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ORIGINAL RESEARCH

Psychometric Properties of the Multidimensional Subjective Financial Well-Being Scale among Iranian Emerging Adults

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Abstract

The Multidimensional Subjective Financial Well-Being Scale (MSFWBS) has demonstrated strong validity in assessing subjective financial well-being among emerging adults in WEIRD (Western, Educated, Industrialized, Rich, and Democratic) contexts. However, evidence from developing countries remains limited and mixed. This study aimed to validate the Persian version of the MSFWBS among emerging adults in Iran. Adopting a contemporary view to validity, the scale was first translated and culturally adapted to ensure face and content validity. Subsequently, a series of Structural Equation Models were conducted to collect evidence of score structure, reliability, generalizability, and both convergent and criterion-related validity. Data were collected from 356 participants aged 18–29 in Sanandaj, Iran. Confirmatory factor analysis supported the original five-factor structure, with good fit indices and high internal consistency. Measurement invariance was confirmed across gender, age, living arrangement, and occupational status. Additionally, significant associations with personal income and life satisfaction provided further evidence for convergent and criterion-related validity, respectively. Overall, the findings suggest that the Persian version of the MSFWBS is a reliable and valid instrument for assessing subjective financial well-being among Iranian emerging adults. The study contributes to expanding research in non-WEIRD populations and supports the broader cross-cultural applicability of the MSFWBS in developing economies.

Keywords Subjective financial well-being · Emerging adults · Developing economies · Cross-cultural validation · Psychometric properties

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Introduction

Financial matters affect individuals' daily lives, shaping their living standards, purchasing power, and long-term goals. Reflecting these influences, the concept of financial well-being (FWB) has received growing recognition, especially in developed countries (Vieira et al., 2023). FWB is described as a positive financial condition that incorporates both objective and subjective aspects (Comerton-Forde et al., 2018). The objective dimension of FWB involves tangible economic resources like income and assets, while the subjective side reflects individuals' emotional and cognitive evaluation of their financial situation (Sorgente & Lanz, 2019). Researchers increasingly recognize that objective measures of FWB alone are insufficient, as personal perceptions and emotions about money can help better explain individuals' overall financial experience (Brüggen et al., 2017).

Building on this view, research indicates that subjective financial well-being (SFWB) is a multidimensional construct encompassing various aspects. For instance, Netemeyer et al. (2018) identified two key dimensions: current money management stress and anticipated future security, reflecting short-term challenges of managing day-to-day finances and long-term financial stability concerns. Subsequent studies expanded this framework to include cognitive, behavioral, materialistic, relational, and temporal aspects, shaping financial perceptions through overall financial satisfaction, management habits, perceived financial sufficiency, peer comparisons, and confidence in future financial security (Sorgente et al., 2024; Sorgente & Lanz, 2019). Previous research indicates that SFWB is positively associated with both psychological and subjective well-being (Brüggen et al., 2017; Iannello et al., 2021).

SFWB was initially studied in older populations due to the unique financial challenges for these groups, such as retirement planning, healthcare costs, and social exclusion (Piumatti, 2017). Recently, however, interest has expanded to the SFWB of emerging adults - typically aged 18 to 29 – who are transitioning from completing their education to making key life commitments such as marriage, parenthood, and career building (Arnett, 2023). This period is marked by significant social, cognitive, and psychological development (Wood et al., 2018). In this phase of life, individuals take on greater economic responsibilities and become less dependent on family and institutional support due to necessity, personal choice or societal expectations (Cherney et al., 2020). Emerging adults are in an in-between phase, positioned between adolescence and adulthood, navigating the balance between independent living and reliance on their parents, both for housing and financial support (Sorgente & Lanz, 2017). In this transitional period, traditional social milestones like education, marriage, and starting a family are no longer the primary markers of adulthood. Instead, financial behavior and well-being have become key indicators of readiness for adult roles and responsibilities (Serido et al., 2023).

