

Original

Employee Turnover Rate for Persons with Mental Disabilities in the Japanese Labor Market

Nobuyoshi Fukui¹⁾, Shinichi Takabatake²⁾, Hironobu Nakayama¹⁾,
Tomoko Nishikawa²⁾ and Takuya Hashimoto¹⁾

¹⁾Faculty of Allied Health Sciences, Osaka Health Science University

²⁾School of Comprehensive Rehabilitation, Osaka Prefecture University

(Received: June 30, 2011)

Abstract

Aim: The employment statistics on persons with disabilities published by the Japanese Ministry of Health, Labor and Welfare includes the number of employed, an indicator of the employment situation, but not the employee turnover rate which indicates whether employees with disabilities maintain their employment. The authors thus attempt to estimate the employee turnover rate for persons with disabilities.

Methods: The authors employ an original method using data on the annual number of employees with disabilities, its increase relative to the previous year, and the number of hirings.

Results: The result shows that, based on a comparison with persons with physical disabilities and those with intellectual disabilities, the employee turnover rate for persons with mental disabilities is significantly high.

Conclusion: It is considered that the employee turnover rate is important data for understanding whether persons with mental disabilities maintain their employment.

(JJOMT, 60: 55—60, 2012)

—Key words—

employee turnover rate, persons with mental disabilities, labor market

Introduction

Japan's Ministry of Health, Labor and Welfare publishes data on the hiring situation of persons with mental disabilities and reports that the number of persons with mental disabilities entering employment shows an increasing trend, and that the increase has been remarkable for the past several years.¹⁾ The authors attribute this situation to the job-matching function of the Hello Work (unemployment) offices being strengthened and companies' greater understanding of the employment of persons with disabilities. The authors also consider that the Levy and Grant System for Employing Persons with Disabilities, which was introduced in 2006, has had strong effects.²⁾ The number of persons with mental disabilities entering employment is small at present compared to persons with physical disabilities or those with intellectual disabilities, but is expected to increase further in the future.

The Ministry does not, however, publish the employee turnover rate which would indicate whether hired persons with mental disabilities retain their jobs. The authors consider that although an increasing employment rate for persons with mental disabilities is desirable, if the employee turnover rate were to rise at the same time, the number of persons with mental disabilities in the labor market or in companies as a whole would not change, which would necessitate a policy response to counteract employee turnover and include the introduction of a new program.

This research uses existing employment statistics on persons with disabilities published by the Ministry and discusses issues implied by the employee turnover rate and hiring rate for persons with mental disabilities

Table 1 Calculation Result for the Employment Turnover Rate for Persons with Disabilities

Persons with physical disabilities						
	Annual number of employees (N)	Number of hirings (E)	Increase relative to previous year (ΔN)	Hiring rate (1) ($E/N \times 100$)	Rate of increase (2) ($\Delta N/N \times 100$)	Turnover rate (1) - (2)
1999	208,717	18,162				
2000	206,893	19,244	-1,824	9	-1	10
2001	200,336	18,299	-6,557	9	-3	12
2002	196,383	19,104	-3,953	10	-2	12
2003	194,614	22,011	-1,769	11	-1	12
2004	195,905	22,992	1,291	12	1	11
2005	194,342	23,834	-1,563	12	-1	13
2006	193,324	25,409	-1,018	13	-1	14
2007	194,760	24,535	1,436	13	1	12
Persons with intellectual disabilities						
1999	92,312	6,805				
2000	92,550	7,412	238	8	0	8
2001	91,679	7,069	-871	8	-1	9
2002	90,542	7,269	-1,137	8	-1	9
2003	91,300	8,249	758	9	1	8
2004	92,555	9,102	1,255	10	1	9
2005	93,253	10,154	698	11	1	10
2006	95,447	11,441	2,194	12	2	10
2007	98,478	12,186	3,031	12	3	9
Persons with mental disabilities						
1999	4,603	1,384				
2000	4,851	1,614	248	33	5	28
2001	5,123	1,629	272	32	5	27
2002	5,427	1,890	304	35	6	29
2003	5,985	2,493	556	42	9	33
2004	6,616	3,592	631	54	10	44
2005	7,653	4,665	1,037	61	14	47
2006	9,136	6,739	1,483	74	16	58
2007	11,524	8,479	2,388	74	21	53

as well as the need for preventive measures against such turnover.

