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Psychometric Properties of the Millon Clinical Multiaxial Inventory–III in an Arabic Clinical Sample Compared With American, Italian, and Dutch Cultures

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Abstract

Millon Clinical Multiaxial Inventory MCMI–III is a multidimensional measure of psychopathology with excellent construct validity, test-retest reliability as well as internal consistency. Factor analysis of the MCMI-III has produced mixed results, extracting parsimonious three-factor solutions, or replicating the original four-factor solution in psychiatric samples from Western countries. However, little work has been done on the psychometric properties of the MCMI–III, using non-Western psychiatric samples. Outpatients (N = 212) completed the MCMI–III during a semi-structured interview. Eight exploratory factor analysis (EFA) methods were used to explore the underlying structure of MCMI–III. Skewness, kurtosis, and descriptive statistics confirmed that scales of MCMI–III were normally distributed. High-internal consistency was found. The eight EFA methods applied to the 24 clinical scales identified a consensual three-factor solution: factor I (internalizing psychopathology; 18 scales), factor II (externalizing psychopathology; 4 scales) and factor III (psychological disturbance; 2 scales), accounting for a total of 72% of the common variance. Regarding the cross-cultural equivalence of the MCMI–III structure, Tucker's congruence coefficient (Φ) was used and confirmed that internalizing (F1) and externalizing psychopathology (F2) factors obtained in this study are similar to high vs. low psychopathology and emotional constraint factors provided by American study of Haddy et al. (2005) (Φ was 0.86 and 0.97). These two factors are also similar to the general adjustment and antisocial acting out factors provided by the American study of Craig and Bivens (1998) (Φ was 0.82 and 0.96). The first two factors in this study also reflect high similarity with the factor solutions obtained with the Italian and Dutch versions of MCMI-III (Rossi et al., 2007; Pignolo et al., 2017). Despite using a psychiatric sample from a non-Western culture, the two factors identified for this MCMI–III Arabic version were similar to those reported on studies with MCMI–III, using primarily Western samples (Craig and Bivens, 1998; Rossi et al., 2007). © Copyright © 2021 Alareqe, Roslan, Nordin, Ahmad and Taresh.

Author Keywords

advanced factor analysis; externalization; internationalization; MCMI-III; psychometrics; psychopathology; tucker's coefficient of congruence

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