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The Family Material Possession Index: An Alternative Measurement of Socioeconomic Status in Hong Kong

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SOCIOECONOMIC STATUS IN HONG KONG**

by

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INTRODUCTION

It is a well-known fact that social class or socioeconomic status (SES) is one of the most important variables in social research. It is commonly used as an independent variable to account for variations in attitudes, behaviour, and a wide range of social characteristics. Conceptually, SES is rich in meaning in that it embodies such ideas as economic achievement, self-accorded esteem, social recognition, power, and privileges. Traditionally, SES is measured in terms of one or more of three major indicators: educational attainment, occupational prestige, and income. The measurement of these indicators and their relative weight in making up a composite SES index, if one is used, vary from one study to another.

Social researchers in Hong Kong have used various measures of socioeconomic status when youths are the subjects of study, such as father's or mother's education, father's occupation, and family income (e.g., Mitchell, 1969; Agnes Ng, 1975; Pedro Ng, 1975; Family Planning Association of Hong Kong, 1983). Type of housing has occasionally been included as one of several measure of SES (e.g., Choi and Chan, 1973; Pedro Ng, 1976; Hong Kong Federation of Youth Groups, 1985). Multiple indicators in combination have also been used. In a Hong Kong-wide "biosocial" study of adults aged 20-59, Millar (1979) combined household income and educational attainment into a relatively simple index of SES. Each indicator was first trichotomized, then added and recoded into three categories. Using data from the same study, Lee (1980) devised his measurement of SES based on three indicators: housing status (type of housing), family income, and material standard of the household as

assessed by the interviewer. Each indicator was scored 0 and 1, summed and resulted in scores of 0, 1, 2, and 3 to represent rising SES. In his study of the socio-demographic patterns of leisure behaviour of adolescents in Hong Kong, Ng (1984) constructed a composite SES index from four indicators: type of housing (4 categories), father's occupation (7 categories), father's education (7 categories), and family monthly income (8 categories). Index scores ranged from 5 to 26 which were trichotomized in the study.

While different measurements of SES may capture different aspects of the meaning of the concept, depending on the intention of the researcher, the reliability of any of these measurements surely depends greatly on how cooperative, willing, and even capable the respondents are in providing the information needed. Thus, reported family or household income and educational attainment are areas where inaccuracy may be intentionally or unintentionally introduced. If the data are obtained by home visit interview, and if type of housing and general material standard of the household are included as SES indicators, the researcher may have some control over ascertaining such information by trained interviewers although the latter's observation is not completely error-free. In the case of data collection by self-administration such as in a mail questionnaire survey, researchers usually would ask questions on respondents' education, occupation, and income. In the absence of an interviewer, response difficulties concerning occupation and income cannot be resolved as readily as in an interview situation. Misunderstanding of the question, fear or unwillingness to reveal personal information, and memory failure may all result in errors or non-response.

Where the respondents are youths or adolescents, similar information is usually asked about their parents. Many previous local surveys have shown that young respondents do not know enough about their parents' education, details of occupation such as job nature and rank. Neither are they sufficiently knowledgeable of the total income of their family. Alternatively, their responses may be casually or haphazardly given, only to result in gross inconsistencies. In any case, the result is a high percentage of missing or unuseable cases for the measurement of SES.

What might be a solution to this problem? If we cannot use such indicators as parents' education, parents' occupation, and family income because of the risk of non-response or unuseable data, perhaps we can use instead something which youngsters can be expected to know reasonably well and which would be conceptually relevant to SES. Material possessions in the family household would be just such an indicator. First, material possessions obviously reflect the availability and disposability of economic resources. Second, material possessions indicate a style of life that is not only dependent on economic resources but also consequent of a person's values and preferences which in turn are shaped by both one's educational attainment, occupational subculture, and social network. Of course, particular items of material possession by themselves do not sufficiently indicate socioeconomic status since they may be common to most social classes or they may sometimes over-represent the economic dimension. However, if a composite picture is obtainable based on multiple items of material possession that in combination reflect the way of life as well as the level of material consumption, then perhaps

it would be a reasonably satisfactory indication of the family's relative SES. It is to this that the remaining part of this paper is addressed.

