



Validation of the MMPI in Kuwait

Mostafa Toriki*

* Ph.D. in Psychology of Personality, Kuwait University, 1973.
Professor, the Department of Psychology, Kuwait University





Abstract

Sixty five Kuwaiti male prisoners of an average age of 24.5 years (SD = 4.6) and 64 male non-prisoners whose average age was 24.2 years (SD = 4.2) were administered the Minnesota Multiphasic Personality Inventory, Arabic Version. No significant differences between the two groups were noted on L, HS and D Scales. Prisoners were significantly higher on F, K, Hy, PD, Mf, Pa, Pt, Sc, Ma, and Si. Chi-squared procedures indicated many items did not differentiate between the two groups. These findings were interpreted cross-culturally.

The Minnesota Multiphasic Personality Inventory (MMPI) has been translated into a number of different languages around the world,¹ but its validation was ignored or postponed until some vague future time². The MMPI was translated into Arabic in 1959³, but since that time no published researches have investigated the validation of the complete Arabic version. However, validity studies of some individual scales such as Schizophrenia⁴, Depression⁵, Psychopathic Deviate⁶ and Hysteria⁷ in Egypt and MF Scale in Kuwait⁸ have been carried out. The important step of adaptation of a test to rise in a different culture is to ensure that the adapted test measure the same constructs as in the original test. The question about cross-cultural test validity in the new culture must be addressed before the adapted instrument can be relied upon. Dana (1988) concluded that research on the potential cultural content of differences in MMPI continues to be necessary.⁹ The purpose of the present study was to assess the validity of the entire MMPI Arabic version in Kuwait.

Method

Subjects

This study investigated the validity of the MMPI Arabic version by testing the discriminating power between two groups: prison inmates and non-prisoners. The prison, even a short period of time, can affect people, and MMPI scale in prison 'are up' ^{10,11,12,13,14,15,16}, therefore the inmates scores could be higher than the nonprisoners scores.

The prison inmates were 65 Kuwaiti citizens, men who agreed to take the test while in the Kuwait Central Prison; incarcerated for drug addiction, sexual and money offences. Nonprisoners were 64 Kuwaiti citizens, men whose average age was 24.3 years (SD = 4.1). There was significant age difference between the two groups ($t = .32$). The two groups were matched in education and occupation.

Measure

The MMPI Arabic version was completed without major changes of content and it assesses the same dimension measured by the English version and in the same order. The split-half reliability was estimated on responses of 100 on normal subjects¹⁰ and the values ranged from .52 to .88 and on 50 normal females for whom the values on clinical scales ranged from .63 to .89¹⁷. The entire MMPI Arabic version (566 items) was administered to these subjects.

Results

The two types of analysis were performed to estimate the validity of the MMPI Arabic version.

1. Discriminating Power

The scale means, standard deviation (raw scores) and multivariate analysis of variance from the two groups are presented in Table 1. The analysis indicated no significant differences between the two groups on L, HS, and D Scales, inmates were higher on F,K,(3) HY (4) PD (5) MF (6) Pa (7) Pt (8) Sc (9) Ma and (0) Si (see Figure 1).

Table 1: Means, Standard Deviations of Raw Scores and Multivariate Analysis of MMPI Scales for Prisoners and Non-Prisoners

Scales	Prisoner (n=65)		Non-Prisoner (n=64)		Univariate F	p
	M	SD	M	SD		
L	8.05	2.16	8.00	22.31	.01	.900
F	33.97	6.14	28.31	5.87	28.54	< .010
K	18.65	4.03	17.11	4.31	4.38	.040
HS	15.68	3.73	14.86	3.28	1.75	.190
D	32.18	5.44	30.89	4.98	1.99	.160
HY	34.22	6.91	31.30	6.02	6.53	.010
PD	28.85	5.43	25.86	5.65	9.38	< .003
MF	32.91	6.49	28.30	5.52	18.86	< .001
Pa	21.74	5.38	17.98	5.52	15.29	.001
Pt	25.95	7.47	22.28	7.04	8.191	.005
Sc	40.82	10.24	33.56	8.96	18.311	< .001
Ma	24.18	5.51	21.13	5.97	9.152	.003
Si	41.57	8.16	35.64	7.49	18.477	< .001

Note:

- Test for equality of dispersion, $F_{91, 50524} = 1.01, p = .44$;

Test for equality of means $F_{13, 115} = 3.33, p = .001$.

