A Study on the Situation of the Training of the Persons with Disability

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Abstract—**Concerning their physical and psychological disabilities, the education for the impaired people should be paid more attention. This study aims at surveying the situation of the on-line and off-line training of the disabled by the questionnaire and the in-depth interviewing. It is found that regarding the on-line or off-line training for the disabled, the disabled persons' needs and expectations should be met, considering feasibility of the website, the content of the training, the quality of the teachers and so on.**

Keywords—persons with disability; training situation; questionnaire

I. INTRODUCTION

It is reported that the total number of the disabled in China has reached 85000000. [1] As for their physical and psychological disabilities, they can't be educated in the same way as others, so it is of great significance to offer suitable and useful training for the handicapped to promote themselves for adapting to the society. The Chinese government has issued various laws and regulations for safeguarding the disabled persons' educational rights and interests. And with the rapid growth of Internet, there are more opportunities for the disabled to learn on line with much convenience for they can acquire knowledge at any proper time and place. For the disabled persons, spare-time training means a lot for them to get in touch and keep with the outside society (Li, 2002). Thus, it is of vital importance to investigate the training situation in order to provide better service for the impaired. This study aims at surveying the situation of the on-line and off-line training of the disabled by the questionnaire and the in-depth interviewing.

II. LITERATURE REVIEW

The previous researches on the education of the disabled group in China mainly are about the regulations and laws, the experiences in other countries, and the investigations into the educational situations of persons with disability. Regulations of Education of People with Disabilities guarantees the disabled persons' educational rights for better learning environment, highly-qualified teachers, and so on (Jin, 2016; Ding, 2017; Chen, 2017; Li, 2017). Some experts introduced the successful experience in other countries, such as the inclusive education in the USA[2], the Administrative Tribunal in Britain. [3] Liu (2012) analyzed the basic educational situation of persons with disability in Beijing city which is based on the data of both special and additional investigations on general conditions and needs of persons with disability.[4]

Though some studies have focused on the education of persons with disabilities, there is little research on the investigation of the on-line and off-line training for the disabled. Hu (2017) stated that it is vital to develop the on-line education for the impaired persons in modern society.[5] Hence, this study tried to answer the question: Dose the on-line and off-line training meets the needs of the persons with disabiliy? And what are their expectations for the training?

III. METHODS

A. Participants

The research sample included 285 disabled people, 130 male (45.6%) and 155 female (54.4%) altogether. They are all residents in one district in a northern city of China, and were selected on the stratified and random sampling. The impaired enrolled in this study included visual deformity (12.6%), hearing deformity (8.1%), speech deformity (0.7%), physical deformity (56.5%), mental retardation (10.2%), mental disorder (6.3%), and multiple disabilities (5.6%). 73.0 percent of them stated that they were disabled for the external factors, for instance, the car accidents, the disease and on on.

B. Instruments

The questionnaire is the main tool in this study to investigate the training condition of the disabled. The items

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[1] http://www.cdpf.org.cn/ywzz/wq_188/wqzt/2017lhtags_2697/201711/t20171101_609995.shtml

[2] Sun zhichao. The Study on the Rights of the Educators for the Disability. Education Research Monthly, 2012, (05)

[3] Lin Quanli. The System of the Special Educational Needs Tribunal in Britain and Its Implications. Chinese Journal of Special Education. 2018(10).

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of the questionnaire were designed on base of the interviews with several disabled persons and the officers working for the disabled beforehand. The researchers also looked up the concerning regulations and laws for the disable and consulted some previous studies (Liu, 2008; [6] Zeng, 2013[7]). Then the questionnaires were revised after the pilot survey among 12 impaired people. Two items were deleted for the misunderstanding and four open-ended questions were added for more detailed information. There are 4 parts in this questionnaire. The first part and the second part are about whether the candidate has taken any on-line or off-line training. If the enroller had taken any training in this recent one year, he or she were required to underline the specific content, such as the skill training, startup training, interests and so on. The third part focuses on the smartphone use of the disabled. The last part is mainly for the demographic characteristics, including the age, gender, and education experience and so on.

Interviewing is the other instrument in this research for complementing the questionnaire to obtain more detailed information and help the researcher to have a deep insight into this survey. The candidate taken in the interviewing were volunteered to join in the subsequent interviewing when they were filling the questionnaire. The outline of the interviewing is semi-structured. Eventually, there are 14 interviewees to participate in the interviewing.

