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Consumer preference for supermarket food sampling in China

Abstract: Food sampling has become a prominent promotion tool in Chinese supermarkets which aims at attracting consumers and inducing purchases. The study focuses on probing latent factors that influence consumer preference for sampling. Based on an in-person survey yielding 1,139 usable responses conducted in Nanjing City of China, a simultaneous equation model with a three-stage least square (3SLS) estimator is employed to control for endogeneities of sampling preference and consumer trust. Results show consumer preference for sampling are decided by respondent demographic characteristics, social capital factors and the level of consumer trust in the food system. The only significant external factor is consumers' perception of price having a negative influence on the sample decision.

Keywords: Sampling, Supermarket, Preference, Trust

1. Introduction

In the late 1990s and early 2000s, supermarkets achieved a rapid diffusion in developing countries, most prominently China. China is the third diffusion wave followed by South America, East Asia (outside China) wave in the early 1990s and Central America, Mexico and Southeast Asia wave in the mid-1990s (Minten and Reardon, 2008). The supermarket revolution has a faster spreading speed in China than other countries due to China-specific policies. A local newspaper in 1998 in Nanjing, China which leads a brisk and steady pace of supermarket opening offered this description:

Suddenly, like a spring wind, big and small supermarkets are almost everywhere. In just the past four or five years, over thirty supermarket companies and six or seven hundred branches of supermarkets have arrived. (Lu and Zhen, 1998)

Data from Planet Retail, a leading retail data service who tracks more than 7000 retail companies in 211 countries, shows the sales of top five supermarket chains in China have grown more than 10 fold from 2001 to 2009 (Reardon, Timmer, and Minten, 2012). As a result of the rapid growth of supermarkets, evidence indicates

that this growth has brought a great challenge to traditional food retail system in developing countries by exerting impacts on consumer shopping behavior, food quality and price, diet diversity (Reardon et al., 2010).

In China, with the increase in residents' income and awareness of food safety over the past two decades, supermarkets have gradually become a main venue for consumer shopping. Compared with traditional farmers markets in China (He 2005), supermarkets attract more and more consumers due to the advantages in food quality and reliable branding, and it is believed that supermarkets will get a bigger food market share in the future (Chen 2013, Zhou 2003). For Chinese urban consumers, weekly, one-stop food shopping trips in supermarkets have become more common compared to daily shopping trips to "farmers market" around neighborhoods (Veeck and Burns, 2005; Veeck, Yu, and Burns, 2010).

Faced with diversified food displayed within supermarkets, inexperienced consumers are easily confused by supermarket information. Meanwhile, supermarket managers and food suppliers tend to rely on various promotion tools to induce purchase and to build buyer loyalty (McNeill, 2006). Specific marketing communications frequently applied in food retail have turned out to be effective following two central elements, advertising and sales promotions(Buil, de Chernatony, and Mart nez, 2013). Monetary promotions include price discounts and coupons(Palaz ón-Vidal and Delgado-Ballester, 2005), and non-monetary promotions include complimentary gifts, sampling, sweepstakes, contests, loyalty reward programs, etc.(Buil et al., 2013; Palazon and Delgado - Ballester, 2009). Researchers have studied advantages and intrinsic disadvantages of these marketing tools. Food product advertising helps build brand image and generate word-of-mouth communication about the product, but always comes with a considerable cost and exaggerated effect on teenagers (Hawkes, 2008; X. Lu, Ba, Huang, and Feng, 2013). Making available coupons is effective in attracting potential consumers and increasing consumers' routine purchase of an product, but coupons' value can be depreciated due to an expiration date leading to a high opportunity cost of redeeming(Barat, Amos,

Paswan, and Holmes, 2013; Q. Lu and Moorthy, 2007). Discount supermarkets that provide food at a lower price may have a positive influence on enhancing repeat purchases for price-sensitive consumers but also raise the concern of perceived inferior quality(Gottschalk and Leistner, 2013; Palazon and Delgado - Ballester, 2009). Receiving a free gift with a purchase may increase product sales by increasing the value of transaction when a consumer perceived uncertainty is managed in the promotion campaign. The research is mixed on whether a free gift is beneficial or detrimental for brand image and future purchase (Laran and Tsiros, 2013; Raghubir, 2004).

