BRIEF HISTORY AND OVERVIEW OF THE MINNESOTA MULTIPHASIC PERSONALITY INVENTORY (MMPI) AND MMPI-2 IN PSYCHOLOGICAL ASSESSMENT AND THE USE OF THESE TEST IN RECENT RESEARCH STUDIES IN INDONESIA

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Abstrak

Tes kepribadian MMPI sebenarnya sangat dibutuhkan dalam berbagai bidang, baik bidang pendidikan maupun bidang kerja (karier), tetapi tes MMPI dan MMPI-2 ini tidak banyak diketahui oleh khalayak umum di Indonesia. Tes MMPI ini mula-mula lahir tahun 1943 di Amerika Serikat, dan diperbaharui pada 1989 (MMPI-2). Tes ini sudah diterjemahkan dalam lebih dari 100 bahasa (termasuk dalam Bahasa Indonesia) dan dipergunakan di lebih dari 50 negara. Sekarang juga dibentukkan MMPI-A, untuk mengetes anak remaja secara akurat. Sepuluh ribu artikel dan buku telah membahas riset tentang tes ini.

Di Indonesia, secara khusus, sebagai contoh penelitian, pada tahun 2001 University of Gunardarma di Jakarta telah mempergunakan tes ini untuk meneliti indikasi adanya sifat Kepribadian *Type A* (dorongan dan motivasi tinggi untuk mencapai gol-gol) dalam mahasiswa baru. Pada tahun 2006, *Jurnal Medicine Nusentara* menerbitkan artikel berjudul, "Profil MMPI dan Indeks Prestasi (I.P.) Mahasiswa Kedokteran" yang meneliti relasi antara profil kepribadian mahasiswa dan hasil akademik mereka di kemudian hari.

Penelitian penulis ini bertujuan utama untuk menjelaskan tentang tes MMPI dan MMPI-2, serta unsur-unsur yang terkait di dalamnya. Kedua, bertujuan menjelaskan penggunaannya dalam konteks Indonesia.

Metode penelitian yang digunakan penulis adalah metode diskriptif, yang akan menjelaskan atau memamparkan data tentang tes MMPI dan MMPI-2. Sedangkan dalam mengumpulkan data, peneliti mempergunakan studi pustaka.

Sedangkan hasil penelitian sebagai berikut: MMPI penting karena dapat digunakan untuk membedakan orang yang normal dengan orang yang ada kemungkinan ketidaknormalan dalam kepribadiannya, walaupun gejalanya belum terlalu nampak. Usulan peneliti: Jika penelitian dengan memakai tes MMPI lebih sering dilakukan di Indonesia, maka skala pengukuran yang sesuai dengan kebudayaan orang Indonesia akan semakin tepat dan akurat.

General Introduction and History of the Original MMPI Test

The most widely used personality inventory test in the United States is the Minnesota Multiphasic Personality Inventory (MMPI) which was first published in 1943 (Barlow and Durrand, 2002, p. 74). It's authors, Stark Hathaway, Ph.D. (a psychologist) and J. Charnley McKinley, M.D. (a neuropsychiatrist) expected the MMPI would be useful for diagnostic assessments (Dahlstrom, Welsh, and Dahlstrom, 1972, p. 4). It was intended to distinguish normal from abnormal groups, to aid in diagnosis of major

psychiatric or psychological disorders (Kaplan and Saccuzzo, 1993, pp. 425-426), locating potentially neurotic or psychotic individuals before the deviation became overt, and improving the objectivity of clinical diagnosis (Buchanan, 1994, pp. 15-151).

The MMPI emerged on a scene where the projective tests Rorschach and TAT were rapidly gaining in popularity. However, many psychologists had deeply ingrained suspicions of these projective tests, especially the Rorschach. The development of the MMPI in 1943 began a new era of structured personality tests and helped revolutionize them. A large number of research studies provided insight into the scores. The MMPI has since met with substantial popularity and support from the scientific and professional community (Kaplan and Saccuzzo, 1993, p. 22).

