



Research Paper

Translating and Assessing the Reliability of the Persian Version of the Profile of Occupational Engagement



Tayebeh Masoumi¹, Narges Shafaroodi^{2*}, Faezeh Alvandi³, Abbas Ebadi⁴

1. Department of Counseling, University of Social Welfare and Rehabilitation Sciences, Tehran, Iran.

2. Department of Occupational Therapy, School of Rehabilitation, Iran University of Medical Sciences, Tehran, Iran.

3. Department of Occupational Therapy, School of Allied Medical Sciences, Zanjan University of Medical Sciences, Zanjan, Iran.

4. Department of Nursery, Faculty of Nursing, Baqiyatallah University of Medical Sciences, Tehran, Iran.



*This work has been published under CC BY-NC-SA 4.0 license.

Article info:

Received: 10 Sep 2021

Accepted: 24 Dec 2021

Available Online: 30 Dec 2021

Funding

The paper was extracted from a research project of the second author, Department of occupational therapy, Faculty of Rehabilitation, Iran University of Medical Sciences.

Conflict of interest

The authors declared no conflict of interest.

ABSTRACT

Background and Objectives: The profile of occupational engagement in People with Severe Mental Illness (POES) is one of the time-use-based instruments, which can uncover the rhythm of activity and rest, as well as the variety and range of meaningful occupations. The current study aimed to report the translation process and assess the inter-rater reliability of the Persian version of POES.

Methods: In the present study, the translation process took place in three phases: forward-translation, backward-translation, and two expert panels review. To assess inter-rater reliability, all the POES forms were rated by the first and the third author.

Results: The data achieved from 47 patients with schizophrenia were carefully analyzed. The inter-rater reliability analysis shows the intra-class correlation values were 0.86 in single and 0.92 in average measures.

Conclusion: The reliability results are entirely consistent with the previous studies on POES.

Keywords: Schizophrenia, POES, Occupational engagement



Cite this article as Masoumi T, Shafaroodi N, Alvandi F, Ebadi A. Translating and Assessing the Reliability of the Persian Version of the Profile of Occupational Engagement Function and Disability Journal. 2021; 4:E47. <http://dx.doi.org/10.32598/fdj.4.47>

doi <http://dx.doi.org/10.32598/fdj.4.47>

* Corresponding Author:

Narges Shafaroodi, Associate Professor.

Address: Department of Occupational Therapy, School of Rehabilitation, Iran University of Medical Sciences, Tehran, Iran.

Tel: +98 (912) 2158348

E-mail: shafarodi.n@iums.ac.ir

↑ *What is “already known” in this topic:*

POES is a useful instrument to assess participation of patient with schizophrenia in daily life functions.

→ *What this article adds:*

There is no Persian instrument to assess occupational engagement of people who suffer from severe mental illnesses like schizophrenia.

Introduction

Time use diary is the most established research technique to explore important aspects of human occupation [1]. The diary is mainly used in social science for different purposes [2-5].

Similarly, in occupational therapy, time-use studies widely use it to understand the impact of disabilities on a client's participation and to measure health outcomes [6, 7]. Research in this field shows not only the restriction in the patient's time use pattern but also the change in their perception of time [8].

In people with a chronic mental health condition like schizophrenia, studies show deterioration in their everyday functioning [9]. They mainly participate in limited occupations and avoid trying their capacities because of their poor sense of self-concept [10]. They also do passive activities to stay away from stress [11].

Sleep and quiet activities are the predominantly performed activities, and home is the social environment in which they spend most of their hours. This kind of lifestyle is in harmony with a low level of structure and organization in their occupational pattern [12].

Research indicates that occupational engagement can improve health and quality of life [13, 14], and occupational therapists should recognize the importance of occupational engagement's capacities in their clinical practice [15].

There are some time use based instruments that are used in occupational therapy: time use questionnaire [5], occupational performance history interview II [6] national institute of health activity record [16].

The profile of occupational engagement in People with Severe Mental Illness (POES) is one of the time

use based instruments, which can uncover the rhythm of activity and rest, the variety and range of meaningful occupations, and the person's ability to join the community to interact with others [17].