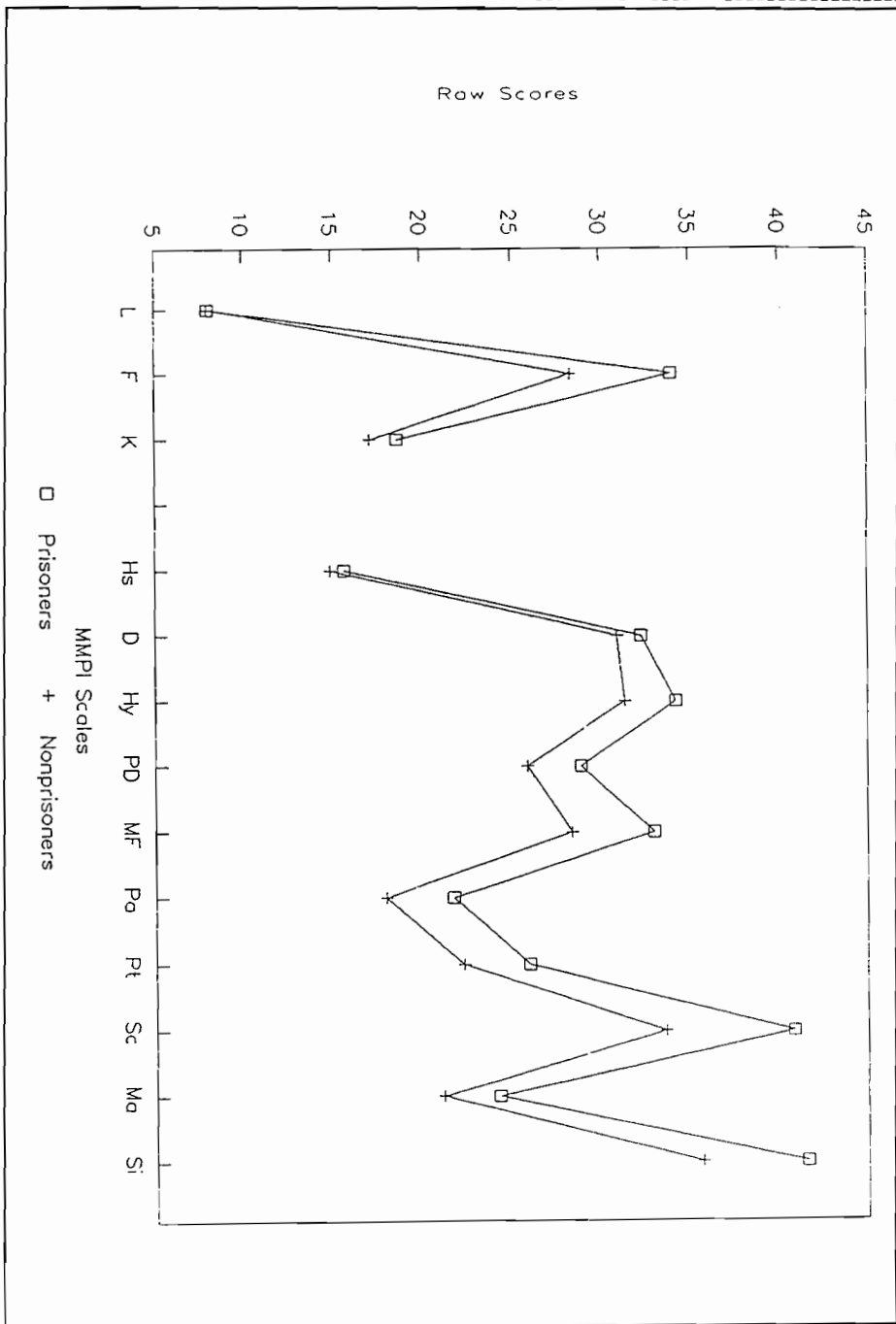


Figure 1: Mean MMPI Profiles of Prisoners and Nonprisoners

2. Item analysis

Chisquare was used to analyze group differences on items to examine which differentiated between the prison inmates and the nonprisoners. The scales were: L 1 item, F 15 items, K 4 items, Hs 4 items, D 10 items, Hy 11 items, PD 10 items, MF 12 items, Pa 11 items, Pt 11 items, Sc 21 items, Ma 9 items and Si 18 items.

Discussion

The results of this study support the findings of several previous investigators that there are measured MMPI personality differences between prison inmates and non-prisoners. Scales F, K, Hy, PD, Pa, Pt, Sc, MA and Si significantly differentiated the groups with prison inmates scoring higher than nonprisoners. These results suggest that MMPI Arabic version is valid for use in Kuwait culture.

The items validity confirms the findings of previous investigators in Egypt, Kuwait and other Eastern countries such as Hong Kong¹⁸, Korea¹⁹ and Japan²⁰. The results may be explained culturally, as the Kuwait culture differs from the United States culture in habits, language, sexuality, religion and social attitudes, so items related to these areas may not work in Kuwait culture. Analysis also indicated that, out of 20 items on religious attitudes, no item differentiated the two groups: out of 19 items on sexual attitudes, 2 items differentiated between the two groups: out of 29 items on the Family and Marital attitude 5 items differentiated between the two groups and out of the 18 items of the occupations attitude category 4 items differentiated the two groups.

The MMPI, D, Hy, and PD scales illustrate this situation. Depression as a Psychological entity seems to be a universal phenomenon, although the behavioral and Psychological manifestation differs according to cultural context, therefore some depression items did not work in Kuwait culture specially these related to behavioral manifestation as swearing (item 30), smashing things (item 39), picking a fight with someone (item 145), and some other items did not differentiate between the two groups in this scale such as: 18, 98, 153.

