

台北市超級市場消費購買行為之實證研究報告
Shopping Behavior at Supermarket in Taipei City: An Empirical Study

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(Received July 22, 1976)

ABSTRACT — An empirical approach based on personality test of consumer's driving needs and response traits predicts Taipei housewives' reaction in buying process at supermarkets. Some comprehensive views present hereby to help the marketer to design of proper marketing strategy in supermarket operation.

1. Introduction

In any industrialized society, saving time is important for any one. Special deal, bargaining to set price in the traditional retailing operation can not reach that goal. But, supermarket service may avoid such a problem.

Shopping at supermarket in Taipei City is one of the important turning-points in her economic progress. Chinese people in Taiwan have built and run their supermarket [1] for more than a decade. The increasing number of vocational women also have given supermarket operations more favorable chance to make profit. Convenience for location, service, wider selection of merchandises, higher quality of packaged goods and longer operation hours provide for the consumers, especially the housewives, to obtain their necessities from supermarket at one time [2].

City shoppers suggest that the buying or bargaining behavior may be developed from their social psychology and formal economic model of city life [3]. Traditional views of buying is emphasized in variables such as emotion, personal goal and internal policies involved in buying decision process to the goal of the buying task or non-task in obtaining product performance, personal favors; in enhancing one's own ego; in reducing perceived risk; or in enjoying buyer-clerk interpersonal interaction [4]. A number of published studies assessed buyer's price consciousness and their reaction to deal. Some others included socio-economic measures [5]. To understand better about price proneness or other non-price proneness, the study must tap buyer's belief to reflect their internalized value. So, to measure opinion as a manifestation of buyer's attitude provides one feasible method of appraising buyer's behavior tendencies.

Shopping behavior at supermarket is presently taken much more attention in Taipei local marketers and other academic institutes. In April of 1975, the Taipei Consumer Association made a research to study housewives' attitude toward supermarket retailing. About sixty-five percent of all respondents showed pro-supermarket, but some of them still like to shop at the old and general traditional food market [6].

The purpose of this study presents herein is an empirical work to investigate the attitude measures of supermarket shopping behavior:

1. to describe the specific buying situation,
2. to identify the relevance of variables and permit greater insight into the process of shopping behavior,
3. to present a comprehensive view of buying behavior and help the marketer to analyze available information, and
4. to set up the pattern of buying behavior to design of proper marketing strategy.

II. Methods

This study employed five hundred judgment samples randomly picked from Taipei City and her vicinities. Those respondents' dwelling are one mile away from the following supermarkets, namely, Shin Shin (Ta-Chung), Shin-Shin (Fu-Hsin), Shin-Shin (Wan-Hua), Shin-Kuang, Hua-Hsin and Chung-Hsing [7]. Then each of twenty college students picked twenty to thirty samples to interview. The surveys were conducted on every Sunday in the Fall of 1975. Since streets in Taipei City area are generally short or have different street name down or up the intersection. It is obviously difficult to build a completed frame list of sampling for survey. Interviewees were selected at random, each three interviewers grouped to start the survey from different sides near the assigned supermarket area. The answers of quota interviewing varied considerable on the degree of respondent's cooperation. Despite of such a trouble, the questionnaires with completed answer are about 211, and response rate averaged approximately 42 percent. The incompletes were abandoned from the study.

The framework of this study mainly investigated two sets of criterion measures. The first set requested what different buyer type to shop at supermarket, and three groups of "always", "sometimes" and "few" were classified. The second set featured some interests derived from supermarket shopping. A pilot test in one panel group was undertaken before the formal survey. Most members of the panel group agreed what interests in supermarket shopping decision were:

1. convenience of location and service,
2. reasonable listed price of merchandises,
3. higher quality and packaged merchandises,
4. wider selection of merchandises,

5. special sales to promote trade,
6. longer operational hours,
7. goodwill of store brand, and
8. friendly relationship among buyers and clerks.

