

Research Paper

Determining the Discriminant Validity of Family Cohesion and Flexibility Subscales and a Cutoff Score to Separate the Healthy and Clinical Groups



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Citation Habibi M, Mazaheri A, Ashouri A, Sayed Alitabar SH. (Determining the Discriminant Validity of Family Cohesion and Flexibility Subscales and a Cutoff Score to Separate the Healthy and Clinical Groups (Persian)). Iranian Journal of Psychiatry and Clinical Psychology. 2019; 25(3):344-355.

doi <http://dx.doi.org/10.32598/ijpcp.25.3.344>



Received: 17 Nov 2018

Accepted: 31 Jul 2019

Available Online: 01 Oct 2019

Key words:

Family relations, Psychometrics, Family cohesion, Family flexibility

ABSTRACT

Objectives This study aimed to evaluate the discriminant validity of family adaptability and cohesion evaluation subscales. We investigated families referring to counseling, family courts, substance dependence treatment centers, and healthy and clinically defined cutoff scores for the breakdown of healthy Iranian families.

Methods This scale was validated by four psychologists and translated by a professional English translator. After conducting a pilot study on 30 subjects, the necessary corrections were made to the scale. Families from 7 provinces (N=1652 subjects, parents=558, mothers=576, mothers and children=518) responded to the scale. For data analysis, univariate Analysis of Variance (ANOVA) and multivariate operating characteristic curves were used.

Results The obtained results suggested that family mean normal score in all groups, clinical counseling, substance dependence, and family courts subscales suggested significant differences in terms of adverse life events, family interactions, family satisfaction, integrity, balance, flexibility, intertwined, torn, confused, and frustrated that there is flexibility ($P<0.05$).

Conclusion The operating characteristic curve analysis to determine cutoff scores revealed the cutoff scores of family adaptability and cohesion evaluation subscales between normal and clinical diagnosis established optimum. Psychometric properties of the Persian version of family adaptability and cohesion evaluation is applicable for psychological research and clinical diagnosis.

Extended Abstract

1. Introduction

The field of family and marriage interventions focused on providing a systemic theory of family as well as new ways to intervene in the family. Early family therapy includes great ideas, such as cog-

nitive science, system theory, and cybernetics. A systematic approach explains all psychological pathologies of most human behaviors; all family therapy interventions were considered antidote to all human problems. The positive effect of the system revolution is not negligible. This global revolution has attracted the attention of most clinical and mental health professionals to persons' behavior. This study aimed to evaluate the discriminant validity of family adaptability and cohesion evaluation

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subscales among families referring to counseling, family courts, substance dependence treatment centers, and normal and clinically defined cutoff scores for the breakdown of normal society in Iranian families.

2. Methods

This research has mainly focused on validation; however, according to the implemented method, it could be put into context. The statistical population consisted of all Iranian families living in Iran in 2009. Considering the community size, multistage cluster sampling technique was the most appropriate method for this research. Iran was classified into 5 clusters of north, south, east, west, and central parts. The samples were randomly selected from each cluster. In the center of each selected province, random blocks were selected.

Furthermore, in the selected families, each of the couples, and in families with single children aged 18 to 18 years, the eldest son of the family answered the questionnaire. A total of 1652 subjects from family members in 7 provinces (558 fathers, 576 mothers, and 518 children) formed the standardization component. This scale was validated by 4 psychologists and translated by a professional English translator. After performing a pilot study on 30 subjects, the necessary corrections were made to the scale. The family members from 7 provinces of Iran responded to the scale.

For data analysis, univariate Analysis of Variance (ANOVA) and multivariate operating characteristic curves were used. The subjects participated in the study after obtaining informed verbal consent and could have terminated cooperation if desired. The present study was approved in terms of ethical issues in Shahid Beheshti University Family Research Institute. At the first stage, the scale of coherence and family flexibility was translated by 4 psychologists (two faculty members and two doctoral students); then, the content validity and face validity were assessed by psychologists and psychology professors. Subsequently, it was back-translated from Persian to English by a faculty member of the English language, and the correctness of the translation of the phrases was confirmed.

Then, in a preliminary study on 30 ordinary families, the level of comprehensibility of the Persian version of the scale of cohesion and flexibility of the family was investigated. Next, after eliminating the deficiencies, a questionnaire was prepared for implementation in the original sample. To test its validity, the test was first performed on the problematic families in the clinical group. Then, using two methods, the validity of the subscales and the total test were obtained. First, the mean scores of the families in each subscale were

compared with the mean scores of the normal group on the same scale by statistical tests.

3. Results

The achieved results suggested that family mean score was normal in all groups; clinical counseling, drug abuse, and family court subscales indicated significant differences in terms of adverse life events, family interactions, family satisfaction, integrity, balance, flexibility, balance, intertwined, torn, being confused and frustrated that there is flexibility ($P < 0.05$).

4. Discussion

Based on the operating characteristics, curve analysis was used to determine the cutoff scores. In other words, the cutoff scores of family adaptability and cohesion evaluation subscales between normal and clinical diagnosis established optimum values. Psychometric properties of the Persian version of family adaptability and cohesion evaluation has the required criteria for the application of psychological research and clinical diagnosis. The study findings indicated a statistically significant difference between the normal and clinical groups in the subscales of family functioning.

The obtained results suggested a significant difference between the mean scores of families of the normal group and all three other groups of counseling, addiction, and family courts in terms of adverse events and disasters, family engagement, family satisfaction, balanced cohesion, balanced flexibility, intrinsic, discrete, disturbed, and uncertain validity. This means that ordinary families had more family members, family satisfaction, coherence and flexibility than the clinical groups (counseling, family courts, and addiction).

However, clinical groups achieved higher scores in the subscales of events and disasters, stress, disruption, turbulence, and ineffectiveness, compared with the normal group. This finding indicates the proper separation validity of the fourth version of the scale of cohesion and family resilience. Based on the analysis of the operational characteristics curve results, the cutoff score in the lifeblood of incidents, family interactions, family satisfaction, balanced cohesion, the diagnosis was optimized between the normal and clinical groups. No research has determined the cutoff score of the subscales of the fourth edition of family cohesion and flexibility.

Ethical Considerations

Compliance with ethical guidelines

The ethical approval was obtained from the university's research committee.

Funding

This research was supported by grant from Family research institute, Shahid Beheshti University.

Authors contributions

Conceptualization: Mojtaba Habibi, Ali Mazaheri, Ahmad Ashouri; Methodology: Mojtaba Habibi, Ahmad Ashouri; Investigation: Mojtaba Habibi, Ali Mazaheri, Ahmad Ashouri; Writing – Original Draft, Mojtaba Habibi, Sayed Hadi Sayed Alitabar; Writing – Review & Editing, [Mojtaba Habibi, Sayed Hadi Sayed Alitabar; Funding Acquisition: Ali Mazaheri; Resources: Mojtaba Habibi, Ali Mazaheri, Ahmad Ashouri; Supervision: Mojtaba Habibi.

Conflicts of interest

The authors declared no conflict of interest.