Thus, FWB is crucial in this phase, and studies on emerging adults' FWB have surged since the 2008 economic crisis (Sorgente & Lanz, 2017). Most of these studies have been conducted in developed countries (e.g., Cherney et al., 2020; Lanz et al., 2020), but recently, interest in emerging adults' FWB has been growing in developing countries as well (e.g., Shankar et al., 2022; Siregar et al., 2024). A key challenge for researchers in developing countries when measuring FWB of emerging adults is

selecting an appropriate assessment tool. Many widely used instruments from developed countries may not be directly applicable because of variations in economic conditions, financial accessibility, and sociocultural factors (Bashir & Qureshi, 2023; Vieira et al., 2023). On the other hand, there are studies that have shown that scales usually adopted in developed countries may be applicable to developing countries as well (de Oliveira Cardoso et al., 2024).

To contribute meaningful insights to this ongoing debate, the current study aims to evaluate the validity of the Persian translation of the Multidimensional Subjective Financial Well-being Scale (MSFWB) in a sample of Iranian emerging adults.

Instruments to Assess FWB

Earlier studies on emerging adults' FWB predominantly relied primarily on ad hoc items (Sorgente & Lanz, 2017). Over time, however, scholars increasingly recognized the need for validated, age-specific measurement instruments. Recently, two systematic reviews cataloged the available tools for assessing FWB, identifying 11 scales (Vieira et al., 2023) and 10 (de Oliveira Cardoso et al., 2023), respectively. Although many of these instruments focus exclusively on the subjective aspect of FWB, they often fail to comprehensively capture all theoretical dimensions of SFWB (de Oliveira Cardoso et al., 2023). Additionally, only two scales have been specifically developed for emerging adults: the Financial Well-being Scale (Norvilitis et al., 2003) and the Multidimensional Subjective Financial Well-being Scale (MSFWBS; Sorgente & Lanz, 2019). Based on the systematic review conducted by de Oliveira Cardoso et al. (2023), the MSFWBS shows good psychometric properties and is regarded as the most comprehensive tool currently available for assessing FWB.

Multidimensional Subjective Financial Well-being Scale (MSFWBS)

The MSFWBS consists of 25 items and evaluates five key dimensions of FWB in emerging adults. These dimensions include a *cognitive* dimension, which reflects the overall assessment of one's financial situation (general subjective financial well-being); a *behavioral* dimension, which captures the perceived ability to manage financial resources (money management); a *materialistic* dimension, which measures the perceived adequacy of material resources (having money); a *relational* dimension, which involves comparing one's financial status to that of peers (peer comparison); and a *temporal* dimension, which encompasses expectations for one's future financial status (financial future) (Sorgente & Lanz, 2019).

Originally developed in Italy (Sorgente & Lanz, 2019), the MSFWBS has since been tested in several countries including Austria, Canada, Finland, India, Italy, Portugal, Romania, Slovenia, and Turkey, confirming the five-factor model in all except India (Sorgente et al., 2024). While the model was supported in Turkey (Sorgente et al., 2024) and Brazil (de Oliveira Cardoso et al., 2024), findings from India provided mixed evidence regarding its applicability in developing economies.

The Case of Iranian Emerging Adults

Iran, as an upper-middle-income developing economy, experienced 5.0% economic growth in 2023, driven mainly by oil exports, with additional support from advancements in the services and manufacturing sectors (World Bank, 2024). However, Iran's economy continues to face growth challenges, particularly due to economic sanctions, limited access to external markets and modern technologies, lack of foreign investment, and the adverse effects of the COVID-19 pandemic (World Bank, 2023).

Iran is traditionally seen as a collectivist society (Hofstede, 2001), though a recent study suggests rising individualism (Moradi, 2024). This cultural shift, along with economic instability, a rigid labor market favoring older workers, and social norms delaying marriage, has significantly impacted pathways to adulthood and financial independence (Egel & Salehi-Isfahani, 2010). Thus, in the Iranian context, youth face a prolonged and challenging transition to adulthood, marked by frustration and uncertainty—a phenomenon termed "waithood"(Salehi-Isfahani, 2011). Waithood refers to unintentional delays in achieving key milestones of adulthood including marriage and employment (Smith-Hefner & Inhborn, 2020; Singerman, 2013). In addition, many Iranian youth in their late teens to mid-to-late 20s feel "in-between" adolescence and adulthood, mirroring the experiences of young people in other countries (Fathi et al., 2018). Thus, the financial life of emerging adults in Iran is particularly relevant today, making it a suitable context to test the applicability of the MSWFSB in developing economies.