It is a beneficial instrument that can be used in clinical practice and research as an outcome measure of treatment [18, 19]. Psychometric testing of the instrument in other international contexts has been recommended [17].

Because there is no instrument in Persian to evaluate occupational engagement in people with schizophrenia, the current study aimed to assess inter-rater reliability of the Persian version of POES.

Materials and Methods

Translation process:

The English version of the POES was received from its original developer, and official permission was also given for its translation.

Firstly, two expert translators translated POES into Persian. Then the initial Persian draft was discussed within two expert panels consisting of three occupational therapists (except the first two authors). The members of the expert panels were all occupational therapy university professors and had at least 20 years of work experience. The initial Persian draft and the original POES form have been sent to the first expert panel members, and all their comments and suggestions were discussed during the first panel. According to the first translation panel, the first author prepared a draft for the second session. Again the draft was sent to all expert panel members in addition to the original form. Finally, the revised version of the instrument was prepared considering the changes made by experts in the second panel and translated backward—the backward translated document sent to the developer via email. Unfortunately, we have not received

any feedback, so we used the final revised Persian version after expert panels reviews in the current study.

Recruiting process:

In the current study, the study participants were selected from the patients who visited an outpatient clinic at one of the psychiatric hospitals of Tehran Province. Our inclusion criteria were being diagnosed with schizophrenia and lacking any other comorbidity like substance abuse. To complete the forms by the patients, the first author was stationed at the outpatient clinic, inviting patients who had received a definitive diagnosis of schizophrenia based on their psychiatric records. Patients who agreed to participate in the study completed a personal information form and a consent form before the study. All collected forms were later scored by two separate raters (the first and third authors).

POES

POES instrument consists of three parts. In part I, 24-h yesterday time use diary is recorded with a supplementary interview. Part II assesses the information gathered in the previous step through nine items: the daily rhythm of activity and rest, place, variety and range of occupations, social environment, social interplay, interpretation, the extent of meaningful occupations, routines, and initiating performance. These nine items are rated from 1 to 4, and the total score may range from 9 to 36. In part III, the level of occupational balance is judged in the following categories: being under-occupied, over-occupied, and having occupational balance.

The research outcomes about POES show that the inter-rater agreement was good (the weighted kappa ranged from 0.50 to 0.82), and the homogeneity of its items was high (alpha coefficients were in both rater sat-

isfactory, at 0.97 and 0.95) [19]. Moreover, assessing the construct validity of the instrument shows the significant relationship between POES total score and GAF (0.73), activity Level (0.70), and satisfaction with daily occupation (0.50) [18].

In the most recent study about the construct validity of POES using the Rasch measurement model, results show overall fit to the Rasch model ($\chi^2= 18.815$; $df=18$; $P= 0.40$). In addition, the instrument's reliability was also high (Person Separation Index [PSI] with extremes = 0.93; the Cronbach alpha = 0.95) [17].

Results

The obtained data from 47 patients with schizophrenia were carefully analyzed. The demographic characteristics of the participants are presented in Table 1.

As mentioned before, the POES forms were scored by two of the researchers separately. To check the inter-rater reliability, the Intra-Class Correlation (ICC) was run for the total scores reported by the two raters. The results are provided in Table 2.

The relationship between the scores of the nine domains of the POES was measured by the kappa coefficient. Table 3 shows the results of the correlation of the scores.

Discussion and Conclusion

Deinstitutionalization and community-based mental health services in most countries have started in the past two or three decades. With this critical step in treatment and rehabilitation services for people diagnosed with mental health illnesses like schizophrenia, the clients have to fill their own time with little care, support, and rehabilitation [20]. Accordingly, as occupational engage-

Table 1. Demographic information

Variables	No. (%)
Gender	Female 21(44.68)
	Male 26(55.31)
Marital status	Married 11(23.40)
	Single 36(76.59)
Education level	High school 28(59.57)
	Diploma 12(25.53)
	Above diploma 7(14.89)

