

CHANGE OF PSYCHOLOGICAL NEEDS OVER THIRTEEN YEARS

CHIEN-HOU HWANG

Summary: One hundred and sixty subjects who took the EPPS in 1963 when they were in the university were given the same test again recently. The two sets of scores they obtained on the two occasions were compared with each other. Significant differences were found on many of the EPPS scales. The group showed greater needs on Ach., Ord., Aut., Dom., Het., and Agg, than they did thirteen years ago while their needs on Aff., Int., Suc., and Aba. showed decreases. Men and women showed a similar trend of need change but they differed in the magnitude of the changes. It seemed that these need changes did not have much relation with the general social change of the community, but were rather a result of personal development of the subjects. It was also found that the need changes could be described in terms of the EPPS factors extracted in a previous study.

INTRODUCTION

Thirteen years ago, the present author introduced the Edwards Personal Preference Schedule (EPPS) to the Republic of China and reported a few years later the EPPS scores of a Chinese university students population (Hwang, 1967). Since then, the Chinese version of the EPPS has been well received by psychologists of this country and several interesting studies have been published (Yang, 1967; Lu, 1969; Ko, 1974; Liu, 1975). In most of those studies, Hwang's findings have been regarded as the basic reference. Later, in 1975, Chang found that the EPPS scores of his subjects in a private, missionary university in central Taiwan were significantly different from those reported by Hwang. He thought that the difference was due to social and environmental factors and suggested that regional norms of the EPPS should be established. The present author was very interested in Chang's article but felt that there could be a different interpretation. He hypothesized that the differences between Chang's results and his own findings obtained thirteen years ago was probably not due to geographic or social differences between the two groups, but was mainly the result of the rapid general social changes which took place in recent years in this country.

To test his hypothesis, this author administered in 1975 the EPPS to 269 university students (to be referred as "the 1975 group" in the following paragraphs) from the same institution where he made his first study. The results, when compared with those of the 1963 testing, showed significant differences on many of the EPPS scales. The 1975 group got higher scores on seven scales than the 1963 group with significant increases on Exhibition,

Autonomy, Introception, Change, and Heterosexuality. On the other hand, the former group got lower scores on eight scales than the latter with significant decreases on Deference, Order, Nurturance, and Endurance. When these more recent results were compared with those reported by Chang, most of the differences he pointed out disappeared. Thus the hypothesis proposed by this author was confirmed (Hwang, 1975). This means that the psychological needs of present day Chinese university students are no longer the same as those of their counterparts thirteen years ago.

The abovementioned need changes are not at all a surprise because this country has been undergoing a phase of rapid development in recent years. With a long history of an agricultural community, the Republic of China has launched her industrial and economic development and has gained a very substantial progress in those aspects. As a consequence, the life patterns of people in general including their family structure has also been changing. A byproduct of these changes is that the needs and value systems of Chinese people are shifting toward the direction which is in a greater consistency with the so called modern life. But this raises another interesting question: How about those subjects who were in the university thirteen years ago? Have their needs changed too? If so, are the changes similar to what has been just pointed out? The present research is designed to find the answers to these questions.

METHOD AND PROCEDURE

In the 1963 study of this author, 660 university students were tested. These subjects graduated from the university ten to twelve years ago and are now scattered in every corner of the world. With great effort, this author managed to get in touch with some two hundred of those who have been staying on this island. The EPPS booklet and the answer sheet were mailed to each of them with a letter explaining the purpose of this follow-up research. Most of them responded promptly. For practical reasons, the 80 males and 80 females who sent in their responses prior to April 15, 1976 were included in this study. Nearly two thirds of these subjects are now teaching at secondary schools and the mode their of age falls in the range of 32-35. Their responses to the EPPS were scored accordingly.

