Personality Traits of Thai Students

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SUMMARY

The Eysenck Personality Questionnaire (EPQ) was back translated into Thai and administered to a sample of 116 male and female Thai University students. The EPQ items were then submitted to item analyses and a rotated factor analysis and the results were compared with those from a large British sample. Neuroticism (N), Extraversion, and Social Desirability were shown to be valid in Thailand and special scales were constructed to compare the Thai and British personality. The Thais scored higher than the British on N and this finding is discussed in the light of previous studies of Thai personality.

A. INTRODUCTION

There is little firmly based psychological knowledge concerning the personality of the Thai. This is not to deny the insight and elegance of Phillips' (14) studies of Thai peasants using sentence completion tests, but projective test data especially in a non-Western culture is inevitably less than definitive. One description of Thai personality has been attempted by Sharp *et al.* (15) who used descriptions such as hospitable, of slow tempo, equanimous, respectful of age, conservative, ritualistic, showing little steadfastness, extravagant, bashful, introverted, not joiners, indolent, egotistical, self-centered, lacking persistence, mild and nonviolent. However, although seemingly accurate (14), its basis is intuitive and not empirical.

It was decided to investigate Thai personality by using a standard personality questionnaire, the Eysenck Personality Questionnaire (EPQ). It was chosen because according to its authors (4) the variables measured are largely genetically determined and likely to be found, therefore, in all

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cultures: extraversion (E) is related to the arousability of the central nervous system; neuroticism (N) to the lability of the autonomic nervous system, and psychoticism (P), although with less evidence, to the androgen level of the individual.

In addition to this theoretical argument for using the EPQ there is the practical point that the EPI (5), a highly similar test, has been shown to work in other non-Western cultures: India (e.g. 6), Ghana (10), Uganda (7), and more recently these claims have been confirmed in Nigeria (6) and Japan (8).

The decision to use the EPQ did not ignore the obvious problems involved in using personality questionnaires in cultures different from those for which they were designed. These problems have been fully discussed (11) and will be summarized here. Some items are culture bound inevitably—i.e., specific to a culture; others are culture free. However, if the scales are shown to be valid in the new culture, then it follows that the items cannot by definition be culture bound. The EPQ appears in terms of item content to be likely to be less culture bound than many other personality questionnaires. Translation of the items is necessary unless a very limited sample (who know English) is to be used. Back translation was used here to provide as accurate a rendering as possible. To show the scales are working in a new culture it is necessary to examine the factor analyses and item analyses which should be similar to those of the original version. Such an examination successfully refutes, if items do work, claims of culture boundness. Finally, comparisons between cultures can only be made with items that work in both cultures, hence special scales of such items are necessary or else special items to replace those that failed can be written—a far more difficult method. This is the problem of metric equivalence.

This last point raises the old etic-emic dilemma (e.g., 2). Obviously cross-cultural comparisons are etic. However, by using scales of items which have been shown to be statistically equivalent and hence meaningful in both cultures, essentially we are measuring etic constructs with emic measures.

From this we would argue that to give the EPQ to a Thailand sample and to examine carefully the behavior of the items in Thailand and Great Britain is a viable cross-cultural project, which should throw light on both the problems of cross-cultural personality testing and on the Thai personality, if the scales work well.

B. METHOD

1. *Sample*

*S*s were 116 Thai students, volunteers from four universities in Bangkok, including 71 females (mean age 20.72 years) and 45 males (mean age 23.13 years).

2. *Test*

The EPQ (4) was translated into Thai by the third author and then back translated by a university lecturer in Bangkok who did not know the EPQ test. Discrepancies in the English versions were noted and any necessary alterations were made in the final Thai translation. The translated EPQ can be obtained from the authors.

3. *Procedure*

The test was administered to the Thai *S*s by the third author in group sessions. Rapport was good and it was understood that all results would be confidential.

4. *Statistical Analyses*

Means and standard deviations of the Thai groups on all four EPQ scales [N, E, P, and L (LIE)] were computed for the purpose of comparison with the EPQ norms.

The item correlations were subjected to a principal components analysis followed by a rotation to simple structure of the first four primary factors. Four factors were chosen, not only because four factors are reputed to account for the EPQ variance but also because in a previous study (1) of the EPQ items, the first four factors clearly emerged as E, N, P, and L. The rotation used was Direct Oblimin (9) with delta varied to allow all levels of obliquity, the final position being determined by the criterion of the maximum hyperplane count, a procedure which in the previously quoted study resulted in the clear emergence of the factors and in the attainment of simple structure. This analysis indicated whether the test items were behaving in the Thai culture as intended by the authors of the test, and as they behaved in Great Britain.