C. Procedure

The survey lasted for almost two months from November to December in 2017 and was greatly supported by the community staffs responsible for the disabled. At the first stage, the postgraduate students who had been trained beforehand for this research enquired about the sample with the questionnaire face-to-face. The respondents were all asked for permission first and rewarded some gift after finishing the questionnaire. The face-to-face questionnaire was carried out during the gathering of the disabled, for the community at certain period held some activities to enrich their life, and so it was the best time for the researchers to obtain information from the sample before or after the activities. In the second stage, the telephone questionnaires were carried out for some samples had no time to attend the activities because of jobs. The telephone questionnaires were conducted during the weekend or in the off-work time as required by the samples. Finally, 312 questionnaires were collected and during the date-input procedure 285 questionnaires were considered qualified, for some candidates missed some key items of the questionnaire. As for most of the candidates, they can fill out the questionnaires with the help of the postgraduates, but for those who couldn't answer the questionnaires, their caregivers were allowed to complete the questionnaire. At the last stage, personal interviewing with some candidates and caregivers were made. Each interviewing was recorded with permission and lasted no less than 1 hour.

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[6] Liu Juan & Ma Bin. The Study and Analysis on the Education of the Disabled in Heibei Province. Tribune of Social Sciences. 2008(09).

[7] Zeng Liyan etc. Exploration and Pondering on the Distance Higher Education for Disabled Persons.Disability Research, 2013(03).

D. Statistical Analysis

The answers to the questionnaires were analyzed by SPSS. As for the answers to open-ended items in the questionnaire were encoded according to the key words. The content of the interviewing was summarized in light of the interviewing questions, such as the reasons for choosing on-line or off-line training, the opinions to the training, and the anticipation for the teachers and so on.

IV. RESULTS

A. On-line Training

Among the 285 candidates, only 24.4% of the impaired had taken part in the on-line training. The specific content of the on-line training is listed in "Table I"[8]. Except for the on-line training mentioned in the questionnaire, the other on-line training the candidates mentioned included the accountant training, the gardening, the vocality study, taijiquan, business management, Chinese chess and so on. Though there were various trainings, it was obvious that the number of candidates taking the on-line training was far smaller.

TABLE I. THE INFORMATION OF THE ON-LINE TRAINING

Types	Content	Frequency	Percentage
Skills training	Blind Massage	6	18.2
	Handicraft	8	24.2
	Design	1	3.0
	Computer skills	14	42.4
	Hairdressing/Cooking	8	24.2
	Others	11	33.3
Start-up training	Policy learning	17	77.3
	experience learning	4	18.2
	E-commerce Learning	3	13.6
	Others	3	13.6
Interests and Hobbies	Calligraphy	12	28.6
	Drawing	11	26.2
	Body-built	18	42.9
	Dancing	11	26.2
	Others	18	42.9

The candidates who had taken the on-line training noted they learnt on the Internet through the government website especially for the disabled (the official website of the China Disabled Persons' Federation,), organization or university's online courses, and various kinds of APPs. Most of the websites and Apps are not only for the impaired, so some candidates complained that the operation were too complicated for them. One candidate of visual deformity said he seldom had the on-line training because of the lack of voice instructions.

"Table II" is for the comparison between the candidates with the answer of "yes" (on-line training) and with the answer of "No" (no on-line training). The chi-square test result shows that it is significantly interrelated concerning the gender (sig=0.528>0.05), but it has significant difference in the age stage (sig=0.01<0.05) and the education level (sig=0.01<0.05) for fewer elder candidates would rather take

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[8] Note: the candidates can choose more than one answer according to their own experience.

the on-line training in contrast with the younger candidates, and candidates with higher education were more likely to attend the on-line training.

TABLE II.   THE DEMOGRAPHIC CHARACTERISTICS WITHIN THE ONLINE TRAINING

		Yes	No
Gender	Male	49.2	44.6
	Female	50.8	55.4
Age stage	19-30	21.7	78.3
	31-40	34.8	65.2
	41-50	27.4	72.6
	51-60	18.7	81.3
	61 above	8.8	91.2
Education	High School	14.80	85.20
	University	36.00	64.00
	Postgraduate	33.30	66.70
	Uneducated	0.00	100.00

B. Off-line Training

64.2% of the candidates had taken the off-line training, which is larger than the number of the candidates for the on-line training. "Table III" lists the concrete content of the off-line training.[9] As the data in "Table III" shows interests and hobbies are the main content of the off-line learning. The other off-line trainings mentioned by the candidates included various themes of learning, such as the law, the rehabilitation, Internet and mobile usage, mental health and so on.

TABLE III.   THE INFORMATION OF THE ON-LINE TRAINING

Types	Frequency	Percentage
Academic education	46	18.3
Skills training	73	29.1
Start-up training	15	6.0
Interests and Hobbies	96	38.2
Others	21	8.4

"Table IV" reveals the demographic characteristics the off-line training participants and the none-off-line training participants. The chi-square result has no significant difference in gender (sig=0.389>0.05), age stage (sig=0.517>0.05) and education (sig=0.232>0.05). It means that the factors of age, gender and education level didn't affect the candidates to take part in the off-line training.

