

Use of the MMPI in Asian Countries: A Review

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ABSTRACT

The Minnesota Multiphasic Personality Inventory (MMPI) is a commonly employed psychological evaluation designed for assessing both personality traits and psychopathological tendencies. This review highlights the importance of integrating both universal and culturally distinctive attributes in assessment techniques, including that of measures similar to the MMPI. This work focuses on the translational history of the MMPI in various Asian countries. It discusses the development of Chinese, Japanese, Korean, Vietnamese, Hmong, Filipino, and Thai versions of the MMPI. Each translation required careful consideration of cultural norms and language differences. Modifications were made to assessment items to ensure cultural sensitivity and accuracy. The review of available literature indicates limited research has been conducted on the topic, indicating a concerning gap in knowledge. This review calls for global collaboration in scientific investigations to establish specific norms and conduct comparative analyses that consider cultural factors and gender disparities.

Keywords: MMPI, Asian, Culture

USE OF THE MMPI IN ASIAN COUNTRIES

Personality has been defined as the constellation of traits that contribute to consistent and enduring patterns of emotions, cognition, and behavior within an individual (Pervin et al., 2005). Empirical research indicates a degree of stability in personality across diverse situations, contexts, and social interactions. Theoretical frameworks often delve into the integrative and organizational aspects of personality, portraying it as a coherent framework of behaviors that reflect an individual's internal organization (Taneja, 2016). This perspective underscores the pivotal role of personality in shaping interpersonal dynamics and interactions with one's environment, impacting one's capacity for adaptive responses. The intricate nature of personality encompasses both overt and covert manifestations that are inherently unique to each person (Taneja, 2016). Martinez and Oishi (2006) emphasized the importance of emotions, thoughts, actions, self-perception, drive, and principles as core components of an individual's personality framework. McAdams and Pals (2006) additionally suggest that cultural and societal surroundings contribute to shaping personality alongside factors like maturity and unique adjustments, often leading to nuanced alterations in its characteristics.

CULTURE AND PERSONALITY

Culture is a collective framework of shared meanings encompassing values and norms adhered to by community members. A commonly held view is that these convictions and principles are passed down through generations via language usage, societal norms, institutional frameworks, and collectively shared historical stories (Senior & Bhopal, 1994; Markus & Kitayama, 1998). Extensive research spanning decades underscores the considerable and foreseeable psychological impact of cultural factors on individual developmental trajectories. However, emerging paradigms propose a constrained scope of cultural influence on human behavior (Stryker & Burke, 2000). The intricate interplay between culture and personality has been a matter of inquiry since the early 20th century

(Taneja, 2016), and has posed challenges in delineating the relationship between universal personality archetypes and culturally contingent variations (Cheung, Vijver, & Leong, 2011).

The scholarly landscape has witnessed the examination of culture's role in shaping personality from two historical vantage points: cross-cultural psychology and cultural psychology (Kwan & Hermann, 2015). Advocates of cross-cultural psychology emphasize that culture, while influential, is not the sole determinant of an individual's personality. They posit a common underlying psychological structure shared across all individuals, suggesting universality in personality traits (Church, 2000). For instance, investigations into social axioms have unveiled a universal core cognitive system irrespective of cultural background (Bond, 2000).

Conversely, cultural psychology contends that an individual's personality is molded by their degree of alignment with their respective cultural milieu (Church, 2000). In this view, cultural scholars contend that societal influences shape personality traits, giving rise to cross-cultural variations. Contemporary perspectives acknowledge certain universal personality traits, yet acknowledge their diverse manifestations across cultures. As a response, a comprehensive approach to personality assessment has been advanced, integrating both cross-cultural and culture-specific facets, in a concerted effort to harmonize these dual aspects (McCrae, 2000).

A FEW VERSIONS OF THE MINNESOTA MULTIPHASIC PERSONALITY INVENTORY (MMPI)

Hathaway and McKinley (1943) formulated the Minnesota Multiphasic Personality Inventory (MMPI) with the intention of creating a comprehensive personality assessment to aid in diagnosing and evaluating personality traits (Graham, 2012). The MMPI evaluates an individual's beliefs concerning mental, medical, and neurological conditions, as well as personal experiences, attitudes, behaviors, and the manifestation of gender roles. Beyond use in medical and psychiatric domains, the assessment is used in employment, education, legal, correctional, and military arenas. A revision by Ben-Porath and Tellegen in 1989 sought to rectify limitations of the original version, including culturally biased language, grammatical errors, double negatives, and omissions of pertinent symptomologies such as drug usage, treatment adherence, and suicidality. The resulting MMPI-2 encompasses 567 true-false items and is designed for individuals aged 18 and above with a minimum sixth-grade reading proficiency. The MMPI-2 scales utilize a T score conversion, with an average of 50 and a standard deviation of 10. The assessment includes several types of scales: validity, clinical, content, and supplementary.