Concerning Hysteria Scale (Hy) there are some items related to psychological and behavioral manifestation of Hysteria which did not differentiate between the two groups in Kuwait culture, such as: 6,7,55,103,238. Psychopathic deviate scale (PD) also illustrates the situation; the content of items which did not differentiate between the two groups in Kuwait culture is about family attitude, such as: 42, 96, 216, 235, 237. The parents' responsibility toward their children in Arab culture is throughout their life, the Arab family being cohesive and both males and females feeling the

intimacy of family relationships, therefore family ties in Kuwait culture are strong. Items related to sex in PD scale also did not differentiate between the two groups in this study; sex in Arab culture is a touchy subject, and relationship between males and females in Arab culture differs from that in the culture of the United States. Some of the items related to sex in PD scales, which do not work in Kuwait culture, are: 20, 37, 231.

The above discussion indicates that some MMPI Arabic version items are valid in Kuwait and that there are some items which, although they differentiate between clinical and normal groups in the United States, were not useful in the Kuwait culture. There are some cultural factors which might be accountable for this situation. The Japanese are likely to perceive prominent depressive and schizophrenic characteristics more as a cultural peculiarity rather than as a pathological one²¹. Therefore, the cultural variance can be identified in item content^{22,23}

The MMPI Arabic translation should include a "cultural translation", i.e. the translation should be both linguistically in Kuwait culture and differentiating between the prison inmates and nonprisoners. It nevertheless operates somewhat differently within the Kuwait population, and therefore requires standardization before it can be considered an equivalent measure.