Table 2. Intra-class Correlation (ICC) of total scores reported by the two raters

Measures	Intra-class Correlation ^b	95% Confidence Interval		F Test With True Value 0			
		Lower Bound	Upper Bound	Value	df1	df2	Sig.
Single	0.866 ^a	0.759	0.925	15307	46	46	0.000
Average	0.928 ^c	0.863	0.961	15307	46	46	0.000

The two-way mixed-effects model where people effects are random and measures effects are fixed; ^aThe estimator is the same, whether the interaction effect is present or not; ^bType A intra-class correlation coefficients using an absolute agreement definition; ^cThis estimate is computed assuming the interaction effect is absent because it is not estimable otherwise.

Table 3. Weighted kappa coefficients of scores of nine domains of Profile of Occupational Engagement (POES) reported by two raters (n=47)

POES Items	Inter-rater Reliability Weighted Kappa Value	Standard Error
Daily rhythm of activity and rest	0.671	0.13
Place	0.721	0.14
Variety and range of occupations	0.856	0.14
Social environment	0.53	0.14
Social interplay	0.48	0.14
Interpretation	0.484	0.13
Extent of meaningful occupations	0.642	0.11
Routines	0.613	0.09
Initiating performance	0.597	0.09

ment is fundamental in occupational therapy theory and practice [21], we need more tools and measures to understand how clients spend their lifetimes. In this regard, the Profile of Occupational Engagement in Schizophrenia (POES) was constructed in 2006 to assess the engagement of patients with schizophrenia in activities based on their time use patterns [19].

In the present study, as explained in detail before, the translation process took place in three phases: forward-translation, backward-translation, and two expert panels review. It is worth mentioning that despite sending a copy of the backward translation to the original developer and requesting its evaluation, we received no response. Therefore, the modified version approved by the research team in the expert panels was utilized to collect the data.

To evaluate the inter-rater reliability, two raters assessed all the gathered questionnaires independently. According to the ICC with an average measure of 0.928 for the total score and the weighted kappa coefficient between 0.48 and 0.85 for all nine domains, the inter-rater reliability of the Persian version of the POES was acceptable.

The obtained results in inter-rater reliability are completely consistent with the results of the previous studies. In the Bejerholm et al. study, the level of agreement between the two evaluators on the total score was 0.70, and the level of agreement between the raters on nine domains varied from 0.50 to 0.80 [18]. The French version of the POES also shows high inter-rater reliability with ICC=0.94 [22]. Finally, since we do not have any other Persian tool to assess occupational engagement in schizophrenia, we recommend using the Persian version of the POES as an outcome measure in future studies among the Iranian population.

Ethical Considerations

Compliance with ethical guidelines

This study was approved by the Ethics Committee of the Iran University of Medical Sciences (Code: 1395.95-03-32-29421).

Funding

The paper was extracted from a research project of the second author, Department of occupational therapy, Faculty of Rehabilitation, Iran University of Medical Sciences.

Authors' contributions

Conceptualization: Tayebeh Masoumi, Narges Shafaroodi; Data collection: Tayebeh Masoumi, Faezeh Alvandi; Data analysis: Abbas Ebadi; Writing – original draft: Tayebeh Masoumi; Supervision: Narges Shafaroodi.

Conflict of interest

The authors declared no conflict of interest.

Acknowledgements

We thank all the patients who have participated in this study.