Further tool advancements emerged with the creation of the MMPI-2-RF by Ben-Porath and Tellegen in 2008. This refinement aimed to enhance the coherence of clinical scales, yielding more specific and clinically pertinent measurements. At the same time, its objective was to reveal the distinctive substantive nature of each clinical scale by eliminating common elements of general distress, often referred to as the demoralization factor. This process led to a hierarchical arrangement where higher-order (HO) scales take precedence over the restructured clinical (RC) scales and other substantive scales (Tellegen & Ben-Porath, 2008). This revised version consists of 338 items, featuring three HO scales, nine RC scales, five somatic scales, nine internalizing scales, four externalizing scales, five interpersonal scales, two interest scales, and five PSY-5-r scales.

Notably, the initial MMPI renorming effort excluded Asian Americans from the normative sample to a significant extent. This underrepresentation has spurred scholarly discussions emphasizing the imperative of further research into the test's validity within the Asian community. Though adaptations for culturally diverse populations continue to evolve,

this study endeavors to critically assess the adequacy and application of such culturally attuned modifications.

HISTORY OF MMPI/MMPI-2 TRANSLATIONS IN ASIA

Psychologists in Hong Kong and China have completed the translation of the MMPI into Chinese when Fanny Cheung initiated the process of translating and standardizing the Chinese MMPI in Hong Kong in 1976 (Cheung, 1985).. This endeavor originated in 1976 when Fanny Cheung initiated the translation and standardization of the Chinese MMPI in Hong Kong (Cheung, 1985). This initial translation was refined through careful examination of item endorsement trends within representative populations from Hong Kong and the US. In a parallel initiative, Weizheng Song from the Institute of Psychology at the Chinese Academy of Sciences adapted the Hong Kong version to fit the Mainland China context in 1981. Comprehensive validation of translation equivalence ensued, employing samples from both Hong Kong and China. This validation process incorporated various techniques, including test-retest analyses, examination of item endorsement patterns, and assessment of item desirability ratings, all aimed at evaluating the similarity between the Chinese and English versions.

The Chinese iteration of the MMPI has found active application in therapeutic settings across China and Hong Kong, with Cheung and her colleagues conducting in-depth assessments of MMPI profiles among Chinese patients afflicted with schizophrenia and neurotic disorders (Fan et al., 1995 & 1999). Afterward, numerous research studies in Mainland China have explored the practical uses of the Chinese MMPI, primarily shared through publications in the Chinese language. The coordination of data collection efforts in China was orchestrated by Professor Song through the formation of the National MMPI Coordinating Group. Drawing from a normative sample encompassing 1,553 men and 1,516 women across seven major Chinese population centers, comparisons against American norms revealed elevated scores among Chinese respondents on select scales, including those measuring potential overreporting, depression, and schizophrenia. Consequently, the establishment of Chinese norms resulted in attenuated mental patient profiles, indicating the necessity of setting a T score threshold of 60. Throughout the course of these endeavors, Chinese researchers advocated for an interpretative framework encompassing both American and Chinese traditions (Cheung, 1995). Additional refinements included the development of a Chinese Infrequency Scale and augmenting the F scale (which indicated overreporting) by leveraging data from the Chinese normative population (Cheung et al, 1991). A collaborative endeavor involving researchers from Hong Kong and Mainland China resulted in the development of the Chinese MMPI-2, whose validity has recently been bolstered through studies involving Chinese Americans (Butcher et al., 2003). Following Professor Song's transition out of this work, Jianxin Zhang began the coordination of the Chinese MMPI-2 standardization at the Institute of Psychology. The Chinese University of Hong Kong Press and the Institute of Psychology obtained permission from the University of Minnesota Press to publish the Chinese MMPI-2, reconciling distinctions between the Mainland and Hong Kong versions. Primarily, the differences manifested in the script, with the Hong Kong version using traditional Chinese characters while the Mainland version used simplified Chinese characters. A nationwide standard was established, encompassing a representative group of 1,180 males and 1,199 females from various regions of China. Ongoing research employing the Chinese MMPI-2 has consistently shown strong test-retest reliability, equivalence in translation, consistency in factor structure, and clinical validity.