Because of the technical problems associated with the factorization of items (13), a classical item analysis of the four scales was carried out—the point biserial correlation of each item with its total scale score was com-

puted together with the proportion of the sample putting the keyed re-
sponse. This procedure also acts as a check on the factor analysis, since
there should be close agreement between the point biserial correlations and
the factor loadings (13).

It should be noted that the two item analyses were done on the total Thai
sample as these require, for stability, as large a sample as is possible.

5. *Comparison Group*

Since Thai students are not comparable with British students in terms of
age, it was considered that the best comparison group would be the norm
sample males and females matched by age from the test manual (4), a large
and properly selected sample: N = 768 males, 1366 females, age range
20-29 years.

A Gallup sample group of British adults, N = 600 males and 598
females, was used to compare factor analyses of the Thai items. This
sample was representative of the British adult population and the EPQ
scores were given to us for further analyses by H. J. Eysenck.

For the statistical comparison of Thai and British Ss, the E, N, and L
scales were rescored for both the Gallup sample and the Thais with the use
of shortened scales of the items successful in Thailand. The P scale could
not be used in this way.

C. RESULTS

Table 1 shows the mean and *SD* of the EPQ scales of the Thai and the
comparison groups.

TABLE 1
SAMPLE AND NORM SCALE MEANS AND *SD*s

Scale	Thai sample males		Norm sample males		Thai sample females		Norm sample females	
	$\bar{x}$	σ	$\bar{x}$	σ	$\bar{x}$	σ	$\bar{x}$	σ
L	8.56	3.68	6.50	3.88	9.11	3.89	7.17	3.85
E	13.73	3.66	13.72	4.79	13.56	4.17	12.89	4.70
N	14.42	4.22	9.81	5.09	15.41	4.03	12.87	4.99
P	7.16	3.10	4.19	3.26	6.63	2.97	2.79	2.41

Note: Mean age of males = 23.13; age range = 20-29. Mean age of females = 20.72; age range =
20-29.

1. *Item Analysis*

Statistical significance of the rpb coefficients was set at $\alpha = .05$ two tail. For the L scale, only two items failed out of 21. For the E scale, one out of 21 failed. On the N scale one of the 23 items failed. Finally, for the P scale, three of the 25 items failed to reach the criterion, 22 remained.

2. *Factor Analysis*

The items with factor loadings $> \pm .3$ on the four factors among the Thai sample are as follows: Factor 1, (N), 21 N items + five P and one L item; Factor 2, (E), 15 E items + two P, one N and one L item; Factor 3, (L), 17 L items + two N and three P items; Factor 4, (P), eight P items, one L and four N items.

As a contrast to these results, the Gallup sample loading pattern for Factor 1 consisted of the entire N scale. For Factor 2, 19 E items were retained; Factor 3 consisted of the entire L scale. For Factor 4, 22 P items were retained. Incidentally, these four Gallup factors were "item pure" in the sense that only items from one scale loaded on each factor.

D. DISCUSSION

Mean scores of groups for whom a test was not originally designed have to be treated with great caution when they are compared with the scores of normative groups, because such mean scores can be grossly affected by items that have failed to work. At this point it is to be noted that the Thais were virtually identical with the British on the extraversion scale, the scale on which, as it happened, the items were almost all successful.

1. *Standard Item Analyses*

a. The E Scale. Of the 21 E items, only one failed to correlate significantly with the total E score at the .05 level. At the .01 level, one further item failed, whose correlation with the total score was .216. In previous cross-cultural studies with the 16PF and EPI in Ghana (10), it was shown that these scales were valid there with more failing items than this. It can be argued, therefore, that the E scale is valid in Thailand, and that the mean scores are probably comparable with British norms as they stand. In fact, as noted, there were no significant differences between the groups.

The failing items: Item 36 enquires whether the *S* thinks of himself as happy-go-lucky, while 64 is concerned with whether *S*s undertake more

activities than they have time for. While there seems no obvious cultural reason why 64 should have failed (and it only just did so), 36 is explicable because the Thai culture supports the notion of control. It is wrong to be too expressive and unrestrained [except in private (12, 14)].