METHOD

The measurement of SES based upon family material possessions was included in a questionnaire survey of Hong Kong's secondary school students taken in June and July 1984 designed primarily to study their leisure behaviour and life satisfaction. Taking part in the survey were 30 schools (8 Government, 16 assisted, and 6 private) from Hong Kong Island, Kowloon, and various parts of the New Territories, randomly selected from a regionalized school list. As far as possible, each participating school provided a class each of Form 1 and Form 4 as subjects for the survey. Weighting was applied to achieve approximately proportional representation of students coming from the three types of school. The resulting adjusted sample consisted of 1906 students.

The question asking about material possessions is as follows: "Different families would have different kinds of possessions and facilities in their homes. Are the following objects or facilities present in your home?"

The list consisted of eighteen objects and four facilities:

air-conditioner (if yes, how many?)
washing machine
dryer
vacuum cleaner
dehumidifier
high-fidelity sound system
video tape recorder
electric sewing machine
blender
oven
water heater
camera (if yes, how many?)
cabinet/shelf system
television (if yes, how many?)
dish washer
personal computer
piano
private car
bathtub
storeroom
built-in closets
wooden floor

Simply counting the number of objects and facilities present in the home would not adequately meet the purpose of measuring socioeconomic status because this would not take into account at all the

different degrees to which different objects reflect a status differential in life style. Two dimensions were considered to be important for tapping status differential in the measurement of SES using the eighteen objects: value and rarity. Value refers to the relative monetary value of the object and rarity refers to the extent to which an object is possessed by the group of people in question. The greater the relative monetary value of an object, the more economic status it may be assumed to indicate. However, objects that are about the same in monetary value could be quite different in rarity because of difference in preferred life style. Alternatively, objects of great monetary value may also be rare in ownership. Presumably, rarity of ownership suggests a certain degree of luxury or a preference for "nicety" that is associated with higher social status. Thus, rarity is conceptually different from value and each should be given appropriate attention.

While rarity may be seen in the percentage of respondents who say they have a certain type of object at home, some additional task must be undertaken to ascertain the value, or rather, the relative value, of different objects. The list of eighteen objects was presented to a panel of judges each of whom was asked to give an estimate of the current market value of each object. They were asked to give not the most or least expensive estimate but the best general value they were aware of. A total of 67 judges (including 16 university teachers of various disciplines, 11 secretaries and clerical workers, 6 research assistants, 6 administrative staff members, 12 undergraduates, 9 graduate students, and 7 minor staff members or janitorial workers)

participated in the value estimating exercise. Table 1 shows the median estimated values of the objects which are divided into four groups according to these values.

Table 1 Median estimated values of 18 objects

Object	Median estimated value (HK\$)
<u>Group 1</u>	
Blender	300
Oven	420
Vacuum cleaner	500
Dehumidifier	900
Water heater	900
<u>Group 2</u>	
Electric sewing machine	1,000
Camera	1,000
Dryer	1,400
Dishwasher	1,500
Washing machine	1,800
<u>Group 3</u>	
Cabinet/shelf system	2,400
Air-conditioner	2,500
Television	2,800
Video tape recorder	3,000
Hi-fi sound system	3,600
<u>Group 4</u>	
Personal computer	5,000
Piano	8,000
Private car	50,000

Any of the 18 objects that was present in the home was assigned a value score according to the group it belongs. Thus, a Group 1 object was scored 1, a Group 2 object was scored 2, and so on.

Next we assigned a rarity score to objects present in the home according to a simple scheme dividing the objects into four groups, as indicated in Table 2 in which the objects are arranged in terms of the percentages of respondents saying that an object is present in the home. As in Table 1, a Group 1 object was scored 1, a Group 2 object was scored 2, and so forth, only this time a higher score would represent greater rarity.

