

Support Needs and Service Provision for Social Participation of Persons with Intellectual Disabilities

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Abstract: *Background:* Person-centered support based on self-determination is needed for persons with intellectual disabilities to participate in society in Japan. However, work supporters may be unable to provide sufficient support for this purpose.

Objective: This study analyzes work supporters' implementation of necessary support to understand persons with intellectual disabilities' support needs.

Methods: This study compared persons with intellectual disabilities' support needs with the implementation of support from work supporters at vocational rehabilitation agencies (Survey 1) and the support needs of persons with intellectual disabilities (Survey 2).

Results: The results showed that the persons with intellectual disabilities most required support related to daily living. This was consistent with the support provided by the work supporters. However, there were situations wherein the smooth transition of support was not provided, which was attributed to the lack of knowledge and cross-disciplinary involvement of the work supporters in the employment-related welfare services for persons with disabilities.

Conclusions: Possessing the knowledge and skills required for vocational rehabilitation and working in vocational rehabilitation agencies could contribute to the smooth transition of support for persons with intellectual disabilities. Accordingly, the results can clarify the required role of work supporters for persons with intellectual disabilities future participation in society.

Keywords: Intellectual disability, social participation, vocational rehabilitation, self-determination, needs, assessment.

INTRODUCTION

To support persons with disabilities, it is important to examine objectives based on their needs and make efforts to achieve the desired outcomes. In vocational rehabilitation, this person-centered approach makes it possible to provide support that respects the individuality of clients from diverse backgrounds to achieve a smooth transition of client support [1, 2]. When implementing this person-centered approach, it is necessary to support persons with disabilities self-determination. Doing so can better support their education and transition [3-6]. The ability to self-determine consists of having to control beliefs that are voluntary (i.e., intentional and based on the person's interests and preferences), proactive (i.e., goal-oriented), and behavioral (i.e., the belief that the behavior will lead to the furtherance of one's goals). Thus, a person with the ability to self-determine will be better able to lead their life [7]. Even if a person has a disability, having the ability to self-determine in order to

live their life better is considered a major advantage for participation in society.

While the importance of self-determination is understood, the literature has pointed out difficulties in supporting the self-determination of persons with intellectual disabilities. For example, based on interviews with work supporters of persons with intellectual disabilities in adulthood, Ohashi and Tomita identify the work supporters' lack of understanding regarding the need to apply the results of their support to real-life situations when developing support for self-determination [8]. Endo conducts a theoretical study of the content of self-determination support for persons with intellectual disabilities and reveals that work supporters tend to have been insufficient understanding of the need for social outreach because of their implicit understanding that persons with disabilities have inadequate abilities to make judgments and decisions [9]. Based on a literature review and case study, Nishimura points out the dangers of power relations between work supporters and persons with intellectual disabilities and the need for supporters to reflect on their own perceptions of persons with disabilities [10]. Thus, there is potential for

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work supporters to neglect their clients' self-determination, especially when supporting persons with intellectual disabilities.

Therefore, work supporters must be continually conscious of keeping their clients at the center and providing support based on their client's needs. Using a staff survey at a community living support center, Suzuki reports that the factors that guarantee opportunities for self-determination include the need for work supporters to provide opportunities for choices, decision-making, and independence [11]. Moreover, from a survey of persons with disabilities who use group homes, Suzuki also reports that to provide opportunities for self-determination, there must be a clear program for transition support, sufficient awareness related to self-determination among the community and facility staff, and parents and relatives understanding [12]. Yonamine, Okada, and Shirasawa also assert the need to redefine the support of self-determination as a task not simply for an individual but as a task that interacts with the environment, such as the perception of the work supporters and the support methods that they provide [13]. These studies have suggested that when implementing support based on clients' needs, it is important for clients to make independent choices and for work supporters to understand clients' needs.

