

THE AFFECTION OF DEMOGRAPHIC CHARACTERISTICS ON MEDIA CHOICE

A Case about Chinese Miniature Automobile Consumers

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Abstract: This paper explores the media choice of Chinese miniature automobile consumers in obtaining purchasing information about miniature automobile. A worldwide survey involved a majority of Chinese areas was conducted. The survey focused on consumers' demographic characteristics and media choice. The result of the survey shows that consumers chiefly choose newspaper, TV or automobile exhibitions as the media to obtain purchasing information about miniature automobile. Then, based on optimal scaling regression analysis of statistics, the influences of demographic characteristics on media choice were studied. The study finds that consumers' demographic characteristics significantly affect their media choice. In detail, consumers' living city, occupation and education are three most important characteristics that affect the media choice of consumers.

1 INTRODUCTION

Consumers can obtain purchasing information from various media such as newspaper, TV, magazine, or Internet. Many scholars studied the consumers' media choice behaviour (Wei and Pan, 1999, Hung, Gu, and Tse, 2005, Geist, 2004, Ducoffe, 1996, Yoon and Kim, 2001, Milsom, 2003). These studies found that consumers which are from different countries or purchase different products have different choice to media in obtaining purchasing information.

There are many factors influencing consumers' media choice. Demographic characteristics, such as age, education, occupation, and income, are generally regarded as important factors affected the media choice of consumers (Westbrook and Fornell, 1979, Andreasen and Ralchford, 1976, Schaninger and Sciglimpagiia, 1981, Newman and Staelin, 1973, Chiteji and Stafford, 1999, Claxton, Fry, and Portis, 1974). This study has the main objective of empirically determining the affection of

demographic characteristics on media choice of Chinese miniature automobile consumers.

2 QUESTIONNAIRE AND RESPONSE

Newspaper, magazine, TV, Internet, and automobile exhibition are selected as the resources from which Chinese consumers get purchasing information about miniature automobile. Gender, living city, occupation, education, age, and monthly household income are used to describe demographic characteristics. Gender has two levels (1=male, 2=female), living city four levels (1=big city, 2=city of middling size, 3=county seat, 4=villages and towns), occupation seven levels (1=government servant, 2=employee of national enterprise, 3=employee of private enterprise, 4=employer of individual enterprise or partnership enterprise, 5=farmer, 6=professional (lawyer, accountant, teacher, doctor, athlete, reporter etc.), 7=other),

education six levels (1=junior high school or below, 2=senior high school, 3=technical secondary school, 4=junior college, 5=college or university, 6=graduate student), age seven levels (1=18-21years, 2=22-25, 3=26-29, 4=30-34, 5=35-39, 6=40-59, 7=60 or above 60 years), and monthly household income four levels (1=less than ¥2 000, 2=¥2 000 to less than ¥5 000, 3=¥5 000 to less than ¥8 000, 4=more than ¥8 000).

The data used in this study are obtained from a large survey sponsored by an automobile group company in China. 2 630 questionnaires are sent 263 dealers of the automobile group through mails, commencing in December 2003, at three month intervals. A dealer selected is responsible for 10 questionnaires. The objects of the survey are consumers who visit the shop of dealers and have intention to purchase miniature automobile. The survey areas involve 31 provinces, municipalities and autonomous regions of Chinese Mainland. A total of 2 623 usable responses are received, yielding a response rate of 99%. 280 questionnaires in 2 623 are discarded because they are not perfectly filled. The remaining 2 343 questionnaires are used for the final analysis. All data are processed by SPSS 15.0.

3 RESULTS

3.1 The Media Choice of Chinese Consumers

The result of the media choice by Chinese miniature automobile consumers is shown in table 1. The percentage of the media choice breakdown in descending order is as follows: newspaper (42.1%), TV (36.8%), automobile exhibition (23.9%), Internet (20.2%), and magazine (12.0%). The percentage of newspaper is higher than that of TV, which shows that it is more possible for consumers to obtain advertising information from newspaper than from TV although Chinese families almost have TV. Though Internet has had a rapid development in China in recent years, it is early for Internet to be regarded as a main medium of consumers for obtaining automotive advertising information. It appears surprising that the percentage of magazine, as an important traditional medium, is only 12.0%, which may be because Chinese miniature automobile consumers are not known as chief target of magazine.