Table 2 Rarity of 18 objects

Object	% of respondents saying object is present in the home
<u>Group 1</u>	
Television	99
Washing machine	81
Camera	80
Water heater	57
Cabinet/shelf system	55
Hi-fi sound system	53
<u>Group 2</u>	
Electric sewing machine	41
Air-conditioner	36
Oven	30
Blender	24
<u>Group 3</u>	
Video tape recorder	21
Vacuum cleaner	19
Personal computer	15
Private car	13
Dryer	13
<u>Group 4</u>	
Dehumidifier	11
Piano	9
Dishwasher	2

With the two dimensions of value and rarity scored, a very basic measurement of material possessions was already taking shape. Some further details had to be taken care of, however. First, the question of "how many?" was asked in the cases of television sets, cameras, and air-conditioners since these could well be present in numbers greater than one. Normally, a larger quantity of these objects tends to indicate greater affluence. Thus, points ought to be given for this, if applicable. Second, in addition to the 18 objects, the list contains four items that are facilities which, if present in a home, would represent a better quality of living in Hong Kong. Points also ought to be given to reflect this. A somewhat arbitrary scheme was used to assign points for "extra quantity" and facilities, as follows:

Extra Quantity

2 air-conditioners	2 points
3 or more air-conditioners	3 points
2 or more televisions	1 point
3 or more cameras	1 point

Facilities

Built-in closets (27)*	2 points
Bathtubs (28)	2 points
Storeroom (13)	4 points
Wooden floor (19)	4 points

* percent of respondents saying the facility is present in the home

To illustrate, if a respondent said that his home has wooden floor and that there are three air-conditioners, he would get 4 points for the wooden floor, 3 points for "value" of air-conditioners, 2 points for "rarity" of air-conditioners, and another 3 points for the fact that there are three (or more, if applicable) air-conditioners. These two items alone would then contribute a total of 12 points toward the overall measurement of family material possession.

In this manner, the 18 objects on the list would be scored for "value," "rarity," and "extra quantity" if applicable. The four facilities would be scored separately depending on which ones were checked. If all items on the list were checked and if televisions, cameras, and air-conditioners were present in the maximum quantity for the scoring, the total index score would be exactly 100 composed as follows:

Value	42
Rarity	41
Facilities	12
Extra quantity	5

Maximum total	100

FINDINGS

The Family Material Possession (FMP) Index scores for the survey in question ranged from 0 to 93. Naturally, they could range differently for different samples, although the range of the index itself is from 0 to 100. For the purposes of the analyses in this report, the FMP scores are grouped into five categories, as indicated in Table 3.

Table 3 Distribution of FMP scores

FMP Score	Percent
40 - 93 (High)	18.8
30 - 39	17.7
22 - 29	22.9
16 - 21	17.8
0 - 15 (Low)	22.8
Total (N)	100.0 (1906)

Internal Consistency

To check the internal consistency of the index, we chose several sets of special items and examined the degree to which these items occurred according to different levels of the FMP index scores. The sets of items used for this analysis are: (a) any one of: dishwasher, piano, dryer, and dehumidifier; (b) bathtub plus any one of: store-room, built-in closets, and wooden floor; (c) two or more televisions; (d) one air-conditioner; (e) two or more air-conditioners. Since all these items, some of which being facilities of accommodation, tend to be

present in homes of relatively high socioeconomic status in Hong Kong, they should show up substantially in cases for which the overall FMP index score is high. The results are shown in Table 4.

Table 4 Presence of Special Items by FMP Score

Special Items	FMP Score				
	Low 0-15 (434)*	16-21 (340)	22-29 (436)	30-39 (337)	High 40-93 (359)
Any one of: dishwasher, piano, dryer, dehumidifier	2.8	9.3	16.3	38.2	66.2
Bathtub plus any one of: storeroom, built-in closet, wooden floor	1.5	5.5	8.6	19.4	57.6
Two or more TVs	5.6	10.7	13.7	24.0	45.7
One air-conditioner	5.7	14.6	29.5	50.6	84.7
Two or more air-conditioners	0.0	2.1	3.4	11.6	51.0

*Base number for percentage

We can see that the higher the FMP score, the more likely that special items such as the ones chosen and shown in Table 4 are to be present in the home. Each of the five specific criteria indicates that the magnitude of the overall FMP score may serve to predict very well whether or not the special items are present in the home. Thus, for example, the likelihood of having a dishwasher, piano, dryer, or dehumidifier is 66 per cent among those scoring 40 or more on the index but only less than 3 per cent for those scoring less than 16. Similarly, slightly over half of the high scorers have two or more air-conditioners but none of the low scorers do.

