

Personal Life Styles and Willingness to Pay on Salt Consumption

Hsu-Ju Teng and Chi-Feng Lo

Abstract—This study aims to investigate the relationship of personal lifestyles and willingness to pay on salt consumption. Focus groups and the survey on a sample of 649 valid Taiwanese consumers, who had purchased Himalayan salt within 1 month. Results indicated that when consumers were more concerned about luxury attribute of salt consumption, their willingness of pay is even higher; product knowledge contributes insignificant moderating effects on personal lifestyles and willingness to pay. The main contribution of this study applied the theory of food imprinting and revealed that short-term external forces (e.g., product knowledge) are ineffective in making any changes when consumers recognize a product as high-priced. And consumer perceived the “Luxury” delivered based on their personal lifestyles and further influenced their willingness to pay on salt consumption.

Index Terms—Personal lifestyle, product knowledge, salt consumption, willingness to pay.

I. INTRODUCTION

In modern times, the concept of health has attracted increasing attention. This phenomenon is even more prominent as food safety issues become more widely discussed. Consumers have become aware of the importance of a healthy diet and are increasingly prudent with their purchase of seasoning. However, studies on the consumption of seasoning are rare, despite seasoning being a part of consumers’ diets. Neglecting seasoning prevents researchers from comprehensively exploring the influence of consumers’ dietary habits on their health. Studies on food consumption habits have frequently addressed personal lifestyle and willingness to pay, but have rarely discussed consumers’ willingness to pay for seasoning. Novel food affect consumers’ willingness to choose what they want to eat more than food they are familiar with do [1]–[3]. Because Himalayan salt is a new seasoning that is unfamiliar to Taiwanese consumers, they consider it a high-end ingredient. Consumers have been prompted to select healthy and nonpolluted food to ensure dietary safety because of increased environmental protection and health awareness. Himalayan salt is sold at a much higher price than its counterparts, which discourages potential buyers. Further exploration is required to determine whether consumers’ willingness to purchase Himalayan salt, which is characterized by its high retail price and novelty, can be explored using the notion of personal lifestyle examined in previous studies. The primary objective of this study was to

investigate the relationship between personal lifestyle and willingness to purchase Himalayan salt.

Studies have posited product knowledge as a crucial factor influencing consumer decision-making [4], [5]. Piha *et al.* (2016) first addressed the relationship between food neophobia, product knowledge, and purchase intention. Based on the perspective of consumer information processing, they proposed that product knowledge reduces consumers’ unfamiliarity with novel food and improves their understanding of the products, thereby increasing consumers’ purchase intentions [6]. This study argued that Himalayan salt is a novel product among Taiwanese consumers. Therefore, improving consumers’ product knowledge increases their understanding of Himalayan salt, which in turn affects the relationship between personal lifestyle and willingness to pay. However, the aforementioned argument has not been empirically examined and requires further discussion. Therefore, the second research question of the present study was whether product knowledge moderates the relationship between consumers’ personal lifestyle and their willingness to pay for Himalayan salt. Seasoning are a vital part of consumers’ diets. However, existing studies have rarely discussed the seasoning market, especially the high-priced and novel products, and have not investigated factors influencing consumer purchases. Based on consumer information processing, this study provides further explanation of consumers’ Himalayan salt purchasing decisions by addressing product knowledge, personal lifestyle, and willingness to pay. This compensates for the inadequacy of existing studies.

II. LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

A. Personal Lifestyle

Personal lifestyle refers to a way and style of living. Racial, religious, and cultural factors contribute to individual differences [7]. Kelly (1955) first proposed the concept of lifestyle based on her personal construct theory, which advocates that individuals’ internal world changes with their external environment. Individuals express their way of living through activities, interests, and opinions. Existing studies have reported a strong correlation between lifestyle and consumer characteristics, which facilitates the implementation of communication strategies by business operators [8]. Jang, Kim, and Bonn (2011) discussed the characteristics of Generation Y consumers when choosing environmentally friendly restaurants by dividing consumers into four groups according to food-related lifestyles. Differences in characteristics and behavioral intentions regarding environmentally friendly restaurant choices

between different consumer groups were explored [9]. Previous studies divided consumers into two groups based on their lifestyles to discuss the purchasing behavior of various consumers in online specialty stores. Consumers with different lifestyles had significantly different online shopping attitudes, subjective norms, perceptual control, socioeconomic background, and individual behavior (e.g., online shopping behavior). To summarize the aforementioned studies, business operators may conduct market segmentation and distinguish target customers according to product characteristics and personal lifestyles.