References

- [1] Wilcock AA. Occupation and health: Are they one and the same? *J Occup Sci.* 2007; 14(1):3-8. [DOI:10.1080/14427591.2014.878200]
- [2] Gersbunly J, Sullivan O. The sociological uses of time-use diary analysis. *Eur Sociol Rev.* 1998; 14(1):69-85. [DOI:10.1093/oxfordjournals.esr.a018228]
- [3] Bhat CR, Koppelman FS. A retrospective and prospective survey of time-use research. *Transportation.* 1999; 26(2):119-39. [DOI:10.1023/A:1005196331393]
- [4] Nie NH, Hillygus DS. The impact of Internet use on sociability: Time-diary findings. *It Soc.* 2002; 1(1):1-20. https://www.researchgate.net/profile/D-Sunshine-Hillygus-2/publication/247901330_The_Impact_of_Internet_Use_on_Sociability_Time-Diary_Findings/links/0deec5398edce1b76800000/The-Impact-of-Internet-Use-on-Sociability-Time-Diary-Findings.pdf
- [5] Harvey SA, Pentland WE, McCoil MA, Lawton P. *Time use research in social Sciences.* New York: Springer US; 1999. https://www.google.com/books/edition/Time_Use_Research_in_the_Social_Sciences/6_RQeWGhYaEC?hl=en&gbpv=0
- [6] Farnworth L. Time use, tempo and temporality: Occupational therapy's core business or someone else's business. *Aust Occup Ther J.* 2003; 50(3):116-26. [DOI:10.1046/j.1440-1630.2003.00391.x]
- [7] Yerxa EJ, Locker SB. Quality of time use by adults with spinal cord injuries. *Am J Occup Ther.* 1990; 44(4):318-26. [DOI:10.5014/ajot.44.4.318] [PMID]
- [8] Seymour W. Time and the body: Re-embodying time in disability. *J Occup Sci.* 2002; 9(3):135-42. [DOI:10.1080/14427591.2002.9686501]
- [9] Reichenberg A, Feo C, Prestia D, Bowie CR, Patterson TL, Harvey PD. The course and correlates of everyday functioning in schizophrenia. *Schizophr Res Cogn.* 2014; 1(1):e47-52. [DOI:10.1016/j.scog.2014.03.001] [PMID] [PMCID]
- [10] Chugg A, Craik C. Some factors influencing occupational engagement for people with schizophrenia living in the community. *Br J Occup Ther.* 2002; 65(2):67-74. [DOI:10.1177/030802260206500204]
- [11] Minato M, Zemke R. Occupational choices of persons with schizophrenia living in the community. *J Occup Sci.* 2004; 11(1):31-9. [DOI:10.1080/14427591.2004.9686529]
- [12] Bejerholm U, Eklund M. Time use and occupational performance among persons with schizophrenia. *Occup Ther Ment Health.* 2004; 20(1):27-47. [DOI:10.1300/J004v20n01_02]
- [13] Bejerholm U, Eklund M. Occupational engagement in persons with schizophrenia: Relationships to self-related variables, psychopathology, and quality of life. *Am J Occup Ther.* 2007; 61(1):21-32. [DOI:10.5014/ajot.61.1.21] [PMID]
- [14] Laliberte-Rudman D, Yu B, Scott E, Pajouhandeh P. Exploration of the perspectives of persons with schizophrenia regarding quality of life. *Am J Occup Ther.* 2000; 54(2):137-47. [DOI:10.5014/ajot.54.2.137] [PMID]
- [15] Law M. Participation in the occupations of everyday life. *Am J Occup Ther.* 2002; 56(6):640-9. [DOI:10.5014/ajot.56.6.640] [PMID]
- [16] Gerber LH, Furst GP. Validation of the NIH activity record. A quantitative measure of life activities. *Arthritis Care Res.* 1992; 5(2):81-6. [DOI:10.1002/art.1790050206] [PMID]
- [17] Bejerholm U, Lundgren-Nilsson Å. Rasch analysis of the profiles of occupational engagement in people with severe mental illness (POES) instrument. *Health Qual Life Outcomes.* 2015; 13:130. [DOI:10.1186/s12955-015-0327-0] [PMID] [PMCID]
- [18] Bejerholm U, Eklund M. Construct validity of a newly developed instrument: Profile of occupational engagement in people with schizophrenia, POES. *Nord J Psychiatry.* 2006; 60(3):200-6. [PMID]
- [19] Bejerholm U, Hansson L, Eklund M. Profiles of occupational engagement in people with schizophrenia (POES): The development of a new instrument based on time-use diaries. *Br J Occup Ther.* 2006; 69(2):58-68. [DOI:10.1177/030802260606900203]
- [20] Bejerholm U. *Occupational perspectives on health in people with schizophrenia: Time use, occupational engagement and instrument development.* Lund: Lund University; 2007. https://www.google.com/books/edition/Occupational_Perspectives_on_Health_in_P/0rZrNQAACAAJ?hl=en
- [21] Black MH, Milbourn B, Desjardins K, Sylvester V, Parrant K, Buchanan A. Understanding the meaning and use of occupational engagement: Findings from a scoping review. *Br J Occup Ther.* 2019; 82(5):272-87. [DOI:10.1177/0308022618821580]
- [22] Larivière N, Aubin G, Pépin MÈ, Maurice V, Lavertu F, Tardif C, et al. French version of the profiles of occupational engagement in people with severe mental illness: Translation, adaptation, and validation. *Int J Ment Health.* 2017; 46(4):346-57. [DOI:10.1080/00207411.2017.1368308]