External Consistency

In spring 1985, another survey on family life and media behaviour was conducted on essentially the same sample. However, owing to class reallocation or students' changing schools, not all of the original sample of students were available. Only about 50 per cent of the original 1984 sample were resurveyed in 1985. Nevertheless, the same questions concerning family material possessions were asked again in 1985 and thus provided an opportunity to check the "test-retest" reliability of the FMP index. Naturally, after a period of almost a year, material conditions in the household may have changed. Still, for the 937 cases for whom FMP scores were obtainable in both 1984 and 1985, the Pearson's correlation coefficient of these scores at two time points is .86. This means that the two sets of FMP scores are highly similar and that the FMP index can be said to be externally consistent.

Validity

Having demonstrated that the FMP index is reasonably consistent internally and externally, we proceed to check its validity in several ways. First, we shall use three variables included in the 1984 survey as criteria, namely, father's education, father's occupation, and type of housing. Since the index is supposed to measure socioeconomic status, it should correlate to some degree with these variables which are among the traditional measures of SES. In this survey, the variables of father's education and father's occupation have a high amount of missing data (roughly 20 per cent) since many respondents were not able to provide the required information. But with whatever obtainable information we do have on these indicators of SES, it would still be useful to examine how well the FMP scores parallel them as

rough measures of SES. Second, we shall show how the classification of a random sub-sample of the respondents on SES by a small panel of judges correlates with the FMP scores. Finally, we shall examine the rank correlation between the FMP scores and the 1981 Census average household incomes by district.

Validity: using criteria included in the survey

Tables 5 and 6 show the distribution of FMP scores conditional on father's education and occupational ranking. There is clearly a positive association between FMP scores on the one hand and father's education and occupational ranking on the other. Thus, we see that as father's educational attainment rises, the FMP scores tend to rise also. Among those youths whose fathers have obtained a post-secondary education, 47 per cent have "high" FMP scores (40 or higher) as compared with only 9 per cent among those whose fathers have no formal schooling. Chi-square test showed that the distribution of FMP scores is not independent of father's education. The strength of association as measured by Gamma is .30, which means that for pairs which are ranked differently on the two variables, there is a 30 per cent reduction in error in predicting ranking on one variable from knowledge of ranking on the other variable by using the "same order" ranking rule rather than predicting rankings randomly.

Table 5 FMP Scores by Father's Education

FMP Score	Father's Education				
	No Schooling	Primary	Lower Secondary	Upper Secondary	Post- Secondary
	%	%	%	%	%
40-93 (High)	8.9	12.8	20.0	39.5	47.0
30-39	17.8	17.1	22.3	13.2	20.6
22-29	21.7	23.0	25.1	16.2	16.6
16-21	17.8	21.3	14.3	20.0	7.4
0-15 (Low)	33.8	25.8	18.4	11.1	8.3
Total (N)	100.0 (296)	100.0 (609)	100.0 (357)	100.0 (139)	100.0 (132)

Missing cases = 373

Chi-square = 181.9, df = 16, p < .01
Gamma = .30

Similarly, as the figures of Table 6 indicate, FMP scores rise with higher ranking of father's occupation. Thus, nearly two-thirds of those whose fathers have highest-ranked occupations live in homes with high FMP scores, as contrasted with only 5.6 per cent among those with fathers in the lowest-ranked occupations. The distribution of FMP scores is statistically not independent of father's occupational ranking. The value of Gamma, measuring the strength of association, is .44, which may be regarded as moderately strong.

Table 6 FMP Scores by Father's Occupational Ranking

FMP Score	Father's Occupational Ranking*			
	Low 1	2	3	High 4
40-93 (High)	5.6	11.6	30.6	65.5
30-39	10.5	18.5	23.3	14.2
22-29	26.7	24.6	21.9	13.5
16-21	27.3	19.4	10.6	4.9
0-15 (Low)	29.9	25.9	13.7	2.0
Total (N)	100.0 (116)	100.0 (468)	100.0 (695)	100.0 (259)

Missing cases = 368

*Father's occupation is classified into four ranks, basically as follows:

- 4 (high): professionals, executives, and senior administrative workers
- 3: middle managers, technicians, semi-professionals, higher clerical workers
- 2: personal service, lower clerical, and semi-skilled production workers
- 1 (low): office attendants, unskilled workers in service and production industries

Chi-square = 305.3, df = 12, p < .01
Gamma = .44

Table 7 shows the distribution of FMP scores by type of housing. Five types of housing are used in the analysis, i.e., temporary housing, public housing, single room in private housing, home ownership scheme flat, and private housing flat. There are clear differences in the distribution of FMP scores from one type of housing to another. Again, chi-square test showed that the two variables are not independent of each other. Basically, we can see that FMP scores tend to be higher in home ownership and private housing flats, but much lower in the other housing types. This is quite compatible with the fact that in Hong Kong private flats and flats purchased under the "home ownership" scheme are generally more spacious and better equipped than units in public housing estates and temporary housing compounds. However, a family living in just a single room in private housing may fare no better than one in public or temporary housing.

Since type of housing is essentially a nominal variable, Gamma would not be appropriate as a measure of association between it and FMP scores. Instead, Freeman's coefficient of differentiation, theta (Freeman, 1965), was used. Like Gamma and some other measures of association, the value of theta ranges between 0 and 1. Theta's value for Table 7 is .35, which means that 35 per cent of all the comparisons among individuals living in different types of housing show consistent differences in FMP scores (ranked). Thus, it would be moderately helpful to predict FMP score level on the basis of the type of housing.

Table 7 FMP Scores by Type of Housing

FMP Score	Type of Housing				
	Temporary Housing	Private Room	Public Housing	Home Ownership	Private Flat
	%	%	%	%	%
40-93 (High)	8.5	12.9	7.9	46.6	42.4
30-39	21.4	9.3	15.4	30.1	19.7
22-29	17.3	18.6	27.7	6.3	17.4
16-21	21.6	13.1	21.9	12.5	10.3
4-15 (Low)	31.2	46.1	27.0	4.6	10.2
Total (N)	100.0 (190)	100.0 (85)	100.0 (1016)	100.0 (36)	100.0 (516)

Missing cases = 63

Chi-square = 384.8, df = 16, p < .01
 Freeman's coefficient of differentiation (theta) = .35

Validity: using correlation with panel's SES assignment

Four judges (two sociologists and two research assistants) were each asked to assign an SES classification to each of 100 randomly selected cases from the sample based on their independent reading of such information contained in the questionnaires as district of residence, type of housing, parents' education and occupation, and material possessions in the home. The SES classification used is simply: upper, upper middle, lower middle, and lower. However, since the "upper" category was found to be hardly applicable except to one or two cases, it was combined with the "upper middle" category.

In 80 of the 100 cases, three or all four judges were in agreement in their SES assignment. In seven other cases, all three SES

ranks were assigned. For them, the middle rank ("lower middle") was adopted. There were ties in SES assignment for the remaining 13 cases, with two judges giving one rank and two other judges giving an adjacent rank (e.g., two giving "lower," and two others giving "lower middle"). A fifth judge was asked to give an additional assessment. As a result, eight cases received the higher rank and five cases the lower rank.

The crosstabulation of the judges' SES assignment and FMP scores of the 100 cases, as in Table 8, shows that the two variables are highly correlated. Thus, for example, all 12 of the cases classified by the judges as "upper middle" scored 30 or higher on the FMP index. By comparison, 38 of the 53 cases (or about 72 per cent) classified as "lower" scored no more than 21. The value of Gamma measuring the association between the judges' SES assignment and FMP scores, as categorized in the table, is as high as .80.

Table 8 FMP Scores by Judges' SES Assignment of 100 Cases

FMP Score	Judges' SES Assignment		
	Lower	Lower Middle	Upper Middle
40-93 (High)		11	9
30-39	9	11	3
22-29	6	5	
16-21	11	4	
0-15 (Low)	27	4	
Total	53	35	12

Gamma = .80

Validity: comparison with Census mean household income by district

Finally, household income was used as a criterion to check the validity of the FMP index. No question on income was asked in the 1984 survey because teenage respondents were rather incapable of providing accurate information on parents' income. From a one per cent random sample of the Hong Kong 1981 Census data, provided to the Centre for Hong Kong Studies by the Census and Statistics Department of Hong Kong Government, mean household monthly income by district was calculated. As far as possible, the districts coded in the 1984 survey were arranged, either individually or in some combination, to match those used in the 1981 Census. Where this proved too difficult, a few districts had to be abandoned. The exercise resulted in 23 districts. Mean FMP scores by district were computed and ranked. These ranks were then compared with those of mean household income by district, as shown in Table 9. Spearman's rho, measuring the correlation between the two rankings, is .85, thus indicating that the two rankings are very similar. That is, districts that have high mean FMP scores also tend to have high mean household incomes.