With respect to sampling, the initial objective is to enhance consumer familiarity with a particular branded product (Lammers, 1991). Sampling tends to develop a positive effect on consumers' purchasing. As a unique promotional technique which allows consumers to get access to a sensory trial of products before making purchase decisions (Marks and Kamins, 1988), sampling has been proven to increase store traffic, improve product image (Bettinger, Dawson, and Wales, 1979), generate word of mouth advertising (Meyer, 1982), create awareness at the point of purchase and increase repeat purchases (Heilman, Lakishyk, and Radas, 2011; Lammers, 1991; Valette-Florence, Guizani, and Merunka, 2011; Wu, 2010). The sampling experience may create a hedonic perception about sampled products, category and even improve the market's image (Chandon, Wansink, and Laurent, 2000; L. Chen, Parcell, and Moreland, 2016; McGuinness, Gendall, and Mathew, 1992).

In the past decades, sampling has become an emerging promotion tool in Chinese food retail settings, especially in supermarkets, which is gradually taking place of traditional monetary promotions (Shi, Cheung, and Prendergast, 2005). However, there is limited research focus on advocating and analyzing benefits of conducting sampling campaigns in a qualitative way. Empirical studies are needed to scrutinize Chinese consumer preference for food sampling to fill the research gap when taking Chinese consumers characteristics, social economic elements, and food safety concerns into account. The current study uses consumer information collected during a food sampling campaign conducted in a Chinese supermarket setting. A field study was carried out in two representative supermarkets in Nanjing City, People's Republic of China, to collect data on consumer preference, pre- and post-sampling decision criteria and consumer trust during food sampling promotions. Three different kinds of representative foods were considered. The findings of this study relate valuable insights for supermarket managers and food suppliers on managing effective sampling promotions.

2. Research hypotheses

This study addresses how latent factors influence Chinese supermarket consumers' preference for offered samples. Thus in this scenario, two major dimensions that need to be taken into account are individual consumer features and food system background.

Due to a scarcity of empirical research on supermarket food sampling, generalized conclusions are difficult to extract. Previous research focus has been casted on important effects of sampling promotions in both the short term and long term on purchase rate, product and store image, word of mouth, consumer valuation and learning (Amor and Guilbert, 2007; Dey, Lahiri, and Liu, 2013; Holmes and Lett, 1977; Lammers, 1991). Consumer behavior toward sampling decision are impacted by several indirect and latent factors that generally are not clear. Consumers' preference and behavior are affected by external factors such as market brand, design and layout (Sorensen, 2009). It can be inferred that different supermarkets represent different consumer clusters differentiated in both personal characteristics and psychological cognition. Sampling effectiveness also varies with respect to different food categories. The first two hypotheses tested in the current study are:

Hypothesis 1a. Supermarket brand has a significant impact on consumer preference for sampling.

Hypothesis 1b. Consumer preference for sampling varies by food category.

In the field of market promotion research, many comparisons between monetary and non-monetary promotion tools have been studied. The inherent motivation is the perceived monetary benefit from price related promotions (Kim, Natter, and Spann, 2014). For example, in the promotion of organic food, consumers become more price sensitive and price has an inverted U-shape effect (Ngobo, 2011). Sampling effectiveness is considered to relate to product price (Wu, 2010). The next hypothesis to be tested is:

Hypothesis 2. Product price is a determinant of consumers' sampling decisions.