THE RESULTS

1. *The Central Tendency of Need Changes*

Now we have a group of 160 subjects (to be referred as "the present group") who took the EPPS twice with the first testing in 1963 and the second in 1976. Their mean scores on the EPPS scales of these two occasions are given in Table 1 for comparison. In the column of "Difference", a plus sign (+) indicates an increase in the second testing in

comparing with the first one while a minus sign (-) indicates a decrease. The level of statistical significance of those differences are also indicated with asterisks. From the figures in this table, we can find significant difference on ten of the EPPS scales. The present group made a higher score on Achievement, Order, Autonomy, Dominance, Heterosexuality, and Aggression than they did in 1963 and a lower score on Affiliation, Introception, Succurance, and Abasement. This means that there have been definite changes in their needs the tendency of which is also presented in a graph form in Figure 1.

Table 1: The EPPS scores of the Present Group at 1963 and 1976

Need Scales	Male			Female			The Present Group Total		
	1963 scores	1976 scores	Diff.	1963 scores	1976 scores	Diff.	1963 scores	1976 scores	Diff.
Ach	15.31	16.26	+*	15.70	16.36	+	15.50	16.31	+**
Def	12.91	12.86	-	14.27	13.75	-	13.59	13.30	-
Ord	15.35	16.81	+**	17.36	18.05	+	16.36	17.43	+**
Exh	10.08	10.09	+	8.63	9.39	+	9.35	9.74	+
Aut	13.46	14.05	+	12.11	13.04	+*	12.79	13.54	+*
Aff	14.46	12.78	-***	16.46	14.93	-**	15.46	13.85	-***
Int	14.53	13.85	-	15.18	13.46	-***	14.85	13.66	-**
Suc	12.51	11.16	-*	15.20	13.64	-**	13.86	12.40	-***
Dom	15.68	16.48	+	12.36	13.25	+	14.02	14.86	+*
Aba	16.45	15.24	-*	17.85	16.05	-***	17.15	15.64	-***
Nur	16.13	15.63	-	17.59	17.18	-	16.86	16.40	-
Chg	13.79	13.15	-	15.20	14.98	-	14.49	14.06	-
End	17.05	17.81	+	17.58	17.10	-	17.32	17.46	+
Het	11.28	12.56	+	4.54	7.46	+***	7.91	10.01	+***
Agg	10.92	11.10	+	9.76	11.08	+**	10.34	11.09	+*

Fig. 1: Changs of Psychological Needs in Graph Presentation



---The Present Group, 1963; —The Present Group, 1976;The 1975 Group.

2. *Sex Differences of Need Change*

As pointed out in the Introduction, the present group is equally divided by sex. In Table 1, the mean scores of both male and female subjects are also separately presented to see if there is any sex difference. We can see that generally, those university educated men and women showed a similar trend of change of their needs over the span of thirteen years. Together, the two sexes tended to have stronger need than before on Achievement, Order, Exhibition, Autonomy, Dominance, Heterosexuality and Aggression, and weaker need on Deference, Affiliation, Introception, Succurance, Abasement, Nurturance, and Change although not all these changes were significant statistically. However, a careful examination of the data would reveal that within the general similar pattern of changes, there were still noticeable sex differences, mainly in the magnitude of the changes. When men's increase of their needs on Ach. and Ord. were significant, women's change on these needs were not significant. On the other hand, men did not join their female counterparts in showing significant increase of need on Aut., Het., and Agg., nor did they make a significant decrease on Introception as did the female subjects. The overall picture seemed to suggest that women tended to show a greater degree of need change than men over these years.

DISCUSSION

From the abovementioned results, it seems evident that there have been changes in psychological needs of the present group from 1963 to 1976. The question that we would like to ask now is: What have caused those changes? Are they also the result of general social change of this country as in the case of our 1975 group? Or are they rather the outcome of personality development in the process of maturation? These are very meaningful questions; but it is very difficult to find definite answers to them. Thirteen years is not a short period of time, many things could have happened to each individual subject in these years and could have caused some change in his needs, to intensify one and to suppress another. It is far too complex a problem to be thoroughly analysed in this paper. We shall only try to explore some probable explanations with available materials.

1. *The Effect of General Social Change*

It seems that we can gain some insight concerning the nature of the need changes by comparing the EPPS scores of the present group with those of the 1975 group. Although the two groups were tested at about the same time recently, there were a good deal of differences between their EPPS responses. The present group of subjects had significantly greater needs on Achievement, Deference, Order, Endurance, and Aggression than their younger counterparts

and showed significantly weaker needs on Exhibition, Autonomy, Introception, and Succurance than the latter (Table 2). The differences in graph from can also be found in Figure 1.