The Current Study

The primary aim of the present study was to gather validity evidence for the Persian translation of the MSFWBS among Iranian emerging adults. The scale was first translated into Persian, followed by assessments of its face and content validity. Then, multiple sources of validity evidence were gathered in accordance with the contemporary unified framework of validity (Hubley & Zumbo, 2011) and the methodology used in the original validation study of the MSFWBS (Sorgente & Lanz, 2019). Specifically, we assessed: (1) the score structure of the scale using confirmatory factor analysis (CFA) to test the hypothesized five-factor model; (2) reliability by estimating omega coefficients to evaluate the internal consistency of each subscale; (3) generalizability by testing measurement invariance across gender, age groups, living arrangements, and occupational status; (4) convergent validity by investigating correlations between MSFWBS dimensions and objective FWB; and (5) criterion-related validity by examining the associations between MSFWBS dimensions and life satisfaction.

Method

Ethical Considerations

Prior to data collection, the study was reviewed by the Counseling Department of the University of Kurdistan, confirming its ethical and methodological appropriateness.

Informed consent was obtained from all participants, who were informed of their right to withdraw from the study at any time. To ensure transparency and reproducibility, all data (https://osf.io/2hyfd/?view_only=a387fdf478c2405bba8e3c670105afee), codes (https://osf.io/7k645/?view_only=df10309334b046d995da8e7c61f04039), and materials (https://osf.io/ptbg5/overview?view_only=) are publicly available on the Open Science Framework (OSF).

Procedure

In the first step, the MSFWBS was translated into Persian using Brislin's (1970) method, involving two bilingual specialists in psychology. One translated the scale into Persian, while the other, unaware of the original, back-translated it into English. Then, four translators, all holding degrees in psychology, compared both versions to identify discrepancies. Inconsistencies were identified in items 3, 9, 12, and 13, which were analyzed for linguistic, cultural or interpretational differences. After reaching a consensus, the Persian version was refined by rephrasing sentences, adjusting terminology, and ensuring cultural relevance while preserving the original conceptual meaning.

To evaluate face validity, two rounds of cognitive interviews were conducted with eight emerging adults, from both academic and non-academic backgrounds. Cognitive interviews are a widely endorsed approach for evaluating face validity, enabling researchers to closely investigate whether questionnaire items are suitable for the target group and to understand how participants mentally process and interpret the questions (Boateng et al., 2018). The interviews took place in a quiet university setting, where participants verbalized their thoughts while responding to the items, helping researchers improve comprehensibility of the questionnaire.

In the next step, a panel of eight experts—five psychologists familiar with the topic and three university professors of psychology—assessed the clarity of the translated scale using both qualitative and quantitative methods. In the qualitative evaluation, experts reviewed the readability and language of the items, provided feedback, and suggested revisions, which were incorporated and then reviewed again. In the quantitative evaluation, they rated each item's necessity (on a 3-point scale) and relevance (on a 4-point scale). Results are reported in the results section.

After finalizing the translated version, data were collected using convenience sampling from emerging adults aged 18–29 residing in Sanandaj, Kurdistan, Iran. Of the 390 questionnaires distributed, 356 were completed, resulting in a 91.3% response rate. Data collection spanned approximately six months, from June to November 2024.

Participants

The final sample consisted of 356 participants with a mean age of 23.18 (SD = 2.96). Of the participants, 112 (31.5%) were male and 244 (68.5%) were female. Regarding occupational status, the largest group comprised part-time employed individuals, making up 33.7% of the sample. Unemployed participants accounted for 29.2%,

irregularly employed 19.1%, and full-time employed 18.0%. The majority of participants (57.3%) reported living most or all of the time with their parents or other close relatives, while 42.7% lived away from their parents most of the time. The sample consisted primarily of participants holding a bachelor's degree (52.2%), followed by those with a high school diploma or less (23.0%), a master's degree (19.7%), and a smaller proportion with a doctoral degree or specialization (5.1%). The largest group of participants were single (62.4%), with 23.0% being in a relationship but not cohabitating, 11.8% married, and 2.8% falling into other categories such as divorced.

