

## **THE SUITABILITY OF THE CHILDREN PERSONALITY QUESTIONNAIRE IN IDENTIFYING CHILDREN AT RISK<sup>#</sup>**

**Habibah Elias**

*Faculty of Educational Studies  
Universiti Putra Malaysia  
Selangor, Malaysia*

*A study was conducted to determine the suitability of a personality instrument in identifying children at risk. Sample in the study was comprised of 589 Standard Five pupils from three primary schools in a new industrial area in Selangor, Malaysia. The instrument was a translated version of the Children Personality Questionnaire (CPQ) by Cattell and Porter (1985). Results showed that the 14 factors in the CPQ had low reliability levels with Cronbach alpha values 0.5 and below. Factor analysis showed a different set of factors with low factor loadings and non-significant to explain the personality of Malaysian children. The implications for the low reliability of the translated version of the CPQ were discussed.*

The meaning of 'at risk' is not precise and varies considerably in practice (Slavin, Karweit, & Maddan, 1989). Some researchers (e.g., Howard & Anderson, 1978; Lloyd, 1978) primarily focus on school drop out as the major criterion. In other studies such as Phi Delta Kappa International (Frymier & Gansneder, 1989), the term 'at risk' was defined as students who are likely to fail in either school or life. Factors associated with being at risk include failing a course in school, being retained in grade or dropping out of school.

Educators and policy makers agree that early education should be the main priority (Brandt, 1993). Rather than letting pupils fail and later offer them remedial services, it is better to prevent failure at an early stage. Slavin, Karweit, and Wasik (1993) stated that most children, regardless of their social class or other factors, entered school with full enthusiasm, motivation, self-confidence, and with high expectations to achieve success in school. At the end of the first year, however, many of them realized that their initial high expectations are not coming true and they have begun to see school as punishing and

---

<sup>#</sup> Correspondence concerning this article should be addressed to Habibah Elias, Faculty of Educational Studies, Universiti Putra Malaysia, 43400, UPM, Serdang, Selangor, Malaysia.

demeaning. To overcome failure later on is rather difficult because the child who has failed is very likely to be unmotivated with a poor self-concept as learners. They may have high anxiety and hatred towards a particular school subject. Even though success at an early stage does not guarantee success throughout the school years and beyond, failure at an early stage most likely will bring about failure throughout the schooling period.

Gottesman, Cerullo, Bennet, and Rock (1991) agreed that any effort to identify students with learning difficulties should be encouraged. Without intervention at an early stage either through a resource center or through supportive services in the normal classroom, there will likely be cumulative skill deficiencies, decrease in self-confidence and long term problems. Early intervention is an alternative which can reduce cost for the student and society. Therefore, an instrument to identify children in the high risk group is needed.

An instrument to measure personality is necessary in school to identify children who need individual attention and guidance in terms of emotional conflict or any behavior problem. Identifying these children at an early stage will help to avoid various behavior problems or handle them before they become defensive habits or complications difficult to treat (Cattell & Porter, 1985).

In Malaysia, the failure rate at secondary school level is about 20% of the school population. School leavers who do not get into higher education or into the job market are creating social problems to the society. Drug addiction and anti-social behavior are some of the problems faced by the society.

Werner (1966) has shown that among 8 to 12 year olds, the high achievers were different from the low achievers. The low achievers showed high anxiety compared to the high achievers. The high achievers were more intelligent and emotionally more stable, had readiness to face higher risk and had higher self-confidence compared to the low achievers.

Other than low academic performance the high risk children also have short attention span and find it difficult to follow instructions. They tend to show ineffective communication and social skills. Therefore, it is necessary to prepare an instrument to measure personality traits in order to identify these "at risk" children. With the above background the present study was conducted with the following objectives: (i) to determine the suitability of translated version of the Children's Personality Questionnaire (CPQ,

Cattell & Porter, 1985) in measuring the personality of Standard Five children, and (ii) to determine the suitability of the translated version of the CPQ in identifying children "at risk".

## METHOD

### Sample

A sample of 589 Standard Five Pupils from three primary schools was taken for the study. The respondents represented a convenience sample of the larger population of Standard Five school children in Hulu Langat, a district in Selangor, Malaysia. The available respondents in the three schools somewhat appeared to be similar to the larger population of Standard Five pupils, except for race. There were 289 boys (49.1%) and 300 girls (50.9%) in the group. The average age of these children was 11 years and 6 months. Respondents belonged to three ethnic groups but the majority were Malays (97%), with very few Indians (2.5%), and Chinese (0.3%).

The general achievement level of the students was measured by the school examination results. Analysis of variance results showed a significant difference between the three schools ( $F = 13.105$ ,  $p < .00$ ). Comparison of the means showed that the mean achievement for School-I was 67.30, for School-II = 66.95, and for School-III = 60.31.