Table 9 Mean FMP Scores and Mean Household Income by District

District	Mean FMP Score	Rank (R ₁)	Mean household income (1% sample of 1981 Census)	Rank (R ₂)
			\$/month	
Mid-levels, Pokfulam	61.0	1	13599	1
Tsimshatsui	50.3	2	10870	5
Sai Kung	40.0	3	12144	2
Tai Hang, Causeway Bay, Happy Valley	38.0	4	11626	3
Central	34.3	5	11168	4
Aberdeen, Wah Fu	33.7	6	7809	9
Wanchai	32.9	7	5499	17
Homantin	31.2	8	9528	7
Hong Kong West	31.1	9	6485	12
Sheung Wan	30.8	10	10303	6
Cheung Sha Wan	30.7	11	8090	8
Hung Hom, To Kwa Wan	30.6	12	5231	18
Yaumatei	29.4	13	7637	10
Shatin	27.0	14	5918	16
Tuen Mun	26.9	15	7377	11
Yuen Long	26.8	16	5985	14
Mong Kok	24.9	17	5204	19
Taipo	24.8	18	6126	13
Wong Tai Sin, Tsz Wan Shan, Ngau Tau Kok, Choi Hung	24.6	19	4294	22
Shek Kip Mei	24.4	20	4713	20
Tsuen Wan, Kwai Chung	24.3	21	4330	21
Fanling, Sheung Shui	22.4	22	5925	15
Kwun Tong	22.0	23	3543	23

Spearman's rho = .85 (Rank correlation between R₁ and R₂)

CONCLUSION

On the assumption that material possessions and facilities in the family household reflect the level of economic resources and the life style pursued by members of a certain socioeconomic status, the Family Material Possession (FMP) Index was designed as an alternative method of measuring socioeconomic status. Using essentially survey data of a sample of secondary school students, it was found that the index has rather satisfactory reliability and validity. For our data, the index correlates well with such traditional indicators of SES as father's education and father's occupation. As we have seen, the index also reflects closely the economic condition of the "average" household of a given geographical district relative to average households of other districts.

What are the advantages of using the FMP index to measure SES in surveys? First, questions on household material possessions and facilities appear to be much less sensitive than questions on income. If the survey is conducted in an interview setting, many of the items on the list of possessions and facilities can be checked off by the interviewer although some items would probably need confirmation with the respondent. Second, using the FMP index in surveys of youths gets around the problem of their inability to give information on parents' education, occupation, and income. We may assume with some confidence that young respondents are more likely to know whether they have a washing machine or air conditioner at home than to know how much their parents earn.

Third, the FMP index does not simply count up how many kinds of possessions are present in the home but also takes into account the degree to which different objects may reflect a status differential in life style. Thus, the index incorporates a coding system which attaches greater weight to rarer objects in addition to more valuable ones. In this way, a high index score generally tends to indicate the presence of either relatively rare or valuable objects or objects that are both relatively rare and valuable.

Nevertheless, the FMP index, as presently designed, does have a few weaknesses. First, since the presence of household possessions may come in numerous combinations, it is possible that a combination of valuable but relatively common objects may result in the same index score as a combination of less valuable but relatively rare objects. Based on the index score alone, they would be classified as belonging to the same SES level or category. Whether or not they can indeed be so regarded is of course hard to determine.

Second, the method of assigning points that make up the index is largely arbitrary. For instance, depending on the degree of refinement desired, both the "value" and "rarity" dimensions could well have been divided into more or fewer groups than four which is the number adopted in our design. Similarly, the point system used for scoring "extra quantity" and "facilities" is also arbitrarily set, although it does attempt to reflect the fact that homes of higher SES tend to have more amenities. The maximum FMP score, 100, is partly contrived and partly coincidental. While it may look convenient, any other maximum index

score should also be possible depending on the method of point assignment used.

