Influence of multi-aspect job preference matching on job tenure for people with mental disorders in supported employment programs in Japan

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We have no conflicts of interest to disclose. We gratefully acknowledge funding from Ministry of Education, Culture, Sports, Science and Technology (Sosei Yamaguchi) and Japan Agency for Medical Research and Development (Sayaka Sato).

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Abstract

Objective: This study examined the association between job tenure and job preference matching for five job preference domains for people with mental disorders enrolled in Individual Placement and Support (IPS) programs in Japan. The domains include occupation type, monthly income, weekly work hours, commute time, and illness disclosure.

Methods: We conducted secondary analysis of participants who obtained employment in a longitudinal study during the 24 month follow-up period at 16 agencies routinely providing IPS programs. We included 112 participants who expressed job preferences and were employed at least once. A total of 130 employment cases were analyzed. Matches in the five domains were determined using participants' job preferences and employment information. The match level (0–5) indicates the number of domains that match the participant's job preferences. Job tenure (weeks worked) was compared between the matched and unmatched groups in each domain and between each match levels using linear regression mixed-effects models.

Results: A match for a given domain did not show a significant relationship with job tenure, whereas match level 3 (B: 29.6, 95%CI: 10.8–48.4, $p = 0.003$) and 4 (B: 37.0, 95%CI: 17.1–56.9, $p < 0.001$) had a significantly longer tenure than those with match level 1.

Conclusions and Implications for Practice: A higher match level may be related to a longer job tenure. The results suggest that employment specialists should prioritize clients' preferences in job searches. Further replication studies in other settings and countries should be conducted to verify the findings in this study.

Keywords: Job preferences, Job matching, Job tenure, Supported employment, Mental disorders

Impact and implications statement

This study showed that jobs with a higher preference match level last longer for people with mental disorders enrolled in Individual Placement and Support (IPS) programs. The results

suggest that employment specialists should assess multiple domains of job preferences for clients and help find a job that matches their preferences as closely as possible.

Influence of multi-aspect job preference matching on job tenure for people with mental disorders in supported employment programs in Japan

Finding a job that suits one's preferences and lasts a long time is a concern for many people, including those with mental illness. Individual Placement and Support (IPS) is an evidence-based practice to assist with employment of people with mental disorders (clients). IPS focuses on clients' job choices and preferences (Bond et al., 2020). Several meta-analyses have demonstrated the usefulness and cost effectiveness of IPS on vocational outcomes (Brinchmann et al., 2020; Frederick & VanderWeele, 2019; Kinoshita et al., 2013; Zheng et al., 2022). Twenty countries have implemented IPS (Bond et al., 2020), including Japan (Hayashi et al., 2020). In Japan, IPS was first introduced in the mid-2000s, and more than 20 agencies now provide IPS programs. Despite the mounting evidence for IPS, it is unclear whether job preference affects job tenure.

IPS helps find employment, but questions have been raised about its effectiveness on employment retention (Bond & Kukla, 2011; Lehman et al., 2002). In several randomized control trials (RCTs), the mean job tenure of participants assigned to the IPS intervention group was only 1–7 months (Burns et al., 2007; Kin Wong et al., 2008; Latimer et al., 2006; Tsang et al., 2009), though it was longer than the control group. A short job tenure is not an issue if the termination is planned for a positive reason such as a career change. However, clients often leave jobs for negative reasons. More than half of job terminations are unsatisfactory. That is, they were fired or quit without having other job plans (Becker et al., 1998; Mak et al., 2006). Identifying factors associated with job tenure is essential to support people with mental disorders.

Several factors have been suggested to affect job tenure. An integrative review identified three themes of factors related to job tenure (Williams et al., 2016). The first is the workers' experience in their current job. This theme refers to job interest and satisfaction with

working conditions such as wages, hours, accommodations, and environment. The second is natural support in the workplace. This includes supportive relationships with supervisors and colleagues and a nurturing culture. The third is strategies for integrating work, recovery, and wellness. Examples are resources for work–life balance such as symptom-managing skills and family members' support. In addition, individual factors such as global functioning (Evensen et al., 2017) and cognitive performance (Gold et al., 2002; Ikebuchi et al., 2017) also affect job tenure. Thus, various factors likely influence job tenure, including individual functioning, work and living environments, and personal views on work.