Measures

Multidimensional Subjective Financial Well-Being Scale (MSFWBS), developed by Sorgente and Lanz (2019), is a validated instrument for measuring the SFWB of emerging adults. It consists of 25 items across five dimensions: general subjective financial well-being (e.g., "My current financial situation makes me feel tranquil"), money management (e.g., "I am satisfied with the way I manage my money"), peer comparison (e.g., "My financial situation is better than that of my peers"), having money (e.g., "Sometimes I miss the cash to buy things I need"), and financial future (e.g., "I'm on the right track to meet my financial goals"). Items are rated on a 5-point Likert scale ranging from 1 (absolutely false) to 5 (absolutely true). The translation and evaluation of content and face validity are described in the Procedure section. Validity and reliability evidence of the Persian version is reported in the Results section. Translated items and scoring procedures are publicly available at https://osf.io/ptbg5/overview?view_only=.

Satisfaction With Life Scale (SWLS), developed by Diener et al. (1985), is a five-item scale widely used to assess individuals' overall life satisfaction. Example items include: "In most ways, my life is close to my ideal" and "The conditions of my life are excellent". Responses are given on a 7-point Likert scale (1 = Strongly disagree; 7 = Strongly agree). In this study, the validated Persian version of the scale was used (Bayani et al., 2007). We conducted CFA to examine the scale's unidimensional structure [χ^2 (1) = 2.476, p = .1156, RMSEA = 0.064, CFI = 0.998, and SRMR = 0.012]. Furthermore, McDonald's omega indicated good internal consistency (ω = 0.87).

Objective Financial Well-being was measured through participants' self-reported personal monthly income. They selected the income range that best reflected their net earnings, including student jobs, regular employment, scholarships, or stipends, from eight brackets in Iranian tomans (e.g., "less than 1 million" to "30 million or more"). Those without a fixed income were instructed to estimate their average monthly income and select the most appropriate category accordingly. Although Iran's official currency is the rial, Toman was used for familiarity in everyday transactions (1 Toman = 10 Rials).

Data Analysis

First, face validity was assessed to evaluate the clarity, relevance, and representativeness of the items from the target group's perspective. Content validity was examined

to determine how well the scale captures the intended construct (DeVellis, 2016). The Content Validity Ratio (CVR) was used to assess the essentiality of each item, rated on a 3-point Likert scale ranging from (1) not necessary to (3) essential. CVR was calculated using Lawshe's (1975) formula:

$$\mathrm{CVR} = \frac{ne - \frac{N}{2}}{\frac{N}{2}}$$

Where ne is the number of experts rating the item as "essential", and N is the total number of experts.

Item relevance was assessed using the Content Validity Index (CVI), based on a 4-point Likert scale from (1) not relevant to (4) highly relevant. The item-level CVI (I-CVI) was calculated by dividing the number of experts rating an item as 3 or 4 by the total number of experts (Polit et al., 2007).

Once the scale translation was finalized and its face and content validity confirmed, we examined score structure, reliability, generalizability, convergent, and criterion-related validity using structural equation modeling (SEM) in Mplus. Missing data (0.50%) were handled with Full Information Maximum Likelihood (FIML) and Likert-type items were treated as continuous (Rhemtulla et al., 2012). Furthermore, due to the presence of kurtosis values exceeding 1 in some items (Muthén & Kaplan, 1985), the Maximum Likelihood estimator with robust standard errors (MLR) was employed. Model fit was evaluated using the chi-square statistic (χ^2), Root Mean Square Error of Approximation (RMSEA), Comparative Fit Index (CFI), and the Standardized Root Mean Square Residual (SRMR), based on the recommended cut-off criteria proposed by Byrne (2013).

When comparing structural equation models - for example, to evaluate generalizability through measurement invariance testing - changes in fit indices such as CFI and RMSEA can be examined (Chen, 2007; Cheung & Rensvold, 2002). Specifically, to assess different levels of measurement invariance - configural (scale structure), metric (factor loadings), scalar (item intercepts) and strict (residual variances) - model comparisons are based on whether changes in CFI ($\triangle$CFI<0.01) and RMSEA ($\triangle$RMSEA<0.015) exceed the recommended thresholds, indicating significant differences between models.