Akin to other promotion tools, consumers' participation in these marketing mix are influenced by individual features. Personal characteristics were compared between "samplers" and "non-samplers" to evaluate consumers' preference or proneness for promotional campaigns (Colombo, Bawa, and Srinivasan, 2003; Heilman et al., 2011; Swaminathan and Bawa, 2005). On one hand, consumer demographic characteristics are effective in examining interactions in consumer context (Raju, 1980), based on which generalized conclusions can be drawn to gain broader explanations. On the other hand, social capital describing an individual's engagement or involvement in a surrounding area is also regarded as a personal characteristic. An example of this is an internet-based social network. (Hawe and Shiell, 2000). Chen and Parcell (2016) found non-internet based social network interactions significantly contribute to a positive preference for sampling among consumers. The next two hypotheses involve socioeconomic factors and social interaction, and are specified as:

Hypothesis 3. Consumers' demographic characteristics impact the decision to sample. Hypothesis 4. Consumers' social networks have a significant impact on sampling decisions.

To be more specific, "trust" is the most prominent attitudinal element of social capital (Reeskens and Hooghe, 2008). In the Chinese supermarket setting, consumer trust in supermarket food system (hereinafter referred to as consumer trust) is an even more critical criteria that cannot be ignored due to the successive food scandals in the last decade. Food-related hazards have damaged consumer trust in China's food

system, which triggers worry about counterfeit and inferior quality food, and distrust in food information sources (Liu, Pieniak, and Verbeke, 2014). Following a lower level of trust, these negative perceptions about the food system will decrease consumers' interest in participating in a sampling campaign. As Chen and Parcell (2016) demonstrated, consumers' trust in a certain food system has a positive influence on sampling decisions. In other words, more trust leads to a higher propensity to accept food samples. In turn, samplers probably have more trust in food system relative to non-samplers. Thus, the next set of hypotheses to test are:

Hypothesis 5a. Consumers' trust have a positive impact on sampling decisions.

Hypothesis 5b. Sampling preference has a positive impact on trust.

As a social-economic variable, trust shares an interaction with personal characteristics. Demographic characteristics have been collected and tested in social-economics studies, which help differentiate consumer segments on the basis of perceived trust and food risk (W. Chen, 2013; Lin, 1995). In another way, social networks are a primary influencing factor that reveal consumer trust by moderating perceived privacy (Shin, 2010), and high public involved consumers are more exposed to food safety issues may generate a different trust. The following hypotheses synthesize the above arguments:

Hypothesis 6. Demographic characteristics significantly impact consumer trust.

Hypothesis 7. Social networks have a significant impact on consumer trust in food system.

3. Methodology

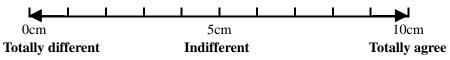
3.1 Measurement

The structural survey was designed following procedures used in previous studies. Open interviews with supermarkets managers, food suppliers and daily consumers were conducted. Survey questions asked were close-ended, while respondents were required to mark the most relevant response. Apart from multiple-choice questions, a visual analog scale was used to measure psychological related questions following the methodology of Wewers and Lowe(1990). Increased use of ultra-brief visual analog scales have demonstrated its reliability and validity in the subjective research area. (M. D. Miller and Ferris, 1993; S. D. Miller, Duncan, Brown, Sparks, and Claud, 2003). Visual analogue designed rank is used to measure respondent personality and respondent trust in the food system. These analog scale variables are coded and treated as continuous variables.

Social capital in our study is introduced through community and public participation themes (Wakefield and Poland, 2005). Social capital is measured by numbers of internet-based social networking websites (e.g., Facebook, Wechat) and non-internet social organizations (e.g., church, Peking Opera Amateur Union) (L. Chen et al., 2016; Fogel and Nehmad, 2009), and monthly shopping frequency. The final category captures to what extent a consumer is involved in supermarket shopping and therefore opportunities to interact with supermarket employees (L. Chen et al., 2016).

