



Research Paper

Psychometric Properties of the Persian Version of the Assessment of Time Management Skills



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ABSTRACT

Background and Objectives: Time management is an essential skill that enables individuals to participate in daily activities effectively. The assessment of time management skills (ATMS) is a widely used instrument to evaluate time management skills, but its psychometric properties have not been examined in Persian-speaking populations. This study aimed to assess the cross-cultural adaptation and psychometric properties of the Persian version of the ATMS (ATMS-P).

Methods: A convenience sample of 144 healthy adults aged 18-55 years completed the ATMS-P, along with several other questionnaires. Face and content validity were determined using the impact score of each item, content validity ratio (CVR) and content validity index (CVI) methods. The construct validity was evaluated using exploratory factor analysis (EFA) and convergent validity was assessed by correlating the ATMS-P with other related measures. The reliability was assessed using internal consistency and test re-test methods.

Results: Face validity impact scores ranged from 2.2 to 4 and the CVR was in an acceptable range of 0.57 to 1, with a CVI of 0.87 to 1. The EFA identified three factors for the Persian version of the ATMS: Time management, organization and planning and emotion regulation. The convergent validity of the ATMS-P was supported by significant correlations with other related measures. The internal consistency of the ATMS-P was excellent (Cronbach's α coefficient=0.926) and it demonstrated good test re-test reliability (ICC=0.903).

Conclusion: The ATMS-P has demonstrated good psychometric properties, making it a reliable and valid instrument for evaluating time management skills in Persian-speaking individuals.

Keywords: Psychometric properties, Assessment of time management skills (ATMS), Time management



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

There are various questionnaires for evaluating time management and the “assessment of time management skills (ATMS)” is one of the newest assessment tools. This questionnaire examines time management skills by considering cognitive aspects.

→ *What this article adds:*

Persian version of the ATMS is a useful tool for assessing time management skills in research and clinical settings in Persian-speaking individuals.

Introduction

Time is a fundamental and valuable resource for human beings, the loss of which can result in irrevocable costs. The relationship between occupation and time is intimate, and individuals determine how to utilize their time by selecting their occupations [1]. The appropriate and judicious selection of occupations in the context of time depends on the individual, as each person chooses occupations according to their life circumstances and schedules and intends to participate in the occupation. This process of planning, organizing, and directing activities towards the attainment of goals is known as time management [2]. Time management refers to a set of purposeful behaviors that individuals practice to use their time efficiently [3]. According to the international classification of functioning, disability and health (ICF), time management constitutes a component of executive functions and is defined as “the mental functions of arranging events based on chronological order, allocating time to events and activities” [4]. Empirical investigations in the field of time management have demonstrated that it is closely linked to various occupational domains, such as employment and education, and that individuals with better time management skills experience less job stress and improved educational performance [5, 6]. Furthermore, time management has positive effects on overall health, including job satisfaction, life satisfaction, and mental health [7]. Given the ramifications of time management on diverse aspects of life, it is imperative to have a tool and method to assess time management skills.

The time management behavior scale (TMBS) is a widely used instrument to investigate time management, comprising a list of common concepts of time management behaviors. Factor analysis has identified four subscales for TMBS, including determination of

goals and priorities, mechanics of time management, organization preference, and perceived control of time [8]. Another instrument frequently employed to assess time management is the time management questionnaire (TMQ), which includes items pertaining to attitudes towards time management and planning for time allocation. Based on factor analysis, the TMQ consists of three factors: Short-term planning, long-term planning, and time attitude [9]. However, the available research on the psychometric properties of these two instruments is limited, and their internal consistency has been found to vary across studies, falling below the generally accepted level, which indicates the need for modification or development of a new tool.

Occupational therapists have developed a relatively new tool, the assessment of time management skills (ATMS), based on the cognitive basis of time management skills. This self-scoring questionnaire contains 30 items and measures three subscales, including emotion regulation, time management and organization and planning. Initially designed to evaluate time management in individuals with serious mental illness and coexisting substance-related disorders [10], the ATMS has demonstrated good psychometric properties in only two studies conducted thus far. The Swedish version of ATMS comprises 27 items, and based on Rasch analysis, it is also suitable for evaluating individuals with neurodevelopmental or mild intellectual disability, consisting of three structures, namely emotion regulation, time management, and organization and planning. In a recent study investigating the original version of ATMS, the English version of ATMS with 27 items was found to be a valid tool for evaluating time management skills in the general population and in individuals with cognitive impairment caused by mental or neurodevelopmental disorder [11, 12].