Results

Face and Content Validity

Two rounds of cognitive interviews with eight emerging adults led to minor revisions for improved clarity. In the qualitative content validity assessment, experts reached consensus on all items, confirming that the translated version was both clear and comprehensible. In the quantitative evaluation, all items met the minimum acceptable value of 0.75, with all but four items achieving the maximum CVR of 1.00 (Lawshe, 1975). All items showed I-CVI scores above 0.87, indicating strong content validity (Lynn 1986), with no further adjustments needed.

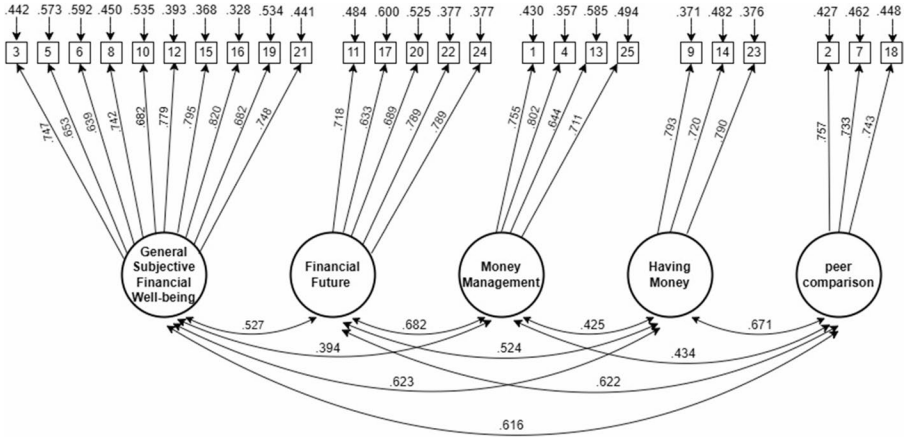

Fig. 1 Confirmatory factor analysis of the 25-item MSFWBS

Score Structure

A CFA was conducted to evaluate the fit of the five-factor model originally proposed by Sorgente and Lanz (2019). Results indicated a good fit to the data [χ^2 (265) = 459.471, $p < .001$, RMSEA = 0.045 (90% CI: 0.038–0.052), p (RMSEA ≤ 0.05) = 0.861; CFI = 0.950; SRMR = 0.043], supporting the proposed five-factor structure of the scale. As shown in Fig. 1, all factor loadings were high (> 0.50) and significant ($p < .001$). The correlations among the five latent factors were all positive and ranged from 0.394 to 0.682, indicating that factors were related but differentiated.

Reliability

Composite reliability was calculated using McDonald's omega for each factor of the MSFWBS. Findings indicated high reliability for each dimension: General Subjective Financial Well-being (ω = 0.919), Money Management (ω = 0.820), Peer Comparison (ω = 0.789), Having Money (ω = 0.813), and Financial Future (ω = 0.848).

Generalizability

Multi-group analyses were conducted to assess the generalizability of the test score interpretations across subgroups. Following Sorgente and Lanz (2019), invariance testing was conducted across gender (males = 112; females = 244), age (18–24 years = 242; 25–29 years = 114), living arrangement (living independently = 152; living with parents = 204), and occupation status (employed = 252; unemployed = 104). As shown in Table 1, ΔCFI and ΔRMSEA values remained within the expected thresholds, supporting configural, metric, scalar, and residual invariance. These findings confirm the scale's measurement stability and equivalence across groups, allowing valid comparisons. We also compared the mean levels of each latent factor of MSWFBS across groups and found some meaningful differences.

Table 1 Measurement invariance of the MSFWBS across various socio-demographic groups