Then twenty attitude horizon scales administered respondent the result of considerable development of personality such as personal belief, emotion, internal policies and reliability of product performance to predict buyer's behavior [8]. The questions were made by the basis of structured and indirect type to reflect the traits or outlook on life, which influencing the perception of alternative for respondents' need satisfaction or response indicated by A.H. Maslow [9] and D. Krech [10]. All measurements of attitude dimension were 100 mm graphic scale listed by Likert degree. The last set mainly gathered the demographic data to analyze the respondents' background impacting to buying behavior. All predictors are listed in Table 1.

In this study, three analytical approaches were undertaken. The first was the analysis-of-variance with F test to compare the eight criterion variables among three buyer groups of respondents who experienced primarily in always, sometimes or few shopping at neighboring supermarkets. The second approach used a chi-square test to present the demographic attributes for those three different segments of supermarket shopper. The third approach developed a series of regression analyses considering each of eight interest characterized from supermarket shopping against all predictors. Only data for respondents' self-designated as "always-shopper" were used hereby, and a search for predictors with strongest relationship to criterion variables will be in the regression equation. The regression approach may appropriated hypothesis-testing in this study of exploratory research design [11].

III. Results

Table 2 presents the results of the analysis-of-variance toward three buyer groups of primary interest to shop foods or general goods at supermarket. The hypothesis-testing of investigation among different buyer groups had significant differences at the 0.05 and/or 0.01 level by analysis of all predictor variables with samples of unequal size [12], and medium discriminant coefficient ($R^2:0.644$) was obtained. As to univariate F test for each shopping interest, there were presented in terms of the individual dimension found among three buyer groups. Convenience of location, wider selection and longer operational hours provided significant differences at 0.05 and/or 0.01 level; reasonable price, special sales, store brand and friendly interpersonal relationship had 0.05 level, and packaged goods were attested to the non-spurious nature of shopping function to the respondents at supermarket shopping. Results of relative position of the different buyer groups on shopping characteristics are indicated in Table 3. This comparative combined finding while respondents' absolute attitude position cannot be exactly obtained from ranking the rela-

tionship of mean scale to each other are only determined as supplement for the following discussions.

TABLE 1

26 PREDICTOR VARIABLES TO REGRESSION EQUATIONS
FOR SUPERMARKET-SHOPPER CHARACTERISTICS

-
- X_1 : Every one must carefully worry about his future life.
- X_2 : Everyone's career is destined when he is born, no one can fight against it.
- X_3 : The wise one lives for himself nowadays, but not works for others.
- X_4 : Psychological needs are important to everyone.
- X_5 : Best way to financial security is through saving day-by-day.
- X_6 : One is satisfied with his present job position and to be promoted by his efforts.
- X_7 : Planning only makes a person unhappy, but one must plan his work everyday.
- X_8 : Parents must do their best important thing is to help their children get further ahead for future.
- X_9 : When people gather, one must stop to see what they do.
- X_{10} : One must take advantage of opportunities to take part in every social affairs.
- X_{11} : One is confident in her life will make her easy in living.
- X_{12} : One must respect the belief what the community respect.
- X_{13} : Best way to judge a person is by his success in his occupation.
- X_{14} : One must respect himself and then others will respect him.
- X_{15} : One at least must be optimistic about his living world.
- X_{16} : One does not ask what he wants from others, but asks what he works for others.
- X_{17} : One must often try new thing before others try.
- X_{18} : One can show his every new and different thing to others.
- X_{19} : The most important qualities of a real man are determination and driving ambition.
- X_{20} : One must be responsible for his duty in a society.
- X_{21} : Age
- X_{22} : Job-working
- X_{23} : Educational level
- X_{24} : Family monthly income
- X_{25} : Family size (number of children under twelve years old)
- X_{26} : Neighborhood

TABLE 2

MEANS, VARIANCE AND UNIVARIATE F RATIO FOR THREE BUYING
GROUPS' INTEREST IN SUPERMARKET SHOPPING
(Analysis of Variance with Samples of Unequal Size)