Given the close relationship between time management and daily occupations, it is crucial to evaluate time management skills by occupational therapists. However, to date, no time management assessment tool has been designed or translated into Persian language, and there is a need for a common measurement tool that can be used for individuals with different disorders and cultures. Therefore, the primary aim of this study was to investigate the psychometric properties of the Persian version of the ATMS-P in healthy Persian-speaking individuals. By validating the ATMS-P, this study will provide a reliable and valid instrument for occupational therapists and researchers to assess time management skills in the Persian-speaking population and contribute to the development of effective interventions to improve time management skills and promote health and well-being.

Materials and Methods

Study design

The study employed a psychometric and descriptive design to comprehensively evaluate the validity and reliability of the Persian version of the ATMS. Specifically, the validity of the assessment tool was assessed using face and content validity, convergent validity, and construct validity, while the reliability was evaluated through measures of internal consistency and test-retest reliability.

Participants

The study was conducted with great attention to participant selection, ensuring validity and reliability. A total of 25 individuals between 18 and 55 years old were recruited for face validity assessment, while 14 occupational therapists with PhD degrees participated in content validity evaluation. The remaining validity and reliability assessments were conducted on 144 individuals within the same age range, recruited using a convenience sampling method but with strict inclusion criteria to ensure homogeneity. Participants had to meet specific criteria, including no previous diagnosis of DSM5 disorders, absence of neurological disorders or chronic diseases, not using psychiatric drugs and not having mental retardation or learning disorders. [Table 1](#) presents the descriptive characteristics of the 144 Persian-speaking participants.

Procedure

The study followed a rigorous translation and adaptation protocol for the ATMS tool, in accordance with the standards set forth by the [World Health Organization \(WHO\)](#) [13]. The translation process was initiated only after obtaining permission from the developer of the ATMS. An expert in Persian language, proficient in English and familiar with occupational therapy terminology, was responsible for the initial translation. A panel of experts reviewed and agreed upon the appropriate Persian translations for key words, with emphasis placed on maintaining the conceptual meaning of words and phrases in addition to linguistic equivalence. The final version

Table 1. Demographic characteristics of Persian-speaking participants (n=144)

Variables		Mean±SD/No. (%)
Age (y)		35.10±5.9
Marital status	Married	77(53.5)
	Single	53(36.8)
	Widowed/Divorced	14(9.7)
Employment statuses	Jobless	22(15.3)
	Full time job	51(35.4)
	Part time job	71(49.3)
Education level	Sub-diploma	6(4.2)
	Diploma	40(27.8)
	Academic	98(68)

of the Persian version of ATMS was translated back into English by a bilingual translator with no prior knowledge of the assessment tool and discrepancies were discussed by the translators and expert panel, resulting in the final version of the Persian translation. The validation process commenced after obtaining approval of the final version from the developer. Prior to evaluation, all participants were informed of the research aims, potential risks associated with the study, and their right to withdraw at any time without penalty. Participants provided written consent and were assessed by an occupational therapist in a single session lasting approximately 60 minutes, with assessments conducted in random order. To investigate the test re-test reliability of the ATMS, 55 participants who agreed to a second assessment were re-evaluated after a three-week interval. Following the completion of the assessments, participants were provided with a report of their performance.

Measurements

The study utilized a variety of validated and reliable measurements to thoroughly evaluate different aspects of participants' time management skills, occupational balance, meaningful activity participation, quality of life (QoL) and executive functions.

The ATMS is a 27-item self-rating questionnaire that measures individuals' awareness of time management skills and use of cognitive strategies for organizing and planning daily life. The ATMS employs a four-point Likert rating scale and measures three constructs: Emotion regulation, time management, and organization and planning. It has demonstrated high internal consistency ($\alpha=0.86$) and good test re-test reliability [10].