As a factor related to personal views, matching the client's job preferences and the actual job has been hypothesized to extend job tenure (job-matching hypothesis). Obtaining the client's preferred job might increase job interest and satisfaction, which have been suggested as factors impacting job tenure (Kukla & Bond, 2012; Resnick & Bond, 2001; Williams et al., 2016). Those who left a job cited dissatisfaction with a job and a lack of interest as the main causes for leaving (Huff et al., 2008; Mak et al., 2006). At least four studies have tested the job-matching hypothesis, but the results were inconsistent. Two studies supported the hypothesis that occupation match contributes to a longer job tenure (Becker et al., 1996; Mueser et al., 2001), while two did not (Becker et al., 1998; Bond et al., 2013). In addition, these four studies examined only the association between occupation type match and job tenure. In practice, job preferences include a variety of aspects besides occupation type such as monthly income, weekly work hours, commute time, and illness disclosure. Consequently, the job-matching hypothesis needs to be tested while considering multiple aspects of job preferences.

The job-matching hypothesis also needs to be tested outside the United States. IPS has spread worldwide, but previous studies were conducted in the United States. Hence, scientific evidence on the fulfillment of clients' preferences and its effect on job tenure should be evaluated under region-specific conditions. In particular, preference on illness disclosure

may be affected by the employment system in each country. For example, Japanese law requires that 2–3% of employees have disabilities in companies with 45.5 or more employees (those who work shorter hours are counted as 0.5) (Hayashi et al., 2020). To comply with the law, employers tend to hire people who disclose their disabilities. Thus, job matching regarding illness disclosure in the Japanese context may differ from other regions. Such investigations will provide new insights.

This study investigates the job matching rate on the five preference domains (i.e., occupation type, monthly income, weekly work hours, commute time, and illness disclosure) for two hypotheses. The first hypothesis is that a match for a given domain leads to longer job tenure. The second hypothesis is that jobs with a greater number of matched domains will last longer.

Method

Study Design

We conducted a secondary analysis of a multisite cohort study with follow-up over 24 months. The cohort study aimed to compare vocational and subjective outcomes between high- and low-fidelity IPS programs in a real-world Japanese setting. The findings of the primary analysis are reported elsewhere (Yamaguchi, Sato, Shiozawa, et al., 2021). This research was registered with UMIN (No. UMIN000025648) and approved by the Research Ethics Committee of the National Center of Neurology and Psychiatry (No. A2016-055). Reporting was based on the STROBE guidelines (Elm et al., 2007).

Programs and Settings

Sixteen agencies, which routinely provide IPS programs, were registered. These agencies were identified through prior studies (Hayashi et al., 2020; Sasaki et al., 2018; Yamaguchi et al., 2020) and by the cooperation of the Japan IPS Association. Each agency met two criteria for inclusion: 1) it provides individual services (i.e., offers more than group services), and 2) it has ‘zero exclusion’ criteria related to client enrollment (i.e., clients can be enrolled in

the program regardless of work readiness or symptom severity). Seven agencies were located in the Tokyo metropolitan area, while the rest were in other areas of Japan. The average duration of the IPS program offered was 4.3 years (0.6–8.7 years) at the time of registration.

Each agency's program fidelity was measured by two fidelity scales: IPS fidelity scale – 25-item version (IPS-25) (Bond et al., 2012) and the Japanese version of the individualized Supported Employment Fidelity scale (JiSEF) (Sasaki et al., 2018). Two trained reviewers visited the site and measured the IPS-25 in 2018, JiSEF in 2016, and JiSEF in 2018. The average IPS-25 score was 86.1 (range, 69–99) in 2018 (Bond et al., 2012). The averages of JiSEF scores were 91.4 (range, 77– 108) in 2016 and 92.0 (range, 68–115) in 2018. Considering the JiSEF cut-off score of 91 (Yamaguchi et al., 2018), the registered programs showed fair fidelity overall. Since some criteria of IPS-25 are difficult or inappropriate to implement under the Japanese mental health and welfare system, JiSEF was developed by modifying IPS-25 to fit the Japanese system while adhering to the principles of IPS. JiSEF showed a good concurrent validity with employment outcomes, a sound convergent validity with IPS-25, and a high inter-rater reliability (Sasaki et al., 2018; Yamaguchi et al., 2020; Yamaguchi, Sato, Ojio, et al., 2021). The differences from IPS-25 are reported elsewhere (Sasaki et al., 2018).

