



Woman in Development and Politics

Development of a Measurement Tool for Women's Empowerment: Steps and Results

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Article Info	ABSTRACT
Article type: Research Article Article history: Received: 9 May 2025 Received in revised form: 9 September 2025 Accepted: 5 October 2025 Published online: 23 October 2025 Keywords: <i>Empowerment, Measurement, Questionnaire, Women.</i>	Introduction Empowering women as a key concept in achieving gender justice and sustainable development has attracted the attention of researchers, policymakers, and international organizations in recent decades. This multidimensional process encompasses the enhancement of individual agency, access to equal opportunities, and the transformation of unequal institutional structures, in addition to the enhancement of economic and social conditions for women. Nevertheless, the absence of standardized and localized instruments for the comprehensive measurement of various dimensions of women's empowerment in societies with specific cultural-social characteristics, such as Iran, has always been a challenging research issue. Economic dimensions (such as access to financial resources) have been the primary focus of previous studies in Iran. However, psychological aspects (self-efficacy), social dimensions (participation in groups), and civic aspects (awareness of legal rights) have been less thoroughly investigated. This conceptual and methodological gap has led to the design of ineffective programs and the neglect of the specific needs of women in different areas of Iran, especially in rural and marginalized communities. The objective of this article is to address this research gap by creating and evaluating a multidimensional and context-specific questionnaire that is designed to assess the empowerment of Iranian women. This instrument facilitates a more precise evaluation of women's status by incorporating global indicators (such as access to economic resources) and culturally-socially specific components of Iran (such as gender attitudes). The significance of this research is not limited to the provision of evidence-based data for policymaking; it also establishes a comparative framework for cross-cultural studies in Persian-speaking communities (such as Afghanistan and Tajikistan). Methodology In terms of purpose, this research is descriptive-analytical, applicable, and employs a hybrid approach (qualitative-quantitative). It is designed and executed in three primary stages. Initially, a systematic review of the literature in reputable scientific databases, including Scopus, ScienceDirect, ProQuest, and Google Scholar, was conducted during the qualitative stage to design the questionnaire items. Relevant keywords such as "women's empowerment," "measurement tools," and "questionnaire," were employed to generate an initial questionnaire consisting of 79 questions. Then, through semi-structured interviews with 14 experts, the items were reviewed for their relevance to the cultural context of Iran, and 37 questions were selected as the final questionnaire items based on the CVR (Content

Validity Ratio) index and content validity (CVI). There were 37 questions selected. The questionnaire was predominantly tested among 30 women to determine its face validity. The final questionnaire was distributed to a sample of 800 Iranian women (aged 15 and above) from five geographical areas (north, south, east, west, center) in the second stage, which was quantitative. Cluster sampling was employed to ensure that the sample was proportional to the population distribution. Exploratory factor analysis (principal component analysis followed by Varimax rotation) was employed to evaluate the questionnaire's structure and determine construct validity. To ensure the sample size was adequate, the Bartlett test and KMO index were used. The reliability of the questionnaire was evaluated by calculating Cronbach's alpha. Ultimately, the representativeness of the sample from the target population was guaranteed by analyzing the collected data from the 36-item multidimensional questionnaire, as well as demographic data (such as age, marital status, education, and employment), using SPSS version 27.

Findings

After the first phase and literature review, 79 questions were designed for the questionnaire. The final draft of the questionnaire was prepared with 37 questions based on the Content Validity Ratio (CVR) and Content Validity Index (CVI), following feedback from experts and professors regarding the relevance and clarity of the proposed questions. 42 questions were subsequently removed from the questionnaire due to their failure to achieve a suitable CVR and CVI score.

The correlation matrix analysis, which employed KMO and Bartlett's tests, was implemented in the second phase to assess the sample's ability to extract factors. The sample size was found to be adequate, as evidenced by the KMO and Bartlett tests, which returned values of 0.88 and $P < 0.001$, respectively. Following exploratory factor analysis, a Varimax rotation identified 9 factors with eigenvalues greater than 1, and ultimately 7 factors were identified as subscales of empowerment. These subscales were categorized as psychological empowerment, decision-making, social, gender, economic, health and well-being, and civil, based on the characteristics of the items placed under each factor according to their factor loadings. One of the 37 items in the questionnaire did not obtain significant loading in any of the seven subscales. Consequently, the final questionnaire consisted of 36 items. The identified subscales accounted for 59% of the variance in the data, as indicated in Table 3, which was extracted from the research findings. This is a reasonable estimate for a questionnaire. The final questionnaire was composed of 36 items, which were categorized into seven groups as follows:

Psychological Empowerment accounts for 7% of the total variance and six items.

Decision-Making Empowerment accounts for 8.9% of the total variance and includes five items.

Social Empowerment contains 8 items and contributes 14.9% to the overall variance.

Gender Empowerment accounts for 8.3% of the total variance and including four items.

Economic Empowerment accounts for 8.9% of the total variance and includes five items.

Health and Family Well-being Empowerment accounts for 5% of the total variance and includes four items.

Civil Empowerment: Comprising four items and accounting for 4% of the total variance. The questionnaire's aggregate Cronbach's alpha coefficient was 0.83, suggesting that the instrument is highly reliable. Additionally, the subscales demonstrated satisfactory reliability. The results of the data analysis from 800 female participants (mean age 31 to 45 years, 68% with university education) indicated significant diversity in employment status and a balanced geographical distribution (sampling from five regions of Iran). The highest share of variance was attributed to social empowerment (14.9%) and the lowest to civil empowerment (4%). The economic and decision-making dimensions each accounted for 8.9% of the variance, which is consistent with prior research that has underscored the critical

role of autonomy and access to financial resources in the empowerment of women.

Conclusion

This research has made a significant contribution to the current dearth of context-specific measurement instruments by developing and validating a multidimensional questionnaire to assess women's empowerment in Iran. This instrument is particularly well-suited for societies with traditional structures, such as Iran, due to the integration of global indicators (such as access to economic resources) and cultural components (such as gender attitudes). The designed tool, covering dimensions such as psychological, social, and civil that have received less attention in previous studies, provides a more comprehensive assessment of women's status. Conclusions suggest that the economic and gender subscales are highly reliable and valid, whereas the civil subscale necessitates significant modifications. This tool enables policymakers to evaluate empowerment programs more accurately and design more targeted interventions. Additionally, the data obtained can serve as a framework for comparative studies in communities facing similar challenges (such as Afghanistan and Tajikistan). Nevertheless, additional research is necessary to investigate the indigenous characteristics of each region in order to enhance its intercultural adaptability. It is recommended that the capabilities of this instrument be enhanced in future research by incorporating additional pertinent items into civil empowerment and utilizing international samples. The ultimate goal of this research is to fortify the connection between theory and practice in the field of gender justice by offering stakeholders precise and applicable evidence. Ultimately, the development of such tools not only contributes to the scientific advancement of gender studies but also functions as a bridge between theory and practice, thereby enhancing the role of women in achieving sustainable development goals.

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