Model	χ^2	df	*p*	RMSEA (CI)	*P*	CFI	ΔCFI	ΔRMSEA
Gender								
Configural	1057.144	555	<0.001	0.071(0.06,0.07)	<0.001	0.881		
Metric	1029.530	550	<0.001	0.070(0.06,0.07)	<0.001	0.886	0.005	−0.001
Scalar	1082.510	570	<0.001	0.071(0.06,0.07)	<0.001	0.878	-0.008	0.001
Residual	1141.253	595	<0.001	0.072(0.06,0.07)	<0.001	0.870	-0.008	0.001
Age								
Configural	1085.245	555	<0.001	0.073(0.06,0.08)	<0.001	0.875		
Metric	1049.545	550	<0.001	0.071(0.06,0.07)	<0.001	0.883	0.008	-0.002
Scalar	1103.782	570	<0.001	0.073(0.06,0.07)	<0.001	0.875	-0.008	0.002
Residual	1155.000	595	<0.001	0.073(0.06,0.07)	<0.001	0.868	-0.007	0.000
Living arrangement								
Configural	952.372	555	<0.001	0.063(0.05,0.07)	<0.001	0.904		
Metric	939.059	550	<0.001	0.063(0.05,0.07)	<0.001	0.906	0.002	0.000
Scalar	979.151	570	<0.001	0.064(0.05,0.07)	<0.001	0.901	-0.005	0.001
Residual	1029.149	595	<0.001	0.064(0.05,0.07)	<0.001	0.895	-0.006	0.000
Occupation status								
Configural	1030.897	555	<0.001	0.069(0.06,0.07)	<0.001	0.889		
Metric	1013.270	550	<0.001	0.069(0.06,0.07)	<0.001	0.892	0.003	0.000
Scalar	1066.534	570	<0.001	0.070(0.06,0.07)	<0.001	0.884	-0.008	0.001
Residual	1118.438	595	<0.001	0.070(0.06,0.07)	<0.001	0.878	-0.006	0.000

As shown in Table 2, females reported lower FWB than males across all five dimensions, though only the financial future dimension was statistically significant ($p=.022$). Similarly, participants living with their parents reported lower FWB than those living independently across all dimensions, with a significant difference also in the financial future dimension ($p=.005$). Employed individuals reported significantly higher FWB than unemployed participants in financial future ($p=.018$) and money management ($p=.021$). No significant differences were observed across age groups. For more clarity, Table 2 also includes mean item-level scores in parentheses for each subscale, calculated using SPSS.

Convergent Validity

Convergent validity was evaluated by examining the correlation between the five latent factors of the MSFWBS and a single-item measure of personal income (i.e., objective FWB). This model adequately fits the data [χ^2 (285)=490.910, $p<.001$; RMSEA=0.045 (90% CI: 0.038–0.052), p (RMSEA≤0.05)=0.887; CFI=0.949; SRMR=0.043]. The standardized coefficients of correlation between latent factors of the MSFWBS and personal income were significant ($p<.001$) for all dimensions: General Subjective Financial Well-being ($r=.40$), Financial Future ($r=.49$), Peer Comparison ($r=.39$), Having Money ($r=.31$), and Money Management ($r=.33$).

Criterion-Related Validity

Criterion-related validity was evaluated by examining the relationship between the five latent factors of the MSFWBS and the SWLS latent factor. The model demonstrated an

Table 2 Mean comparisons of latent factor scores and observed score obtained through items average (in Parentheses) across demographic groups

	GS	FF	MM	HM	PC
Gender					
Male	0.00 (M = 2.92; SD = 1.06)	0.00 (M = 3.41; SD = 1.09)	0.00 (M = 3.25; SD = 0.97)	0.00 (M = 2.92; SD = 1.21)	0.00 (M = 3.16; SD = 1.13)
Female	−0.23 (M = 2.68; SD = 0.92)	-0.30 (M = 3.13; SD = 0.97)	-0.08 (M = 3.17; SD = 0.96)	-0.14 (M = 2.75; SD = 1.15)	-0.14 (M = 3.01; SD = 0.98)
Age					
18–24 years	0.00 (M = 2.75; SD = 0.94)	0.00 (M = 3.24; SD = 0.95)	0.00 (M = 3.13; SD = 1.00)	0.00 (M = 2.78; SD = 1.13)	0.00 (M = 3.1; SD = 0.99)
25–29 years	0.01 (M = 2.78; SD = 1.04)	-0.10 (M = 3.17; SD = 1.14)	0.21 (M = 3.33; SD = 0.88)	0.09 (M = 2.86; SD = 1.24)	-0.17 (M = 2.96; SD = 1.11)
Living arrangement					
Living independently	0.00 (M = 2.83; SD = 0.95)	0.00 (M = 3.40; SD = 0.99)	0.00 (M = 3.30; SD = 1.04)	0.00 (M = 2.89; SD = 1.25)	0.00 (M = 3.14; SD = 1.04)
Living with parents	-0.11 (M = 2.70; SD = 0.98)	-0.36 (M = 3.08; SD = 1.02)	-0.21 (M = 3.11; SD = 0.90)	-0.12 (M = 2.74; SD = 1.10)	-0.14 (M = 3.00; SD = 1.02)
Occupation status					
Unemployed	0.00 (M = 2.75; SD = 0.87)	0.00 (M = 3.00; SD = 0.88)	0.00 (M = 3.00; SD = 0.98)	0.00 (M = 2.75; SD = 1.08)	0.00 (M = 3.05; SD = 0.92)
Employed	0.01 (M = 2.76; SD = 1.01)	0.34 (M = 3.31; SD = 1.06)	0.30 (M = 3.27; SD = 0.95)	0.11 (M = 2.83; SD = 1.20)	0.01 (M = 3.06; SD = 1.07)