Participants

Each agency recruited participants using three criteria. Clients were eligible to participate if they: 1) were 20 years or older, 2) had a diagnosed mental illness, and 3) enrolled in the program to seek a job between January 1 and June 30, 2017. The analyses in this study included participants who obtained competitive employment at least once during the 24 month follow-up period. Competitive employment was operationally defined as working at least one day a month during the follow-up period at minimum wage or higher, as determined by Japanese law. All agencies displayed an official poster informing participants about the use of observational data from their service records such as background characteristics and vocational

outcomes. Clients who refused to participate after seeing the poster were excluded from the study. Case managers explained the study procedure and the ethical issues in detail before enrolling participants. Each participant's verbal consent was formally recorded in their service records.

Measures

Baseline Assessment

Participants' information was obtained from the daily service records and service assessment profiles. Collected information included gender, age, educational background, living situation, disability pension and social security receiving, diagnosis (ICD-10), hospitalization history, work history, and the Global Assessment of Functioning (GAF) (Association, 1994) score. Participants' job preferences were determined by an interview with an employment specialist in the program within the first month of service use. Preferences in five domains were assessed: occupation type, monthly income, weekly work hours, commute time, and illness disclosure. The occupation types preferred by participants were classified into 11 occupational categories according to the Japanese Occupational Classification Table (Japan Institute for Labour Policy and Training, 2011). We obtained continuous data for monthly income, weekly work hours, and commute time from the interview. The illness disclosure domain had three options: "disclosure," "non-disclosure," or "either is fine/unknown."

Job Match and Job Tenure

Vocational outcome data on the obtained competitive employment were collected from their service records, employment agreement documents, and participant interviews. The data included the employment conditions in the five domains and the employment start and stop dates. If information was missing, the researchers contacted the agency staff to complete it. Even after participants dropped out of the programs, the agency staff contacted them to collect information about their employment during the follow-up period. Follow-up

was completed on June 30, 2019, and data collection was completed in December 2019.

Analysis was performed at the job level instead of the individual level because the employment conditions and job match differed for each job obtained. That is, a participant could have more than one job. If a participant found a job twice during the period, the first and second jobs were each considered in the analysis (i.e., n = 2 per participant). We determined job match for each job according to the following criteria. Occupation type indicates whether the actual job is in the same category as the preferred type. Monthly income is whether the wage exceeds the preferred amount. Weekly work hours are a match if they are within ±20% of the preferred weekly hours. Commute time is evaluated as to whether the commute is less than the preferred time (minutes). Illness disclosure is whether disclosure is the same as the preferred disclosure type. Note that “either is fine” is always considered a match. The match level, a variable we created, ranges from 0 to 5, where a 5 indicates that all domains match the client’s preference. Job tenure (weeks worked) was calculated from the start and end employment dates or the end of the follow-up period. If the employment continued after a participant dropped out of the program, the period after the dropout was also included when determining job tenure.

Analysis

Linear regression mixed-effects models were used to test the associations of the job tenure with the preference match in each domain or the match level. Differences between programs were modeled as random intercepts. The models were adjusted for GAF and the cut-off score of JiSEF (high fidelity ≥ 91; low fidelity ≤ 90) as covariates based on the literature (Evensen et al., 2017; Yamaguchi et al., 2018; Yamaguchi, Sato, Shiozawa, et al., 2021). Sensitivity analysis was conducted by adjusting for all remaining baseline variables. Due to the small sizes for match levels 1 and 5, we performed another sensitivity analysis by comparing job tenure between two groups categorized as low or high match levels (i.e., match levels 1–2 versus match levels 3–5). A statistical significance was set at 5% ($p < 0.05$). The statistical

software used was R version 4.0.4.

Results

Figure 1 shows a flow diagram of the participants. Of the 219 potentially eligible participants recruited, 206 enrolled in the study, but 4 withdrew consent during the follow-up period. Of the 202 participants who completed the follow-up period, 186 (92.1%) expressed an occupation-type preference, 182 (90.1%) expressed a monthly income preference, 188 (93.1%) expressed a weekly work hours preference, and 186 (92.1%) expressed a commute time preference. For illness disclosure preference, all participants were considered to have expressed their preference because those who did not expressed their preference were assigned “either is fine/unknown.” In addition, 174 (86.1%) provided their preferences for all five domains, and 112 participants (64.4%) obtained a job at least once during the follow-up period (16 obtained a job twice and 1 obtained a job three times). Hence, the analysis included 130 employment cases.