B. Willingness to Pay

Willingness to pay is defined as the maximum amount of money a consumer is willing to pay for a product [10]. Batte, Hooker, Haab, and Beaverson (2007) mentioned that consumers' price premiums increase with the amount of organic ingredients in a product [11]. For example, a product containing 100% organic ingredients carries an additional price premium of US\$0.45 (1/3 of the original market price). The price premium decreases when the amount of organic properties (e.g., absence of pesticides, nongenetically modified, and local production) decreases. A product containing less than 70% organic properties carries an additional price premium of US\$0.15. Ureña, Bernabéu, and Olmedac (2008) discussed the differences between men and women in their attitudes toward purchasing organic food and their willingness to pay for such products [12]. Zhang and Wu (2012) evaluated the willingness of Chinese people to pay for green electricity. Xu, Zeng, Fong, Lone, and Liu (2012) explored seafood pollution incidents in China and efforts to rebuild consumers' confidence in seafood safety and to understand their willingness to pay for seafood with a green label [13].

Individuals have different lifestyle focuses. For example, when purchasing seasoning, some consumers value convenience, some focus on senses, and some prioritize health. Because consumers have different emphases, their willingness to pay also vary. Himalayan salt is a seasoning characterized by novelty and high price. Thus, this study postulated that the diversity in personal lifestyle significantly affects consumers' willingness to purchase Himalayan salt. Accordingly, the following hypothesis is proposed.

H1: Willingness to purchase Himalayan salt varies according to consumers' personal lifestyles.

C. Product Knowledge

Product knowledge refers to consumers' consciousness of specific information concerning a given product [14], [15], including their experiences with actual purchase or product use [16] and how they process such information [14]. Scholars have confirmed that product knowledge affects consumers' purchases [14], [17], [18]. Most of these studies have applied subjective knowledge [19], [20], objective knowledge [19], and experience-based knowledge as measurement tools. Moreover, studies have suggested that product knowledge affects consumers' intention to purchase a product [17], [18] and that varying levels of product knowledge result in different consumer behaviors [16], [21] considered different degrees of familiarity with products to

constitute varying levels of product knowledge, thus affecting consumers' purchase intentions. Scholars have also indicated that consumers with more product knowledge are more familiar with certain products and tend to use intrinsic cues (e.g., physical products) to evaluate product attributes and quality. By contrast, consumers with less product knowledge tend to rely on extrinsic cues (e.g., attributes or prices) when making purchase decisions.

According to this description, product knowledge exerts positive effects on consumers' purchasing behavior and intention, and the lack of relevant product knowledge can affect consumers' decision-making. Because Himalayan salt is a rare seasoning in Taiwan, we inferred that Taiwanese consumers lack subjective and objective knowledge of Himalayan salt. This study hypothesized that enhanced product knowledge would familiarize consumers with Himalayan salt and prompt them to evaluate product attributes and quality according to its utility, thus increasing their willingness to pay. Accordingly, the following hypothesis is proposed.

III. METHOD

A. Research Framework

H2: Product knowledge strengthens the relationship between personal lifestyle and willingness to pay.

This study mainly discussed the influence of Himalayan salt on consumers' personal lifestyle and willingness to pay. Fig. 1 illustrates the research framework, which was established on the basis of the aforementioned literature.

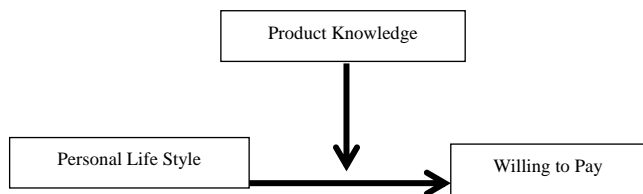


Fig. 1. Research structure.

B. Participants and Methods

In this study, consumers in the metropolitan areas of northern, central, and southern Taiwan were surveyed. We planned to distribute 700 questionnaires at supermarkets, public leisure squares, department stores, and farmers' markets. Designated personnel were assigned to assist consumers with questionnaire completion, which involved face-to-face, one-on-one, two-way communications. During the survey, consumers who had used Himalayan salt were prioritized. The survey was divided into three stages: first, the participants were introduced to the research objective and topic. Subsequently, designated personnel were on standby to provide assistance as the participants completed the questionnaire. Finally, after completing the questionnaire, participants were given a gift, and the safety of the gift was explained to them. Because the sample number of the region stratification variables was already controlled, convenience sampling was performed. A total of 660 questionnaires were distributed, of which 11 were invalid and removed, resulting

in 649 valid samples returned. This study collected 288, 175, and 186 valid responses from northern, central, and southern Taiwan, respectively, with a valid response rate of 98%.