References

1. Butcher, J.N., Pancheri, P. **A Handbook of Cross-national MMPI Research.** Minneapolis: Univ. of Minnesota Press, 1976.
2. Butcher, J.N., Garcia, R. "Cross-national Application of Psychological Test". **Personnel and Guidance**, 56, 1978, 472-475.
3. Hana, A .M., Ismail, M., Melika, L. **Personality and its Measurement.** Cairo, Al-Nahda Al-Arabia, 1959.
4. Melika, L.K. **Schizophrenia Scale of the MMPI.** Cairo: Dar Al-Taaleef Press, 1960.
5. Melika, L.K. **The Depression Scale of the MMPI.** Cairo: Al-Nahda Al-Arabia, 1966.
6. Melika, L.K. **The Psychopathic Deviate Scale of the MMPI.** Cairo: AlNahda Al-Arabia, 1966.
7. Melika, L.K. (1967) **The Hysteria Scale of the MMPI.** Cairo: Al-Nahda Al-Arabia, 1967.
8. Torki, M.A. "Validation of the MMPI Mf Scale in Kuwait." **Psychological Reports**, 47, 1980, 1152-1154.
9. Dana, R.H. "Culturally Diverse Groups and MMPI Interpretation". **Professional Psychology: Research and Practice**, 19, 1988, 490-495.
10. De Schamphelre, D. "MMPI Characteristics of Professional Prostitutes: A Cross-cultural Replication". **Journal of Personality Assessment**, 54, 1990, 343-350.
11. Fowler, R.D. "Computer Interpretation of the MMPI in a Prison Population". **Proceedings for 6th International Conference on Personality Assessment**, Kyoto, Japan, 1979.
12. Gearing, M.L. "The MMPI as Primary Differentiator and Predictor of Behavior in Prison: A Methodological Critique and Review of the Recent Literature". **Psychological Bulletin**, 86, 1979, 929-963.

13. Schmalz, B.J., Fehr R.C., & Dolphy, J.T. "Distinguishing Forensic Psychiatric and Inmate Groups with the MMPI." **American Journal of Forensic Psychology**, 7, 1989, 37-47.
14. Walters, G.D. "Screening for Psycho-pathology in Groups of Black and White Prison Inmates by Means of the MMPI." **Journal of Personality Assessment**, 50, 1986, 257-264.
15. Walters G.D. "Correlates of Institutional Adjustment in Two Groups of Emotionally Disturbed Offenders." **International Journal of Offender Therapy and Comparative Criminology**, 31, 1987.141.
16. Walters, G.D.; Mann, M.F.; Miller, M.P. & Newphill, L.L. "Emotional Disorder Among Offenders." **Criminal Justice and Behavior**, 15, 1988, 433-453.
17. Melika, L.K. **Manual of Multiphasic Personality Inventory**. Cairo: Al-Nahda Al Masria, 1986.
18. Cheung, F.M. "MMPI Profile and Analysis of Normals in `Hong Kong." **Proceedings for 6th International Conference on Personality Assessment**, Kyoto, Japan, 1979.
19. Ki Suk, K. "The MMPI in Korea". **Proceedings for 6th International Conference on Personality Assessment**, Kyoto, Japan, 1979.
20. Abe, M. "The Objective Method of Personality Comparison (MMPI) in International Research". **Proceedings for 6th International Conference on Personality Assessment**, Kyoto, Japan, 1979.
21. Ono, N. "Depressive and Schizophrenic characteristics of the Japanese People on the MMPI Data." **Tohoku Psychologica Folia**, 44, 1985, 105-108.
22. Dana, R.H. & Whatley, P.R. "When Does a Difference Make a Difference? MMPI Scores and African-American". **Journal of Clinical Psychology**, 47, 1991, 400-406.
23. Pollack, D., Shore, J.H. "Validity of the MMPI with Native Americans". **Americans Journal of Psychiatry**, 137, 1980, 946-950.

* * *