Table 1 summarizes the characteristics of the 112 participants. Sixty-seven percent were male with a mean age of 35.2 years (SD = 9.9). The most frequent diagnosis was schizophrenia (40.2%), followed by psychological development disorders (23.2%) and depression (21.4%). Almost half (49.1%) held an undergraduate degree or higher.

Figure 1

Flow diagram of participants inclusion and follow-up

Table 1

Characteristics of the participants at the baseline assessment

	n = 112	
Sex, Male, n (%)	75	(67.0%)
Age, mean (SD)	35.2	(9.9)
Diagnosis, n (%)		
Schizophrenia [F2]	45	(40.2%)
Depression [F3]	24	(21.4%)
Bipolar disorder [F3]	9	(8.0%)
Neurotic, stress-related, or somatoform disorder [F4]	6	(5.4%)
Personality disorder [F6]	0	(0.0%)
Intellectual disorder [F7]	2	(1.8%)
Disorders of psychological development [F8]	26	(23.2%)
Highest level of school completed, n (%)		
Middle (junior high) school	3	(2.7%)
High school	38	(33.9%)
Technical college	12	(10.7%)
Junior college	4	(3.6%)
University, undergraduate degree	53	(47.3%)
University, graduate degree	2	(1.8%)
Living situation, n (%)		
Living with family	76	(67.9%)
Living alone	35	(31.2%)
Residential facility	1	(0.9%)
Disability pension received, n (%)	48	(42.9%)
Social security received, n (%)	15	(13.4%)
Worked more than 30 days in past 12 months, n (%)	46	(41.1%)
Hospitalized in past 12 months, n (%)	21	(18.8%)
Global assessment of functioning (GAF), mean (SD)	53.4	(12.6)

The top three preferred occupation types were clerical (36.6%), service industry (17.0%), and professional and technical (12.5%). For the 130 employment cases, the most common occupation types were clerical (n = 37, 28.5%) followed by service industry (n = 36, 27.7%), and delivery, cleaning, and packaging (n = 20, 15.4%) (Supplementary Table 1). The mean preferred monthly income was $1,168 (SD = 488), whereas the actual income was $869 (SD = 435). The mean preferred weekly work hours was 30.0 hours (SD = 9.2), but the actual employment hours were 26.8 (SD = 10.0). The mean preferred commute time was 49.3 minutes (SD = 16.9), while the actual commute time was 38.6 minutes (SD = 21.1). Finally, as for illness disclosure, 67.0% of participants wanted disclosure, 21.4% wanted non-disclosure, and 11% were fine with either or did not answer. Supplementary Table 1 provides additional information on participants' job preferences and how many preferred matches were made.

The most often matched domain was illness disclosure (86.9%) (Table 2) followed by commute time (82.3%). On the other hand, monthly income was the least likely to match (35.4%). Whether a domain matched the participant's preference was not significantly related to job tenure. Sensitivity analysis revealed a similar trend.

Regarding the match level, the most common pattern was match level 3 (n = 45, 34.6%) (Table 3). Relatively few employment cases had match levels 1 or 5 (n = 14, 10.8% and n = 11, 8.5%, respectively). Match levels 2–5 had a longer mean job tenure than a match level 1 (Fig. 2). In the statistical analysis, the mean job tenure was significantly longer for match level 3 (crude model: B = 26.5, 95%CI = 7.8–45.2, p = 0.007; adjusted model: B = 29.6, 95%CI = 10.8–48.4, p = 0.003) and match level 4 (crude model: B = 34.5, 95%CI = 14.8–54.2, p < 0.001; adjusted model: B = 37.0, 95%CI = 17.1–56.9, p < 0.001) compared to match level 1. However, job tenure for match level 2 or 5 did not significantly differ from that for match level 1. The sensitivity analysis indicated a similar trend. Dividing the employment cases into two groups according to the match level (The low group: match levels 1–2; the high group: match levels 3–

5) revealed a significant trend. Job tenure was longer in the high group (crude model: B = 19.7, 95%CI = 8.1–31.3, p = 0.001; adjusted model: B = 21.1, 95%CI = 8.4–33.8, p = 0.002) than the low group.