In conclusion, the E scale of the EPQ could be used in Thailand without too much error, as it stands. The removal of item 36 would make little difference.

b. *The N Scale.* Of the 23 N items, again only one failed to reach significance at the .05 level. At the .01 level, one further item failed. Thus with only two failing items from 23, it is arguable that the N scale is valid in Thailand and that the mean scores are comparable as they stand with the British norms.

Examination of the failing items is revealing. Thus item 47 is concerned with worries about health. In tropical climates, such as that of Bangkok, there are numerous health hazards and it is not unreasonable to expect intelligent, well educated Ss to be worried about it. This interpretation is confirmed by the fact that 96% of the Thai population claimed to be worried about their health. The item therefore failed to discriminate in this culture.

Item 84 is concerned with energy. "Are you sometimes full of energy, sometimes sluggish?" Again, in a tropical humid climate we should expect such an item to behave differently compared with its performance in Great Britain. This interpretation is again supported by the fact that 99% of the Thai sample positively endorsed the item.

It can be concluded that the two failing N items failed simply because the behavior tapped is affected by the tropical climate of Thailand. Would that all item failures in cross-cultural studies were this simple.

c. *The P Scale.* Of the 25 P items, only three items failed to reach significance at the .05 level. Five others, however, failed to reach significance at the .01 level. This can be partly accounted for by the low scores on the P scale of normal Ss such that few items are endorsed. As is clear from Table 1 the norms of the British group are extremely low. For this reason, of inevitably low item polarities, the point biserials are also bound to be depressed. We shall, therefore, accept as failing items in the P scale only those which failed to reach the five percent significance level.

Item 6 refers to the worry of being in debt. Here it is not unlikely that the failure of the item is due to a different valuation of money in Western and Eastern cultures. Item 53 concerns worries over mistakes on work; its

failure has no obvious explanation. Item 61 was the other bad failure. This asks whether your mother was or is a good woman. It is likely that different cultural attitudes to parents would affect this response, since veneration of the elderly is part of the dutiful Thai's attitude (15). Thus of the three definitely bad items, two are clearly likely to be affected by cultural values, those concerned with money and mothers, and these were very poor discriminators. Only one of these items defies cultural explanation.

The content of the five items significant only at the 5% level is interesting: They concern the taste of food being the same, punctuality, being rude, breaking friendships, and the lies of others. All are of the type likely to behave differently in different cultures.

It may be concluded from this item analysis that most of the P items worked in Thailand. However, comparison of mean scores with the British normative group could be misleading. It is, however, clear that mean comparisons on N, E, and P scales between Thai students and the British norms could be made by selecting items that were successful in Thailand and using these in a brief scale.

d. The L Scale. The L scale which measures the tendency to endorse the socially desirable response is of less interest in the study of personality and will be dealt with more briefly. In fact, only three items failed at the .01 level. These were concerned with good habits, minor stealing, and obedience as a child. Only this last item is obviously culturally affected, since there is a greater emphasis on such obedience in Thailand (12). In conclusion the L items formed a scale and there was no evidence from the mean score that the Thai responses in the test as a whole should be discounted as being too affected by social desirability.

In summary, this item analysis reveals that the EPQ works surprisingly well in Thailand with only about three items per scale failing to reach a reasonable correlation with the total scale score.

2. *Factor Analysis of* EPQ *Items*

The first four principal components were subjected to a Direct Oblimin analysis, since if valid, N, E, P, and L should thus appear, and since in our previous study with the Gallup sample ($N = 1198$) this was indeed the case (1).

Before examining this factor analysis one point must be borne in mind. With 90 items, according to some authorities (e.g., 13) 900 Ss would be

needed for an adequate solution. The sample, while sufficient for a sensible result is not as large as desirable, which is the reason for carrying out the classical item analysis above. Nevertheless, the results make it clear that N, E, and L did emerge, although they had one or two extraneous items loading on them. Thus Factor 1 loaded on 20 of the 23 N items, together with five P and one L item. This is clearly the N factor and 20 of the 23 items would appear to be valid. Factor 2 loaded on 15 of the 21 E items together with two P, one N and one L items. Again, therefore, the E factor was valid with only four poor items. Factor 3 is the L factor loading on 17 of the 21 items together with three P and two N items. L, therefore, has only four poor items. Factor 4, however, loaded on eight P, four N and one L item(s) of the 25 possible P items. This factor does not support the validity of the P factor.