Methods

Data

Since no data on the employee turnover rate for persons with disabilities is available, the rate is estimated with an original calculation method. The data used for calculating the rate are the annual number of employees, its increase relative to the previous year, and the annual number of hirings. Based on these data, the employee turnover rate is calculated for persons with physical disabilities, those with intellectual disabilities, and those with mental disabilities. The term “persons with disabilities” in this study means those who have a government-issued disability certificate.

Method of Calculation and Analysis for the Employee Turnover Rate (Table 1)

The following is the formula for the employee turnover rate.

Employee turnover rate = Annual number of job separations/Annual number of workers

However, although data on the annual number of workers (the variable in the denominator) exists, no data on the annual number of job separations (the variable in the numerator) is available. The authors consider that the latter can be obtained as follows.

Annual number of job separations = Annual number of hirings - Increase in annual number of employees relative to previous year

Here, N is the annual number of employees, ΔN is the increase in annual number of employees relative to previous year, E is the annual number of hirings, and L is the annual number of job separations. The annual

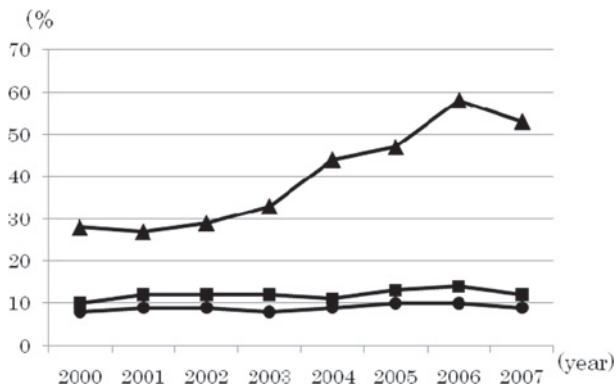


Fig. 1 Turnover Rates for Persons with Disabilities by Year
 ▲ Persons with mental disabilities, ■ Persons with physical disabilities, ● Persons with intellectual disabilities

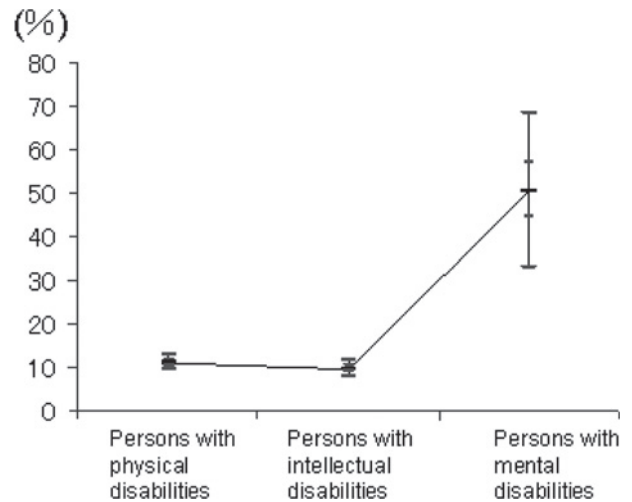


Fig. 2 Multiple Comparisons of Turnover Rates for Persons with Disabilities
 (Bonferroni; $P < 0.05$)

employee turnover rate is obtained with $L/N = E/N - \Delta N/N$.

With this method, the employee turnover rate and hiring rate are calculated for persons with physical disabilities, those with intellectual disabilities, and those with mental disabilities, and differences by disability type are examined using Bonferroni's multiple comparison test. Statistical significance was set at the 5% level. The statistical analysis is based on the results obtained from SPSS 16.0.