In the 1950s, researchers completed the initial Japanese version of the original MMPI (Butcher et al., 2003). Afterward, a relatively short period saw the emergence of nearly 15 different Japanese translations or adaptations (Butcher et al., 2003). However, many of these

early versions did not follow the rigorous and now-established protocols for translating psychological assessments into various languages. Additionally, there was little effort to establish the translated version's psychometric equivalence with the original tool or to conduct comparisons with existing translations. In 1979, a collaborative effort began to promote joint research among Japanese MMPI translators and scholars with the goal of creating a single translation to become the national standard. Lee Anna Clark and J. N. Butcher collaborated with multiple Japanese MMPI researchers to address the challenges posed by the proliferation of different test versions (Clark, 1983, 1985) and to work together in establishing a unified, reliable, and validated Japanese MMPI. This collaborative initiative, led by Clark, involved assessing existing translations and incorporating advantageous elements from various versions. The result was the Consolidated Version of the Japanese MMPI (Clark, 1985), which Clark demonstrated to have conceptual equivalence with the original MMPI, thereby establishing its reliability for future research and use involving Japanese populations (Clark, 1985). Concurrently with the US MMPI Rstandardization Project, the Japanese MMPI-2 (Shiota, 1990) was developed, featuring 704 items, including 550 from the original MMPI and 154 provisional items. The translation process prioritized linguistic and conceptual equivalence, confirmed through a second back-translation inquiry, affirming clear correspondence between Japanese and English wording at the item level.

Han's preliminary validation of the Korean version of the MMPI-2, as referenced in Butcher et al. (2003), entailed an examination of a Korean collegiate sample, leading to certain item modifications. Notably, Item 12, "My sex life is satisfactory" faced mistranslation among female Korean students. More than half (59%) refrained from responding due to the perception that only married women could assess their sex life, given the rarity of premarital relations in Korea. Consequently, an alteration in wording transpired, yielding the revised item: "If you are married, your sex life is satisfying; if you are single, yours is, too." Subsequently, Han and Lim (2001) undertook an exploration of the clinical utility of the Korean MMPI-2. Their analysis involved a comparative assessment of MMPI-2 scores between 120 mental patients and 167 university students, analyzing scale scores and the frequencies of endorsed items. This investigation also involved a comparison between samples from Korea and the United States. Similarly, Cheung and colleagues (1996) conducted a parallel study using Chinese and Hong Kong samples. This study revealed elevated clinical scores among typical individuals, with a moderate differentiation observed between normal and psychotic samples.

In the Korean context, the range of reported psychiatric behaviors likely exhibits narrower variability, contributing to a potential ceiling effect and the attenuated distinction between normative and clinical groups. Certain MMPI-2 items may not effectively discriminate between these groups, a notion supported by Cheung and colleagues' 1996 study. Moreover, on scale of Depression (scale D), schizophrenia patients yielded identical scores to those with depression, suggesting a trait-like manifestation of depression among Korean psychiatric patients. Nonetheless, meaningful conclusions regarding MMPI-2 performance across diagnostic categories proved elusive in item-level analyses. Given the study's limitations, caution is advised in interpreting the findings, emphasizing the need for further research to ascertain the clinical utility of the Korean MMPI-2. A recent study conducted by Hahn (2001) closely examined the ability of the Korean MMPI-2 validity scales to detect invalid profiles, with a specific focus on differentiating between fake and genuine responses. The research involved 169 Korean students who completed the MMPI-2 following standard instructions and experimental conditions designed to mimic feigned negative traits, denial of psychological problems, or exaggerated virtues. Concurrently, 50 Korean inpatients underwent the MMPI-2 following standard instructions. Hahn (2001) concluded that the validity indicators (F: infrequency, Fb: Back infrequency, and F-K index)

of the Korean MMPI-2 effectively distinguished between feigned negative profiles, truthful responses, and psychiatric patients. Subsequently, in 2001, the Korean MMPI-2 standardization committee was established, and research initiatives commenced in 2003.