The occupational balance questionnaire (OBQ11) is an 11-item questionnaire that evaluates occupational balance, defined as having the right number of occupations and sufficient diversity in occupational patterns. Scores range from 0 to 3 per item, with a final score ranging from 0 to 33. A higher score indicates better occupational balance. The OBQ has demonstrated high reliability (Cronbach's $\alpha=0.92$) [14].

The meaningful activity participation assessment (MAPA) is a self-report instrument that assesses participation in 28 daily activities according to their frequency and meaning. The final MAPA score ranges from 0 to 672, with a higher score indicating greater participation in meaningful activities. MAPA has demonstrated acceptable internal consistency (Cronbach's $\alpha=0.79$) and good test re-test reliability (ICC=0.92) [15].

The 36-item short-form health survey (SF-36) is a well-established questionnaire that measures health-related QoL across two domains: Physical and mental, and eight subscales. The final score ranges from 0 to 100, with a higher score indicating better QoL. The SF-36 has demonstrated high reliability, with a reported coefficient between 0.77 and 0.95 [16].

The dysexecutive questionnaire (DEX) is a 20-item questionnaire that assesses executive functions and associated behaviors. Scoring is based on a Likert scale ranging from 0 to 4, with higher scores indicating greater executive deficits. The self-rating version of the questionnaire was utilized in this study and the DEX has demonstrated good test re-test reliability, with a reported coefficient of 0.88-1 [17].

The selected measurements were chosen based on their established reliability and validity and were deemed appropriate for use in the current study. Their utilization reinforces the study's methodological rigor and enhances the validity of the obtained results.

Statistical analysis

Statistical analysis was conducted using SPSS software, version 23. To assess the face validity of the ATMS-P questionnaire, a quantitative face validity method was employed and 25 participants were asked to rate the importance of each item using a five-point Likert scale. Items with an impact score >1.5 were deemed suitable for further analysis [18]. Content validity was evaluated using two methods: Content validity ratio (CVR) and content validity index (CVI). CVR was calculated using responses from 14 occupational therapists, with scores >0.51 accepted based on Lawshe's criteria [19]. The CVI was calculated using Waltz and Bausell reliability method, with items accepted based on CVI scores >0.79 . [20]. For construct validity, exploratory factor analysis (EFA) with principal component analysis was conducted after performing sample adequacy evaluations using the Kaiser-Meyer-Olkin test and correlation matrix validity using Bartlett's test of sphericity. Positive correlations were expected between the ATMS and all questionnaires except the DEX to investigate convergent validity. Test re-test reliability was determined using the intraclass correlation coefficient (ICC) with a 95% confidence interval (CI), with values >0.7 considered acceptable [21]. Internal consistency was evaluated using Cronbach's α , with values >0.7 considered acceptable [21]. The floor and ceiling effects were calculated, with a value $<15\%$ considered acceptable. The standard error of measurement (SEM) was calculated to evaluate the accuracy of

repeated measurements. The minimal detectable change (MDC) was calculated as [Equation 1](#):

$$1. Z_{95} \times \sqrt{2} \times SEM$$

To determine the minimal change in score indicating real change in function. All statistical analyses were conducted with a significance level of 5%.

Results

Face and content validity

The ATMS-P was found to have satisfactory face validity, with impact scores ranging from 2.29 to 4.003 for each item. Occupational therapists provided suggestions for improving certain items, but none were deleted or modified following the final review. The CVR and index were calculated for each item and all items fell within an acceptable range of 0.57 to 1, indicating good content validity. The impact score, CVR and index for each item are presented in [Table 2](#).

Construct validity

The ATMS-P was subjected to EFA using principal components extraction and varimax rotation. The analysis revealed three factors with eigenvalues >1, which explained 57.72% of the total variance. The initial correlation matrix was examined to determine item-factor correlations, with criteria for entering variables into factors being correlations >0.4 between factors and items. Negative coefficients <0.4 were considered criteria for excluding variables. From the items that loaded onto each factor, the three domains or factors that the ATMS-P measures were inferred. The three factors were labelled as follows: Factor 1 (time management skills), factor 2 (organization and planning skills) and factor 3 (emotional regulation skills). The item factor loadings for each factor are as follows:

Factor 1 (time management skills)

Items 1-4, 6, 8, 9, 13, 14, 17-25 had factor loadings ranging from 0.159 to 0.853, indicating that they primarily measure time management skills.