Figure 2

Mean and standard deviation of job tenure by match level

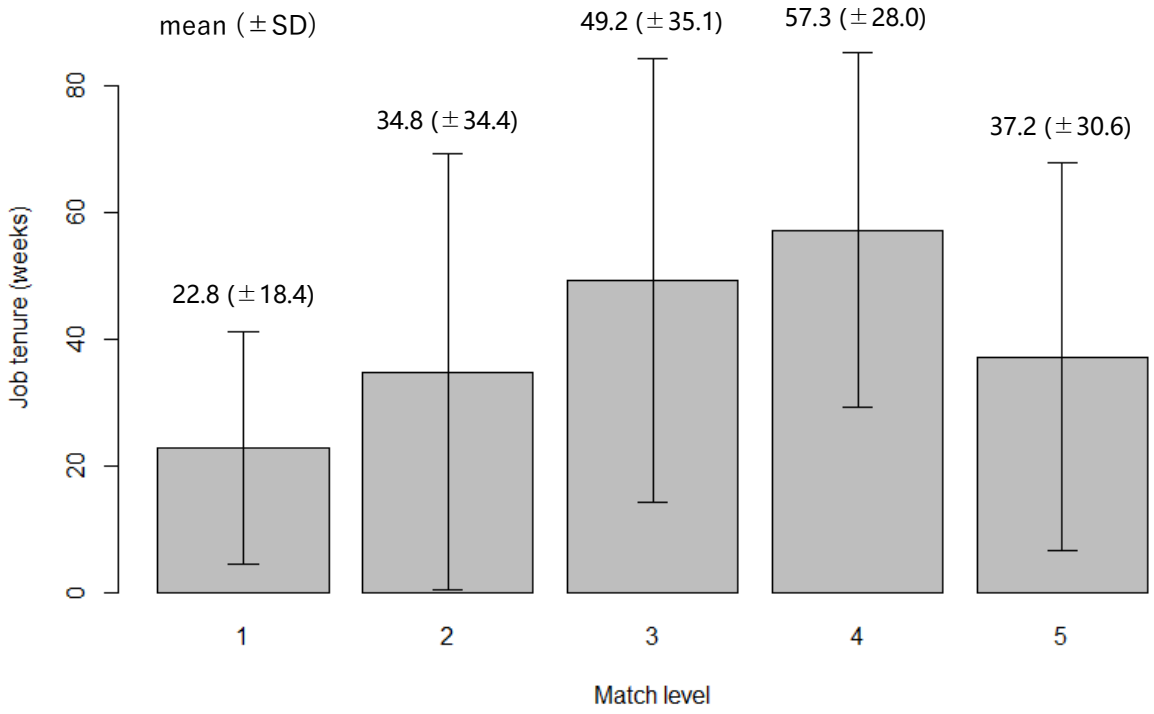

Table 2

Comparison of job tenure between matched and unmatched groups in each job preference domain

			Job tenure (weeks)									
	n = 130		mean (SD)				Crude models			Adjusted models		
Job preference	matched, n (%)		matched		unmatched		B	95% CI	p	B	95% CI	p
Occupation type	63	(48.5%)	49.8	(32.0)	38.6	(33.3)	11.2	0.0 to 22.4	0.053	10.3	−0.6 to 21.3	0.070
Monthly income	46	(35.4%)	46.1	(32.1)	42.9	(33.6)	3.2	−8.7 to 15.1	0.598	4.8	−7.1 to 16.7	0.433
Weekly work hours	57	(43.8%)	48.6	(30.8)	40.5	(34.4)	8.1	−3.3 to 19.5	0.165	7.2	−4.1 to 18.4	0.219
Commute time	107	(82.3%)	46.8	(33.9)	31.1	(25.2)	15.7	1.0 to 30.4	0.038	12.7	−2.5 to 28.0	0.107
Illness disclosure	113	(86.9%)	45.0	(33.2)	37.7	(31.7)	7.3	−9.6 to 24.1	0.400	9.0	−8.8 to 26.8	0.327