In our scenario, consumer trust consists of basic interpersonal trust and general trust in the food system (Poortinga and Pidgeon, 2003). As for interpersonal trust, a visual analogue design was used for respondents who were asked to respond to the following question (Reeskens and Hooghe, 2008):

"Generally speaking, would you say that most people can be trusted, or that you can't be too careful in dealing with people?" Please rank to what extent you are agree with this statement by marking on the 10 centimeter long scale:



3.2 Sample selection and data collection

A field study was designed to collect consumer's preference for food sampling in Chinese supermarkets in the city of Nanjing, which is a typical modernized and developed city having typical urban supermarket growth and changes in food shopping (Veeck and Burns, 2005). Cooperation was obtained from two different domestic supermarkets. To keep information confidential, the titles Supermarket A and Supermarket B were assigned. Both supermarkets were established in the 1990s. Supermarket B originated from Nanjing and has become a cultural element embedded in citizens' daily life over the last two decades. Supermarket B is highly exposed to citizens' lives and has a high penetration rate in communities. Consumers shopping in Supermarket A may have a higher propensity to accept offered samples because Supermarket A is a boutique supermarket providing high quality imported products. This kind of boutique supermarket has become a common format in developed cities in China, especially in the recent decade when food safety issues gained the public's attention. For each supermarket, A and B, respondent feedback was collected from two different store branches located in different districts of the city. Capturing respondent feedback from two different stores allows for consumer heterogeneity and ensures sample randomness (Heilman et al., 2011).

According to the supermarket managers at the stores where respondents were contacted, fresh fruits and yogurt are two main food categories promoted by sampling. Based on supermarket manager suggestions and preceding hypotheses, Red Pitaya (Red Dragon Fruit) was selected for sampling as a representative of fruit. An imported and a domestic yogurt were chosen for the study of respondent interest in sampling yogurt. The yogurts chosen include Emmi from Germany and the domestic yogurt Ambrosial. Ambrosial brand yogurt is from the domestic dairy giant Yili. Since the Chinese consumer has concerns with the domestic dairy industry and food safety issues (Wang, Mao, and Gale, 2008), the difference in willingness-to-sample between a domestic and imported product may yield interesting results.

The collection of respondent feedback occurred over a two week period in late April and early May 2016. The longer data collection period allows for sample size distributed randomly on workdays from Monday to Thursday with less supermarket use as well as shopping days from Friday to Sunday with higher supermarket use. A team of trained agricultural economics graduate student investigators were recruited to administer the face-to-face interview with patrons inside supermarkets. The duration of sample collection was consistent each day from 11 a.m. to 8 p.m. (the supermarkets' closing time is 9 p.m. on weekends), which makes it possible to capture broader clusters of consumers during peak supermarket usage hours. This includes popular shopping times like lunch and dinner times. Interviewers cooperated with promotion specialists around the booth where samples were displayed to attract and interact with consumers. Professional promotion specialists consisted of investigators from the research team and staff hired by supermarket or product supplier. In order to control sampling tactics were consistent across different supermarket stores and different product categories, an on-site training was organized to educate promotion specialists to promote product samples in a sanitary, friendly, and interactive way (L. Chen et al., 2016). Investigators screened consumers walking past the booth, offering complimentary samples to ensure consumers noticed these samples.

Investigators would choose every fifth consumer as a targeted respondent, allowing the individual the freedom to sample without recruitment. Investigators would follow up and intercept these customers to ask if they are willing to complete a questionnaire referring to their preferences of the sampling promotion. The respondents were given a 10 yuan coupon as an incentive to compensate for their opportunity cost. Of those customers intercepted, 74.6% of respondents accepted this offer.

Among 1,176 completed questionnaires, 96.8% were valid questionnaires making the final sample size 1,139, including 740 samplers who accepted complimentary food samples and 399 non-samplers who declined offered samples.

3.3 Variables and model

The purpose of data collection is to verify the hypotheses proposed above. Dependent and independent variables are specified in Table 1.

