found 122 as valid and 1 as invalid.

#### b. Gender and age

Male are 90 (73.8%) and female were 32 (26.2%) in valid 122 responses.

The average age was 47. The youngest was 20 and the eldest was 71. (The median age was 46.) By age group is as follows; Under 19 was 0, from 20 to 24 was 1(0.8%), from 25 to 29 were 6 (4.9%), from 30 to 34 were 11 (9.0%), from 35 to 39 were 9 (7.4%), from 40 to 44 were 24 (19.7%), from 45 to 49 were 21 (17.2%), from 50 to 54 were 16 (13.1%), from 55 to 59 were 14 (11.5%), from 60 to 64 were 10 (8.2%), from 65 to 69 were 8 (6.6%) and over 70 were 2 (1.6%). (Figure 1).

#### c. Disability levels

Disability levels were as follows; People with severe disabilities were 116 (95.1 %) (with a Grade 1 were 74 (60.7%), with a Grade 2 were 42 (34.4%), with a Grade 3 were 2 (1.6%), with a Grade 5 was 1 (0.8%), with no Physical Disability Certificates were 2 (1.6%) and unidentified was 1 (0.8%) (Figure 2).

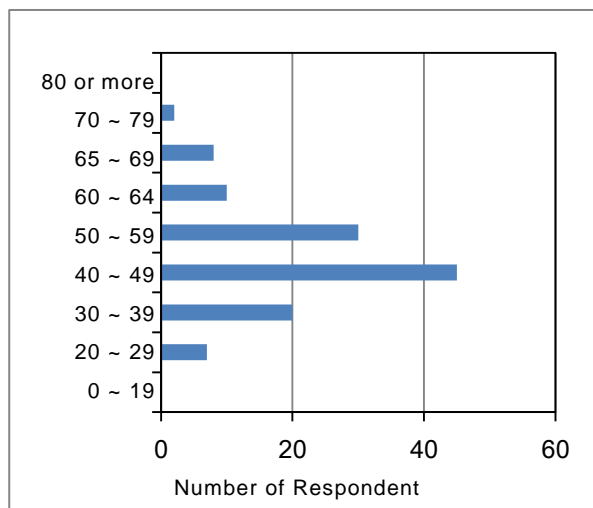


Figure 1 Age of Respondents

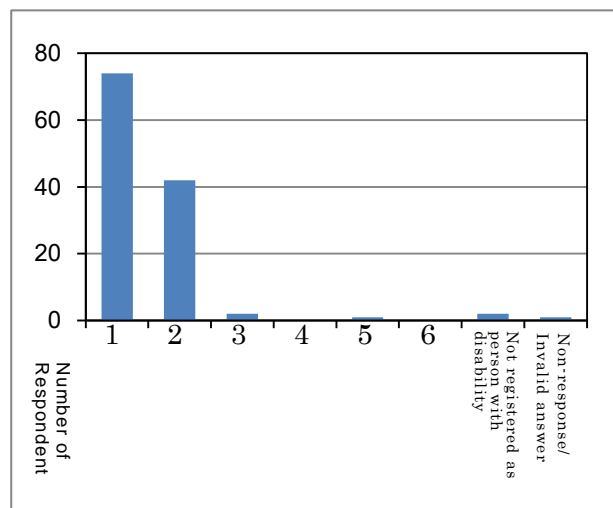


Figure 2 Disability Degree of Respondents

### B. Categories and contents of business

#### a. Categories of business

By analyzing categories of the business of the respondents according to the large classification of the Japanese industrial sector standards, we have found that persons with Visual Disability are employed by a broad range of categories of business, i.e. 13 among 20 categories of industrial sector standards. (The ratio of employees of 13 categories in all employees was 93.0%. (Labor Force Survey, 2017)) (There were 14 respondents with no response or unidentified by response.) (See Table 2.)