The MMPI is currently the most widely researched and frequently referenced of all personality tests both in the United States and other countries (Sundberg, Tyler and Taplin, 1973, p. 565; Kaplan and Saccuzzo, 1993, p. 221). According to Archer (1992, p. 558) it was estimated that 84 per cent of all research conducted in personality inventory has been centered on the MMPI. It is estimated that 10,000 articles and books have documented uses of the MMPI. Most of these were as a means of increased understanding of clinical phenomena, such as alcohol and substance abuse.

The MMPI is used in over 50 countries and has more than 100 foreign translations (Hebrew, Chinese, Dutch, Russian, Spanish, Indonesian, Japanese, Italian, and German among others). It was first translated into *Bahasa Indonesia* is 1982 (Syamsuddin, Limosa & Syauki, (2006) p. 11-14). It was noted, however, that research comparing the values obtained from other languages, such as the Spanish and English versions on the same bilingual individuals, showed that the Spanish mean scores were higher on five scales, making the two translations non equivalent (Friedman, Webb, and Lewak, 1989, p.39).

Times have changed since the original MMPI was first published in the United States. Much of the normative data for the original MMPI was collected in the late 1930's. In the U.S. English version, there was concern that the average American citizen had changed since the data had been collected 50 years before. Item content was also a question. Some language and references in the test were archaic and obsolete (i.e. “sleeping powders,” and “street cars”). The test also contained sexist language, reference to bowel and bladder functions which were irrelevant and objectionable. Some items needed to be included which weren’t in the original test such as references concerning suicide attempts and the us of drugs other than alcohol (Graham,1993, p. 9).

In response to these criticisms about its original test standardization sample, the MMPI has recently been revitalized by exceptionally rigorous methods. In a restandardization begun in 1986 many of these problems were corrected (Kaplan and Saccuzzo, 1993, p. 22). The MMPI-2 published in 1989 was intentionally similar in most ways to the original MMPI. The validity scales and clinical scales are alike although not all of the supplementary scales that could be scored from the original MMPI can be scored from the MMPI-2. Much of the earlier research concerning interpretation still applies directly to the MMPI-2. Improvements in the MMPI-2 include a more contemporary and representative standardization sample, updated and improved items, deletion of objectional items and some new scales (Graham, 1993, p. 13). An adolescent version, the MMPI-A, has also been developed for subjects aged 18 or younger.

The MMPI-2 Development

In developing the updated MMPI-2, effort was made to preserve the original standard scores while making the control group more representative of the U.S. population, one of the major criticisms of the MMPI (Archer, 1992, p. 561). Developers selected 2,900 subjects from seven geographic areas of U.S.A. 300 were eliminated due to faulty profiles, resulting in a final control group of 2,600 men and women. Because participation in testing was voluntary, the final sample was more educated and had greater economic means than the general population (Kaplan and Saccuzzo, 1993, p. 432). 45 per cent of the total sample were college graduates or those who had done post graduate studies. Over 40 per cent were from professional occupational groups as contrasted to 16 per cent of the normal population as evidenced in the 1980 census (Colligan and Offord, 1992, p. 15).

A unique feature of the MMPI-2 is 15 new content scales evaluating such things as Health Concerns (HEA), the Type A Personality (TPA), Family Problems (FAM) showing family disorders and possible child abuse, and Work Attitudes (WRK) which were likely to interfere with job performance (Kaplan and Saccuzzo, 1993, p. 434). These content scales were developed using the deductive approach with several involved developmental stages and multi-method procedures that combined rational and statistical methods (Butcher, Graham, Williams and Ben-Porath, 1990, pp. 26-38).