Name	Variable Description	s summary Non-sampler	Sampler	
SP	Sampling decision(0=Non-sampler,1=sampler)	35.03%	64.97%	
SUM	Supermarket(0=Supermarket B(557 in total), 1=Supermarket A)	0=51.38%	0=47.57%	
PCA	Product category-Pitaya(0=No, 1=Yes(575in total))	46.12%	52.84%	
PCB	Product category-Emmi yogurt(0=No, 1=Yes(280 in total))	25.31%	24.19%	
PCC	Product category-Ambrosial yogurt(0=No, 1=Yes(284 in total))	28.57%	22.97%	
G	Gender(0=Female(871 in total), 1=Male)	0=74.18%	0=74.70%	
А	Age	Mean=28.51	Mean=32.09	
ED	Education(1=Primary School, 2=Junior High School, 3=Senior High School, 4=Bachelor, 5=Graduate)	4=73.68%(Mode=4)	4=64.32%(Mode=4)	
HI	Household income	4=16.29% 6=16.04% 3=15.04% Mean=4.44	4=17.70% 6=15.14% 3=14.73% Mean=4.78	
ST	Monthly food shopping times	Mean=5.79	Mean=6.99	
ISO	Number of internet-based social capital	Mean=2.68	Mean=2.41	
NISO	Number of non-internet social capital	Mean=1.30	Mean=1.39	
PPBS	Price perception before sampling(1=Totally unreasonable, 7=Totally reasonable)	Mean=4.2	Mean=3.89	
PSN	Personality("-5"=Totally intrinsic, "+5"=Totally extrinsic)	Mean of Intrinsic=1.34 Mean of Extrinsic=2.33	Mean of Intrinsic=1.37 Mean of Extrinsic=2.36	
IPT	General interpersonal trust(0=Totally distrust, 10=Totally trust)	Mean=5.64	Mean=5.69	
TSF	Trust in supermarket food system(0=Totally distrust, 10=Totally trust)	Mean=6.83	Mean=7.06	
ATSF	Amended trust in supermarket food system(0=Totally distrust, 10=Totally trust)	Mean=6.49	Mean=6.59	

Table 1 Variable specification and statistics summary

PR	Number of cognized food scandals(Perceived risk)	Mean=6.96	Mean=7.03
SBF	Sickened by food experience(0=No, 1=Yes(195 in total))	14.54%	18.51%

Note: Sample size is 1,139.

The majority of supermarket consumers are prone to take the offered food samples following the random sampling approach outlined above. The sample size and samplers' ratio to non-samplers between the two supermarkets are similar. The allocated ratio of product categories between samplers and non-samplers are also distributed similar. In demographic aspects, food samplers tend to be female, have a relatively older age and higher household income. In social-economics dimension, samplers shop more frequently, place more trust in the supermarket food system, and are more cognizant of food scandals.

A simultaneous equation model is specified to assess the relationship between sampling preference (SP) and consumer trust (TFS), allowing for endogeneities of the two variables jointly(Cai, 2010). The simultaneous equation model also allows for modeling the fact that the binary endogenous variable "sampling decision" is explained by latent continuous variables(Heckman, 1977). The conceptual analysis in our context was developed in an identifiable two equation system as below:

Equation 1: SP = $\alpha_1 + (\beta_1 SUM + \beta_2 PCA + \beta_3 PCB) + (\beta_4 G + \beta_5 A + \beta_6 ED + \beta_7 HI)$ + $(\beta_8 ISO + \beta_9 NISO + \beta_{10} ST) + \beta_{11} PPBS + \beta_{12} TSF + \varepsilon_1$

Equation 2: TSF = $\alpha_{2+}(\rho_1 PSN + \rho_2 IPT + \rho_3 PR + \rho_4 SBF + \rho_5 ATSF) + \rho_{13} SUM + \rho_{14} SP + (\rho_6 G + \rho_7 A + \rho_8 ED + \rho_9 HI) + (\rho_{10} ISO + \rho_{11} NISO + \rho_{12} ST) + \varepsilon_2$

Equation 1 is specified to examine latent factors that impact consumer preference for sampling, which denotes a binary variable SP as the endogenous variable. Explanatory variables are classified in five dimensions: 1) control variables such as supermarkets (SUM) and food categories (PCA and PCB); 2) demographic characteristics; 3) social-economics variables including internet-based social networks (ISO), non-internet social networks (NISO) and monthly shopping frequency (ST) ; 4) economics variable described by consumers' perception of food price (PPBS); and 5) a trust variable.