As a criticism of paternalism, a work supporter's application of the support system framework without confirming their client's wishes will eliminate the possibility of persons with intellectual disabilities participating in society. In a survey of parents of persons with intellectual disabilities, Brown, Anand, Fung, Isaacs, and Baum reveal that families have dynamic needs, and the need to provide support considers each family's individual needs [14]. From their survey of the support needs of both persons with intellectual disabilities and their families, Vilaseca *et al.* also state that to improve quality of life, work supporters must take both a person and family-centered approach [15]. Understanding that some gaps exist between the work supporters' intentions and the client's needs is very important to implement the support that clients truly need properly.

Few studies have been conducted in Japan that examine the support needs of persons with intellectual disabilities in terms of social participation, the gap between these needs, and their work supporters' perceptions. Addressing this gap is expected to provide valuable data for work supporters to provide more

professional support in the future implementation of vocational rehabilitation in Japan. Therefore, this study is based on the following research questions: (i) What support needs do persons with intellectual disabilities have in Japan? (ii) What support needs of persons with intellectual disabilities are consistent or inconsistent with the support needs that they have and their work supporters' perceptions?

METHOD

This study administered two surveys with the same item content to both work supporters engaged in vocational rehabilitation (Survey 1) and persons with intellectual disabilities (Survey 2) and then compared the survey results.

Survey 1

Participants

Survey 1 included the work supporters at all 336 employment and livelihood support centers for persons with disabilities in Japan.

Procedure

The surveys were mailed to all employment and livelihood support centers for persons with disabilities between October 15, 2021, and November 19, 2021. Five sets of survey forms were mailed to all centers with the request that they would be distributed to all work supporters affiliated with the centers. The survey respondents were asked to return the surveys with a self-addressed envelope after completion.

Survey Items

Basic Attributes

The basic attributes included sex; age as of October 1, 2021; years of work support; years of education; and qualifications possessed.

Intake Assessment and Outcome Evaluation-Japanese Version

This study used the assessment content of the Intake Assessment and Outcome Evaluation (IAOE) for the items in the survey instrument. The IOAE is an assessment tool that was reorganized by Dr. Kundu and colleagues at the Department of Rehabilitation and Disability Studies in America [16]. The IOAE was created based on the content originally created by Geist and Calzaretta, which was field tested and verified for reliability by Dr. Kundu and colleagues [17]. In the current study, the IOAE was translated into

Japanese via back-translation and used for the survey items [18].

Alike the English version, the Intake Assessment and Outcome Evaluation-Japanese Version (IAOE-J) consists of eight subsystems: client (15 items), health (6 items), education (6 items), family (7 items), society (10 items), employer (8 items), placement (7 items), and funding (13 items). There are 72 items in total.

The survey implemented the 72 items to assess the situation of persons with intellectual disabilities on a 5-point scale (1 = not at all, 2 = not very much, 3 = undecided, 4 = somewhat, and 5 = frequently). The respondents' scores were used as the total scores for the IAOE-J.

Survey 2

Participants

Survey 2 included 316 parents of persons with intellectual disabilities in one city located in a rural area of Japan.

Procedure

This study contacted the office of an organization for persons with intellectual disabilities in the city where the survey subjects resided to ask for their cooperation in conducting the survey. Between January 14, 2022, and February 10, 2022, this study mailed the survey to the parents of persons with intellectual disabilities who were registered with the organization. The survey respondents were asked to return the survey form with a self-addressed envelope after completion.

Survey Items

Basic Attributes

The basic attributes included the parents' attributes and age as well as the target respondents' age, sex, certificate of possession, current affiliation (in school, general business, welfare facility, home, and other), and whether the target respondent had worked in a company.

IAOE-J

The items were the same as those in the IAOE-J, consisting of 72 items and 8 subsystems. For each item of the IAOE-J, the following scores were used to measure support needs: 1 = not at all necessary, 2 = not very necessary, 3 = neither necessary nor necessary, 4 = somewhat necessary, and 5 = very necessary. The scores were used as the needs scores (NS).

The IAOE-J is shown in the Supplementary Material.

Analysis Method

This study conducted simple tabulations for the basic attributes of Surveys 1 and 2. This study calculated the mean and standard deviation of the NS in Survey 2. The mean scores were reordered from highest to lowest to show the ranking of the top and bottom 10 items. This study also calculated the differences between the mean of the IAOE-J in Survey 1 and the mean of the NS in Survey 2.