Factor 2 (organization and planning skills)

Items 5, 10, 11 and 26 had factor loadings ranging from 0.632 to 0.843, indicating that they primarily measure organization and planning skills.

Factor 3 (emotional regulation skills)

Items 7, 12, 15, 16 and 27 had factor loadings ranging from 0.266 to 0.784, indicating that they primarily measure emotional regulation skills.

These factor loadings suggest that the ATMS-P items are measuring three distinct factors related to time management, organization and planning and emotional regulation skills. This supports the construct validity of the ATMS-P, as it confirms that the ATMS-P is measuring what it is intended to measure. The results of the factor analysis for the ATMS-P are summarized in [Table 3](#).

Convergent validity

Descriptive data of measures used for investigating convergent validity and the results of the correlation analysis conducted to assess the convergent validity of the ATMS-P are presented in [Table 4](#). The analysis revealed that all correlations were significant at the 0.01 level (2-tailed). The findings indicated a high level of positive correlation between the ATMS-P total score and its subscales with the MAPA, SF36 and OBQ, suggesting that the ATMS-P measures constructs related to time management, occupational balance and health-related QoL. In contrast, a significant negative correlation was observed between the ATMS-P and its subscales with the DEX, indicating that reduced time management skills are associated with higher levels of executive dysfunction. These results provide evidence for the convergent validity of the ATMS-P as a valid tool for assessing time management skills in Persian-speaking individuals.

Internal consistency

The internal consistency of the Persian version of the ATMS-P was excellent, with a Cronbach's α of 0.926 for the total score. The time management subscale and organization and planning subscale also showed high reliability with Cronbach's α of 0.917 and 0.939, respectively. However, the emotional regulation subscale demonstrated lower but still acceptable reliability with a Cronbach's α of 0.691.

Test re-test reliability

The test re-test reliability of the ATMS-P was high for all subscales, with the total score showing an ICC of 0.906 (95% CI, 0.84%, 0.94%). The ICC values for the time management subscale, organization and planning subscale and emotional regulation subscale were

Table 2. Face and content validity scores of the ATMS-P: Results of expert review

	Items	CVR	CVI	Impact Score
1	I feel I manage my time well.	0.85	1	4.003
2	I carry an appointment book.	0.71	1	3.36
3	I stop and plan out the steps before I start something new.	0.71	0.89	3.69
4	I plan my daily activities.	0.85	0.97	3.76
5	I rush while completing my work.	0.71	1	2.63
6	I do my most difficult work at the time of day when I have the most energy.	0.57	0.94	2.73
7	I find that I am overwhelmed by my daily routine.	0.57	0.87	2.88
8	I find that even though I want to be on time, I am often late.	0.71	1	2.32
9	Even if I don't like to do something, I still complete it on time.	0.71	0.89	3.17
10	I am disorganized in my tasks.	0.57	0.94	3.22
11	I clear my work-space before beginning a task.	0.57	0.95	2.78
12	I complete the tasks on my schedule or appointment book to my satisfaction.	0.85	0.87	2.84
13	I make to-do lists.	0.85	0.97	2.73
14	I wait until I feel better before taking on important tasks.	0.71	1	2.57
15	I reward myself for doing a good job.	0.71	1	2.2
16	I put off things I don't like to do until the very last minute.	0.71	0.89	2.51
17	I can correctly estimate the time I need to complete my tasks.	0.85	0.92	3.41
18	I learn from my mistakes.	0.57	1	2.29
19	I make sure I have a good night's sleep.	0.71	0.95	2.43
20	I feel competent about managing my time when I write down my appointments.	0.85	0.89	3.30
21	My mood affects my ability to manage my time.	0.71	0.89	3.36
22	I feel confident that I can complete my daily routine	0.71	0.97	2.89
23	I put in more effort to follow my schedule when I see others keeping up with their schedule.	0.71	0.87	2.38
24	I run out of time before I finish important things.	0.85	1	2.61
25	I look at a watch or a cell phone to keep track of the time.	1	1	3.78
26	I put my things back where they belong or where I got them from.	0.71	0.95	2.43
27	I feel that I don't manage my time well	0.85	1	3.25