Equation 2 is specified to assess variation in consumer trust in the supermarket food system. The variable SP is introduced into the equation to explore underlying interaction with TSF. Similarly, the variable SUM is included as a control variable. Demographic characteristics and social-economics variables are included as explanatory variables to account for respondent heterogeneity. Trust-related measurement refers to an individual's psychological attributes such as self-reported personality (PSN), general interpersonal trust (IPT), and control variables. The two control variables are risk perception of the food system (PR), experience that one has been sickened by food (SBF), and amended consumer trust in supermarket food system (ATSF)¹.

4. Empirical Results

A three-stage least square (3SLS) estimator is employed to allow for an asymptotically consistent and efficient estimator, for this technique aims at solving the potential for endogeneity by introducing the variables as instrumental variables (Dhrifi, 2015; Green, 2003). The program STATA is used to estimate the 3SLS estimator. The results presented in Table 2 provide coefficients for factors in the system of equations.

¹ Amended consumer trust in supermarket food system (ATSF) denotes a second rate of consumer trust in supermarket food system after taking cognized food scandals and sickened by food experience into account.

Sampling Decision (Yes = 1)			Trust in Food System (Totally Distrust=0, Totally Trust=10)		
Consumer trust	TSF	0.0216*	Sampling preference	SP	-1.2233*
	G	-0.0615*		G	0.1139
Demographic	А	0.0002**	Demographic	А	-0.0000
characteristics	ED	-0.0222	characteristics	ED	-0.1214*
	HI	0.0133**		HI	0.0359*
	ISO	-0.0376***	Social capital	ISO	-0.0176
Social capital	NISO	0.0262		NISO	0.0795
	ST	0.0050*		ST	0.0174**
	SUM	0.0371		PSN	0.0457**
Control factor	PCA	0.0071		IPT	0.0935**
	PCB	-0.0188	Trust measurement	PR	0.0019
Price perception	PPBS	-0.0549***		SBF	0.0371
	Constant	0.7580***		SUM	0.3205**
				ATSF	0.6490**
				Constant	2.8667**

Table 2 Results of Sampling and Trust Simultaneous Equation Model

Notes:*Statistically different at p<0.1;**Statistically different at p<0.05; ***Statistically different at p<0.01

Considering self-reported preference may be biased from actual behavior (Liu, Pieniak, and Verbeke, 2013), and distractions while tasting a food sample may influence subsequent choices (Shiv and Nowlis, 2004), we measured consumer preference for supermarket sampling with practical sampling decisions on accepting or declining food samples made by consumers independently.

Results show that consumer demographic characteristics have different significant impacts on sampling preference and consumer trust, in support of hypotheses H3 and H6. To be more specific, gender, age and household income are significant factors that differentiate samplers and non-samplers. Samplers who accepted the offered food samples tended to be female, older and higher income consumers. Females tend to be the main shopping decision-maker in the Chinese household, and high-income households can afford to be more cautious about purchases. Sampling offers consumers a good access to food before making a food purchase decision.

On the other hand, education and household income are significant influences to consumer trust in the Chinese food system. Higher education level is negatively related with consumer trust. Higher educated consumers are likely more informed about the food system and more aware of food safety issues (Liu et al., 2013). Consumers from high income families tend to perceive higher trust for they are more likely to buy hazard free food, green food and organic food that are perceived as superior quality(Liu et al., 2013).

Social capital refers to what extent a consumer is involved in the surrounding community and public (Wakefield and Poland, 2005). Respondent data shows monthly food shopping frequency has a significant positive effect on both willingness- to-accept samples and consumer trust. As for social networks, only internet-based social networks was found to be statistically significant and for consumer willingness-to-accept samples only. Because of recent food safety concerns in China, these consumers may be swayed by social media reports on food safety concerns. Social networks being not significant effective to consumer trust may reveal a need of Chinese government to organize information and social media delivery of prompting food safety, in which way consumer trust can be rebuilt and improved. H4 and H7 are partly supported.