Ethical Considerations

This study was approved by the Ethics Review Committee for Research on Human Subjects at Akita University Tegata District (No. 3-27, dated October 28, 2022).

RESULTS

Work Supporters' Basic Attributes

A total of 346 work supporters (134 males, 209 females, and 1 other) responded to Survey 1. They are practitioners in vocational rehabilitation in Japan with an average of 10 years of experience in work support. Table 1 shows their basic attributes.

A total of 54 parents of persons with disabilities responded to Survey 2. Table 2 shows their basic attributes. About 80% of the targeted persons with intellectual disabilities graduated from a high school for special needs and are currently in some kind of employment-related training at a welfare facility. About 90% have no experience in company employment.

Top- and Bottom-Ranked Items of the NS for Persons with Intellectual Disabilities

The NS ranking was based on the average NS of the survey items for persons with intellectual disabilities. Table 3 shows the top 10 items. The items with the highest rank relate to support aspects of daily life, such as health, money management, and lifestyle. The items ranked; first, second, fourth, fifth, seventh, and tenth relate to aspects of daily living, and the persons with intellectual disabilities' NS for these aspects are high.

Table 4 shows the bottom 10 items in the NS ranking. Items with low NS relate to support issues arising from religious beliefs (first and second place)

Table 1: Work Supporters' Basic Attributes

Sex	<i>N</i>	%
Male	134	39.0
Female	209	60.8
Other	1	0.3
	Mean	SD
Age (<i>N</i> = 337)	45.0	10.60
Years of experience (<i>N</i> = 323)	10.9	8.71
Years of education (<i>N</i> = 342)	14.9	1.61
Number of cases per week (<i>N</i> = 342)	15.6	17.55
Number of qualifications	<i>N</i>	%
Vocational counselor for persons with disabilities	0	0.0
Job coach	64	18.5
Social worker	95	27.5
Mental health social worker	62	17.9
Industrial counselor	5	1.4
Occupational therapist	5	1.4
Clinical psychologist/certified psychologist	7	2.0
Certified care worker	63	18.2

SD: Standard deviation.

Years of experience: Years of work supporting engagement.

Years of education: Total years of education.

Table 2: Persons with Intellectual Disabilities' Basic Attributes

Respondent's relationship				
Type of relationship	<i>N</i>	%		
Father	22	40.7		
Mother	30	55.6		
Other	2	3.7		
	Mean	SD	Min.	Max.
Age	67.6	11.5	48	93
Persons with ID				
Sex	<i>N</i>	%		
Male	39	72.2		
Female	14	25.9		
Other	1	1.9		
	Mean	SD	Min.	Max.
Age	37.8	13.1	18	68
Type of certification	<i>N</i>	%		
Medical rehabilitation handbook	53	98.1		
Grade A/Severe	27	50.0		
Grade B/Mild	23	42.6		
Other	4	7.4		
Physical disability certificate	11	20.4		
Mental disability certificate	0	0		

(Table 2). Continued.

Final educational level	N	%		
Elementary school	1	1.9		
Junior high school	1	1.9		
Junior high school for special needs	1	1.9		
High school for special needs	44	81.5		
Professional training college	1	1.9		
Other	3	5.6		
Blank	3	5.6		
Employed in company	N	%		
Yes	2	3.7		
No	49	90.7		
Blank	3	5.6		
Use of employment-related disability welfare services				
	Mean	SD	Min.	Max.
Number of days per week	5.04	0.33	4	6
Hours per day	6.01	1.13	3	8

ID: Intellectual disability.
SD: Standard deviation.
Min.: Minimum value.
Max.: Maximum value.