Thus the broad examination of the factor analysis confirms the item analysis in that N, E, and L are valid in Thailand with few poor items. Only Factor 4 fails to agree with the item analysis. We shall now examine the factors separately.

a. Factor 1—N. There is high agreement between the item analysis and the factor analysis. The four items loading highest on the N factor were also the four items with highest point biserial correlation in the item analysis.

Furthermore, the two items that failed the item analysis also failed to load on the N factor. One other item failed to load on the N factor and this was one of the poorest of the successful items in the item analysis. There is, therefore, striking agreement between the item analysis and the factor analysis. There is little doubt that in Thailand the N scale is largely valid.

b. Factor 2—E. There is again high agreement between the factor analysis and the item analysis. The four items loading highest on the factor had also the highest point biserial correlations in the item analysis.

Furthermore, the two items that failed the item analysis, failed to load on the E factor. Three of the other four items failing to load on the factor had the lowest point biserial correlations of the successful items.

Thus there is little doubt that the factor analysis of the E scale and the item analysis are in good agreement. A large factor clearly runs through the E items and there can be little doubt that the E scale is valid in Thailand.

c. Factor 3—The L Scale. The L scale item analysis and factor analysis was again in almost perfect agreement. Thus the four items with the highest loadings on the factor had the highest point biserial correlations in

the item analysis. Their ordering was also the same. Three items failed the item analysis and these were three of the four items that did not load on the L factor. The other item which failed to load on the L factor had the lowest biserial correlation of the successful items. Thus agreement between the two analyses indicates that a clear factor runs through the L items and that in Thailand it is a valid scale.

Indeed, it is argued with respect to E, N, and L that the item analyses indicate that the items form a scale and that the factor analyses indicate that a common factor runs through the items. It is therefore reasonable to claim, where item and factor analyses agree, that the items are measuring a common factor and hence are valid.

The P scale, however, did not show such agreement and the factor analysis of the P scale must now be examined.

d. Factor 4—The P Scale. The P scale results are very different from those which we have already discussed. Factor 4 had only 13 items loading significantly on it. Of the 25 P items only eight loaded on this factor, the other salient items were four N and one L items. This Factor 4 was a bipolar factor with N items contrasted with P items.

These results make it difficult to interpret Factor 4 as the P factor, a difficulty compounded by the presence of the high loading N items. Examination of the item content does not readily suggest a label for this factor which seems little more than a mixture of items.

It could be the case that in the Thai sample the P factor was a higher-order factor, which Eysenck (3) has pointed out often occurs, in his nomenclature a superfactor. To test this, 10 factors significant by the scree test were rotated and subjected to higher order analysis. However, no P factor emerged.

It must be concluded that this factor analysis does not support the validity of the P scale in the Thai sample. However, the apparent discrepancy between the item analysis of the P scale and the factor analysis must now be discussed.

The item analysis revealed that the majority of items in the scale were measuring the same variable, although it is noteworthy that the average item total correlation was only around .3, far lower than in the valid N, E, and L scales. However, the factor analysis reveals that this variable, whatever it is, is not unifactorial. Certainly there is no common factor accounting for the item variance. Thus the P scale cannot in the Thai culture be held to be measuring P, although there is some dimension common to the items.

In summary, therefore, the factor analysis taken together with the item analysis clearly shows that E, N, and L were largely effective scales in Thailand. The P scale is unlikely to be valid.

3. *Comparison of Thai and British Results*

As indicated in the discussion of Table 1, comparison of means of tests in different cultures is difficult, since item behavior can be differentially affected in the cultures. Since we have shown that E, N, and L were valid scales in Thailand, despite the failure of a few items in each scale, it is argued that it becomes meaningful to compare the Thai and British scores on these scales. The P scale which did not work in Thailand is omitted from this comparison.

To make the comparison on E, N, and L, we rescored the Thai and British *S*s on *those items that were successful in Thailand* (in both analyses). The N Scale —20 items were used. The E Scale—15 items were used. The L Scale—17 items were used.

Comparison of the mean scores of the Thai and Gallup samples has to be cautious (*a*) because the Gallup sample is so large tending to make even small differences significant, (*b*) because that sample is older than the Thai sample and (*c*) because the Thai sample split by sex is small. For these reasons we shall only discuss in any detail the differences significant at the .01 level or beyond.