Results

The employee turnover rate and the data used to calculate it are shown by disability type in Table 1. As an example, data on persons with mental disabilities for 2007 show that the number of employees is 11,524, the number of hirings is 8,479, and the increase in the number of employees relative to the previous year is 2,388. Using these data, the employee turnover rate is calculated. The hiring rate is the ratio of the number of hiring to the number of employees and is determined to be 74% ($8,479/11,524 \times 100$). The rate of the employment increase is the ratio of the increase in the number of employees to the number of employees and is calculated to be 21% ($2,388/11,524 \times 100$). The employee turnover rate can be considered as the difference between the hiring rate and the rate of the employment increase and is determined to be 53% ($74\% - 21\%$). Using the same method, the employee turnover rate is calculated for persons with physical disabilities and those with intellectual disabilities. The average employee turnover rate for the recent eight years is 12.0% for persons with physical disabilities, 9.0% for those with intellectual disabilities, and 39.9% for those with mental disabilities. In contrast, the corresponding hiring rate is 11.1%, 9.8%, and 50.6%, respectively. Fig. 1 presents a graph of the employee turnover rates by disability type.

Multiple comparisons conducted for the employee turnover rates by disability type reveal a significant difference between the rate for persons with mental disabilities and the rate for those with physical disabilities ($p = 0.0001$) and between the rate for persons with mental disabilities and the rate for those with intellectual disabilities ($p = 0.0001$). No significant difference is observed between the rate for persons with physical disabilities and the rate for those with intellectual disabilities (Fig. 2).

Similarly, multiple comparisons conducted for the hiring rates by disability type reveal a significant difference between the rate for persons with mental disabilities and the rate for those with physical disabilities ($p = 0.0001$) and between the rate for persons with mental disabilities and the rate for those with intellectual disabilities ($p = 0.0001$). There is no significant difference between the rate for persons with physical disabilities and the rate for those with intellectual disabilities.

Discussion

The results indicate that the average annual employee turnover rate for persons with mental disabilities is 39.9%. This number is such that starting at a given point in time, all employees with mental disabilities could be entirely replaced in a period of around 2.5 years. In reality, it is considered that some workers repeatedly change their jobs, but even taking this fact into account, 39.9% is an extraordinarily high number. Moreover, the employee turnover rate for workers without disabilities is between 10% and 20% for 2000 and onward⁹⁾. Thus, the rate for persons with mental disabilities is about three times as high as that for workers without disabilities.

Turnover of Employees with Mental Disabilities

Although there are no studies in the literature on employee turnover rate for persons with mental disabilities, studies do appear for this group on their employment period and reasons for leaving a job. With regard to the employment period, a survey of 908 people with mental disabilities who gained employment through Hello Work offices found that 40% of all placements were still in operation one year from the date of employment starting; thus, 60% of them had quit their jobs after one year.⁴⁾ There are also reports from overseas stating that the period of time for which persons with mental disabilities work at a company is short.⁵⁾⁶⁾ As to reasons for leaving a job, it is reported that among the many factors involved are the ability to perform given tasks, the degree of mental disability, and the level of satisfaction gained from work.⁷⁾⁸⁾ Even though studies on persons with mental disabilities have revealed short employment periods in companies and reasons for their job separation, it is not easy to curb these separations. Some studies argue that pre-employment occupational rehabilitation such as occupational assessment or training provided to persons with physical disabilities and those with intellectual disabilities is not effective for persons with mental disabilities to retain their jobs.⁹⁾¹⁰⁾ In the case of persons with mental disabilities, despite receiving pre-employment training, flexible measures are frequently required in accordance with their mental conditions, opinions, and needs after they start their job, which makes it difficult for them to consistently complete occupational training programs.¹¹⁾

In response to such difficulties, supported employment aims at job retention for persons with mental disabilities has been introduced. One advantage of supported employment is personal support that is mainly provided to complement their skills. This support enables them to work by providing an appropriate environment. It is reported that supported employment is more effective than the aforementioned traditional occupational rehabilitation in realizing continued employment.^{12)~14)}

For persons with physical disabilities, those with intellectual disabilities, and those with mental disabilities in Japan who received supported employment, the average job retention rate after one year of employment was 81.9%, which is a good result, but the rate for persons with mental disabilities was statistically significantly lower than that for persons with physical disabilities or those with intellectual disabilities.¹⁵⁾ Studies conducted overseas on supported employment report that this type of employment is not effective for persons with mental disabilities in retaining employment over the long term.¹⁶⁾¹⁷⁾ In the case of Japan, one reason why supported employment does not lead to job retention for persons with mental disabilities is that support by job trainers lasts only 2 to 4 months.