The MMPI-2 has also been adapted for use with refugee populations in the United States, particularly focusing on Vietnamese and Hmong communities. Tran (1996) undertook the task of adapting and researching the Vietnamese version of the MMPI-2, which was further explored by other researchers (Nguyen, 1999). To accommodate Hmong refugees from Laos, the MMPI-2 was translated into the Hmong language (Deinard et al., 1986). Notably, since the Hmong language had only recently been documented in written form over the past four decades, traditional printed materials were less accessible to older refugees who lacked literacy in the language. In response, an audio-recorded version was developed to better serve this demographic (Deinard et al., 1996). In the Philippines, the original MMPI in English has been in use since the 1950s. This adoption was made possible by the prevalent English language proficiency among Filipinos, enabling the utilization of the original MMPI and standard American norms (Alcuaz-Reyes, 1981; DeLeon, 1977; Dionisio, 1957; Diy, 1967). This versatile application extended to diverse assessment contexts such as clinical evaluations, medical school admissions, vocational counseling, legal referrals, addressing educational challenges, industrial screening, and academic research (Alcuaz-Reyes, 1981). Additionally, Galvez (1971) embarked on a translation of the original MMPI into Filipino (Tagalog). However, due to translation errors, the equivalence of this version was compromised, prompting subsequent research investigations (Butcher et al., 2003).

The MMPI-2, introduced in 1989, has gained significant popularity as an evaluative tool in the Philippines. The prevailing approach involves utilizing the English-language booklet along with American norms for the Philippine population. Its contemporary applications encompass tasks like personnel screening, assessing applicants for firearms licenses, evaluating individuals involved in alcohol-related driving incidents, and conducting clinical psychiatric evaluations. After Pongpanich and Butcher translated the MMPI into Thai in 1979, its usage expanded in Thailand. Pongpanich, along with colleagues from the Royal Thai Army, extensively employed the assessment for screening potential military officers, medical students, and nurses. Moreover, the MMPI found wide-ranging utilization in clinical evaluations across various mental health facilities in Bangkok. Upon the release of the MMPI-2 in 1989, Pongpanich undertook a comprehensive translation and adaptation process to develop a Thai-specific version, completing it by the end of 1999. The translation of the MMPI-2 into Thai was guided by the same committee-based technique employed for the initial Thai version of the MMPI (Pongpanich, 1996). A substantial number of items in this translation endeavor did not necessitate retranslation, as they closely aligned with the existing Thai MMPI items.

The translation and subsequent back-translation were meticulously executed by a team of eight Thai bilingual experts alongside an American instructor. Thorough measures were taken to ensure the accurate equivalence of meaning in the back-translated items. If any items posed difficulties, they were retranslated until their meanings aligned with those of the English versions. The translation team observed that translating MMPI-2 items proved to be smoother compared to translating original MMPI items. This was attributed to their previous experience in handling linguistic nuances, particularly qualifiers. Furthermore, the language used in the MMPI-2 displayed a simpler and more easily understandable structure compared to the original MMPI items, with fewer awkward phrasings. Additionally, the translation team found that no items were culturally irrelevant within the Thai context. It is worth noting that the Thai adaptation team concluded that using American standards was appropriate for Thai clients, based on prior research indicating that typical Thai samples scored within a range similar to American samples on MMPI-2 scales (Pongpanich, 1996).

SUMMARY AND CONCLUSION

The MMPI is used widely throughout several areas in the world, including in Asian countries. While the original MMPI item set exhibited a high degree of cultural sensitivity with a more focused scope addressing a narrower range of issues, the expanded item pool of the revised MMPI-2, which encompasses a wider variety of concerns, demonstrated a lesser ability to address cultural considerations between varied populations. While translators in several Asian countries have historically generated distinct in-country norms for test translations, some current versions lack separate norms and rely on American norms as a comparative benchmark. Notably, specific countries such as the Philippines and Thailand have developed a tradition of utilizing English language versions, thereby foregoing the development and use of distinct national norms. Considering this circumstance, fostering international collaboration in scientific research and undertaking comprehensive studies incorporating a broader array of cultural variables and gender disparities is imperative for more accurate use of the MMPI measures. Such endeavors will play a pivotal role in supporting the formulation of culturally specific norms, facilitating meaningful comparative analyses, and providing more pertinent information regarding Asian subjects who are administered the measure.

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