Table 1: Media choice by consumers (N=2 343).

Information sources	Frequency	Percent (%)
Newspaper	986	42.1
Magazine	281	12.0
TV	863	36.8
Internet	474	20.2
Automobile exhibition	559	23.9

3.2 The Influence of Demographic Characteristics on the Media Choice

We conducted optimal scaling regression analysis. Newspaper, TV, Internet, automobile exhibition, or magazine is dependent variables and gender, living city, occupation, education, age and monthly household income are independent variables. The regression result is shown in table 2.

3.2.1 Newspaper

From table 2, we know that the regression model is statistically significant at the 0.01 level ($F=3.210$, $Sig.<0.01$). Of six demographic characteristics, four characteristics, living city ($F=29.476$, $Sig.<0.01$), occupation ($F=5.929$, $Sig.<0.01$), monthly household income ($F=7.693$, $Sig.=0.006<0.01$), and age ($F=2.901$, $Sig.=0.021<0.05$) have a significant influence on dependent variable newspaper. Living city (62.2%) is the most important characteristics, followed by monthly household income (20.0%), occupation (8.2%), and age (5.3%). Gender and education have not significant affection on dependent variable newspaper.

3.2.2 Magazine

The result of ANOVA shows that the regression model on magazine has statistical significance at the 0.01 level ($F=2.600$, $Sig.<0.01$). From table 2, we can see that occupation ($F=11.032$, $Sig.<0.01$), education ($F=19.720$, $Sig.<0.01$) and age ($F=4.858$, $Sig.<0.01$) produce significant influence on dependent variable magazine. The three demographic characteristics breakdown in descending order of importance are as follows: education (55.6%), occupation (32.7%), age (11.6%).

From table 2, we can know that gender, living city and monthly household income have not significant affection on choice of consumers on magazine.

Table 2: Results of Regressions of Consumer Characteristics on Media Choice (N=2 343).

Media	Characteristics	ANOVA	Beta	df	F	Sig.	Importance
Newspaper	Gender	F(16, 2 326) =3.210 Sig.=0.000	.022	1	1.063	.303	.015
	Living city		.114	2	29.476	.000	.622
	Occupation		-.054	6	5.929	.000	.082
	Education		-.018	2	.625	.536	.028
	Age		.036	4	2.901	.021	.053
	Income		-.059	1	7.693	.006	.200
Magazine	Gender	F(19, 2 323) =2.600 Sig.=0.000	.033	1	2.405	.121	.013
	Living city		-.020	2	.825	.438	-.024
	Occupation		.071	6	11.032	.000	.327
	Education		-.101	5	19.720	.000	.556
	Age		.046	3	4.858	.002	.116
	Income		-.008	2	.144	.866	.012
TV	Gender	F(15, 2 327) =2.108 Sig.=0.008	-.028	1	1.799	.180	.078
	Living city		-.078	1	13.747	.000	.416
	Occupation		.050	6	5.416	.000	.153
	Education		-.066	4	9.063	.000	.200
	Age		.027	2	1.721	.179	.071
	Income		.032	1	2.345	.126	.081
Internet	Gender	F(23, 2 319) =16.133 Sig.=0.000	.011	1	.311	.577	-.004
	Living city		.053	2	6.917	.001	.060
	Occupation		.161	6	52.029	.000	.331
	Education		-.221	5	91.927	.000	.524
	Age		.084	6	18.557	.000	.062
	Income		-.047	3	5.598	.001	.027
Automobile exhibition	Gender	F(16, 2 326) =2.479 Sig.=0.001	-.049	1	5.413	.020	.187
	Living city		.052	2	5.700	.003	.228
	Occupation		.060	6	8.227	.000	.264
	Education		-.054	4	6.099	.000	.228
	Age		.014	1	.473	.492	.026
	Income		.047	2	4.972	.007	.068