مقاله پژوهشی

ترجمه و سنجش پایایی نسخه فارسی نیمرخ در فعالیتهای

طیبه معصومی^۱، نرگس شفارودی^۲، فائزه الوندی^۳، عباس عبادی^۴

۱. گروه مشاوره، دانشگاه علوم بهزیستی و توانبخشی، تهران، ایران.
۲. گروه کاردرمانی، دانشکده توانبخشی، دانشگاه علوم پزشکی ایران، تهران، ایران.
۳. گروه کاردرمانی، دانشکده علوم پزشکی وابسته، دانشگاه علوم پزشکی زنجان، زنجان، ایران.
۴. گروه پرستاری، دانشکده پرستاری، دانشگاه علوم پزشکی بقیه الله، تهران، ایران.

چکیده

مقدمه: نیمرخ درگیر شدن در فعالیتهای افراد مبتلا به بیماری شدید روانی یکی از ابزارهای مبتنی بر الگوی گذران وقت است که می تواند ریتم فعالیت و استراحت، همچنین تنوع و دامنه فعالیت‌های معنادار را آشکار کند. پژوهش حاضر با هدف گزارش فرآیند ترجمه و ارزیابی پایایی بین ارزیاب‌ها نسخه فارسی این ابزار انجام شده است.

مواد و روش‌ها: در پژوهش حاضر، فرآیند ترجمه در سه مرحله ترجمه پیش رو، ترجمه به عقب و دو پیل تخصصی انجام شد. برای ارزیابی پایایی بین ارزیاب‌ها، تمام فرم‌های توسط نویسنده اول و سوم نمره دهی شدند.

یافته‌ها: داده‌های به دست آمده از ۴۷ بیمار مبتلا به اسکیزوفرنی به دقت مورد تجزیه و تحلیل قرار گرفت. تجزیه و تحلیل پایایی بین ارزیاب‌ها نشان می‌دهد که مقادیر همبستگی درونی در معیارهای منفرد ۰/۸۶ و در میانگین ۰/۹۲ بود.

نتیجه‌گیری: نتایج پایایی کاملاً با مطالعات قبلی در مورد این ابزار مطابقت دارد.

تاریخ دریافت: ۱۹ شهریور ۱۴۰۰

تاریخ پذیرش: ۰۳ دی ۱۴۰۰

تاریخ انتشار: ۰۹ دی ۱۴۰۰

کلیدواژه‌ها:

اسکیزوفرنی، نیمرخ درگیر شدن در فعالیتهای

Use your device to scan and read the article online



Cite this article as Masoumi T, Shafaroodi N, Alvandi F, Ebadi A. Translating and Assessing the Reliability of the Persian Version of the Profile of Occupational Engagement Function and Disability Journal. 2021; 4:E47. <http://dx.doi.org/10.32598/fdj.4.47>

<http://dx.doi.org/10.32598/fdj.4.47>

* نویسنده مسئول:

نرگس شفارودی

نشانی: گروه کاردرمانی، دانشکده توانبخشی، دانشگاه علوم پزشکی ایران، تهران، ایران.

تلفن: ۲۱۵۸۳۴۸ (۹۱۲) +۹۸

رایانامه: shafarodi.n@iums.ac.ir