To summarize the situation of turnover of persons with mental disabilities, one reason why they face a high job separation rate would be that measures to curb employee turnover are insufficient because reasons for their leaving a job are numerous. If the current situation does not change, employment retention of persons with mental disabilities is expected to become more difficult, which will be disadvantageous to both persons with mental disabilities and their employees and will potentially become a serious social problem. The employee turnover rate is an important indicator of the level of job retention and needs to be watched closely in the future. Analysis has been conducted on the relationship between the employee turnover rate for normal workers and their attributes or the business cycle;¹⁸⁾ likewise, the employee turnover rate for persons with disabilities should be analyzed and, based on such analysis, new support measures for them should be urgently developed.

The Hiring Rate for Persons with Mental Disabilities

Similarly to the case for employee turnover rate, the hiring rate for persons with mental disabilities is significantly higher than that for persons with other types of disabilities. As mentioned at the beginning of this paper, this is considered to be the result of the strengthened job-matching function of Hello Work offices and other institutions, companies' greater understanding of the employment of persons with disabilities, and the introduction of the Levy and Grant System for Employing Persons with Disabilities.

Under the current system, companies that do not satisfy a statutorily required level of employment of persons with disabilities must pay contributions to the government according to the level of the deficiency, and companies that meet the required level receive a grant from the government according to the number of employees with disabilities beyond the required level.¹⁹ The system makes it mandatory for companies to have a certain number of employees with disabilities, but is not considered to be effective in promoting job retention of each worker with disabilities. The system was introduced in Japan in 1976 for persons with physical disabilities and in 1997 for persons with intellectual disabilities, and the number of persons with disabilities employed by companies has subsequently increased.²⁰ For persons with mental disabilities the system was introduced in 2006, and in a future research project we intend to examine its effect on the hiring rate for persons with mental disabilities.

Conclusion

In this paper, we calculated the employee turnover rate for persons with disabilities, data on which is not published domestically or internationally, using an original method. The results show that the employee turnover rate for persons with mental disabilities is significantly high. This is considered an urgent problem that requires the development and introduction of prompt countermeasures. From a review of studies on employee turnover rate, it was found that although factors of employee turnover have been examined, effective systems to curb it have yet to be established.

As a potential future research project, we will examine factors of employee turnover in detail for different employment lengths and regions in our efforts to contribute to the creation of a system that curbs employment turnover for persons with mental disabilities.

References

- 1) Japan Organization for Employment of the Elderly and Persons with Disabilities: Supporting the Employment of Persons with Disabilities, Japan Organization for Employment of the Elderly and Persons with Disabilities, Tokyo, 2009.
- 2) Hasagawa T: Japan's employment measures for persons with disabilities: centered on quota systems of "Act on Employment promotion of persons with disabilities". *Japan Labor Review* 7: 26—42, 2010.
- 3) The Japan Institute for Labor Policy and Training: Japanese Working Life Profile 2006/2007—Labor Statistics. The Japan Institute for Labor Policy and Training, Tokyo, 2007.
- 4) National Institute of Vocational Rehabilitation: A study on the employment conditions, etc., to promote employment of persons with mental disabilities. Research Reports 2010; 95. [Cited 1 January 2010.] Available from: <http://www.nivr.jeed.or.jp/download/english/researches/reports/report95.pdf>
- 5) Anthony WA, Blanch A: Supported employment for persons who are psychiatrically disabled: A historical and conceptual perspective. *Psychiatr Rehabil J* 11: 5—23, 1987.
- 6) Breier A, Schreiber J, Dyer J, et al: National Institute of Mental Health longitudinal study of chronic schizophrenia. *Arch Gen Psychiatry* 48: 239—246, 1991.
- 7) Becker D, Whitley R, Bailey EL, Drake RE: Long-term employment trajectory among participants with mental illness in supported employment. *Psychiatr Serv* 58: 922—928, 2007.
- 8) Anthony WA, Cohen MR, Danley KS: The psychiatric rehabilitation approach as applied to vocational rehabilitation, Vocational rehabilitation of persons with prolonged psychiatric disorders. Ciardiello JA, Bell MD, editors. Baltimore, Johns Hopkins University Press, 1988, pp 59—88.
- 9) National Institute of Vocational Rehabilitation: A Study about the Development of the Support Method Coping with the Needs and the Change of the Work Support Process for Schizophrenic Person, Survey Report 2009: 90. [Cited 1 January 2010.] Available from: <http://www.nivr.jeed.or.jp/download/english/researches/reports/report90.pdf>
- 10) Summers F: The effect of aftercare after one year. *J Psychiatr Treat Eval* 3: 405—409, 1981.
- 11) Tessler RC, Manderscheid RW: Factors affecting adjustment to community living. *Hosp Community Psychiatry* 33:

203—207, 1982.

- 12) National Institute of Vocational Rehabilitation: Comprehensive Study on Network Development of Working Life Supports for People with Disabilities through Community Collaboration between Employment and Medical Fields. Research Report 84: 1—11, 2008. [Cited 1 January 2010.] Available from: <http://www.nivr.jeed.or.jp/download/english/researches/reports/report84.pdf>
- 13) Cook JA, Leff S, Blyler CR, et al: Results of a multisite randomized trial of supported employment interventions for individual with severe mental illness. Arch Gen Psychiatry 62: 505—512, 2005.
- 14) Drake RE, McHugo GJ, Becker DR, et al: The New Hampshire study of supported employment for people with severe mental illness. J Consul Clin Psychol 64: 391—399, 1996.
- 15) National Institute of Vocational Rehabilitation: Study on the current situations and employers' needs for employment support by job coach and other personal assistance, Research Report 2008: 86. [Cited 1 January 2010]. Available from: <http://www.nivr.jeed.or.jp/download/english/researches/reports/report86.pdf>
- 16) Bonds GR, Drake RE, Mueser KT, et al: An update on supported employment for people with severe mental illness. Psychiatr Serv 48: 335—346, 1997.
- 17) Crowther RE, Marshall M, Bond G, et al: Helping people with severe mental illness to obtain work, systematic review. BMJ 322: 204—209, 2001.
- 18) Koike K: The Economics of Work in Japan, LTCB International Library Foundation, Tokyo, 1995.
- 19) Tsuchihashi T, Oyama D: Disability Employment Levy-Grant Scheme from an economic viewpoint. Japan Labor Review 7: 43—53, 2010.
- 20) Kudo T: Japan's employment rate of persons with disabilities and outcome of employment quota system. Japan Labor Review 7: 5—25, 2010.

Reprint request:

Nobuyoshi Fukui

First part of the address Faculty of Allied Health Sciences,
Osaka Health Science University, 1-9-27, Tenma, Kita-ku,
Osaka-shi, Osaka, 530-0043, Japan.

別刷請求先 〒530-0043 大阪府大阪市北区天満 1—9—27
大阪保健医療大学保健医療学部
福井 信佳

日本の労働市場における精神障がい者の離職率に関する研究

福井 信佳¹⁾, 高畑 進一²⁾, 中山 広宣¹⁾

西川 智子²⁾, 橋本 卓也¹⁾

¹⁾大阪保健医療大学保健医療学部

²⁾大阪府立大学総合リハビリテーション学部

—キーワード—

離職率, 精神障がい者, 労働市場

【目的】

厚生労働省が公表する障がい者の就業統計には、就業状況を示す就職件数は公表されているが、入職した障がい者が定着しているかどうかの指標となる離職率は公表されていない。

【方法】

そこで筆者らは、独自の方法として、厚生労働省が公表している「障がい者の年間の就職者数」、「対前年度増加数」、「入職件数」を活用し、障がい者の離職率の推定を試みた。

【結果】【考察】

その結果、身体障がい者、知的障がい者との比較から精神障がい者の離職率が有意に高いことを認めた。今後、精神障がい者が定着しているかどうかを知る手がかりとして離職率は重要なデータになると考えられた。

(日職災医誌, 60 : 55—60, 2012)