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Publication Details

Lowe, A. & Worsley, A. (2003). "Social drivers" as predictors of yoghurt consumption in China. *Food Australia*, 55 (1-2), 42-44.

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"Social drivers" as predictors of yoghurt consumption in China

Abstract

A survey of yoghurt consumption by female consumers in Beijing showed 42% consuming often, 26% occasionally and 32% never. Consumers were generally younger and more driven by materialistic values than non-consumers. "Social drivers" are presented as a 1001 for marketers to predict the use of consumer products.

Keywords

drivers, social, yoghurt, china, predictors, consumption

Disciplines

Education | Social and Behavioral Sciences

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"Social drivers" as predictors of yoghurt consumption in China

A. Lowe & A. Worsley

A survey of yoghurt consumption by female consumers in Beijing showed 42% consuming often, 26% occasionally and 32% never. Consumers were generally younger and more driven by materialistic values than non-consumers. "Social drivers" are presented as a tool for marketers to predict the use of consumer products.

There has been much interest in the growth of food markets in the Asia Pacific region, particularly in East Asia (Buisson & Garrett 1996). It has been noted that consumers' purchasing power in the People's Republic of China for consumer goods represents approximately two thirds of the spending power of the East Asia region including Japan. This sort of observation has generated considerable excitement in the Australian and New Zealand business community

With the introduction of reform in 1978, the PRC government has gradually changed from a centrally controlled economy into one that is market based. This change has lifted the economic performance and standard of living for people in the PRC, particularly in the last ten years.

Anecdotal evidence suggests that many people are beginning to throw off the constraints of communism and are single-mindedly pursuing cash and pleasure. For example, in Shanghai and Beijing, there are no shortages of privately owned, imported, luxury vehicles on the city streets, or women dressed in fashions that would not be out of place in any major Western city. Exclusive discos and karaoke clubs, with high cover charges, are packed with young socialites, who patronise them regularly enough to have their own personal bottle of spirits labelled in racks above the bar. However, these factors have not been systemically researched and the lifestyle characteristics of consumers in the PRC remain relatively unexamined.

While demographic information is useful in sketching the outlines of consumer markets, other information is usually needed for producers to market their products effectively. Several researchers have shown that values and lifestyle criteria (hereafter referred to as social drivers) are important indicators of groups of consumers who are more likely than others to buy and consume particular products (eg Mitchell 1983, Holman 1984, Corfman & others 1991).

However, the factors which influence the purchase of food products, other than sensory perceptions, are relatively unknown. Grunert & others (1993) described and tested a Food Lifestyle model in Denmark which proposes a number of influences on food purchasing and consumption. Among them are consumers' personal values and interest in shopping and cooking, as well as abstract and concrete perceptions of the product, such as its 'nutritional' properties, and more tangible properties like price and quantity.

Even less is known about the influences of social drivers on Asians' food consumption. In a previous cross-cultural study we designed and tested a values inventory

which can be used to measure Asian as well as Western consumers (Lowe & Corkindale 1998). This research indicated that the differences in attitudes and perceptions towards various marketing stimuli (eg advertising themes, sales promotions) between Westerners and Chinese are associated with differences in cultural value systems.

More importantly, however, the values which influence these attitudes and perceptions, are more complex than just the differences in cultural values. While one set of values may influence attitudes and perceptions towards a particular marketing stimulus amongst Western consumers, there may be a totally different set of values for Chinese consumers for the same marketing stimulus. In other words, one cannot assume that the same set of values will influence two different groups of consumers' responses to the same marketing stimuli (Lowe & Corkindale 1998). It is, therefore, important to conduct research studies across different countries.

Yoghurt is an established product in China and appears to be rapidly increasing in popularity. Various foreign brands dominate the market and it is a product which more Australian and New Zealand companies could export to the PRC. In this paper we briefly describe a study which was designed to examine the influences of social drivers on the yoghurt consumption of Beijing women.

Method

The research was conducted in two stages:

Stage 1:

Seven focus group discussions were conducted. There were eight participants in each group. The aim for this phase of the research was to acquire in-depth knowledge of the social drivers and other factors likely to influence the consumption of foods. The results of the focus groups were used to refine the measuring instruments for Stage 2.

Stage 2:

Metropolitan Beijing was divided into eight census districts. Women (372) were selected from these eight regions through a proportional stratified random sampling technique. Respondents came from randomly selected streets and apartment blocks (or houses) in each of the regions in three age bands (18 to 29, 30 to 44 and over 44 years of age) with specific quota within each age band. Men were also selected but as their yoghurt consumption was influenced by a different combination of factors their findings will be reported elsewhere, as will findings relating to other foods.

Findings from the focus groups were incorporated into a questionnaire which was translated into Chinese. To check the accuracy of the translation, an independent person translated the new Chinese instrument back into English. The leaders of the interviewing teams piloted this new Chinese measuring instrument in Beijing, before the final version was produced.

