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## **THE REFERENCE GROUP INFLUENCE ON CELL PHONE PURCHASING BEHAVIOR: RESEARCH ON CHINESE YOUTH**

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The cell phone has experienced a change from a private luxury product into a public necessity product in the late 1990s China. According to consumer behavior theories, individuals would be significantly influenced by their reference groups when making a purchasing decision of a certain commodity such as the cell phone. The reference group influence encompasses three types: informational influence, utilitarian influence, and value-expressive influence. This paper utilizes the empirical research method to investigate the three types of reference group influence on Chinese youth's cell phone purchasing behavior. The research results indicate that reference groups have a significant influence on cell phone purchasing behavior among Chinese youth. This paper also investigates the different degree of influences between genders and between the working and non-working youth. Based on the research conclusions, this paper provides some suggestions for marketers competing in the Chinese cell phone market.

### **Introduction**

In China during the early 1990s, the cell phone was a symbol of high income and ideal social status. Those people with the big, heavy cell phones in their hand talked loudly in the streets to show their lofty status. The famous advertising slogan "All in control with hand" sent a message that cell phones only belonged to successful leaders or managers who might afford the phone's high price, which usually equaled the average people's 2-year income at that time. However, the cell phone changed from a luxury to a necessity during the late 1990s. Today, the new generation of cell phones may be found on sale everywhere. They are much smaller, lighter and have multiple functions. Now, everybody can easily obtain the feeling of "All in control with hand".

Shanghai's cell phone market, for example, has ten million cell phone users and the number is still increasing by twenty-five percent each year. Many native and multinational cell phone manufacturers

compete in this market, and a wide range of marketing tactics and strategies are applied. Some of the manufacturers boast about their phones' high technology, some ask celebrities to endorse their product, and some emphasize their phones' individualization and ornate appearance. The effects of different methods may vary among different segments of consumers. However, to know more about consumers' purchasing behavior is always a key to marketers.

Today's youth are usually easily persuaded to follow the latest fashion and they contribute to a majority of consumers for modern digital products, including cell phones. The author's research explores the reference group influence factor in Chinese youth's cell phone purchasing decision in order to theoretically support manufacturers' marketing practice.

## **Literature Review**

Basic consumer behavior theory tells us that a consumer's purchasing motivation comes from how the product can satisfy his or her needs. However, reference groups (such as friends, family, work associates) may influence the consumers final decision on whether to buy the product and which brand or model to choose.

The research on reference groups has a relatively short history. Hyman (1942) elaborated the term "reference group" when he asked respondents with which individuals or groups they compare themselves. This term has been refined by additional relative research, and it now has a broader, more precise definition. In the author's research, the reference group refers to the groups used by the individual to direct his or her behavior in a particular situation. The groups here not only include the groups that the individual has a frequent contact with (such as family members, work associates, friends, classmates) but also include the groups that the individual does not have a membership in or a direct contact with (such as some expected groups or people in a certain social level) (Hawkins, Best, & Coney, 1998).

The research on reference groups has been used as a basis for its application in a variety of fields. For example, Hyman and Singer (1968) found that this concept could be widely applied in studies of peasants, scientists, alcoholics, the mentally ill and consumers. The following researchers added physicians (Coleman, Katz, & Menzel, 1966), auto owners (Grubb & Stern, 1971), cosmetic users (Moschis, 1976) and students and housewives (Park & Lessig, 1977) into the above list (Bearden & Etzel, 1982).

Many scholars have conducted consumer behavior research from

the perspective of reference group influence, which refined the original concept of the reference group. Witt and Bruce (1972) suggested seven determinants in the influence, including perceived risk, expertise of the referent, and the individual's need for social approval, etc. Morchis (1976) found that consumers use both reflective and comparative appraisal to choose their products. Consumers not only apply direct and verbal interaction to obtain the evaluations from reference group, but also observe reference group members' behavior to make a decision (Bearden & Etzel, 1982). Park and Lessig (1977) found that American students are more likely to be influenced by reference groups than American housewives when choosing products. Bearden and Etzel (1982) suggested that the individual's choice of different brands may also be influenced by his or her reference groups. Park and Lessig's research also found that advertisements and promotions utilizing reference group influences better motivated consumers' purchases.