### Instrument

#### *Childrens' Personality Questionnaire (CPQ)*

The instrument used for the study was a translated version of the CPQ (Cattell & Porter, 1985). This was a standardized personality instrument, well researched in the West. The instrument measures 14 personality factors namely Warmth, Intelligence, Ego Strength, Dominance, Emotional Stability, Enthusiasm, Super Ego Strength, Boldness, Tough Mindedness, Individualism, Shrewdness, Self-Confidence, Self-Concept-Control, and Tension Level. There were 70 items and respondents were required to choose between two alternatives, either positive or negative statement for each item. For each positive item a score of one (1) is given and for each negative item a score of zero is given. The validity and reliability of the CPQ was quite established and has been satisfactory. The test-retest coefficients after a week for the CPQ scales as reported by Cattell and Porter (1985) are as follows:

Table 1

*Test-retest reliability coefficients of the CPQ*

Factors	Test-retest Coefficients
Warmth	0.46
Intelligence	0.75
Ego Strength	0.62
Dominance	0.74
Emotional Stability	0.52
Enthusiasm	0.58
Super Ego Strength	0.56
Boldness	0.28
Tough-Mindedness	0.60
Individualism	0.58
Shrewdness	0.57
Self-confidence	0.37
Self-concept Control	0.63
Tension Level	0.47

The CPQ scales show good reliability over a reasonable period of time as shown in Table 1. From the point of view of internal consistency, using the Kuder-Richardson formula 21, Cattell and Porter (1985) reported the coefficients as give in Table 2.

Table 2

*Internal consistency of the CPQ*

Factors	K-R 21
Warmth	0.56
Intelligence	0.79
Ego Strength	0.73
Dominance	0.75
Emotional Stability	0.65
Enthusiasm	0.65
Super Ego Strength	0.74
Boldness	0.49
Tough-Mindedness	0.78
Individualism	0.53
Shrewdness	0.73
Self-confidence	0.32
Self-concept Control	0.70
Tension Level	0.72

Cattell and Porter (1985) agreed that these coefficients are not so high as are sometimes seen for achievement test scores. However, the traits measured by the CPQ are much broader and less homogeneous than what is measured by a particular achievement test. A single scale of the CPQ can figure in the prediction of many different areas of academic achievement, creativity, and clinical disorders as well.

### *Translation Procedure*

The CPQ was initially translated into Bahasa Malaysia by the researcher and then given to a translation panel of 3 local experts: Two associate professors in psychology and one lecturer in educational psychology. After receiving separate comments from each panel member, the researcher made the necessary amendments to the wording of the items as suggested by the panel members. The CPQ was then administered to a group of Standard Five children in a primary school. The respondents were instructed not only to respond to every item but also to mark any item that they could not understand. A number of items were reworded on the bases of the feedback from the children.

### **Procedure**

The CPQ was administered to the pupils in the three schools during several visits that the researcher made. The time for the administration of the questionnaire on various visits was arranged by the principals of the three schools. The questionnaire was administered in the classrooms in the presence of the class teacher. The time taken for the children to complete the CPQ was about 45 minutes.

## **RESULTS**

The data were analyzed using a computer software package known as SPSS for Windows.

### *Reliability of CPQ*

The internal consistency reliability estimate of the translated version of the CPQ was rather low. The Cronbach alpha coefficients for the 14 factors are shown in Table 3.

Table 3

*Cronbach alpha coefficients of the translated version of the CPQ*

Factors	<i>Alpha Coefficients</i>
Warmth	0.26
Intelligence	0.33
Ego Strength	0.51
Dominance	0.42
Emotional Stability	0.18
Enthusiasm	0.12
Super Ego Strength	0.08
Boldness	0.14
Tough-Mindedness	0.22
Individualism	0.31
Shrewdness	0.28
Self-confidence	0.33
Self-concept Control	0.23
Tension Level	0.47

The low reliability of the factors means that the five items in each factor were not measuring the same variable. The low reliability is an indication that the translated version of the CPQ is not a dependable measure. The instrument can not be used until it is further validated.

#### ***Test-Retest Reliability of the CPQ***

The reliability of the instrument was also checked by using the test-retest method. A test-retest (after a lapse of 15 days) data indicate a generally higher coefficients for most of the factors. This is shown in Table 4.

The moderately high correlation coefficients indicate that the individual items which make up the factors are consistent and reliable over a reasonable period of time. The coefficients for 10 out of 14 items are above 0.5.

Table 4

*Test-retest reliability of the translated version of the CPQ*

Factors	Alpha Values
Warmth	0.58
Intelligence	0.39
Ego Strength	0.58
Dominance	0.70
Emotional Stability	0.55
Enthusiasm	0.68
Super Ego Strength	0.25
Boldness	0.53
Tough-Mindedness	0.76
Individualism	0.61
Shrewdness	0.45
Self-confidence	0.47
Self-concept Control	0.59
Tension Level	0.68

The correlation coefficients in this study are comparable to those of Cattell and Porter (1985) as shown in Table 5.