Table 2: EPPS scores of the Present Group and the 1975 Group

Need scales	The Present Group	The 1975 Group	t
Ach	16.31	15.17	3.53***
Def	13.31	12.06	3.61***
Ord	17.43	14.20	7.40***
Exh	9.74	10.94	3.36***
Aut	13.54	14.83	3.34***
Aff	13.85	14.94	2.68**
Int	13.66	16.54	6.79***
Suc	12.40	13.40	2.34*
Dom	14.86	14.57	0.56
Aba	15.64	16.37	1.72
Nur	16.40	16.42	0.05
Chg	14.06	14.62	1.31
End	17.46	15.61	4.36***
Het	10.13	9.71	0.49
Agg	11.09	10.32	2.00*

*P .05

**P .01

***P .001

In his 1967 study, the present author reported that the needs of Chinese university students differed greatly from those of American college subjects (Hwang, 1967). More recently when he made a similar Chinese-American comparison by using the scores of the 1975 Chinese group, the cross-cultural differences in general decreased though they remained statistically significant (Hwang, 1975). In a way, the need patterns of to-day's Chinese university students were closer to the need patterns of American students than those of the 1963 Chinese group. This decrease of the cross-cultural difference could be interpreted as the result due to the impact of the western culture upon the Chinese, and such effect was more evident when the need changes of Chinese subjects were shown in Table 3 where the EPPS scales were listed in an order different from the usual manner. In Table 3, the scales in Group A were those on which the 1963 Chinese group got higher than American students and in Group B were those on which the 1963 Chinese got lower scores than Americans. When the EPPS scores of the 1975 Chinese group were compared with those of the 1963 group, the former got a higher score on every scale in Group A, and a lower score on all but two scales in Group B. The trend of need changes of Chinese university students seemed to be

very clear. However, when the scores of the 1976 testing of the present group were compared with their scores in the previous testing in 1963, the change, be it an increase or a decrease, did not have such an orderly pattern. Thus we may say that the change of psychological needs of this present group does not show a bending toward the western culture; at least not as vividly as did the 1975 group. In other words, those need changes of the present group cannot be attributed to the effect of the general social change which has been taking place in recent years.

Table 3: The Pattern of Need Changes

Need Scales		Need Changes when scores of the Present Group's 1976 testing compared with their 1963 testing	Need Changes when scores of the 1975 Group compared with those of the 1963 Group
GROUP A	Ach	+ **	-
	Def	-	- ***
	Ord	+ **	- ***
	Suc	- ***	-
	Aba	- ***	-
	Nur	-	- ***
	End	+ *	- ***
GROUP B	Exh	+	+ ***
	Aut	+ *	+ ***
	Aff	- ***	-
	Int	- **	+ ***
	Dom	+ *	+
	Chg	-	+
	Het	+ ***	+ **
	Agg	+ *	-

2. The Effect of Personality Development

The present group of subjects graduated from the university between 1964-1966. By now they have been working in the community for ten to twelve years and each of them has doubtlessly gained a great deal of skill, knowledge and experiences in his or her professional field. They have been moving on in their course of development and generally are much more mature during the 1976 testing than they were when they took the EPPS for the first time in 1963. There are good reasons to believe that a considerable portion, if not all, of the changes of their needs can be attributed to the process of maturation.

Let us then examine the need changes of these subjects in connection with their personal development. The increase of the need for Achievement seems understandable. Having been engaged in a career for 10 to 12 years, one often has made some achievement and has

become more alert to the importance of it. His advancement, professional or otherwise, has increased his self-assertion and confidence, and consequently the needs of Abasement and Succurance tend to be lowered. He has become more Autonomous. He finds less need to analyse his own motives and feelings, nor does he care as much as he did during his university years the feelings or motives of others. Thus his score on Intropection drops. He still has friends of course; but in general the people he has been affiliating with are more selective and frequently limited to those in his working community. He is not as active as he once was in making new friends or in other affiliative activities. Generally, ten to twelve years' work in a field would have brought one to a respectable status; it seems natural for one to become more Dominant and Aggressive. However, he will not act impulsively as young people often do; but tends to work in a organized manner and pays more attention to Order. At the age of 32-35, majority of these subjects are married. Their psychosexual development has reached its maturation and they do not have to suppress their Heterosexual need as much as do the university students. All these show that the need changes of this present group in those thirteen years fit well with the process of personality development although we know very well that the changes cannot be attributed to any one factor.