Clinical Scales

There are ten clinical scales featured in the test. In recent years these scales have been referred to only by number and letter abbreviation (not by name), to avoid unnecessary and inaccurate labeling of the client. The scales (and brief descriptions) are: (1) Hypochondriasis (Hs) which is a preoccupation with the body and fears of illness; (2) Depression (D) shows a depressed mood sometimes with suicidal thoughts; (3) Hysteria (Hy) shows immaturity and physical symptoms with no physical cause; (4) Psychopathic deviate (Pd) shows delinquent, criminal and antisocial individuals; (5) Masculinity-femininity (Mf) denotes masculine and feminine interests; (6) Paranoia (Pa) shows suspicion and hostility; (7) Psychasthenia (Pt) shows excessive anxiety and fears; (8) Schizophrenia (Sc) shows alienation, withdrawal, being highly disturbed and out of contact with reality; (9) Hypomania (Ma) shows agitation with poor impulse control, irritability; and (10) Social introversion (Si) identifies extroversion, introversion and shyness (Kaplan and Saccuzzo, 1993, pp. 428-433). Seldom is only one of these scales elevated, thus the elevated scales are considered in combination as a two or three point configuration (Friedman et al., 1989, p. 150).

Critical Items

Critical items are those whose content is judged to be indicative of serious psychopathy. These show potentially serious emotional problems which the clinician needs to explore further with the patient. In the MMPI-2 critical items were chosen relating to six crisis areas: acute anxiety state, depressed suicidal ideation, threatened assault, situational stress due to alcoholism, mental confusion and persecutory ideas (Graham, 1993, pp. 130-131). Presence of these critical items is indicated in the clients profile report for ease of user intervention.

The new MMPI-2 content scales have been arranged on the profile sheet to facilitate a clear organization of interpretive hypotheses. These 15 content scales assess

four general clinical areas. (a) Internal Symptomatic Areas are evidenced in the first six scales: Anxiety, Fears, Obsessiveness, Depression, Health concerns and Bizarre Mentation (hallucinations, delusions and distorted or autistic thinking). (b) External Aggressive Tendencies are shown by the next four scales: Anger, Cynicism (negative view of the motives of others), Antisocial Practices and Type A Behavior (overbearing, aggressiveness). (c) Negative Self Views are shown by the Low Self Esteem scale. (d) General Problem Areas are shown by the Family Problem scale (discord, hate, abuse), by the Social Discomfort Scale (loners), the Work Interference scale (reluctance to work) and the Negative Treatment Indicators scale (reluctance to change, negative attitudes toward mental health treatment) (Butcher et al., 1990, pp. 101-104, Barlow and Durrand, 2002, p. 75).

Structural Features of the MMPI-A (Adolescent)

Despite the popularity and widespread use of the MMPI with adolescents, there was concern that the normative group and item pool did not specifically assess adolescent problem areas. In response the MMPI Adolescent form (MMPI-A) was released in 1992. It is sufficiently modified to enable significant improvements in the assessment of psychopathology in adolescents by underscoring the unique aspects pertinent to this age group. The normative data was gathered from 1,620 adolescents in eight geographic sites across the U.S. The test contains 478 items. It has the 15 newly developed content scales of the MMPI-2 with six supplementary scales which include Alcohol/Drug Problem and Immaturity scales. The MMPI-A has sufficient continuity with the original MMPI to allow for much of the research accumulated on the original MMPI to generalize to the MMPI-A (Parcher and Krishnamurty, 1994).

Utility of the Test

Administration

The MMPI can be administered individually or in groups. For subjects of average intelligence or above it takes one to one and a half hours to complete. For less intelligent individuals it may take two hours or more. The MMPI requires a sixth grade reading level, the MMPI-2 an eighth grade reading level. It's unacceptable to allow subjects to take the test home to complete. It is always completed in a professional setting with adequate supervision. This increases the likelihood that results will be valid and useful. At the beginning of the test an explanation should be given of why the test is being administered, who will have access to the results and why cooperation and best efforts are advantageous to the testee. The examiner must provide a quiet, comfortable location and make sure the examinee understands the instructions (Graham, 1993, p. 16). There are alternatives to the standard test form for people having difficulty using it such as a tape recorded version for semiliterate or disabled persons, and a Spanish language version.

Scoring

In the United States the National Computer Service (NCS) distributes computer software that permits users to score standard validity and clinical scales as well as numerous supplementary scales using a personal computer. A scanner is also available

for high volume users. Results can also be mailed to NCS for scoring. Hand scoring templates are available (Graham, 1993, pp. 17-18).