Table 3. Factor analysis results of the ATMS-P: Factor loadings of items on three factors

	Items	Factors		
		1	2	3
1	I feel I manage my time well.	0.159	0.825	0.167
2	I carry an appointment book.	0.733	0.181	0.071
3	I stop and plan out the steps before I start something new.	0.748	0.146	0.064
4	I plan my daily activities.	0.718	0.133	0.082
5	I rush while completing my work.	0.033	0.699	-0.116
6	I do my most difficult work at the time of day when I have the most energy.	0.793	0.132	0.245
7	I find that I am overwhelmed by my daily routine.	0.275	0.684	0.266
8	I find that even though I want to be on time, I am often late.	0.031	0.707	0.086
9	Even if I don't like to do something, I still complete it on time.	0.071	0.698	0.056
10	I am disorganized in my tasks.	0.843	0.103	0.146
11	I clear my work-space before beginning a task.	0.781	0.018	0.076
12	I complete the tasks on my schedule or appointment book to my satisfaction.	-0.081	0.177	0.757
13	I make to-do lists.	0.849	0.122	0.180
14	I wait until I feel better before taking on important tasks.	0.835	0.119	0.116
15	I reward myself for doing a good job.	0.081	0.341	0.451
16	I put off things I don't like to do until the very last minute.	0.155	0.716	0.202
17	I can correctly estimate the time I need to complete my tasks.	0.160	0.739	0.093
18	I learn from my mistakes.	0.230	0.674	0.137
19	I make sure I have a good night's sleep.	0.647	0.226	0.117
20	I feel competent about managing my time when I write down my appointments.	0.229	0.024	0.471
21	My mood affects my ability to manage my time.	0.220	0.108	0.666
22	I feel confident that I can complete my daily routine	0.147	0.600	0.160
23	I put in more effort to follow my schedule when I see others keeping up with their schedule.	0.166	0.101	0.784
24	I run out of time before I finish important things.	0.137	0.762	-0.020
25	I look at a watch or a cell phone to keep track of the time.	0.853	0.168	0.075
26	I put my things back where they belong or where I got them from.	0.632	0.141	-0.003
27	I feel that I don't manage my time well	0.137	0.838	0.167

Table 4. Descriptive statistics and correlation analysis results of the ATMS-P with other measures: Convergent validity

Measure	ATMS-P Total Score	ATMS-P_T	ATMS-P_O&P	ATMS-P_ER
OBQ11	0.738	0.568	0.633	0.469
DEX	-0.847	-0.639	-0.726	-0.513
MAPA	0.619	0.433	0.520	0.628
36-item short-form health survey	0.678	0.493	0.571	0.475

Variables	Mean±SD	Variables	Mean±SD
OBQ11	21.61±5.04	ATMS-P total score	74.71±12.34
DEX	17.55±8.09	ATMS-P_T	30.87±4.99
MAPA	319.08±51.23	ATMS-P_O&P	27.51±8.33
36-item short-form health survey	67.81±8.34	ATMS-P_ER	16.31±1.98

Abbreviation: ATMS-P: Persian version of assessment of time management skills; ATMS-P_T: ATMS-P time management subscale; ATMS-P_O&P: ATMS-P organization and planning subscale; ATMS-P_ER: ATMS-P emotional regulation subscale; DEX: Dysexecutive questionnaire.

0.939 (95% CI, 0.89%, 0.96%), 0.932 (95% CI, 0.88%, 0.96%) and 0.847 (95% CI, 0.74% 0.90%), respectively.

The SEM and the minimum detectable change (MDC) values were calculated for the total score and subscales. The SEM values were 3.78, 1.23, 2.17, and 0.77 for the total score, time management subscale, organization and planning subscale, and emotional regulation subscale, respectively. The MDC values were 5.38, 3.07, 4.08 and 2.43 for the total score, time management subscale, organization and planning subscale and emotional regulation subscale, respectively. These values represent the minimum score changes that correspond to real changes in individuals. The absence of floor and ceiling effects for the total and subscale scores of the ATMS-P indicates that the scale is able to capture the full range of time management skills in Persian-speaking individuals. Overall, these results provide empirical evidence for the reliability and validity of the ATMS-P as a useful tool for assessing time management skills in clinical and research settings.