Table 3

Association between job tenure and match level

	n = 130		Job tenure (weeks)		Crude model			Adjusted model		
Match level	n (%)		mean (SD)		B	95% CI	p	B	95% CI	p
1 (reference)	14	(10.8%)	22.8	(18.4)						
2	29	(22.3%)	34.8	(34.4)	12.1	−7.8 to 31.9	0.243	15.4	−4.1 to 35.0	0.133
3	45	(34.6%)	49.2	(35.1)	26.5	7.8 to 45.2	0.007	29.6	10.8 to 48.4	0.003
4	31	(23.8%)	57.3	(28.0)	34.5	14.8 to 54.2	< 0.001	37.0	17.1 to 56.9	< 0.001
5	11	(8.5%)	37.2	(30.6)	14.5	−10.2 to 39.1	0.258	21.0	−4.1 to 46.2	0.111

Discussion

The first hypothesis is that a match for a given domain leads to longer job tenure. The second hypothesis is that jobs with a higher match level will last longer. The results reject the first hypothesis, but partially support the second one. The employment cases with match level 3 or 4 had significantly longer job tenures than those with match level 1. Furthermore, the high match level group held a job for a significantly longer time than the low level match group.

Preference Expression and Matching Rate

More than 90% of the participants expressed preferences for each domain. Furthermore, 86% of the participants expressed preferences for all five domains. These results are consistent with the literature, which indicates that most participants (81–98%) have occupational preferences in the United States (Becker et al., 1998; Becker et al., 1996; Bond et al., 2013; Mueser et al., 2001). The finding suggests that people with mental disorders who want jobs have clear preferences about working conditions and occupations regardless of a specific area and culture.

The percentages of preference match in actual employment differed for the five domains. About half had a match for occupation type, which is lower than the literature (60–¬86%) (Becker et al., 1998; Becker et al., 1996; Bond et al., 2013; Mueser et al., 2001). One reason may be few job opportunities in the preferred occupation type of the participants in the area where they were seeking employment. Some of the agencies were located in relatively rural areas, which limited job options. Another reason is that the study was conducted in a real-world setting. Prior studies were RCTs, which were implemented in strict adherence to the service principles. The lower match rate in this study may be due to the lower fidelity to the IPS principles in a Japanese real-world setting. Monthly income and weekly work hours also had lower matching rates of around 40% in this study. This is consistent with two previous studies, which found that participants' preferences for wages and working hours were slightly higher

than the actual wages and hours for the obtained job (Becker et al., 1998; Becker et al., 1996).

Commute time and illness disclosure had high matching rates of over 80%. This may partly be due to the flexibility in the responses for these domains. The participants indicated a relatively long time for commuting and some did not have a preference about illness disclosure. Additionally, most of the participants preferred disclosure because it may be easier to find a job with disclosure than without due to Japanese law (Hayashi et al., 2020). If disclosure was desired, it was more likely to be a match, which may have resulted in a higher matching rate.

Effect on Job Tenure

A match for a given domain did not significantly extend job tenure. This result supports previous studies that rejected the occupational-matching hypothesis (Becker et al., 1998; Bond et al., 2013). On the other hand, the match level had significant association on job tenure. The general trend was the higher the match level, the longer the job tenure. The literature suggests that people with mental disorders value income and other job characteristics as much as people without disabilities (Ali et al., 2011). Interest in the job and suitable job conditions are both factors that affect job tenure (Williams et al., 2016). Therefore, match level, which evaluates multiple aspects of job preference, may have been important for the participants to continue the job. The results suggest that employment specialists should assess multiple domains of job preferences for clients and help find a job that matches their preferences as closely as possible. However, job tenure did not increase linearly according to the match level. The job tenure for match level 5 did not differ significantly from match level 1. This may be due to the small sample size of the employment cases with match level 5. Another assumption is that participants who found a job that matched all their preferences may have worked too hard to keep their employment since they had obtained their ideal job. This hypothesis needs to be evaluated in future studies.