Values outside parentheses represent the mean level of the *factor score*. For each comparison, the reference group's mean was fixed at 0, so the other group's mean can be interpreted as a *difference score*

Values in parentheses indicate instead the *mean (M)* and *standard deviation (SD)* of the *total score*, computed as the average of the items belonging to each subscale. Acronyms in the table refer to the following sub-scales: *GS* General Subjective Financial Well-being, *FF* Financial Future, *MM* Money Management, *HM* Having money, *PC* Peer Comparison

acceptable fit [χ^2 (390) = 743.339, $p < .001$; RMSEA = 0.050 (90% CI: 0.045, 0.056), p (RMSEA ≤ 0.05) = 0.439; CFI = 0.931; TLI = 0.923; SRMR = 0.047]. The results also showed that SWLS was significantly predicted by General Subjective Financial Well-being (β = 0.17, $p = .006$), Peer Comparison (β = 0.36, $p < .001$), Having Money (β = 0.17, $p = .031$), and Money Management (β = 0.20, $p = .008$), while Financial Future did not significantly predict SWLS (β = 0.09, $p = .28$).

Discussion

This study evaluated the psychometric properties of the Persian version of the MSF-WBS among Iranian emerging adults. Findings confirmed the scale's validity in this population. Face and content validity assessments indicated that the translation was

clear, culturally appropriate, and conceptually aligned with the original instrument. The results of the CFA supported the original five-factor model (Sorgente & Lanz, 2019), and composite reliability indicated acceptable to excellent internal consistency across subscales. Measurement invariance was confirmed across gender, age, living arrangements, and occupational status. Additionally, significant group differences in the mean levels of SFWB dimensions aligned with prior research, further supporting the scale's validity. Specifically, females and those living with their parents scored lower on the financial future dimension, while employed participants scored higher on both financial future and money management. The lower financial future scores among Iranian females may reflect persistent gender disparities in access to financial resources and employment opportunities (Chen & Ebadi, 2023), which can limit their optimism and perceived control over their financial future. Lower financial future scores among those living with their parents may reflect the prolonged and uncertain transition to adulthood and limited financial independence (Salehi-Isfahani, 2011), which can reduce optimism and perceived control over the future. In contrast, employed emerging adults reported higher SFWB scores than unemployed peers, likely due to the stability provided by earning a salary, which enhances both their money management and future outlook. Contrary to our expectations, SFWB did not differ significantly between younger (under 25) and older (25 or older) emerging adults, possibly because of the "waithood" situation in Iran (Salehi-Isfahani, 2011), where a prolonged transition to adulthood makes the distinction between these age groups less clear.

Moreover, convergent validity was supported by positive correlations between all five dimensions of the MSFWBS and participants' personal income, aligning with previous findings on the link between subjective and objective FWB in emerging adults (Newman et al., 2008). Criterion-related validity was also confirmed through a significant association with life satisfaction, except for the financial future dimension. The lack of a significant relationship between financial future and life satisfaction may be due to two factors: the different timeframes of the constructs (future vs. present), and the high level of uncertainty currently faced by Iranian emerging adults, which may weaken the influence of future outlook on present satisfaction (Salehi-Isfahani, 2011).