Interpretation

The combination of Validity, Clinical and Content scales is most helpful in assessing the clients total psychological situation (Butcher et al., 1990, pp. 128-129). The validity scales, taken in combination, reveal helpful information. Four validity scale configurations are particularly important because they occur frequently and add substantially to the interpretation of the clinical scales. These are Validity Scale V, Inverted V, Ascending Slope and Descending Slope.

It is important to consider demographic characteristics, such as age, race, residence, intelligence, education and socioeconomic status, in evaluating profile patterns. The results from an individual profile should be validated against other test and non-test information available about a person such as an interview, observational data and background information. The clinician can then formulate theories about etiology or dynamics underlying abnormal behaviors which have been noted, making a diagnosis, if needed, and a plan for treatment (Atkins, 1989, pp. 329-330).

Critical Analysis

Since its publication in the United States in 1943 the MMPI has been applied to a wide variety of clinical and research problems. Originally developed as an aid to psychiatric diagnosis, the instrument was quickly perceived to have potentialities in many other areas even beyond medicine and health, such as in criminal justice, education and vocational issues and in a wide variety of research studies (Dahlstrom, Welsh, and Dahlstrom, 1975, p.3).

Psychometric properties of the MMPI and MMPI-2 are comparable; the newer version maintains strong continuity with the original. The reliability of the MMPI is excellent when it is interpreted according to standardized procedures. However, clinicians need to interpret the scales using the standard means of interpretation, not just on the subjective basis of their own clinical experience (Barlow and Durrand, 2002, p. 75). The major source of validity comes from the multitude of research studies that describe the characteristics of particular profile patterns (Kaplan and Saccuzzo, 1993, pp. 434-436).

The Use of the MMPI in Research Studies in Several Other Countries, Especially the Country of Indonesia

The use of the MMPI in cross cultural settings in many different languages is an interesting study. (Butcher and Pancheri, 1976, pp. 98-121) cite a study of the internal structure of the MMPI comparing item characteristics across seven national groups and two United States samples. Group mean profiles for male and female normal subjects were compared among the seven groups and the U.S. samples (Israel, Italy, Switzerland, Mexico, Pakistan, Costa Rica and Japan). Profile differences compared to the American samples exist and are dramatic for some countries, particularly Japan and Pakistan.

The highest correlation was seen between the two American test groups and the lowest correlation was between Japanese and American subjects. Other Western national samples were more highly correlated with American groups than were the non Western samples from Pakistan and Japan. The Pakistani and Japanese clinical and validity scales

contained high percentages of differently endorsed items. Non Western thinking patterns differ significantly from U.S. subjects as evidenced by test results.

The author of this paper is particularly interested in the use of the MMPI personality profile in the country of Indonesia, especially how the MMPI has been translated cross culturally as an example of possible cross cultural application of an American psychological testing device. She currently teaches Christian Counseling at Immanuel Christian University (UKRIM) in Jogjakarta, Indonesia.

Several recent studies have been done in Indonesia, using the Indonesian language version of the MMPI. One such study used the MMPI-2 Type-A, Anger Content, and Cynicism Scales to evaluate type-A behavior (hostility, time urgency and competitiveness) in 50 male and 48 female recent Indonesian high school graduates enrolled as new students at the University of Gunardarma, Jakarta, in 2001. The main objective of the study was to establish standard values for indications of Type-A behavior among Indonesians. Though test result indicated a faking of good in a large portion of the respondents which may be cultural, the interpretation of test results was still a quite useful study (Harlan J.,Wibisono S., 2002, p. 381-391).

Another recent study has been done with a group 120 respondents, composed of hospital employees and high school graduates, to establish new Indonesian standard norms for Validity and Clinical scales of the MMPI-2. The journal article is entitled: *Nilai Standar Skala Validitas Dan Skala Klinis MMPI-2 Pada Karyawan Rumah Sakit dan Lulusan SLTA di Indonesia 2003.* (Harlan J., 2005, No. 1-10).