Table 3: Ranking of the Top 10 NS

Ranking	Items	Mean	SD
1	Support for the client's daily life, such as health, money management, lifestyle, and so on	4.40	0.80
2	Support for the client to acquire skills for independent living, such as eating, doing laundry, maintaining the rhythm of life, and so on	4.34	0.90
3	Support for the client to understand social service agencies and other non-governmental support organizations	4.10	0.93
4	Support for the client's communication, such as greetings, reporting, communicating, consulting, and so on	4.06	0.98
5	Support for the client to receive the public disability pension	3.98	1.38
6	Support for the client's mental health, such as mental weakness, excessive anxiety or nervousness, and so on	3.98	1.02
7	Support for the client's hygiene, such as bathing, grooming, shaving, and so on	3.96	1.16
8	Support for the client's primary disability, such as upper and lower limb loss, autism disorder, schizophrenia, memory impairment, and so on	3.94	1.16
9	Consideration of financial support from social welfare corporations or other non-governmental organizations	3.88	1.09
10	Provide information on local social resources needed by clients	3.86	1.12

NS: Need Score.
SD: Standard deviation.

and items related to culture and race (sixth and seventh place). The items ranked third, fourth, eighth, and tenth relate to education. The persons with intellectual disabilities' NS are low for these items.

Differences Between the NS and IAOE-J Scores

This study calculated the differences between the NS and IAOE-J scores. Table 5 shows the top 10 items with higher scores for the IAOE-J than the NS. Large

differences are observed in the items ranked first through fifth and seventh, ninth, and tenth. These items relate to specific support as well as work support procedures at a company.

Table 6 shows the top 10 items with higher scores for the NS than the IAOE-J. Differences are identified in the items ranked first through sixth, which relates to the assessment of persons with intellectual disabilities.

Table 4: Ranking of the Bottom 10 NS

Ranking	Items	Mean	SD
1	Support for the client's religious-related issues	1.90	1.28
2	Identification of issues related to the client's religion	2.00	1.36
3	Support for clients to enter college or other higher education	2.16	1.33
4	Support for clients to receive repayable scholarships	2.18	1.35
5	Support for parenting the client's child	2.20	1.52
6	Support for client's cultural and racial-related issues	2.20	1.54
7	Identification of issues related to the client's culture and race	2.22	1.57
8	Support for clients to graduate from high school	2.24	1.34
9	Support for client's use of prosthetics and orthoses	2.28	1.60
10	Support for clients' receipt of loan-based scholarships	2.29	1.43

NS: Need Score.

SD: Standard deviation.

Table 5: Items with Higher Scores for the IAQE-J than the NS

Ranking	Difference	NS	IAOE-J	Items
1	-1.93	2.71	4.64	Support for clients to register with the Public Employment Security Office, and so on
2	-1.85	2.57	4.42	Support for the client's receipt of employment insurance
3	-1.57	2.92	4.49	Support for client's job search activities
4	-1.56	2.92	4.48	Support for client's workplace training
5	-1.23	3.29	4.52	Support clients to reflect on their work history and consider coping strategies
6	-1.17	2.20	3.37	Support for parenting the client's child
7	-1.10	2.96	4.06	Support for the client's use of a job coach
8	-1.10	3.17	4.27	Support for the client's relationships with family members
9	-1.05	3.15	4.19	Support for perceptions and prejudices that companies have about disabilities
10	-1.05	3.18	4.22	Support the client's access to vocational rehabilitation services

NS: Need Score.

IAOE-J: Intake Assessment and Outcome Evaluation-Japanese Version.

Table 6: Items with Higher Scores for the NS than the IAQE-J

Ranking	Difference	NS	IAOE-J	Items
1	2.15	3.75	1.60	Personality testing to understand the client's personality
2	1.90	3.33	1.43	Intelligence test to understand the client's intellectual level
3	1.56	3.40	1.83	Vocational interest testing to understand the client's vocational interests
4	1.28	2.87	1.58	Academic achievement tests to understand the client's abilities
5	1.23	3.40	2.17	Vocational aptitude testing to understand the client's vocational aptitude
6	1.14	3.37	2.23	Vocational assessment to understand the client's vocational abilities
7	0.98	3.47	2.49	Support for client's use of life insurance and so on
8	0.77	2.65	1.89	Support for clients to receive scholarships and so on
9	0.65	2.96	2.31	Support for labor unions and other organizations in the company for support and cooperation
10	0.53	2.29	1.76	Support for client's receipt of loan-based scholarships

NS: Need Score.