Shopping Interest	Supermarket Shopping (Scale unit:mm)			F Ratio ^c
	Always (n=61)	Sometimes (107)	Few(43)	
1. Convenience of location & Service	51.4 (9.7)	28.2 (14.3)	29.8 (16.6)	4.84 ^{ab}
2. Reasonable price	34.9 (17.4)	58.1 (13.5)	56.4 (14.0)	3.80 ^a
3. Quality and packaged merchandises	37.1 (9.1)	25.3 (8.7)	38.5 (10.3)	2.46
4. Wider selection of merchandises	52.4 (11.7)	47.5 (13.4)	32.8 (15.8)	5.05 ^{ab}
5. Special sales for promotion	31.8 (17.5)	57.7 (12.6)	52.4 (15.7)	4.40 ^a
6. Longer operational hours	60.5 (8.2)	54.8 (13.4)	38.0 (12.8)	5.29 ^{ab}
7. Goodwill of store brand	36.3 (10.3)	32.5 (12.1)	41.7 (16.4)	3.71 ^a
8. Friendly relationship of interpersonal re-action	29.6 (11.6)	31.7 (12.3)	44.2 (19.1)	3.88 ^a

NOTE: a- Significant at 0.05 level for one-way analysis of variance.
b- Significant at 0.01 level.
c- Degree freedom, ie. 2,208

Constant	Multiple F	DF1	DF2	R ²	Residual
6.4151	4.11 ^{ab}	7	1,656	0.644	0.9690
(N=211)					

TABLE 3

RELATIVE COMPARISONS AMONG GROUP MEAN OF THREE BUYER TYPES
ON EIGHT SHOPPING INTERESTS

Shopping Interest	Supermarket Shopping		
	Always	Sometimes	Few
1. Convenience of location & service	High	Low	Low
2. Reasonable price	Low	High	Middle/High
3. Quality and packaged merchandises	Middle	Low	Low
4. Wider selection of merchandises	High	Middle/High	Low
5. Special sales for promotion	Low	High	Middle/High
6. Longer operational hours	High	Middle/High	Low
7. Goodwill of store brand	Middle	Middle	Middle
8. Friendly relationship of interpersonal reaction	Low	Middle	Middle/High

Table 4 presents the demographic of these three types of supermarket shopper. Significant difference discussed herein are found using a series of Chi-square test. The effect of respondents' age, job-working status, educational level, family monthly income and family size, especially number of children under twelve year-old, were significant differences at 0.05 and and/or 0.01 level. Although the finding concerning respondents' neighborhood were not significant at neither 0.05 nor 0.01 level (were at around 0.62), it was felt that there are interesting enough to be presented here.

To better figure out the characteristics of "Always" group of supermarket-shopper, eight regression equations relating the analyses of Y, the shopping interest from supermarket, to 20 response traits and six demographic variables were considered. Since long equation of multiple regression including all predictors have become difficult to interpret the states of shopping behavior, the analyzing equations included only to have accepted the regression function of Y to related significant predictors to test the hypotheses. And those re-

TABLE 4

CHI-SQUARE TEST IMPACTING TO BACKGROUNDS OF THREE
DIFFERENT BUYER GROUPS (N=211)