Discussion

The present study sought to examine the psychometric properties (test re-test reliability, internal consistency, face validity, content validity and construct validity) of the ATMS-P. The results of the analyses provided evidence that the ATMS-P demonstrates sound validity and reliability within this population.

Initially, the validity of the ATMS-P was ascertained through evaluations of face and content validity based upon the translation of the original ATMS. To the authors' knowledge, no prior studies have endeavored to investigate the face and content validity of this scale. The face validity results suggested that the Persian version of the test was comprehensible and the items were deemed important by individuals within the time management field. The content validity outcomes substantiated that, according to experts, all items on the Persian questionnaire were necessary and conveyed simple, unambiguous, and meaningful concepts germane to the construct of time management. Therefore, the content validity of this tool was deemed adequate, and the tool appears suitable to measure time management skills.

To evaluate construct validity, EFA was undertaken, and the results indicated a three-factor structure for the ATMS-P that termed "time management", "organization and planning" and "emotion regulation". The emergent factors bore similarity to the fundamental structure of the original ATMS and its three subscales, as reported in Janeslätt's study [11]. Also, in another study, Roshanay et al. investigated the psychometric properties of the original version of the ATMS. The results of this study also suggested that the number of items should be reduced from 30 to 27, and like the previous study, ATMS includes three subscales [12].

The findings demonstrated that time management skills were significantly associated with executive functions which is unsurprising given the theoretical relationship between these two concepts. Executive functions repre-

sent a diverse array of cognitive processes and behavioral competencies, according to prior research. Moreover, past research has shown that deficits in executive functions are closely linked with long-term and purposeful planning for occupations, as well as difficulties with time management [22].

The results indicated that time management skills were highly and positively correlated with participation in meaningful activities and occupational balance. As previously discussed, time management skills constitute a higher-level cognitive ability; thus, poor performance on the ATMS may be indicative of cognitive deficits, which are linked to decreased participation in occupations, given that participation necessitates commensurate cognitive abilities [23]. Rotenberg's work showed that individuals with diminished cognitive capacities, despite living independently, experienced challenges participating in daily occupations (especially those demanding higher-level cognitive functions) [24], which aligns with the aforementioned empirical and theoretical works. Furthermore, prior research has demonstrated that management of daily occupations (in both quantitative and qualitative senses) requires time management skills because occupations occur within temporal contexts. Individuals must predict, prioritize, plan, sequence, and estimate the time and connections between current and past events to perform occupations [25]. Therefore, it appears that effective time management of daily occupations may facilitate occupational balance, as occupational balance refers to possessing the appropriate amount and variety of occupations as well as personal satisfaction with them [26]. If a person is able to successfully manage the time demands of their occupations and participate in desired occupations to the extent they wish, they will likely achieve enhanced occupational balance. This relationship between time management and occupational balance is supported in previous research.

The results provide further evidence of a significant correlation between the ATMS and QoL. QoL is a broad construct influenced by diverse factors, most of which pertain to subjective perceptions of life conditions encompassing domains such as work, leisure, finances, living conditions, security, family and social relationships, religion, physical health and mental health, according to prior research [27]. Previous studies have indicated that time management is associated with overall QoL, given that employing time management strategies to engage in physical, social, and recreational activities promotes physical and mental health [28]. A review by Claessens et al. demonstrated that time management shares a positive relationship with job satisfaction, health, and

reduced stress [29]. Beyond these points, time management does not entail controlling every moment of life but rather incorporates the methods individuals utilize to improve their lives. If a person is able to manage time effectively, participation in occupations may improve, and improved participation is linked to enhanced QoL, according to prior research [30].

To evaluate the reliability of the ATMS-P, internal consistency and test re-test reliability were assessed. To the authors' knowledge, only the original scale developers have previously investigated the internal consistency and test re-test reliability of this instrument. The results of the present study, which are consistent with those of White et al. [10], indicated strong test re-test reliability of the ATMS-P. Adequate internal consistency was found for the ATMS and its three subscales, signifying that the items of this instrument are homogeneous in assessing time management skills. Moreover, no ceiling or floor effects were identified for this instrument, which aligns with previous findings [10] and demonstrates the capability of the tool to accurately measure varying levels of time management skills.