Limitations

The findings of the present research should be considered in light of its limitations. The primary limitation concerns the unbalanced distribution of participants across key socio-demographic variables such as gender, age group, living arrangement, and occupational status, highlighting the need for more representative sampling in future research. Another limitation concerns the use of a convenience sample drawn from a single city, Sanandaj—a medium-sized urban center in western Iran with more than 400,000 inhabitants. While this setting provides valuable insights, the findings cannot be generalized to the entire country. For example, emerging adults in Tehran, the capital city of Iran, may benefit from more abundant job opportunities and higher income levels, yet also face greater competition and higher living costs. In contrast, smaller cities may present fewer employment options but different structural barriers.

These regional differences underscore the need for future studies to employ representative sampling across diverse contexts.

Future Research

Future research should extend this study in several directions. First, as mentioned in the Limitations section, replicating the scale in other Iranian cities, such as Tehran or smaller rural areas, would clarify how different regional economic contexts shape financial well-being. Second, longitudinal designs are needed to explore causal relationships between subjective financial well-being and outcomes such as mental health, or general well-being. Third, measurement invariance was only tested across groups based on gender, age, living arrangement, and occupational status, because these were the groups compared in the original validation study (Sorgente & Lanz, 2019). Future studies could test measurement invariance across other meaningful groups, such as by marital status and educational level. In the current study, although information on marital status and educational attainment was collected, subgroup sizes were highly uneven. Such imbalances prevented meaningful invariance testing. Future research with larger and more diverse groups should examine additional variables to provide a better picture of financial well-being and how it differs across groups.

Implications

The findings of the current study have relevant implications both at the national and international level. At the national level, Iran now has its first validated Persian tool to assess the SFWB in emerging adults. The Persian MSFWBS offers a validated tool for assessing FWB in emerging adults, guiding targeted interventions to improve financial literacy, stability, and overall well-being. In particular, as MSFWBS captures five dimensions of financial well-being, the scale can be used either to design comprehensive programs that address all domains or to develop targeted interventions for dimensions in which participants show lower scores. Second, the scale can be administered before and after interventions to evaluate program effectiveness. Third, subgroup differences in our study highlight areas for action: females reported significantly lower levels of financial future, suggesting a need for gender-sensitive initiatives; participants living with parents also scored lower on financial future, underscoring the importance of supporting young adults' transition to independent living; and unemployed participants showed lower money management and financial future, emphasizing their vulnerability. Policymakers and practitioners could use these findings to design saving schemes for women, employment-support programs for young adults, and tailored counseling for vulnerable groups. Integrating the MSFWBS into national surveys could further support evidence-based policymaking and resource allocation.

At the international level, this study contributes to the ongoing debate on whether a unified model of SFWB can be applied to emerging adults in both developed and developing countries. Alongside validations in Turkey (Sorgente et al., 2024) and Brazil (de Oliveira Cardoso et al., 2024), this study provides future support for the

MSFWBS in a developing context—Iran. Such a model would enable international collaboration and more meaningful cross-country comparisons. In this context, a new research project has recently been launched to re-test the MSFWBS in India—the only country where the five-factor model has not yet been confirmed (Sorgente et al., 2024). In addition, the project involves data collection in five other developing countries (Bangladesh, Ghana, Malaysia, Pakistan, and the Philippines), with the goal of gathering further evidence on the generalizability of the model worldwide. Therefore, the present study represents a key piece in a larger and meaningful puzzle, contributing to the fields of developmental and economic psychology, among others.

Conclusion

This study is the first to examine the psychometric properties of the MSFWBS in the context of Iranian emerging adults. The findings collected different kinds of validity evidence, in agreement with the contemporary view of validity (Hubley & Zumbo, 2011): face validity, content validity, score structure validity, reliability, generalizability, convergent validity, and criterion-related validity. Overall, the results indicate that the 25-item MSFWBS is a reliable and valid tool for assessing subjective financial well-being in Iran, with applicability for both researchers and practitioners. Specifically, the scale can help counselors and educators better understand emerging adults' financial well-being and design interventions tailored to their unique needs.

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Declarations

Competing interests The group of authors has no conflicts of interest to declare relevant to this research.

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