#### b. Contents of business

In questionnaire surveys, we have asked respondents to select among works including 13 works

which we suppose the relatively large number of people with Visual Disability engage in and other works (multiple responses). We have found their engagement in a wide range of work since there are 35 in other work categories which is the same number as 35 in 13 works (general office work - general affairs, human resources) (Table 2)

Table 2 Relation of categories and contents of the business of employments in questionnaire surveys

Assigned Jobs Industries (Employers)	Telephone operator	3 therapies etc.	Call-center operator	Salesman/Businessman	Teacher	Systems	Help Desk	Public relations	Accounting work	General office worker	Planning	Research	Manager	Others
Construction				1						2				3
Manufacturing		1				5				7	5	3		5
Information and Communications		3				4		1		3	2	1		4
Transport and Postal Services				1			1	1		1	1	1		
Wholesale and Retail Trade	1	2	1	1			1	1		1	1			1
Finance and Insurance		1				1	1			3				
Real Estate and Goods Rental and Leasing						1				2	1	1		
Academic research, professional and technical services										1	1			
Hotels/ Restaurant services										1				1
Education, Learning Support				1	11		1	1		2	2	6		1
Medical, Health care and Welfare	1	6	2	2	2	3	11	6	1	4	7	1	5	18
Services, not elsewhere classified										2				
Government, except elsewhere							1				1	2		1
<b>TOTAL</b>	<b>2</b>	<b>13</b>	<b>3</b>	<b>6</b>	<b>13</b>	<b>14</b>	<b>16</b>	<b>10</b>	<b>1</b>	<b>29</b>	<b>21</b>	<b>15</b>	<b>5</b>	<b>34</b>

\* Figures do not match to the above-mentioned figures since we have listed persons whose working categories and contents are identified.

### C. Circumstances at the time of employment and carrier development afterward

#### a. Change of the circumstances

According to the cross tabulation of circumstances and ages at the time of employment, we see more employment by employment schemes for persons with disabilities than by general employment . Government measures, and increased motivation in companies for employment of persons with disabilities since the latter half of the 1980s may have contributed it.

#### b. Consideration at the time of employment

The result of the questionnaire surveys shows 58 (47.5%) among 122 have been employed “by job offers, recruitments tests, etc. of employment scheme for persons with disabilities” and 40 (32.8%) have been employed “by general employment schemes although they are persons with Visual Disability.”

Among them, 7 of the former group and 16 of the latter group” have not received any special consideration and have taken the recruitment tests of general employment although they have advised their Visual Disability”. What have been the contents of the tests of general employment in the circumstance that there have been many persons with severe Visual Disability, i.e. 2 of the former group and 11 of the latter group have been with total blind? We cannot analyze from a questionnaire survey, however, it is considered that recruiters can judge the abilities of them to a considerable extent by interviews and by their working carrier if the jobs need professional knowledge and work qualifications, or are those where visual disability does not affect to conduct works.

c. Situation and condition of employment

From the result of questionnaire surveys, as to the relation between the situation of employment (by general employment or by employment schemes for persons disabilities) and the ratio of full-time employees, a higher ratio of full-time employees suggests the cause that persons with Visual Disability employed by general employment schemes have selected employment condition by themselves. On the other hand, it may be observed that, in the schemes for persons with disabilities, there are many conditions of work other than full-time employment, or there is no room for them to work as full-time work although they seek it.

d. Change of condition of employment

Observing persons who have changed from contract workers (non-regular staffs) to full-time employee, there are cases that they have acquired full-time worker’s position irrespective of the extent of disabilities. Tenures of work of many of them are long. On the other hand, tenures of some of them are less than 3 years. This suggests decision of transition to full-time employment is made after a certain period of time reviewing their adaptability to jobs.

e. Promotion or increase in status

From questionnaire surveys, we have found as a tendency that, in their promotion or increase in status, there are many persons who get promotion expanding working fields although a drastic change of works is not observed and that change of workplace or post have not necessarily been taken place.

f. Attendance to study and training inside and outside of the company

From questionnaire surveys, it is observed that studies and training are conducted on the presupposition that their attendance is difficult and that they cannot attend studies and training outside of the company because of the difficulty in transportation to the premises and of the lack of appropriate materials.