The one clear finding is that the Thai sample is more neurotic than the British Gallup sample. Since N does not dramatically increase with age (4), this difference would appear to indicate a true national difference. An examination of the description of Thai personality by Sharp (15) quoted in the introduction supports this finding in that terms ritualistic, lacking persistence, indolent, egotistical and self-centered could apply to the N variable.

This implies that the Thai have more labile autonomic nervous systems than the British, an interesting possibility in the light of the Thai educative aims (12) quoted by Phillips (14), with their emphasis upon "motoric and emotional self discipline" and the fear of losing control over one's impulses (14, p. 45) as if the Thai recognized this motility (implied by high N) and strove to control it culturally.

With less confidence it can be said that the Thai are more extraverted than the Gallup sample. This seems surprising in view of the emphasis on control and the use of the term introverted to describe the Thai personality.

Since extraversion decreases with age and the Gallup sample were older, not too much should be made of this difference.

In summary, it can be said that the Thai are higher N scorers than the British. Obviously before such a conclusion could be clearly stated larger samples are needed. Nevertheless, it must be emphasized that the brief scales used in these comparisons comprise items clearly working in both cultures so that differences are difficult to ignore as being merely test artefacts.

E.   CONCLUSIONS

Fcator analysis and item analysis of the EPQ in Thailand show that: (*a*) A Thai translated version of the EPQ is a viable test at least among students. (*b*) The N, E, and L scales behave virtually as they do in Great Britain: almost all the items in each scale are accounted for by single factors. (*c*) Few items in these scales fail the statistical tests. (*d*) The P scale is not satisfactory in Thailand, not loading on any obvious factor. (*e*) Brief versions of the E, N, and L scales, with items that work in Thailand and Great Britain, enable genuine cross-cultural comparisons to be made. (*f*) The Thai are higher on N than the British Gallup sample and higher also on E (although there are difficulties in the interpretation of this latter result). (*g*) The EPQ deserves further cross-cultural study in Thailand, especially the shortened version.

REFERENCES

1. BARRETT, P., & KLINE, P. Personality factors in the EPQ. *Personal. & Individ. Diff.*, in press.
2. BERRY, J. W., & DASEN, P. R. Culture and Cognition: Readings in Cross-Cultural Psychology. London, England: Methuen, 1974.
3. EYSENCK, H. J. Superfactors P, E, and N in a comprehensive factor space. *Multivar. Behav. Res.*, 1978, 13, 475-481.
4. EYSENCK, H. J., & EYSENCK, S. B. G. Manual to the Eysenck Personality Questionnaire. London,England: Hodder & Stoughton, 1975.
5. ————. The Eysenck Personality Inventory. London, England: Univ. London Press, 1964.
6. GUPTA, B. S. Extraversion and reinforcement in verbal operant conditioning. *Brit. J. Psychol.* 1976, 67, 47-52.
7. HONESS, T., & KLINE, P. The use of the EPI and JEPI in Uganda. *Brit. J. Soc. & Clin. Psychol.*, 1974, 13, 96-98.
8. IWAWAKI, S., EYSENCK, S. B. G., & EYSENCK, H. J. Differences in personality between Japanese and English. *J. Soc. Psychol.*, 1977, 102, 27-33.
9. JENNRICH, R. I. Admissible values of indirect oblimin rotation. *Psychometrika*, 1979, 44, 173-177.

10. KLINE, P. The use of the Cattell 16PF test and Eysenck's EPI with a literate population in Ghana. *Brit. J. Soc. & Clin. Psychol.*, 1976, **6**, 97-107.
11. ——. Cross-Cultural Studies and Freudian Theory in Studies in Cross-Cultural Psychology. London, England: Academic Press, 1977.
12. Ministry of Education of Thailand. Characteristics of a good person. A handbook for teachers instructing in proper behaviour. Bangkok Min. Educ., Bangkok, Thailand, 1959.
13. NUNNALLY, J. Psychometric Theory. New York: McGraw-Hill. 1978.
14. PHILLIPS, H. P. Thai Peasant Personality. Berkeley: Univ. California Press, 1965.
15. SHARP, L., MOORE, F. J., VELLA, W. F., & Assoc. Thailand. (Subcontractors Monograph). New Haven, Conn.: Human Relations Area Files, 1956.

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