The existing literature also told us that reference groups have a significant influence on consumer's purchasing behaviors. Although an individual may consider whether to follow the group consciously, in most conditions, he or she agrees with the group subconsciously. An individual will try to satisfy reference groups' expectation by complying with groups' norms or acting in an expected role in the group. The norms here refer to those compliance expectations for every group member within a particular social background. Whenever there is a group, those norms will function without any verbal interaction or thinking (Park & Lessig, 1978).

## **Theory and Methodology**

Previous research (Park & Lessig, 1977; Bearden & Etzel, 1982) has identified three types of reference group influences: informational influence, utilitarian influence and value-expressive influence.

### **Informational Influence**

The informational influence is based on a desire to make informed decisions and optimize the choice. Kelman (1961) suggested that an individual would accept an influence that improves the individual's knowledge/ability to cope with their environment. The informational influence only functions when the individual regards the behavior and value of reference group members as potentially useful information and takes them into consideration. When a consumer lacks the knowledge of a certain product and the experience of purchasing, he/she

may perceive the information and recommendation from his/her reference group credible and accept them. For example, an individual may ask his/her friends and family members for information about different brands and models of cell phones when considering purchasing one. The individual may also use some cell phone online forums' discussion and reports comparing different brands and models.

### **Utilitarian Influence**

It can be explained by the compliance process (Kelman, 1961) that an individual is willing to satisfy a certain group's expectation in order to obtain the praise or to avoid the punishment from the group. Marketers may suggest in the advertisements that people can obtain social acceptance and praise by using a certain commodity (e.g. Mentos freshmaker). They may also suggest that groups may reject people by not using their product (e.g. Wrigley's Doublemint chewing gum). Those advertisements all take advantage of the reference group's utilitarian influence. For example, parents always complain about their son's playing video games which resulted in his falling behind in his studies. The complaints may lower the student's motivation to purchase the N-Gage, a cell phone famous for its video game function. The famous Asch Experiment proves the power of utilitarian influence. Participants of the Solomon Asch Experiment (1958) are found to conform to group answers. Some change their original answers, which would be the right answer. This kind of compliance is sometimes not only oral but also an affirmation from heart (Rock, 1990).

### **Value-Expressive Influence**

The identification process, described by Kelman, can explain this type of influence. Individuals willing to better express themselves to society may try to make themselves similar to the group which they want to join. At this time, the individual may actively follow the groups' concepts and rules while neglecting the praises or punishments. That is, the individual has completely accepted and internalized the value of that reference group. For example, Pepsi airs its "Young Generation" brand image so that the Pepsi cola consumers accept the value of this group. Andy Lau plays a successful manager's role in the Sony-Ericsson cell phone advertisement and implies that people who buy the cell phone have the same characteristics with that expected group.

## **Assumptions**

In China, people often use cell phones in public. The cell phone's appearance, brand, ringing and its consumption are completely visible. In the author's survey, only 6 subjects (4.3 percent of the sample size) do not own a cell phone, which makes the author believe that the cell phone can be defined as a necessity in the research population. Previous works (Bearden & Etzel, 1982; Bourne, 1957) provide two variables determining the reference group influences: visibility of consumption and necessity of the product (Table 1). Cell phones belong to the public necessity realm, as the table shows. If different models of the same brand can easily be differentiated, different models should be influenced as well as different brands. Thus, the conclusion is obtained: Reference groups should have a strong influence on cell phone purchasing behavior. The influence may encompass whether to buy a cell phone, and which brand and model to choose. These topics are not discussed in this paper. The main purpose of the author's research was to prove the "strong influence". At the same time, youth are found definitively influenced by peer pressures (Teter, 1966; Kanter, 1970; Scott, 1974). Based on all the previous research, the author suggested the following assumptions:

- 1) Reference groups have a significant influence on Chinese youth's cell phone purchasing behavior.
- 2) The reference group influence varies between the two genders.
- 3) Reference groups have a different degree of influence upon working and non-working youth.