3.2.3 TV

The result of ANOVA of regression model on TV shows that the model is statistically significant at the 0.01 level (F=2.108, Sig.=0.008). Living city (F=13.747, Sig.<0.001), occupation (F=5.416, Sig.<0.001) and education (F=9.063, Sig.<0.001) produce significant influence on dependent variable TV. The three characteristics are put in descending order of importance as follows: living city (41.6%), education (20.0%), and occupation (15.3%). Moreover, from table 2 we can know that gender, age and monthly household income have not significant affection on dependent variable TV.

3.2.4 Internet

The result of ANOVA of regression model on Internet shows that the model is statistically significant at the 0.01 level (F=16.133, Sig.<0.001).

From table 2, we can see that living city (F=6.917, Sig.=0.001), occupation (F=52.029, Sig.<0.001), education (F=91.927, Sig.<0.001), age (F=18.557, Sig.<0.001) and monthly household income (F=5.598, Sig.=0.001) produce significant influence on dependent variable Internet. Owing to table 3, we can know that education (52.4%) is the most important of the five characteristics, followed by occupation (33.1%), age (6.2%), living city (6.0%) and monthly household income (2.7%). Gender is only characteristic which is not statistically significant in this case of Internet.

3.2.5 Automobile Exhibition

The result of ANOVA of regression model shows that the model on automobile exhibition is statistically significant at the 0.01 level (F=2.479, Sig.<0.01). From table 2, we can see that consumers' gender (F=5.413, Sig.=0.020<0.05), living city (F=5.700, Sig.=0.003<0.01), occupation (F=8.227,

Sig.<0.001), education (F=6.009, Sig.<0.001) and monthly household income (F=4.972, Sig.=0.007 <0.01) produce significant influence on their choice on automobile exhibition. The five characteristics are ranked in descending order of importance as follows: occupation (26.4%), education (22.8%), living city (22.8%), gender (18.7%), and monthly household income (6.8%). Age has not significant impact on dependent variable automobile exhibition.

4 SUMMARY AND CONCLUSIONS

The study focuses on the media choice of Chinese consumers in obtaining purchasing information about miniature automobile and on the influence of their demographic characteristics on the media choice. The results show that Chinese consumers mainly choose newspaper, TV, and automobile exhibitions to obtain purchasing information about miniature automobile. Chinese consumers appear not to prefer magazine to gain advertising information about miniature automobile.

The study finds that the demographic characteristics of Chinese consumers produce a significant impact at the 0.01 level on whether consumers select newspaper, magazine, TV, Internet, or automobile exhibition as a medium of obtaining purchasing information. Of all six characteristics variable, living city, occupation and education are the three most important characteristics which affect the media choice. Gender has not significant influence on almost all media choice of consumers.

The results provide substantial implications for miniature automobile manufacturers which face advertisement decision. If an automaker intends to select a medium from various media for advertising, newspaper or TV should first be considered. Another implication derivable from this study is that manufacturers should conduct a classification on consumers according to their living city, occupation or education characteristics. Manufacturers should integrate several media to publish advertising information suitable for the consumer categories. For example, if they consider to use newspaper, TV or Internet for advertising, automakers should chiefly focus on the appeals of consumers living in the city of middling size, or individual-enterprise or partnership-enterprise employer doing pioneering work or consumers with a low education level in advertising design of Chinese miniature automobile.

This study is somewhat limited in the sense that the sample is confined to consumers entering the shop of dealer and having intention to purchase miniature automobile, therefore, our results are only a first step toward understanding Chinese miniature automobile consumers. A more comprehensive survey that focuses on all consumers of automobile in China should be conducted in the future. If so, a more representative sample could be obtained. By the new sample, a contrast could be done on the media choice between consumers of miniature automobile and consumers of other automobile categories.

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