TABLE IV.   THE DEMOGRAPHIC CHARACTERISTICS WITHIN THE ONLINE TRAINING

		Yes	No
Gender	Male	61.5	38.5
	Female	66.5	33.5
Age stage	19-30	78.3	21.7
	31-40	60.9	39.1
	41-50	58.9	41.1
	51-60	65.3	34.7
	61 above	66.2	33.8
Education	High School	60.3	39.7
	University	73.0	27.0
	Postgraduate	66.7	33.1
	Uneducated	0.0	0.0

C. Mobile Phone Usage

Among the 285 candidates, 90.5% of them owned the smartphone, 6.3% non-smartphone users and 3.2% impaired people without any phones. For the smartphone users, 17.9 percent of them surfed on Internet for almost one hour per day; 22.1% of them claimed the time on line one day was between one hour and two; 23.6% of the smartphone owners spent almost 3 hours the time on web; 8.1% of them used smartphone between five hour and eight hours; 15.5% smartphone takers played on the Internet more than eight hours. It is evident that using intelligent phone in daily life is common among the candidates. (See "Table V")

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[9]   Note: the candidates can choose more than one answer according to their own experience.

TABLE V. THE INFORMATION OF TELEPHONE USAGE

		Smartphone users	Non-smartphone users	No phones
Gender	Male	90.0	8.5	1.5
	Female	91.0	4.5	4.5
Age	19-30	95.7	0.0	4.3
	31-40	95.7	2.2	2.2
	41-50	95.9	1.4	2.7
	51-60	89.3	9.3	1.3
	61 above	90.9	13.2	5.9
Education	High School	87.8	7.9	4.2
	University	97.8	1.1	1.1
	Postgraduate	100	0.0	0.0
	Uneducated	66.7	33.3	0.0

V. DISCUSSION

The training situation for the disabled are summarized as follows:

Most of the disabled can use the smartphone with easy, which has created good chance for them to learn through Internet. In the interviewing, most of the candidates expressed that Internet had played an essential role in their life, and they could do a great number of things on it. They can communicate with friends through Wechat[10]; they can watch the online video at any time; they can access to information easily by searching the Internet with the weather broadcasting, the traffic jam, the supermarket discount and so on. While it also should be paid attention to the needs and expectations from the senior impaired, who said that surfing on line was beyond their ability. One 74- year-old candidate told that he received information by the radio for the usage of smartphone was too difficult for him to handle with. For some blind persons, the website without voice instructions hinders their use.

For most of the candidates, they preferred to learn off-line. One reason is that the on-line training is not only for the disabled and can't fit the candidate's needs. One interviewee expressed that the on-line courses were so boring and he couldn't consult the teacher when he was puzzled. One caregiver in the interviewee said that the number of the on-line courses was limited, for she couldn't find the lessons she was eager to study.

The employment training is the most popular course among the disabled, as they are longing for a suitable job within their ability to earn the bread and contact with the outside world. For instance, one 31-year-old interviewee expressed his eagerness to find a new job after the car accident and hoped to learn more. The training of hobbies and interests was welcomed by many candidates who were retired and those who couldn't work outside. One caregiver whose daughter was born of cerebral palsy said to the researcher she took her daughter to take part in the off-line courses every time as her daughter was happy to drawn traditional Chinese painting.

VI. CONCLUSION

Regarding the on-line or off-line training for the disabled, the disabled persons' needs and expectations should be met, considering feasibility of the website, the content of the training, the quality of the teachers and so on. The investigation of the training revealed that the on-line training should be improved. It seemed that the the number of the website and the APPs designed for the impaired is not enough; websites and the APPs even that are not particularly for the disabled group should also try to meet the disabled needs, such as the voice-instructed service for the blind. Creating the user-friendly interface should arouse the whole society's attention.

Furthermore, some interviewees' response showed that they wanted more contact with the society, so it is critical that the communication with the learners is as important as imparting knowledge. As some samples were dissatisfied with the on-line training for they couldn't communicate with the teachers as the course were recorded beforehand. It is recommended that the on-line training can adapt method of the live streaming video. In addition, the content of the training should be up-to-date, as the courses to teach the disabled to use the latest APPs.

In conclusion, the training for the disabled people requires the government and organization support, the implementation and the course design. Nowadays, with the rapid development of the Internet and the mobile Internet, it is necessary to develop network courses, which focus on the basic needs of the disabled, and emphasize the convenience and friendly-use for the learner. The on-line and off-line training should complement with each other and offer more useful help towards the impaired group who should be cared about more than others.

This study investigated the training for the disabled groups and their expectations for the training, which can throw light on the further studies with larger sample sizes and different research methods.

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[10] Note : the most popular social media in China.

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