3. *Need Changes in Relation with the EPPS Factors*

In a previous study, this author made a factor analysis of the 15 EPPS scales. Four factors were extracted and they were quite similar to those reported by other researchers (Hwang, 1968). The factors were identified as A. Industriousness, B, Propriety, C. Aggressiveness, and D. Benevolence and the loadings of various scales on these factors are given in Table 4. If we mark those scales on which the present group has made an increase during their recent testing a "+" sign and those on which they have made a decrease a "-" sign as indicated in Table 4, we can find some relation between the need changes and the EPPS factors. Changes on the scales within a factor seem to be in the same direction (the changes on scales with negative loadings are in the opposite direction). To state the fact more specifically, these subjects show a tendency of increase on the needs related to Industriousness and Aggressiveness, and a tendency of decrease on the needs related of Benevolence. No uniform trend exists among the changes of needs related to Propriety. In other words, the need changes can in general be stated in terms of these factors as well as of scales. This fact can be interpreted as a support to the earlier findings concerning the EPPS factors.

Table 4: Relations between Need Changes and the EPPS Factors

Factor A	Factor B	Factor C	Factor D
Industriousness	Propriety	Aggressiveness	Benevolence
ACH +	DEF -	EXH +	AFF -
DOM +	OND +	COM +	ABA -
END +	ABH -	AGG +	NUR -
	END +		
SUC -	EXH +	DEF -	ACH +
HET +	AUT +	INT -	AUT +
	DOM +		DOM +
	CHG -		HET +
			AGG +

Scales above the dotted line are those with positive loadings on the specified factor; scales below the dotted line are those with negative loadings

REFERENCES

- Chang, C. H. The responses of Tonghai Univeasity students to the EPPS. *Psychological Testing*, 1975, **23**, 59-63.
- Hwang, Chien-hou A study of the personal preferences of Chinese university students by Edwards Personal Preference Schedule. *Psychology and Education*, 1967, **I**, 52-68.
- Hwang, Chien-hou A factorial study of the EPPS. Presented at the 1968 Annual Meeting of the Chinese Association of Psychology, June, 1968.
- Hwang, Chien-hou The change of psychological needs of Chinese university students from 1963-1975. *Psychological Testing*, 1976, **23**, 46-52.
- Liu, K. Y. Forced-choiced personality tests in personnel classification. *Psychological Testing*, 1976, **23**, 57-62.
- Lu, Chung-yu A study on personality traits of freshmen at the National Taiwan University. *Acta Psychologica Taiwanica*, 1970, **12**, 1-6.
- Yang, K. S. Need patterns of overseas Chinese students from different Southeast Asian countries. *Acta Psychologica Taiwanica*, 1967, **9**, 1-23.



心理需求在十三年間的轉變

黃 堅 厚

摘 要

民國五十二年筆者曾以其所修訂之「艾德華斯個人興趣量表」研究我國大學生的心理需要，並曾為文報告其結果。現為探討該批受試者在前次受測十三年後，心理需求轉變的情形，乃設法與彼等聯絡，請其就「艾氏量表」再填答一次，有160人（男女各半）按時填答寄回。將此次所得結果與十三年前所收集之資料相較，發現兩者之間有明顯差異。這羣已於十——十二年前畢業的受試，在成就，秩序，愛戀，攻擊，自主，支配等方面之需求顯有增加；而在親和，省察，求援，謙遜等方面之需求則顯著減低。據初步分析，此項轉變主要似為個人發展及成就之結果，整個社會變遷之影響似屬次要；同時這些需要轉變情形也似乎是以「艾氏量表」的因素為單位，支持筆者以往所作的艾氏量表因素分析。

