

Factors related to the continued employment of people with brain injuries

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Abstract

Under the Act on the Promotion of Employment of Persons with Disabilities, the employment rate for people with disabilities has been increasing year by year. On the other hand, cognitive impairments resulting from brain injuries—such as those caused by traffic accidents—are often difficult to detect at first glance. These individuals frequently face difficulties in securing or maintaining employment. One of the factors cited for this is the difficulty employers face in providing appropriate support. The purpose of this study is to identify the factors necessary for the successful employment of individuals with acquired brain injuries by examining the perspectives of both the individuals themselves and their employers. During the grant period, we completed a survey of [...]. We focused on employers who had experienced difficulties in retaining employees and conducted data analysis. The results indicated that in the workplace, symptoms involving a broader range of the brain—such as those affecting social interaction, mental distress, and deteriorating interpersonal relationships—were more significant than apraxia or agnosia. Furthermore, the findings suggested that it is difficult for employers to provide constant support. This study contributed to the development of employment support techniques for both individuals with brain injuries and employers within the field of vocational rehabilitation.

1. Aim of Research

The purpose of this study is to identify the factors related to both individuals with acquired brain injuries and employers that are necessary for the continued employment of such individuals. Specifically, the objectives are as follows.

1-1 Factors related to individuals

We will focus on the cognitive and metacognitive functions of individuals with brain injuries. We will examine these functions quantitatively and qualitatively by comparing individuals who have continued employment, those who have not continued employment, and those who are not currently employed.

1-2 Regarding Employer Factors

The study will target employers who have continued to employ individuals with brain injuries and those who have not. Through semi-structured interviews, we will examine the employers' provision of workforce assistance and support, as well as the burdens they face.

2. Method of Research & Progression

2-1 Data Collection

- (1) 30 participants with acquired brain injury

Inclusion Criteria

- ① Individuals who have been continuously employed at a single workplace for a certain period of time,
- ② Individuals who have experienced difficulty continuing employment at a single workplace,
- ③ Individuals with no prior work experience

Survey Items

- ① Cognitive Function: Japanese version of the Montreal Cognitive Assessment (MoCA-J);
- ② Metacognitive Function: Questionnaires (Japanese version of the Awareness Questionnaire; AQ-J, Japanese version of the European Brain Injury Questionnaire; EBIQ-J, Japanese version of the Self-Regulation Skills Interview; SRSI);
- ③ Semi-structured Interview: Manifestations of difficulties in daily life and work settings, and coping behavior

s and strategies

(2) 20 Employers

Inclusion Criteria

① Workplaces that have continuously employed individuals with acquired brain injuries for a certain period (approximately one year); ② Workplaces where it was difficult to maintain continuous employment of individuals with acquired brain injuries for a certain period (*Eligibility applies only if the individual consents to an interview with the employer after the survey of the individual is completed)

Survey Items

①Semi-structured interviews: The individual's employment status and job duties, challenges encountered in the workplace, specific support measures (including reasonable accommodations), and the burden of providing such support

2-2 Data Analysis

(1) Results for Participants

Quantitative Analysis

We will compare the three groups—the continued employment group, the non-continued employment group, and the unemployed group—using inferential statistics.

Qualitative Analysis

We will create verbatim transcripts of the results from the Japanese version of the SRSI and the semi-structured interviews, and use the qualitative research software NVivo, along with text mining and content analysis methods, to categorize and conceptualize the data.

(1) Survey Results for Employers

Verbatim transcripts were created from the semi-structured interview data, and the data was categorized and conceptualized using the qualitative research software NVivo, along with text mining and content analysis methods.

2-3 Research Progress

During the grant period provided by your foundation, we completed data collection from the individuals involved and their close

relatives. We plan to continue data collection this fiscal year while increasing the number of participants.

We conducted a qualitative analysis of data from workplaces among the participating businesses that had experienced difficulty maintaining employment for a certain period (workplaces with a history of difficulty in maintaining employment). The findings were presented at the World Federation of Occupational Therapists (19th WFOT Congress 2026, Bangkok).

3. Results of Research

Participants are 7 employers and 7 employees with brain injuries. For each employer, semi-structured interviews were conducted and recorded. The interview guide included items such as checklists of cognitive symptoms, difficulties during work, reasonable accommodations, and burdens of employers. All interviews were transcribed and inductively and qualitatively analyzed.

The resulting codes were 191, and the categories were 10. The categories with the most frequently codes were 'cognitive function problems (77 data)', 'deterioration of interpersonal relationships (50)', 'the burden of providing constant support for employees (35)', and 'The employees were not aware of their difficulties (20)'. The main cognitive function problems were executive function and sociality, and there were no results for aphasia or apraxia.

Under Japan's social system, employers are required to provide reasonable accommodations for individuals with disabilities. However, evidence suggests that the assistance required on a constant basis places a burden on employers. In other words, whether the individual can perform tasks independently and whether they are contributing as an employee are likely factors influencing their continued employment.

Through this study, we were able to explore and clarify the actual conditions of the workplace for individuals with acquired brain injuries from the employer's perspective. We believe this will contribute

to the advancement of vocational rehabilitation for individuals with acquired brain injuries and the development of support techniques for employers. During the grant period for this research, we gained valuable opportunities for future research development.

4. Future Area to Take Note of, and Going Forward

Given the limited sample size of this study, it is necessary to increase the number of participants in future research to determine whether similar results can be observed.

Furthermore, it is necessary to continue collecting data to identify the factors contributing to continued employment from the perspective of the individuals themselves. This will facilitate the development of guidelines to promote continued employment

from the perspectives of both the individuals and employers.

5. Means of Official Announcement of Research Results

I presented a paper at the World Federation of Occupational Therapists (19th WFOT Congress 2026, Bangkok).