Third, both the relative value and rarity of household possessions on the list used for constructing the FMP index are likely to change with time. New items (such as carpets, wireless telephones, and video disc systems) may have to be added or certain items already on the list may have to be deleted. This is probably not so much a weakness as perhaps a strength of the index if proper efforts are taken to modify and update the index at appropriate times. After all, the manifestations of socioeconomic status in the form of consumption behaviour are hardly constants as tastes change and standard of living rises.

On balance, it seems that the FMP index can be used as an alternative measurement of socioeconomic status although it should not be regarded as a sufficient indicator of the concept. Shortly after the FMP index was first devised by the author in 1985, a survey on deviant behaviour of a different sample of secondary school youths was conducted in summer 1986 (Cheung and Agnes Ng, 1987) in which the FMP index was used. In that survey, the associations of the index with father's education, father's occupation, and type of housing are very similar to those reported in this paper. Further use and testing of the index will be needed in other surveys so that its suitability as an alternative measurement of socioeconomic status may be better established and improvements made.

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家庭物質擁有指數—— 社經地位在香港的另一種量度法

(中文摘要)

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社經地位是社會研究的一個重要變項，常用以解釋某些態度、行為、或社會特徵的變異。在社會學的概念裡，社經地位包涵着經濟成就、自視地位、社會認可、權力和利益的意思。

社會研究一般選用多種量度社經地位的指標，如：父母親教育程度、職業、家庭收入、住屋類型等。這些指標，有單獨使用的，也有經組合後而用的。不過，這些資料很多時會因為誤解問題、拒絕披露私人資料、或記憶偏差而導致錯漏或失實。這種情況在以青少年為對象的研究尤為嚴重，理由是很多青少年對其家庭經濟狀況或父母的教育背景似乎不大清楚。

本文嘗試設計一種新的社經地位量度法——家庭物質擁有指數。基本構思有兩點：(一)家庭物質擁有品的數量一般顯示家庭經濟資源的多寡；(二)家庭物質擁有品的類別亦反映不同的個人生活方式，而這方式往往跟個人教育水平、職業及其社交網有關。因此，家庭物質擁有品跟社經地位有概念上的關係。同時，對青少年而言，提供家庭物質擁有品的資料似乎比答覆關於父母入息的問題來得容易。

研究資料來自一項在一九八四年六、七月間進行的「中學生生活狀況研究」。該研究先從全港中學名單中按地區以隨機方式抽出三十間學校，再在每間學校中抽出中一、中四各一班，共一千九百名學生填寫一份問卷。問卷中有一題要求學生填報家裡是否擁有下列十八項物品和四項設備：冷氣機（有多少部？）、洗衣機、乾衣機、吸塵機、抽濕機、音響器材、錄影機、電動衣車、攪拌機、焗爐、電熱水器、照相機（有多少部？）、組合櫃、電視機（有多少部？）、洗碗碟機、個人電腦、鋼琴、私家車、浴缸、儲物室、入牆櫃、和木板地。

在設計家庭物質擁有指數的過程中，作者根據答案分類計算如下：(一)物品的價值，（價值由一批評判估計，最高價者得四分，最低價者得一分），幅度為零至四十二分；(二)物品的罕有度，（最罕有者得四分，最普遍者得一分），幅度為零至四十一分；(三)擁有電視機、照相機和冷氣機的數量，幅度為零至五分；(四)設備的種類，幅度為零至十二分。換言之，指數的總分幅度為零至一百分，分數愈高代表社經地位愈高。

為檢定指數的信度和效度，作者以個別家庭物品或設備、縱貫研究所得、父親教育程度和職位、住屋類型、社會階層獨立評判分類、香港一九八一年人口普查的分區住戶收入等資料分別與指數作相關分析，結果一致顯示頗強的相關。

最後，作者指出此指數雖仍具若干弱點，尚可作為量度社經地位的另一方法。相信藉着繼續的研究和應用，此量度法可望日臻完善。