Questionnaire

The interviewers administered the detailed questionnaire. It contained several sections:

Usual food intake: Respondents were asked to indicate their usual frequency of yoghurt consumption. The frequency scale was: never, monthly, once or twice a month, once a week, and several times a week. For the purpose of this analysis, respondents were classified into three categories: non-consumers (never), occasional consumers (once or twice a month or less often) and frequent consumers (weekly or more often).

Lifestyle activities: A series of items (derived from the focus group discussions in Stage 1) was presented. Respondents indicated how frequently they did each of the activities (eg karaoke/dancing, playing golf, dine out with friends) on five point scales (1 = Never to 5 = Several times a week). Patterns of activities were derived from factor analyses of the item responses.

Possessions: A list of common (eg bicycles) and relatively novel consumer goods (eg microwaves) was presented. Respondents indicated possession of these goods on two point scales (yes or no). Again categories of ownership were established through factor analysis.

Radio and TV program selection: Respondents were asked how often (1 = rarely to 5 = daily) they watched or listened to a variety of program types covering Chinese and foreign pop and classical music and films, news programs and documentaries.

Personal values: A 62 item inventory was developed based on the previous study of Chinese values (Lowe & Corkindale 1998). The items covered a variety of value types, eg materialism, respect for tradition, self assertion. Five point scales were used (1 = strongly disagree to 5 =

strongly agree) to express respondents beliefs in each proposition. Multidimensional scaling of these items derived eight scales. In the interests of brevity only those scales which discriminated between the three yoghurt consumption groups will be described here. Further details are available directly from the authors.

Analysis: The data were checked, coded and entered into computer files and verified. Contingency table analyses of the individual items by yoghurt consumption category were conducted. Subsequently, scales were derived from factor and multidimensional scaling analyses (as described above) and respondents' scores on these scales were compared between the three yoghurt consumption groups via discriminant analysis.

Results

Stage 1

The focus group discussions showed that Chinese consumers hold distinctive attitudes and beliefs about yoghurt. For example, nearly all the respondents indicated that yoghurt was nutritious and easy to digest. The majority of yoghurt eaters indicated that they had come to like yoghurt's sour taste. One woman noted that some schools served it to children to overcome their initial dislike of the product. Some middle-aged women believed that eating yoghurt enhanced one's beauty because of the germs involved. Some of them were concerned with the "use-by" date and seldom consumed it in summer because of possible deterioration.

The focus group discussions also strongly suggested that Chinese consumers tend to perceive foreign goods to be of higher quality than locally produced goods. Foreign brands of yoghurt were much more expensive than locally produced equivalents but more highly preferred.

Stage 2

Among the women respondents, 32% claimed to have never eaten yoghurt, while 26% ate it only occasionally and 42% consumed it once a week or more often (Table 1).

Table 2 indicates that higher proportions of consumers of yoghurt were younger than non-consumers, more of whom were over 44 years of age ($p < 0.0001$).

Further, a higher proportion of tertiary graduates (62%) consumed yoghurt when compared to non-tertiary educated women (38%; $p < 0.04$). On the other hand, there were no significant differences in household income among the three age groups.

Table 3 provides brief descriptions of the factors that are useful discriminators between the three age groups. These descriptions are based on factor and multi-dimensional scaling analyses. Further details are available from the authors.

Table 4 shows the respondents' mean scores on the scales presented in Table 3. It also shows the level of statistical significance associated with the differences between the three groups of women for each scale.

It appears that yoghurt consumers' lifestyles were congruent with their relative youth. They engaged more in social activities such as going out with friends or going to karaoke and dances. They also owned more luxury goods, and listened more often to pop music programs.

The differences in personal values between the yoghurt consumption groups were quite pronounced. Frequent and occasional consumers were more materialistic and had less respect for authority, family and traditional values.

Table 1. Frequency of yoghurt consumption of Beijing female consumers

Response	Frequency	
	%	N
Never	32	119
Occasional	26	97
Often	42	156
Total	100	372

Table 2. Frequency of yoghurt consumption of Beijing females by age group

Age (y)	Never (%)	Occas. (%)	Often (%)	Total (%)	N
18-29	18	29	53	29	(108)
30-44	27	29	44	35	(130)
>45	49	20	31	36	(134)
Total %	32	26	42	100.0	
(N)	(119)	(97)	(156)	(372)	

Figure 1 represents graphically the discriminant function which separated the three consumption groups. The scales which discriminated the three groups are represented above the horizontal line according to their discriminant coefficients on the function (an index of their discriminating power) and the centroids of the three groups (the multivariate means of the groups' scores on the scales) are shown below the line.

The discriminant analysis confirms that frequent and occasional consumers of yoghurt were more driven by materialism than the older non-consumers of yoghurt.

Discussion

The results indicate that we have developed a sensitive social drivers measuring instrument which can be used in Chinese markets. This measuring instrument could be used to predict the use of any category of consumer products.