## **Method**

The author applied fourteen statements manifesting reference group functions (Exhibit 1). These statements were first designed by Park and Lessig. "These statements were designed to be general enough to encompass different forms of behavior underlying a given type of reference group influence, yet specific enough to reflect only one motivational function," (Park and Lessig, 1977). The author revised these original statements so that they could be applied in measuring cell phone purchasing behavior.

The subjects were composed of 79 undergraduates from Fudan University and 61 employees from four different companies. All subjects live in Shanghai, China, and are of the same age range. They were presented the fourteen reference group manifestation state-

ments and asked to indicate the extent to which the situation described by the statement was relevant to a consumer's alternative selection. The author used response categories of strongly agree, agree, disagree, and strongly disagree to provide a more balanced set of responses instead of high relevance, medium relevance, low relevance and not relevant, provided by Park and Lessig. The survey was conducted in April 2004. A total of 167 individuals took part in the survey and of these, 140 completed and returned all questions.

## **Analysis and Discussion**

Coding individual responses within a distribution as 4 for strongly agree, 3 for agree, 2 for disagree, and 1 for strongly disagree, the degree of a certain type of reference group influence is defined as the highest response given on any of the statements of that influence.

1) Reference groups have a significant influence on Chinese youth's cell phone purchasing behavior.

The reference group's influence on each subject is shown by the degree of each type. The higher the degree, the larger influence the reference group has on that subject. A significant influence on the sample could be shown when the influence-degree mean of the sample is statistically larger than 2.5, the mean of the response distribution. The author conducted a t-test to compare the sample influence-degree mean with 2.5 (Table 2). The null hypothesis is that the sample degree mean is smaller than 2.5 under  $\alpha$  level of 0.05. The test's result shows a 0.000 significance to reject the null hypothesis for each type of influence degree so that the mean is significantly greater than the expected number 2.5. Thus, we can conclude that the three types of reference group influences are all significant. If the sample can give a picture of the whole Chinese population that we are interested in, the assumption of "Reference groups have a significant influence on Chinese youth's cell phone purchasing behavior," is reinforced.

More information can be found by comparing the sample influence-degree means of each influence type (Table 3). Informational influence has an influence-degree mean of 3.5386, ranking the highest of the three. Compared to the informational influence, the other two types of reference group influences have degrees far behind. This also happens with the following products in Park and Lessig's research (1977) on

U.S students and housewives: color televisions, home air conditioners, physician selection, insurance, and refrigerators. This may be a characteristic of all long-time and investment-like purchasing decisions, which require money and professional knowledge. Park and Lessig's research didn't include the cell phone so that the author couldn't compare the group influence's difference between U.S and Chinese people. But we may expect that Chinese youth have a higher degree of informational influence because of the traditional authority worship in Chinese culture. After all, further research is needed when we try to compare consumers from the two nations.

2) The reference group influence varies between the two genders.

The author conducted an independent sample t-test to find out the difference of reference group influence between genders (Table 4). However, no significant result has been found. If we increase  $\alpha$  level to 0.1, the conclusion would be that the value-expressive influence of male is slightly higher than female (3.3208 compared to 3.1264, Table 5).

3) Reference groups have a different degree of influence upon working and non-working youth.

A significant difference has been found between the utilitarian influence on students and employees (Table 6). The independent sample t-test shows that students have a greatly higher utilitarian influence of 3.3165, compared to employees' 3.0328 (Table 7). As we all know, people in the university are a very large group without strict organization structure and a united value, which provides a place for various opinions and ideas. In universities, full time students are experiencing a continuous learning and socialization process. The school experience is different from the working experience that more mature and socialized similar-aged employees experience. Thus, students are more willing to try different kinds of values, satisfy others' expectations and try to be accepted by different groups (Scott, 1974). On the other hand, employees are mostly limited by the company's culture and it is inconvenient for them to absorb new values within the office. These characteristics may result in the significant difference of utilitarian influence of the two groups.