Variables	Always (N=61) (%)	Sometimes (107) (%)	Few (43) (%)
I. Age			
21-30	32.8	19.6	13.9
31-40	37.7	49.5	34.9
41-50	22.9	16.8	30.3
50 or more	6.6	14.1	20.9
	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>
	$\chi^2=22.74^{ab}$		d. f.=6
II. Job-working			
Yes	75.4	59.8	41.8
None	24.6	40.2	58.2
	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>
	$\chi^2=23.37^{ab}$		d. f.=2
III. Educational Level			
Primary	8.2	10.3	23.3
Secondary	13.1	15.8	21.0
High	16.4	25.3	25.5
College or above	62.3	48.6	30.2
	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>
	$\chi^2=25.02^{ab}$		d. f.=6
IV. Family Monthly Income (NT\$)			
Less 6,000	3.3	6.5	18.6
6,000-10,000	16.4	24.3	34.8
10,000-15,000	24.6	20.5	16.3
15,000-20,000	21.3	23.3	21.0
20,000 or more	34.4	25.4	9.3
	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>
	$\chi^2=36.25^{ab}$		d. f.=8
V. Family Size (Number of children under twelve)			
None	26.2	40.2	7.0
One	19.8	26.2	11.6
Two	27.8	14.0	27.9
Three or more	26.2	19.6	53.5
	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>
	$\chi^2=66.42^{ab}$		d. f.=6

Variables	Always (N=61) (%)	Sometimes (107) (%)	Few (43) (%)
VI. Neighborhood (% of Commercial Zone)			
High (20%)	31.2	32.7	32.6
Middle (50%)	36.0	36.4	27.9
Low (80%)	32.8	30.9	39.5
	100.0	100.0	100.0
		$\chi^2=2.60$	d.f.=4

NOTE: a-Significant at .05 level.

b-Significant at .01 level.

gression equation show as follows [13].

$Y_1 =$ I usually shop at convenient-location and self-service supermarket.

$$Y_1 = 5.3604 - 0.8776X_1 - 0.4611X_6 - 0.2038X_9 + 0.4327X_{13} + 0.6102X_{19} + 0.7668X_{22}$$

$$R^2 = 0.6703$$

$$F = 5.77$$

$$DF1 = 25$$

$$DF2 = 185$$

$Y_2 =$ I usually check the listed price and shop at the reasonable-price store.

$$Y_2 = 1.1746 + 0.4364X_4 - 0.3785X_{10} - 0.3056X_{11} + 0.7622X_{13} + 0.2810X_{19} - 0.0955X_{24}$$

$$R^2 = 0.5922$$

$$F = 8.43$$

$Y_3 =$ I am usually careful to pick the higher quality and packaged merchandises.

$$Y_3 = 0.8255 + 0.2917X_2 - 0.3064X_9 - 0.1009X_{18} + 0.2429X_{19} - 0.5647X_{21} + 0.7612X_{25}$$

$$R^2 = 0.6874$$

$$F = 7.49$$

$Y_4 =$ I like to get my necessities from wider selection of goods display.

$$Y_4 = 1.9269 - 0.3073X_5 - 0.1771X_7 + 0.3684X_{11} + 0.8526X_{18} + 0.5490X_{22} + 0.1184X_{25}$$

$$R^2 = 0.8431$$

$$F = 7.06$$

$Y_5 =$ When shopping at supermarket, I usually watch the advertisement for announcement of special sales and shop a lot of them.

$$Y_5 = -0.7194 - 0.4334X_4 - 0.3198X_6 + 0.2451X_{11} - 0.4155X_{13} + 0.3806X_{19} - 0.4789X_{22}$$

$$R^2 = 0.7627$$

$$F = 2.69$$

$Y_6 =$ I usually like to shop in any easy time but not by specific schedule.

$$Y_6 = 2.0206 - 0.1992X_2 + 0.1401X_9 - 0.2144X_{18} + 0.1587X_{19} - 0.3470X_{21} + 0.3921X_{26}$$

$$R^2 = 0.5364$$

$$F = 9.12$$

Y_7 = I usually patronize a store with good image or high goodwill.

$$Y_7 = 0.0006 - 0.1502X_1 + 0.7445X_6 - 0.6737X_8 + 0.1289X_9 + 0.2698X_{14} + 0.5513X_{21}$$

$$R^2 = 0.5474$$

$$F = 5.95$$

Y_8 = When shopping at supermarket, I usually enjoy friendly personal relation with store personnel.

$$Y_8 = 3.2870 + 0.0955X_3 - 0.7457X_6 - 0.1216X_{12} + 0.4140X_{15} - 0.5513X_{21} + 0.6094X_{23}$$

$$R^2 = 0.6293$$

$$F = 2.36$$

The F value for the analyses of variance on shopping interest were all significant at 0.05 and/or 0.01 level, which provided much important marketing implication for this study to indicate the supermarket shopping process in Taipei City area.