In broad terms, the findings show that social drivers are useful constructs through which marketers can identify and describe their consumers. More importantly, however, social drivers provide marketers with an in-depth understanding of consumers that demographic information cannot provide.

In this study, the demographic data revealed only that frequent yoghurt eaters tend to be less than 44 years old and have received tertiary education. The social drivers, on the other hand, showed that these frequent yoghurt eaters tend to be self-oriented, materialistic and have less respect for authority, family and traditional values. They tend to spend more time in social activities, listening to pop music programs and own more luxury goods than non-eaters do.

Table 3. Description of key factors which discriminated between the three yoghurt consumption groups

Key Factors	CA*
Materialism, eg:	0.71
• It is more important to be wealthy than to be respected by others.	
• It is important to surround ourselves with luxurious/beautiful things.	
Family values, eg:	0.53
• Marriage is an essential part of our society.	
• It is important that one's behaviour does not bring shame to one's family name.	
Respect for authority, eg:	0.56
• One should always accept whatever one's teacher says without question.	
• I will always comply with the majority decision even if I do not agree with the decision.	
Respect for tradition, eg:	0.56
• I will protect my honour at all costs.	
• One should always be proud of one's country of origin.	
Personal luxuries, eg:	0.48
• Owning a Walkman or camera.	
Family luxuries, eg:	0.69
• Ownership of CD player, microwave, air conditioner.	
Social activities, eg:	0.68
• Dining out with friends, karaoke, dancing	
Pop music:	0.75
• Listening or watching Chinese or foreign pop music programs.	

* Cronbach's alpha which is a measure of the internal reliability.

This is useful information for the formulation of marketing plans. For example, it can be used in the design of advertising and promotional campaigns.

In addition, the focus group findings suggest the need for western marketers to take into account the very different perceptions that Chinese consumers hold about yoghurt.

Finally, the popularity of yoghurt amongst younger women (the post 1949 generation) combined with relative openness of the PRC consumers to all things "foreign" suggests that there is a prosperous market awaiting yoghurt exporters.

References

- Buisson, D & Garrett, A. 1996. In Worsley, A (ed). *Marketing Food Choice. Multi disciplinary Approaches to Food Choice*. Adelaide: Food Choice Conference.
- Corfman, KP, Lehmann, DR & Narayanan, S. 1991. Values, utility, and ownership: modelling the relationships for consumer durables. *J. Retailing* 67 (2): 184-204.
- Grunert, KG, Brunso, K & Bisp, S. 1993. Food-related life-style: Development of a cross-culturally valid instrument for market surveillance. MAPP Working paper No. 12, The Aarhus School of Business, Denmark.
- Holman, RH. 1984. A values and lifestyle perspective on human behavior. In Pitts, RE & Woodside, AG (eds). *Personal Values and Consumer Psychology*. Lexington Books. DC Heath and Company, Lexington, MA: 35-54.
- Lowe, ACT & Corkindale, DR. 1998. Differences in "cultural-values" and their effects on the responses to marketing stimuli: A cross-cultural study of Australians and Chinese from The People's Republic of China. *European J. Marketing* 32(9/10): 843-867.
- Mitchell, A. 1983. *The Nine American Lifestyles*, Macmillan, New York. □

Table 4. Comparisons of the mean factor scores of the three yoghurt consumption groups

Factors	Respondents' mean scores'			p'
	Never	Occas.	Often	
Pop music	2.32	2.79	2.86	**
Personal luxuries	1.55	1.69	1.68	****
Family luxuries	1.27	1.35	1.39	**
Social activities	1.27	1.46	1.48	***
Family values	3.71	3.60	3.50	***
Materialism	2.07	2.32	2.43	****
Authority	3.06	2.79	2.86	***
Tradition	3.93	3.88	3.81	*

+ Respondents' mean scores on the scales expressed as mean ratings.

Statistical significance levels of differences between the groups: *p<0.05, **p<0.01, ***p<0.001, etc.

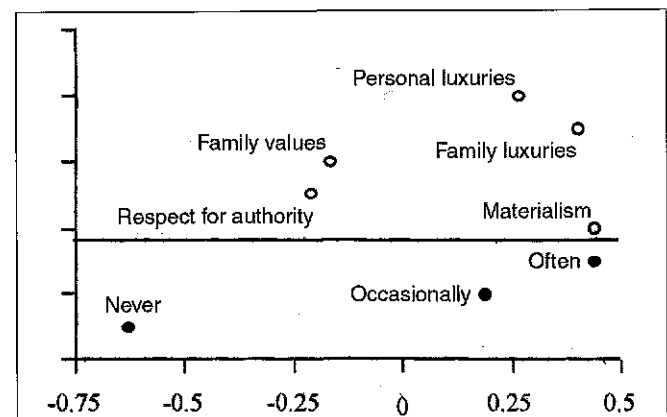


Figure 1. Graph of the function derived from discriminant analysis