## **Conclusion**

The author's research indicates the existence of significant refer-

ence group influences in Chinese youth's cell phone purchasing decisions. The result is consistent with the available theories on reference group influences. Among the three types of influences, informational influence is the greatest. At the same time, the influences are not significantly different between genders. Students have a greater utilitarian influence than same-aged employees. The author has given his own explanation for this difference.

According to the results, some suggestions may be provided to cell phone marketers. As the informational influence plays a main role among the three types of reference influences, marketers would be willing to enhance their information channel to closely persuade those young consumers when promoting their brands or new models. For instance, an online cell phone forum is a quick and credible way to spread brand and model advantages. Another way is to take advantage of professionals and provide more statistics and numbers. These reports and numbers should focus on persuading the opinion leaders who pay a great deal of attention to the information. Motivating opinion leaders will be very effective in magnifying the informational influence. When selling to full time students, marketers could emphasize in the commercials those confirmations and praises that the cell phone user would gain from his or her peers.

The author's research has some limitations, however. First, the author revised the reference group manifestation statements, which may lower the validity of the research. At the same time, scholars (such as Bearden, 1989) found the utilitarian influence and the value-expressive influence difficult to be separated in empirical researches. Their finding again questions the validity of the research. Second, as the subjects are all residents of Shanghai, it is doubtful to apply the results to all Chinese youth. The worst case is that the cell phone is still a luxury in some rural areas, and people may not even have such reference groups to influence them. Finally, this research provides an alternative way to analyze Chinese youth purchasing behavior and adds an application for the literature of reference group influence research.

Table 1: Two Variables Determining the Reference Group Influence

<b>Necessity of the product</b>			
<b>Visibility of consumption</b>		<b>Necessity</b> Reference group has weak influence on product choosing	<b>Non-necessity</b> Reference group has strong influence on product choosing
	<b>Visible</b> Reference group has strong influence on brand choosing	<b>Public Necessity</b> Influence: weak on products, strong on brands Example: watch, car	<b>Public Luxury</b> Influence: strong on both products and brands Example: skiing, SPA
	<b>Invisible</b> Reference group has weak influence on brand choosing	<b>Private Necessity</b> Influence: weak on both products and brands Example: comforter, refrigerator	<b>Private Luxury</b> Influence: strong on products, weak on brands Example: home theater, entertainment center

Del I. Hawkins, Roger J. Best, & Kenneth A. Coney. *Consumer Behavior - Building Marketing Strategy 7th edition (Chinese Version)*

Table 2: T-Test Comparing the Influence-Degree Mean with 2.5

	t	df	Sig.	Mean Difference
II	20.955	139	.000	1.0286
UI	12.499	139	.000	.6929
VI	12.565	139	.000	.7000

II = Informational Influence  
 UI = Utilitarian Influence  
 VI = Value-expressive Influence

Table 3: Sample Influence-Degree Means

	N	Mean	Sd. Deviation	Std. Error Mean
II	140	3.5286	.58078	.04909
UI	140	3.1929	.65587	.05543
VI	140	3.2000	.65919	.05571

Table 4: T-Test Comparing the Influences Between Genders

	Levene's Test for Equality of Variances		t-test for Equality of Means				
	F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference
II	3.400	.067	.895	138	.372	.0907	.10127
UI	.816	.368	1.272	138	.205	.1451	.11403
VI	1.992	.160	1.703	138	.091	.1943	.11408

Table 5: Compare the Influences Between Genders

Gender	N	Mean	Std. Deviation	Std. Error Mean
II male	53	3.5849	.49745	.06833
II female	87	3.4943	.62643	.06716
UI male	53	3.2830	.66151	.09086
UI female	87	3.1379	.65009	.06970
VI male	53	3.3208	.64371	.08842
VI female	87	3.1264	.66130	.07090

reliable information about the brands and models.