IV. Discussion and Findings

1. Illustrative Study of Shopper Type

(1) "Always" Supermarket-shopper

i. Demographic Attributes:

Housewives aged 21-50; most job working; well-educated and four fifth finished high school level; family monthly income at least NT\$6,500 and four fifth by \$10,000 or more; most small family size.

ii. Shopping-interest Attributes:

- (i) High interest to shop at convenient location or service store with wider selection of goods and with longer operational hours.
- (ii) Medium interest to care about the quality or packaging condition of goods, and goodwill degree of store or brand.
- (iii) Low interest to pay attention to the listed price, promoted special-sale and relation with store personnel.

This type of shopper, shopping might be an expensive task on her. Strong desire was made to minimize her expenditure of effort in shopping. Convenient and easy shopping was crucial to her selection of a store rather than price, quality of goods, relation with store personnel, Gregory P. Stone identified her as "Apathetic Shopper" [14]. (28.9 percent of all interviewed in this category.)

(2) "Sometimes" Supermarket-shopper

i. Demographic Attributes:

Housewives aged 21-62; six tenth with job working; two third finished high school level, family monthly income at least NT\$6,000 and seven tenth by \$10,000 or more; medium family size.

ii. Shopping-interest Attributes:

- (i) High interest to pay attention to the listed price or special sales of goods, and also preference to shop at a store with wider selection of goods and with longer operational hours.
- (ii) Medium interest to compare goodwill of store, and to make friendly relation with store personnel.
- (iii) Low interest to care about the quality and packaging condition of goods, and location of store and its convenient service.

This type of shopper was extremely sensitive to price-proneness, relative prices, quality, or selection of goods were decisive in affecting her evaluation of the store. Stone identified her as "Economic Shopper" [15]. (50.7 percent of all interviewees in this category.)

(3) "Few" Supermarket-shopper

i. Demographic Attributes:

Housewives aged 23 or more; six tenth with job working; half finished high school educational level; half family monthly income below \$10,000; medium or bigger family size and half with three or more children.

ii. Shopping-interest Attributes:

- (i) High interest to care about price and special sales of goods, and preference to make personal relation with store personnel.
- (ii) Medium interest to compare the goodwill of store.
- (iii) Low interest to comment the location of store, quality and packing condition of goods, assortment and selection of goods, and operational hours.

This type of shopper were both price-and store-proneness. The conception of good clerk and reasonable prices of goods were crucial to her evaluation of the store. This type of shopper might be grouped as the combinations of "Economic Shopper" and "Personalizing Shopper" identified by Stone [16]. (20.4 percent of all interviewees in this category.)

2. Natures of Empirical Supermarket Shopper

- (1) High emphasis on living for the present life style, the job-working housewife who judges men by their success in occupation, determination and driving ambition, is dissatisfied with her present job position but has no effort for her future promotion, and is always thinking the world revolving around her and her family will prefer to shop at a convenient location and self service retail store.

The discriminant coefficient of hypothesis-testing was moderate and around 0.67, and were significant at both 0.05 and/or 0.01 level to distinguish the

type of housewife described above from the others.

- (2) Relatively high on judging men by their success in occupation, the housewife who emphasizes to enrich her and her family's psychological needs, and has less interests to take part in the social affairs but is nervous in living will pay less attention to price listed if her family has more incomes. She is apathetic to price-proneness.

The discriminant coefficient of hypothesis-testing was moderate and around 0.59, and were significant at both 0,05 and/or 0.01 level.