Conclusion

In summary, the results of this study provide evidence that the ATMS-P demonstrates robust test re-test reliability, high internal consistency, and satisfactory construct validity. The ATMS-P may be considered an appropriate self-report instrument for assessing time management skills in Persian-speaking individuals.

Limitations

The limitations inherent in the present study must be acknowledged as they may have had an impact on the interpretation of the findings. The study did not account for potential moderating variables such as intelligence level, socio-economic status, and time management disorders, which could have influenced the performance of the participants. The absence of this information may have implications for the extent to which the findings can be extrapolated to other contexts.

Ethical Considerations

Compliance with ethical guidelines

This study was approved by the Ethics Committee of Iran University of Medical Sciences (Code: IR.IUMS.REC.1401.623).

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Authors' contributions

Conceptualization, methodology and supervision: Majid Farhadian and Malahat Akbar Fahimi; Investigation: Majid Farhadian; Writing the initial draft: Majid Farhadian; Review, editing and final approval: All authors.

Conflict of interest

The authors declared no conflict of interest.

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مقاله پژوهشی



ویژگی‌های روانسنجی نسخه فارسی ارزیابی مهارت‌های مدیریت زمان

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چیکید

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مقدمه: مدیریت زمان یک مهارت ضروری است که افراد را قادر می‌سازد تا به طور موثر در فعالیت‌های روزمره شرکت کنند. "ارزیابی مهارت‌های مدیریت زمان" ابزاری پرکاربرد برای ارزیابی مهارت‌های مدیریت زمان است، اما ویژگی‌های روان‌سنجی آن در جمعیت فارسی‌زبان مورد بررسی قرار نگرفته است. بنابراین، این مطالعه با هدف انطباق بین فرهنگی و بررسی ویژگی‌های روان‌سنجی نسخه فارسی "ارزیابی مهارت‌های مدیریت زمان" انجام شد.

مواد و روش‌ها: شرکت‌کنندگان به روش نمونه‌گیری در دسترس انتخاب شدند و شامل ۱۴۴ بزرگسال سالم ۱۸ تا ۵۵ سال بودند که نسخه فارسی "ارزیابی مهارت‌های مدیریت زمان" را به همراه چندین پرسشنامه مرتبط دیگر تکمیل کردند. روایی صوری و محتوا با استفاده از روش‌های امتیاز تأثیر هر آیتم، نسبت روایی محتوا و شاخص روایی محتوا تعیین شد. روایی سازه با استفاده از تحلیل عاملی اکتشافی و روایی همگرا با همبستگی نسخه فارسی "ارزیابی مهارت‌های مدیریت زمان" با سایر آزمون‌های مرتبط ارزیابی شد. پایایی با استفاده از روش‌های همسانی درونی و آزمون- بازآزمون ارزیابی شد.

یافته‌ها: نمرات تأثیر روایی صوری از ۲/۲ تا ۴ متغیر بود. نسبت روایی محتوا در محدوده قابل قبول ۰/۵۷ تا ۱ و شاخص روایی محتوا قابل قبول ۰/۸۷ تا ۱ بود. تحلیل عاملی اکتشافی سه عامل را برای نسخه فارسی "ارزیابی مهارت‌های مدیریت زمان" شناسایی کرد: مدیریت زمان، سازماندهی و برنامه‌ریزی و تنظیم احساسات. روایی همگرای ابزار پژوهش با همبستگی قابل توجه با سایر آزمون‌ها تایید شد. سازگاری درونی پرسشنامه عالی بود (ضریب آلفای کرونباخ=۰/۹۲۶) و همچنین پایایی آزمون-بازآزمون خوبی را نشان داد (ضریب همبستگی درون رده‌ای=۰/۹۰۳).

نتیجه‌گیری: نسخه فارسی "ارزیابی مهارت‌های مدیریت زمان" ویژگی‌های روان‌سنجی خوبی از خود نشان داده است که آن را به ابزاری روا و پایا برای ارزیابی مهارت‌های مدیریت زمان در افراد فارسی‌زبان تبدیل کرده است.

کلیدواژه‌ها:

ویژگی‌های روان‌سنجی،
ارزیابی مهارت‌های
مدیریت زمان، مدیریت
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