This study can be evaluated from two perspectives. First, the suggestion to improve comprehensive job matching is easy to incorporate into practice. The five preference domains

are transparent, objective, and easily recordable. Although other factors affect job tenure, they are complex, require treatment/training to change (e.g., cognitive performance), or do not become apparent until after the employment has begun (e.g., job satisfaction). However, job matching can be improved through the actions of employment specialists prior to job placement without additional cost or treatment/training. Employment specialists are recommended to assess their clients' job preferences in the five domains at the time of service registration. Secondly, the result underpins the principle of IPS of focusing on clients' preferences. Since IPS is a client-centered approach (Drake et al., 2020), evidence that a principle helps clients increase job tenure, which is a difficult and desired goal for most, is noteworthy. Considering the implications of this study, further replication studies in other countries and settings to confirm the results are warranted. In addition, future studies should investigate potential covariates such as job satisfaction to clarify the relationships between job matching and job tenure in more detail.

Strengths and Limitations

This study's strength is that it considers multiple aspects of job preferences to examine the association between job matching and job tenure. In addition, this is the first study outside the United States to test a job matching hypothesis. However, this study has some limitations. First, we did not ensure that the job match criteria were consistent with the client's sense of the match. For example, commute time was judged to be a match if it was less than the time participants answered. This may have differed from participants' perception. Some may prefer to have a longer commute time as they do not want to work too close to home due to concerns that their neighbors will find out about their mental disorder. Second, the sample size in this study was relatively small. As a result, this study may have inadequate statistical power, resulting in a type II error.

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Supplementary Table 1 Job preferences at the baseline assessment and domain match in the obtained jobs

Job preference	Baseline assessment (n = 112)		Obtained jobs (n = 130)		Preference matched in the obtained jobs[1]	
Occupation type, n (%)						
Board director	0	(0.0%)	0	(0.0%)	NA	
Professional and technical	14	(12.5%)	9	(6.9%)	3	(21.4%)
Clerical	41	(36.6%)	37	(28.5%)	28	(68.3%)
Sales	13	(11.6%)	13	(10.0%)	6	(46.2%)
Service industry	19	(17.0%)	36	(27.7%)	11	(57.9%)
Security service	1	(0.9%)	0	(0.0%)	0	(0.0%)
Agriculture, forestry, and fisheries	3	(2.7%)	2	(1.5%)	1	(33.3%)
Production process	9	(8.0%)	12	(9.2%)	6	(66.7%)
Transportation and machine-driving	1	(0.9%)	1	(0.8%)	0	(0.0%)
Construction and mining	0	(0.0%)	0	(0.0%)	NA	
Delivery, cleaning, and packaging	11	(9.8%)	20	(15.4%)	4	(36.4%)
Monthly income						
mean (SD)[2]	(yen) 134,285 ($) 1,168	(56,132) (488)	99,899 869	(50,016) (435)	NA	
≤ 50,000 yen ($435), n (%)	5	(4.5%)	18	(13.8%)	4	(80.0%)
≤ 100,000 yen ($870), n (%)	37	(33.0%)	52	(40.0%)	17	(45.9%)
≤ 150,000 yen ($1,304), n (%)	42	(37.5%)	41	(31.5%)	10	(23.8%)
≤ 200,000 yen ($1,739), n (%)	26	(23.2%)	16	(12.3%)	5	(19.2%)
> 200,000 yen, n (%)	2	(1.8%)	3	(2.3%)	1	(50.0%)
Weekly work hours						
mean (SD)	30.0	(9.2)	26.8	(10.0)	NA	
≤ 10, n (%)	4	(3.6%)	11	(8.5%)	2	(50.0%)
≤ 20, n (%)	27	(24.1%)	36	(27.7%)	13	(48.1%)
≤ 30, n (%)	37	(33.0%)	46	(35.4%)	14	(37.8%)
> 30, n (%)	44	(39.3%)	37	(28.5%)	19	(43.2%)
Commute time (minutes)						
mean (SD)	49.3	(16.9)	38.6	(21.1)	NA	
≤ 30, n (%)	34	(30.4%)	65	(50.0%)	27	(79.4%)
≤ 60, n (%)	74	(66.1%)	54	(41.5%)	61	(82.4%)
> 60, n (%)	4	(3.6%)	11	(8.5%)	4	(100.0%)
Illness disclosure, n (%)						
Disclosure (open)	75	(67.0%)	108	(83.1%)	73	(97.3%)
Non-disclosure (closed)	24	(21.4%)	22	(16.9%)	12	(50.0%)
Either is fine/unknown	13	(11.6%)	NA		13	(100.0%)

1. For participants who obtained two or more jobs, we considered a match if at least one matched. 2. US $1 = 115 Japanese yen [February 18, 2022]