- (3) Generally, the bigger family-size of younger housewife who is conservative to her life style, and believes her career destined by God, judges men still by their determination and driving ambition, and emphasizes her efforts to take care of her and her family will pay moderate attention to the quality and packaging condition of her shopping goods.

The housewife described above was significant difference from the averaged housewives to care about the quality and packaging condition of goods in accordance with the preceding F. test. The discriminant coefficient was moderate and around 0.68.

- (4) Relatively high on showing now and different things to others, the bigger family-size of job-working housewife who is confident and generous in her living, views planning to make unhappy and doesn't take much time to plan her work will select goods from wider assortment.

The housewife described above had significantly different perception to distinguish the store characteristics of supermarket from the traditional retail store. The discriminant coefficient was relative high and around 0.84.

- (5) The job-working housewife who emphasized to enrich her and her family's psychological needs but has no confidence in her future life, judges men by their success in occupation but not by their determination or driving ambition pays less attention to store's special sales for promotion.

Hypothesis-testing showed that supermarket's sales promotion was significant difference to the housewife described above from the other averaged. The fact was that the housewife described above was not entirely promoted by store's special sales to make purchasing action, which discriminant coefficient was high and around 0.76.

- (6) The younger wife who is living near commercial zone, is conservative of her appearance and her living in life, encourages herself for her future career, likes group life, and judges men by their success in occupation will prefer to shop at longer-operational-hour retail store.

The discriminant coefficient of hypothesis-testing was moderate and around 0.53.

- (7) Relatively high on satisfaction in her present job position or her present living than future, the aged housewife who likes to make rich social life. emphasizes respect and esteem between people, but may be careless to make

her children advance will prefer the store or brand with higher goodwill. The discriminant coefficient of hypothesis-testing was moderate and around 0.54.

- (8) The higher educational level of younger housewife who views optimistically about her living world, prefers to take care of her by herself and to live in an individualized life style will have less interests to make friendly relation with retail store's personnel.

The discriminant coefficient of hypothesis-testing was moderate and around 0.62.

3. Marketing Implications of Study Issues

Study herein concerned with relations between consumer's personality and store's characteristics have generated several valuable typologies to help marketer to analyze the market and to identify the customer's needs. The most of several key determinations of supermarket shopping interests have been examined; however, the actual choice to the desired-shopping store and satisfaction of the goal embodied in personality were differently determined by shopper's perception to seller's behavior [17] but not entirely by marketing efforts.

(1) Store Image and Loyalty

For the general people, the most important criteria in store selection appears to be the store's reputation, price level and quality of goods [18]. Store's reputation and its image is defined in the shopper's mind partly by its functional quality and partly by psychological attributes [19]. A Sample of Taipei City housewives, on the other hand, produced a quite different ordering longer operational hours, convenience of location, self-service atmosphere, wider assortment and selection of merchandises were found most important; price level, quality of goods, and store's image were least important to supermarket shopper.

Since most studies alleged that store's image evokes shopping actions, [20], if shopper's patronage in Taipei City was lack of attention, indicated by this study, to supermarket, which is vulnerable to seller and/or marketer in their retailing operation.

(2) Unplanned purchasing

Most studies on supermarket shopper's behavior emphasized in their difference between shopper's intention and outcomes, especially the characteristics of unplanned purchasing. Unplanned purchasing is defined as an unplanned, spur of the movement decision to purchase a product [21]. Product characteristics, point-of-purchase materials, end-aisle display, and special sales for promotion are now considered high relation to unplanned purchasing in an attempt to better understand the phenomenon [22]. Shopper at supermarket is accounted for making buying decision in the store characteristics described above rather than relying on a shopping list.

This study showed that some supermarket shoppers in Taipei City were apathetic to in-store promotion. Some unplanned purchasing decision are probably really triggered by shopper exposure to product assortment or store characteristics. The store's location, wider assortment and selection of goods were apparently though to be more consistent with unplanned purchasing than in-store promotional techniques, which provides supermarket manager some significant implication to pay more attention to studying and improving their promotional decision or investment, if unplanned purchasing is viewed as an operational objective or as the potential for increasing sales to their business.