A4: The cell phone's brand and model selected by the individual is influenced by other users' word-of-mouth or some evaluation reports from an independent testing agency (such as online forum on cell phone evaluation and choosing).

A5: The individual's observation of what experts do influences his choice of a brand or model (such as cell phone R&D people, cell phone retailers).

\* Utilitarian Influence

B1: To satisfy the expectations of classmates or fellow work associates, the individual's decision to purchase a cell phone is influenced by their preferences.

B2: The individual's decision to purchase a cell phone is influenced by the preferences of people with whom he has social interaction.

B3: The individual's decision to purchase a cell phone is influenced by the preferences of family members.

B4: The desire to satisfy the expectation which others have of him has an impact on the individual's cell phone choice.

\* Value-expressive Influence

C1: The individual feels that the purchase or use of the cell phone of a particular brand or model will enhance the image which others have of him.

C2: The individual feels that those who purchase or use the cell phone of a particular brand or model possess the characteristics which he would like to have.

C3: The individual sometimes feels that it would be nice to be like the type of person which advertisements show using the cell phone of a particular brand or model.

C4: The individual feels that the people who purchase the cell phone

of particular brand or model are admired or respected by others.

C5: The individual feels that the purchase of the cell phone of a particular brand or model helps him show others what he is, or would like to be (such as a successful businessman, a female professional, etc.).

## References

- Bearden, William O, & Michael J. Etzel. (1982). Reference Group Influence on Product and Brand Purchase Decisions. *Journal of Consumer Research*, 9, 183-194.
- Bourne, Francis S. (1957). Group Influence in Marketing and Public Relations, in *Some Applications of Behavioral Research*, eds. R. Likert and S.P. Hayes, Basil, Switzerland: UNESCO
- Coleman, James S., Elihu Katz, & Herbert Menzel. (1966). *Medical Innovation: A Diffusion Study*. Indianapolis: Bobbs Merrill
- Grubb, Edward L, & Bruce L. Stern. (1971). Self-Concept and Significant Others, *Journal of Marketing Research*, 8, 382-385.
- Hawkins, Del I., Roger J. Best, & Kenneth A. Coney. *Consumer Behavior - Building Marketing Strategy* 7th edition (Chinese Version).
- Hayakawa, Hiroaki, & Venieris, Yiannis. (1977). Consumer Interdependence via Reference Groups. *Journal of Political Economy*, 85, 599-615.
- Hyman, Herbert H. (1942). *The Psychology of Status*. Archives of Psychology, 269, 94-102.
- Hyman, Herbert H, & Eleanor Singer. (1968), *Readings in Reference Group Theory and Research*. New York: The Free Press.
- Kanter, Donald L. (1970). *Pharmaceutical Advertising and Youth*, unpublished paper, Coronada Unified School District, Coronado, Calif. (Park & Lessig, 1977)
- Kelman, Herbert C. (1961). Processes of Opinion Change, *Public Opinions Quarterly*, 25, 57-78
- Lessig, V. Parker, & C. Whan Park. (1977). Students and Housewives: Differences in Susceptibility to Reference Group Influence. *Journal of Consumer Research*, 4, 102-110.
- Lessig, V. Parker, & C. Whan Park. (1978). Promotional Perspectives of Reference Group Influence: Advertising Implications. *Journal of*

*Advertising*, 41-47.

- Moschis, George P. (1976). Social comparison and Informal Group Influence, *Journal of Marketing Research*, 13, 237-244.
- Rock, Irvin. (1990). *The legacy of Solomon Asch: Essays in cognition and social psychology*
- Scott, Ward. (1974). Consumer Socialization, *Journal of Consumer Research*, 1, 1-14
- Teter, J. W. (1966). *The Family, Peers and Media Influence on Youth's Present and Future Consumption Preferences*, unpublished thesis, Oklahoma State University, Stillwater, Okla. (Park & Lessig, 1977)
- Witt, Robert E, & Grady D. Bruce. (1972). Group Influence and Brand Choice Congruence, *Journal of Marketing Research*, 9, 440-443.