Table 5

*Comparison of correlation coefficients*

Factors	Correlation Coefficients	
	<i>(Cattell &amp; Porter, 1985)</i>	<i>(Present Findings)</i>
Warmth	0.49	0.58
Intelligence	0.75	0.39
Ego Strength	0.62	0.58
Dominance	0.74	0.70
Emotional Stability	0.52	0.55
Enthusiasm	0.58	0.68
Super Ego Strength	0.56	0.25
Boldness	0.28	0.53
Tough-Mindedness	0.60	0.76
Individualism	0.58	0.61
Shrewdness	0.57	0.45
Self-confidence	0.37	0.47
Self-concept Control	0.63	0.59
Tension Level	0.47	0.68

*Descriptive Analysis*

The moderately high test-retest reliability of the translated version of the CPQ made it possible to analyze the individual items as they are consistent over time. A descriptive analysis of the individual item indicated that generally, the respondents in the study showed positive personality characteristics which can help them to achieve success in school. The positive behavioral characteristics of children include being well-disciplined, abiding school rules, having positive attitude towards school, tendency to follow instructions given by parents and teachers, do not like to waste time, are careful, meticulous, caring, and emotionally stable, show social maturity, high self-confidence, and do not like aggression, and are ready to learn anything new. Such children also have some negative characteristics which need to be attended. Among the negative characteristics are preference for being alone rather than with friends, unwillingness to try new things or being adventurous, prefer quiet to noisy classroom, unsatisfied with things,



and attention-getting behavior. These are some of the negative characteristics which can impede learning in school.

### ***Factor Analysis***

The researcher did not plan to carry out factor analysis in the beginning but due to the low reliability of the instrument, she intended to determine whether the factors in the data were different from those studied in the West. In order to improve the reliability and validity of the instrument the researcher attempted an exploratory factor analysis to examine if the factors break up into groups different from the way they were originally placed. Results of the factor analysis showed that the factors which emerged were different from the original factors. The items in each factor had very low factor loadings and were not highly correlated with each other. The factors were not significant to explain the personality of Malaysian children. The analysis also showed that they were very few items with factor loadings of .5 and above. The majority of items have factor loadings of .4 and below. As it was not meaningful to extract factors with such low factor loadings, further analysis was not carried out.

## **DISCUSSION AND CONCLUSION**

The findings of the present study indicate that within the Malaysian context, the CPQ in its original form was not an appropriate measure of children's personality. It is not a good measurement even when translated well.

The low reliability of the instrument may be due to the items being interpreted differently by the respondents. The meanings of the items for Malaysian children were different from those who took the English version. The way Malaysian Children think or conceptualize appeared to be different from those who think in the English language. The Malaysian children seemed to understand the items in a different context.

Another possible explanation could be related to the translation procedure used. Even with accurate translation, there would still be nuances in Bahasa Malaysia which gave different meanings to the original English version of the instrument. It is, indeed, difficult to get 100% exact meaning in the process of translation.

The low reliability of the instrument could also be due to the limited variance in the items. Each item was given a two-point scale, forcing respondents to choose either the first or the second alternative. A more appropriate scale would consist of more variance, for example, a 5-point scale ranging from strong agreement to strong disagreement.

Another possible reason for the instrument to have low reliability was that the respondents may not have given enough focus or concentration on items. To complete the 70 items questionnaire in less than an hour could mean that the respondents did not give enough time to concentrate and think carefully on each item. The administration of the questionnaire could be separated into two or more sessions in order to give subjects more time to concentrate on the items.

The findings suggest that the Bahasa Malaysia version of the CPQ is not a reliable measure of personality in Malaysia. Further research needs to be done on the items. The items need to be re-written or reworded or adapted to the Malaysian context.

Another alternative for further research is to construct totally new items which are relevant to the Malaysian context. The new instrument should be tested on Standard Five children and improved from time to time until a valid instrument is formed.

Even though the CPQ has been proved to be a reliable and satisfactory instrument to measure the personality factors of children in the West, in its present form it has yet to prove its reliability in the Malaysian context. The different cultural context could be a factor that may have some effects on the personality factors measured by the instrument.

## REFERENCES

- Brandt, R. (1993). Children are still at risk. *Educational Leadership*, 50(4).
- Cattell, R. B., & Porter, R. B. (1985). *The children's personality questionnaire*. Institute for Personality and Ability Testing.
- Frymier, J., & Gansneder, B. (1989). The Phi Delta Kappa study of students at risk. *Phi Delta Kappan*, 74, 142-146
- Gottesman, R. L., Cerullo, F. M., Bennet., & Rock, D. A. (1991). Predictive validity of a screening test for mild school learning difficulties. *Journal of School Psychology*, 29, 191-205.

- Howard, M. A. P., & Anderson, R. J. (1978). Early identification of potential school drop outs: A literature review. *Child Welfare*, 52, 221-231.
- Lloyd, D. N. (1978). Prediction of school failure from third grade data. *Educational and Psychological Measurement*, 38, 1193-1200.
- Slavin, R. R., Karweit, N. L., & Maddan, N. A. (1989). *Effective programs for students at risk*. Boston: Allyn and Bacon.
- Slavin, E., Karweit, N. L., & Wasik, B. A. (1993). Preventing early school failure: what works. *Educational Leadership*, 50(4), 10-17.
- Werner, E. E. (1966). CPQ personality factors of talented and underachieving boys and girls in elementary school. *Journal of Clinical Psychology*, 22, 461-464.

**Received: October 29, 1997.**