A third research study reported in the Jurnal MedicineNusantara, is entitled: *Profil MMPI dan Indeks Prestasi (IP) Mahasiswa Kedokteran.* This study examines the relationship between the 1) personality profiles of Indonesian medical students as measured by the MMPI personality inventory and 1) their academic performance, as measured by their Grade Point Average (GPA) in medical school. The authors concluded that the Indonesian version of the MMPI could be a very useful tool for selecting new university students in Indonesia (Syamsuddin, Saidah, Limosa, Erlyn, Syauki, Suheyra, 2006, p. 11-14).

Another study was in the form of a college research thesis, written in 2004, entitled: *Adaptasi MMPI-2 untuk Aplikasi Indonesia: Analysis Psikometrik pada Subskala Low Self Esteem, Social Discomfort and Work Interference Content Scales* written by Agustina Citra Ayuningtyas (advisor: Magdalene Surjaningsih Halim), at Atma Jaya University. Augustina studied individuals between the ages of 18-25 who exhibited healthy self esteem to measure the reliability and validity of the MMPI-2 content scales for self esteem in the Indonesian setting (Ayuningtyas, Agustina Citra, 2004, p. 1-2).

These above recent research studies, among others, using the Indonesia translations of the MMPI and MMPI-2 have added to our understanding of how these tests apply cross culturally in evaluating human personality in Indonesia. The author hopes to see additional data of this nature emerging from other research studies in the future, to evaluate norms for Indonesian personality characteristics with increasing accuracy. It is hoped that the increasing accuracy of these tests can be used effectively in such tasks as college admission procedures and as effective screening tools to accept new members into various service organizations.

REFERENCES

Archer, Robert P., Minnesota Multiphasic Personality Inventory-2. In J.J. Kramer & J.C. Conoley (Eds.), *The Eleventh Mental Measurement Yearbook.* Lincoln, NE: Buros Institute of Mental Measurements of the University of Nebraska-Lincoln, 1992.

Atkins, Alvin L., Contemporary training in psychological assessment. In Scott Wetzler,& Martin M. Katz (Eds.), *Contemporary approaches to psychological assessment* pp. 325-334. New York: Brunner/Mazel, 1989.

Ayuningtyas, Agustina Citra, (advisor: Magdalene Surjaningsih Halim) *Adaptasi MMPI-2 untuk Aplikasi Indonesia: Analysis Psikometrik pada Subskala Low Self Esteem, Social Discomfort and Work Interference Content Scales* (Undergraduate thesis written at Atma Jaya University) 2004.

Barlow, David H., Durand, V. Mark, *Abnormal Psychology, An Integrative Approach,* USA: Wadsworth Thomson Learning, 2002.

Buchanan, Roderick D., The development of the Minnesota Multiphasic Personality Inventory. *Journal of the History of the Behavioral Sciences, 30* (2), 148-161., 1994.

Butcher, James N., Graham, John R., Williams, Carolyn L., & Ben-Porath, Yossef S. *Development and Use of the MMPI-2 Content Scales.* Minneapolis, MN: University of Minnesota Press, 1990.

Burcher, James N. & Pancheri, Paolo, A Handbook of Cross-National MMPI Research. Minneapolis, MN: University of Minnesota Press, 1976.

Colligan, Robert C. & Offord, Kenneth P., *The MMPI: A contemporary normative study of adolescents.* Norwood, NJ: Ablex. 1992.

Dahlstrom, W. Grant, Welsh, George Schlager, & Dahlstrom, Leona E., *An MMPI handbook: Vol. 1: Clinical Interpretation (Rev. ed.).* Minneapolis, MN: University of Minnesota Press, 1972.

Dahlstrom, W. Grant, Welsh, George Schlager, & Dahlstrom, Leona E., *An MMPI handbook: Vol. 2: Research Applications (Rev. ed.).* Minneapolis, MN: University of Minnesota Press, 1975.

Friedman, Alan F., Webb, James T., & Lewak, Richard., *Psychological Assessment with the MMPI.* Hillsdale, NJ: Lawrence Erlbaum, 1989.

Graham, John R., *The MMPI: A Practical Guide.* New York: Oxford University Press, 1977.

Graham, John R., *MMPI-2: Assessing Personality and Psychopathology* (2nd ed.). New York: Oxford University Press, 1993.