IAOE-J: Intake Assessment and Outcome Evaluation-Japanese Version.

Table 7: Items with Differences between the NS and IAOE-J Scores of 0.10 or Less

Difference	NS	IAOE-J	Items
0.06	4.40	4.34	Support for the client's daily life, such as health, money management, lifestyle, and so on
-0.05	3.96	4.01	Support for the client's hygiene, such as bathing, grooming, shaving, and so on
-0.04	3.65	3.69	Support for the client's receipt of public welfare assistance
0.00	3.18	3.17	Support for the client's use of financial assistance
0.07	2.44	2.37	Identification of issues related to the client's spoken language
-0.04	2.43	2.48	Support for the client's self-study
0.06	2.40	2.34	Support with issues related to the client's spoken language
0.02	2.22	2.20	Identification of issues related to the client's culture and race
-0.01	2.20	2.21	Support for client's cultural and racial-related issues

NS: Need Score.

IAOE-J: Intake Assessment and Outcome Evaluation-Japanese Version.

Table 7 shows the items for which the differences between the NS and IAOE-J scores are 0.10 or less. Items with a high agreement between the NS and IAOE-J relate to living and hygiene, public assistance, and financial assistance. Conversely, items with the low agreement between the NS and the IAOE-J scores include language, culture, race, and obtaining credentials. Many of these items are similar to those ranked top and bottom 10 in the NS.

DISCUSSION

This study examines the relationship between the support needs of persons with intellectual disabilities who receive work support at welfare agencies and the work supporters affiliated with the vocational rehabilitation agencies that provide work support. The main support needs of persons with intellectual disabilities include money management, lifestyle, meals, laundry, hygiene, leisure time, and other items related to life outside of the workplace. The persons with intellectual disabilities targeted herein were users of employment-based disability welfare services. About 90% of them had no experience in company employment. In Japan, welfare agencies that provide work support are referred to as employment-related welfare services for persons with disabilities. The Employment and Livelihood Support Center for Persons with Disabilities, which was the subject of Survey 1 herein, is a vocational rehabilitation agency that provides support for employment in the workplace. In addition to vocational rehabilitation institutions, there are three types of welfare institutions that provide employment-related welfare services for persons with disabilities: Employment Transition Support Facilities (ETS), Continuous Employment Support Type A

Facilities (CES-A), and Continuous Employment Support Type B Facilities (CES-B). ETS provides work support to persons with disabilities who wish to work for companies for a maximum of two years. CES-A provides employment opportunities based on employment contracts, with no upper limit on the period of use for persons with disabilities who have not been able to find employment at companies. CES-B provides the improvement of employment issues and opportunities for employment, with no upper limit on the period of use.

The career paths of many persons with intellectual disabilities in Japan's high schools for special needs from which many graduates each year show that 34.4% transition to employment in companies, while 59.8% transition to welfare facilities, including employment-related welfare services for persons with disabilities, thus confirming the previous finding that the majority of persons with intellectual disabilities transition to employment-related disability welfare services [19]. In ETS, the transition to company employment is clear because of the two-year period of use and the mobility of users. Meanwhile, in CES-A and CES-B, where there is no upper limit to the period of use, there is less mobility in terms of users' transition to the next step. According to the Ministry of Health, Labor and Welfare, which has jurisdiction over employment-related welfare services for persons with disabilities, the transition rate of ETS to company employment exceeds 50% and is gradually increasing, while the rates for CES-A and CES-B remain flat or decline. Moreover, there are marked differences in performance among individual facilities, while many of the facilities have never placed any of their employees in general employment in the first place [20]. The

participants herein had no prior employment experience and had used employment-related welfare services for disabilities for a long time. Therefore, it is possible that their last opportunity to choose a career path was when they were graduating from special-needs schools. A reason why the participants herein expressed many support needs related to daily life may have been because their current goals in life were more related to how they would live their lives rather than how they would transition to company employees.