By controlling sampling strategies and tactics through experimental design, we were able to take other external factors into account. Contrary to assumptions in hypotheses H1a and H1b, supermarket brand or food category is not a significant determinant to the choice of willingness-to-accept a sample. Thus, hypotheses H1a and H1b are rejected.

Price perception has a negative and statistically significant impact on respondent willingness-to-accept samples. Consumers have a higher possibility to taste the sample with a higher price. The results indicate a failure to reject hypothesis H2.

The higher the level of respondent trust in the food system, the more likely is the respondent's willingness-to-accept a sample. However, respondents'

willingness-to-accept samples has a negative impact on consumer trust. There may be a study bias involved with this result as respondents trust the researchers offering the sample, but may not trust the supermarket food system.

In the structure of trust measurement, three control variables are considered. The significance of "supermarket brand" indicates that consumers place higher trust in food system of Supermarket A which is a boutique supermarket supplying imported foods. Both cognition of food scandals and sickened-by-food experience are not significant, which is contradictory to the conclusions that risk perception will significantly decrease trust in food safety(M. F. Chen, 2008; W. Chen, 2013). An increase in amended trust in food system was measured after taking these two control variables into consideration, which is positive and statistically significantly related to original trust. Compared with low trust consumers, even after reviewing the cognized food scandals and considering sickened-by-food experience, high trust consumers rated amended trust again with relative higher scores. Personality significantly relates to consumer trust by revealing that extrinsic consumers possess more trust in supermarket food system. Extrinsic consumers opt to hold optimistic attitudes towards food safety issues and place more confidence in related food system(De Jonge, Van Trijp, Jan Renes, and Frewer, 2007). An increase in interpersonal trust level has a positive and statistically significant effect on improving food system trust. Based on our measurement, consumers who are willing to trust other people will also trust more in "institution", supermarket food system in this study.

5. Implications and outlook

Several conclusions and recommendations can be drawn from the preceding analysis. Consumer preference for food sampling discussed in our study presents a pragmatic reference for organizers of promotion campaign, such as supermarket managers and food suppliers by examining actual sampling decisions made by supermarket customers. Perception of product price varies among consumers with different financial background and budget limits, and not surprisingly, it is a determinant factor of sampling preference. By controlling other potential external factors in an experimental approach dealing with particular sampling techniques and a statistic approach dealing with supermarket brand and food category, we interestingly find to a great extent, sampling preferences are internally decided and not differentiated across different supermarket brands and food categories. Females and elderly consumers with high household income are more likely to perceive sampling as an effective way to explore food attributes. Social capital's influence in sampling preference gives us an important hint that frequent shoppers are more exposed to food samples may hold a positive attitude towards sampling. However, consumers highly involved in public internet-based social networks appear to be negative to food samples because of more portals to in-depth understanding of food safety concerns.

Consumer trust in the supermarket food system provides a meaningful explanation when decomposing sampling preference. Considering the spread of food safety issues in China, consumer perceived risk and trust play an important role in developing consumer preference and behavior. According to a 2005 investigation report on supermarket food safety status in China, dairy and fresh produce are two main categories carried with most food safety problems (Commerce Department 2005; Li 2007), and also, they are the main categories involved in sampling promotions. Consumers who trust the food system more are prone to accept a food sample instead of declining it. Interestingly, consumer trust is predominantly related to personal characteristics, such as education, income and personality. Obviously, shopping frequency represents consumer trust level, and more confidence and trust in a particular supermarket will drive consumers to conduct more shopping trips.

By looking into consumer preference for sampling, we are able to combine consumer attitudes and food safety concerns together. It is much easier to destroy consumer trust than to rebuild confidence and trust. As an effective component in marketing mix, sampling has become a common promotion and demonstration tool in Chinese supermarkets. Many studies have proved effective promotions help to induce new customers, increase purchase and build brand image. It will be a promising perspective to look at sampling's effect in rebuilding Chinese consumers' trust in the food system. Rebuilding trust by conducting sampling campaigns will be of great value for both the government and supermarkets for the retailing section plays the crucial role in connecting consumers and food systems directly.

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