D. Improvement of circumstances of employment

a. Situation of human support

Questionnaire survey tells that 90% of persons with Visual Disability need human support in conducting their work and that human supports are indispensable for them. It is observed that the range of support they need is wide, i.e. some have a big problem unless the company delegates them to professional caregivers and some do not need daily support but only occasional one. It is also observed

that the contents of business and working environment affect much.

#### b. Improvement of supporting devices

For example improvement of ICT (information and communication technology) has enabled them to conduct works which they have not able to conduct before, etc. We have also noticed, on the other hand, that they struggle to deal with visualizing method, frequent version up of OS, troubles of PCs, etc.

Through surveys by interviewing, it is observed that even the persons in charge of systems have difficulty to cope with when PCs of persons with disabilities need adjustment or have troubles, and that human supports in the company are not enough to solve the difficult problems.

#### E. Needs for assistive devices

In questionnaire survey, numerous needs are raised. Many respondents look for improvement of screen readers and OCR software and some look for establishing systems like help desk which provide professional follow-up for assistive devices of persons with Visual Disability.

#### F. Needs for training

In questionnaire survey, slightly above 45% of respondents have not attended trainings and studies of assistive devices necessary for persons with Visual Disabilities. Many of them have mastered screen readers by themselves. However, it is difficult for them to cope with various matters with basic knowledge of operation. Needs for more strong support for solving problems have been observed.

#### G. Continued employment of persons with acquired Visual Disability

In questionnaire survey, we have analyzed 18 “persons who have been employed without Visual Disability at the time of employment” and have found that they all have been full-time employees at the time. Calculating ages at the time of employment from the tenure of work and educational backgrounds, almost all, except 1, are judged to have been university graduates. Tenures of work are long, i.e. from 12 to 40 years and the average is 25.7 years. We guess that it depends on to the extent of Visual Disabilities whether they resume to previous works. There are some who continue the work without leave in persons with total blindness.

#### H. Issues of social systems

In the free descriptions of questionnaire survey, we found that to pass a certain qualification examination is necessary as a condition for increasing in status. Descriptions also state that, although they can take qualification examinations in braille, it is difficult for them to secure enough information in correspondence course prepared for qualification examinations or it is practically impossible to find supporting persons for them.

In surveys by interviewing, we have found the case that the public servant interviewees challenge many promotion examinations and circumstances of taking examination have been improved by advising issues of consideration for them to take examination easier. We have also found that doctor interviewees working in hospitals report that it has become difficult for persons with Visual Disability to attend studies and training after the super-rotation system has been introduced for doctors.

#### I. Summarization



Among correspondents who have extended their cooperation for this research, majority correspondents are persons with total blind or with severe Visual Disability, and their jobs range really a wide range of work such as massage, acupuncture and moxibustion therapies, jobs which need professional knowledge and experiences, etc. Many of them have studied the operation of assistive devices such as screen reader software by themselves. They also raise specific requests of improvement of functions of assistive devices in order to expand job opportunities, and want to have opportunities to attend studies and training in the evening or on holidays in a familiar manner for improving skills of handling PCs etc. Regarding the improvement of working circumstances, it is noted that the following needs have been advocated; needs for support by professionals such as the provision of help desks for troubles of assistive devices like PCs, and needs for placement of supporting staffs who understand characteristics of persons with Visual Disability and assistive devices operation, and so on.

This research suggests that, with the will of persons with Visual Disabilities and under certain circumstances, it is possible for them to continue their work expanding their jobs to be in charge regardless of their disabilities.

## 7. Related Research report

Expansion of employment opportunities for persons with Visual Disability and support for it ? change and current status of expanding working fields other than “sanryo” -- Material Series No.35, 2006

Research on supporting measures for expansion of employment of persons with Visual Disability -- Research Report No. 91, 2009

Utilization status and direction of improvement of assistive devices for employment of persons with Low Vision -- Material Series No.65, 2012

Research on efforts for expansion of clerical working fields in companies for persons with Visual Disabilities ? Research Report No.116, 2013

Research on ways of support for employers to have persons with Visual Disability develop carriers -- Research Report No.127, 2015