When supporting persons with intellectual disabilities' social participation, it is useful to provide support and training that is in parallel so as to consider both the present situation of how they will live their lives as well as their future transition to company employees. Based on a case analysis of the support for persons with intellectual disabilities to transition into the community, Horiuchi points out that it is necessary to nurture not only daily living skills but also the will of the persons with disabilities to transition into the community, as well as develop their ability to self-determine, which is a precondition for their attitude toward life in the community [21]. Onozato and Iwasaki's study of the readiness of persons with intellectual disabilities for transition support report that the presence or absence of work goals positively influences the acquisition of items of vocational readiness [22]. Thus, it is necessary to engage persons with intellectual disabilities participate in society by both supporting their current needs and providing opportunities for their future transition to society and by setting goals to achieve this. Considering the current reality of persons with disabilities low transition rate from work support welfare services in Japan [20], it is conceivable that the required support for their social participation is not adequately provided. The current study reveals that the support needs of persons with intellectual disabilities tend to coincide with the vocational rehabilitation agencies' implementation of support; thus, the key to breaking through the current issues can be found here. In short, a reason that this transition has not been successful may be because there are few points of contact between persons with intellectual disabilities who wish to be supported and the vocational rehabilitation agencies that provide the support. Accordingly, to create a point of contact, employment-related welfare services for persons with disabilities will need to play a major role. Maebara and Yaeda report that there is potential for collaboration with vocational rehabilitation agencies to enhance work support and promote the transition of users in work supporter programs [23]. To support and encourage

the connection between persons with intellectual disabilities and vocational rehabilitation agencies, it will be necessary to make more information available on social resources to help persons with intellectual disabilities to find employment so as to improve their transition rate and promote their participation in society may be promoted.

LIMITATIONS AND FURTHER STUDY

The persons with intellectual disabilities targeted herein were limited to those living in one rural part of Japan that has few social resources and limited infrastructure, such as public transportation. Therefore, the actual situation may differ from that of persons with intellectual disabilities in Japan as a whole. However, the data obtained herein are certainly valuable in showing this aspect in Japan since Wark points out the importance of considering the geographical factors where persons with intellectual disabilities live [24]. The current study believes that it is difficult to clarify the realities of the lives of persons with intellectual disabilities by standardizing or conducting research in urban areas alone. In particular, when studying the social participation of persons with disabilities, it is necessary to understand the actual circumstances in detail rather than the average-scored reality in a rural area with few social resources. Nevertheless, since this study was conducted from this perspective, the authors believe that it can provide data that will contribute to future improvements in local administration.

Further, the open-ended responses in the surveys administered herein frequently contained statements related to the respondents' concerns regarding the lives of persons with intellectual disabilities after the death of their parents; in this study, the respondents were their parents. The survey also included persons with intellectual disabilities who used employment-based disability services and who were at a level of disability wherein training and support for ongoing social participation were essential for their current situation. Conversely, persons with intellectual disabilities who are currently employed by businesses may have increased needs for items that differ from those related to their daily lives. The differences that arise depending on their current affiliation should be clarified in future surveys.

CONCLUSION

This study assesses the relationship between the support needs of persons with intellectual disabilities and the work support provided by vocational

rehabilitation agencies. The results show that the persons with intellectual disabilities' high support needs relate to aspects of daily living. These support needs for daily living are consistent with the support implemented by the work supporters. However, there appears to be a gap between the support needs and the implementation of support in terms of access to support services. Therefore, it is necessary for work supporters in employment-related welfare services to have the knowledge and skills required to bridge this gap. The results of this study can clarify work supporters' required role in the future social participation of persons with intellectual disabilities.

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ETHICAL CONSIDERATION

This study was approved by the Ethics Review Committee for Research on Human Subjects at Akita University Tegata District (No. 3-27, dated October 28, 2022).

CONFLICT OF INTEREST

No potential conflict of interest was reported by the authors.

SUPPLEMENTAL MATERIALS

The supplemental materials can be downloaded from the journal website along with the article.

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