4. Social Psychodynamics in Shopping Behavior

Unlike some area of sociological and psychological research, the principal contribution of this study was to provide supermarket manager the behavior regularities or states of shopper's social psychodynamics in which behavior decision may be directed toward buying action with demographic facts. A summary of difference in personality traits emerged from the above discussions is provided as follows:

- (1) More conservation or even social (moderate) personality [23] in shopping behavior,
- (2) Thinking high pointed to the present living and/or enriched life style, and world revolving around her and her family [24],
- (3) Lightly stress on rationality and ego-oriented choice,
- (4) Greater sense of shopping choice-making [25],
- (5) Having an apathy to shopping effort,
- (6) The expectation of age about younger,
- (7) The expectation of educational level about higher,
- (8) Job-working, and
- (9) More family income [26].

V. Conclusion

The study described above was conducted by using 211 samples of housewives located in Taipei City Area, and the framework of this study were based on consumer's driving needs and response traits of personality to predict their reaction in buying process. Quite obviously the area of personality test requires further and widen study. However, because study model of shopping behavior up to date is still difficult to make precise findings, which makes personality traits become a possible indicator to describe the shopping behavior.

It is necessary that the findings of this study cited hereby has to be assumed valid, which is the substantial and significant basis to make the following conclusions:

1. Store and product characteristics and shopper's demographic background have segmented housewives into several different shopper types.

2. Supermarket shopping interests are mainly derived from convenient store's location, easy self-service atmosphere, wider assortment and selection of merchandises, longer operational hours rather than from store's reputation, store's personnel, price level and quality of goods. Unplanned purchasing at supermarket are probably really triggered by most important interests described above than in-store promotional techniques.
3. Personality test using need's satisfaction and response traits has significantly reflected that most supermarket shoppers are still more conservative, high pointed to the present, rational, ego-oriented, and apathetic to shopping.
4. The income, educational level in Taipei City Area gradually rise, many of the apparent over-all differences in market substantially diminish. Marketers should consider to improve their operational philosophy and to increase their efforts to reach the goal embodied by shopper's interest and expectation.

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66-67, (1976).

7. All Said supermarkets are near a general traditional food market as neighbor. Also, there locate in the areas of most middle-class residents of Taipei.
8. Although many articles alleged that shopping behavior at supermarket are the most frequent type of unplanned purchase, the problem-solving model of this study is still the system basis to present a comprehensive process of behavior research. Buying behavior was assumed beginning with not only a felt need or drive as a goal but also various personality characteristics or predispositions, experiences, value and attitude developed by Howard, Nicosia, and Engel and Lawrence Light. Unplanned purchase see Consumer Buying Habits Studies, E. I. Dupont de Nemours and company, 1965; Vernon T. Clover, "Relative Importance of Impulse Buying in Retail Store," Jol. of Marketing, Vol. 15 (July 1950), 66-70; David T. Kollat and Ronald P. Willett, "Customer Impulse Purchasing Behavior," Jol. of marketing Research, Vol. 4 (February 1967), pp.21-31, Howard model see John A. Howard, Marketing Management Analysis and Planning, rev. ed. (Homewood, III, Richard D. Inc., 1963), Chaps. 3-4. Nicosia model see Francesco M. Nicosia, Consumer Decision Processes: Marketing and Advertising Implications, (New Jersey; Prentice-Hall, Inc., 1966), P. 156. Engel model see James F. Engel and M. Lawrence Light, "The Role of Psychological Commitment in Consumer Behavior: An Evaluation of the Theory of Cognitive Dissonance," in Frank M. Bass, Charles W. King, and Edgar A. Pessemier, eds., Application of the Science in Marketing Management (New York: John Wiley & Sons, Inc., 1968), pp. 39-68.
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