C. Definition and Evaluation of Research Variables

The questionnaire comprised three sections: the first section asked about product knowledge; the second section asked how consumers' personal lifestyle associated with Himalayan salt; and the third section asked about consumers' willingness to pay for Himalayan salt. The product knowledge section was developed based on the research of [22]; the personal lifestyle scale was established based on the research of Jang, Kim, and Bonn (2011); and finally, the contingent valuation method was applied to develop the

willingness to pay scale [9], [23]. Respondents were asked to answer each questionnaire item by checking the box that best reflected their willingness to pay for Himalayan salt on a 7-point Likert scale (0%, 1%–30%, 31%–60%, 61%–90%, 91%–120%, 121%–149%, and 150% or higher). In addition, SPSS 18.0 and AMOS 20.0 were used to perform reliability and validity analysis, descriptive statistics, exploratory factor analysis, and hierarchical regression analysis for data collection. The reliability and validity results (Table I) indicated that the dimensions yielded an overall reliability value of approximately 0.7 or higher, implying that the questionnaire data were reliable. The construct reliability of the questionnaire also satisfied the required standard [24].

TABLE I: RELIABILITY AND VALIDITY TESTS

Variables/items	Factor loading	Cronbach α	AVE	CR			
Product Knowledge							
1. I am very familiar with Himalayan salt	0.630	0.896	0.5012	0.8332			
2. I am an experienced user of Himalayan salt	0.647						
3. I can provide others the suggestion about Himalayan salt	0.754						
4. I can compare the difference between various Himalayan salt	0.750						
5. I feel I know a lot about Himalayan salt	0.748						
Personal Lifestyle							
Health							
6. I will consider my health to choose the food I eat	0.599	0.859	0.4174	0.8085			
7. I am willing to try to seasoning or receipt introduced from magazine or TV	0.539						
8. I often eat natural or healthy food	0.698						
9. When I choose the food I eat, I will consider the nutrition value	0.778						
10.I like to eat in a healthy restaurant with my friends	0.679						
11.I will compare the brand when I buy seasoning	0.549	0.3163	0.732				
Luxury							
12.The seasoning I bought is a premium product	0.598						
13.I will buy seasonings in specific stores	0.574						
14.I believe the more expensive Himalayan salt is of better quality	0.680						
15.I will compare product labels to choose the most nutritious food	0.5	0.34	0.6726				
16.I like to buy seasonings in specialty stores because I can get advice from professionals	0.458						
17.I don't mind buying expensive seasoning	0.537						
Sensory							
18.Product information helps to buy seasoning	0.608						
19.Eating outside is part of my eating habits	0.595	0.4441	0.7927				
20.When choosing food, my priority will be food taste	0.596						
21.Eating is sensory enjoyment (touch, smell, taste and sight)	0.530						
Assessable & promotion							
22.I often buy seasonings in stores	0.492						
23.I am not interested in buying seasoning*	0.543	0.831					
24.Advertising messages can help to buy better seasonings	0.593						
25.I usually eat frozen and ready-to-eat food at home	0.831						
26.Since I don't need to spend time cooking, I will choose ready-to-eat food	0.801						

Notes: N=649. CR, composite reliabilities; α , Cronbach's α ; AVE, average variance extracted. All CFA factor loadings are significant at $p < 0.01$

IV. RESULT AND ANALYSIS

A. Descriptive statistics

The demographic variables revealed that the following results: Women accounted for 67% of the total respondents; most respondents were aged 21–30 years (33%), followed by those aged 31–40 years (23%); most respondents' average individual monthly salaries ranged from NT\$20,001 to NT\$40,000 (35%), followed by those with salaries less than NT\$20,000 (32%); most respondents were students (26%) or service industry workers (26%); most respondents had an educational level of college (64%); and 52% had purchased Himalayan salt before.

B. Main Factors of Personal Lifestyle

Few studies on personal lifestyle have performed factor analysis to address willingness to purchase seasoning (e.g., Himalayan salt). In this study, a 21-item personal life style scale was applied to investigate seasoning purchases, and factor analysis was conducted. Based on the analysis results, five factors influencing seasoning purchase in personal

lifestyles were identified: health, cost, sense, convenience, and sales promotion. Because few items related to convenience and sales promotion were included, they were combined into one factor, namely convenience–promotion (Table II).

C. The Interference Effect of Product Knowledge

In this study, the four main factors of personal lifestyle (i.e., health, cost, sense, and convenience) were addressed and regression analysis was performed to explore the influence of personal lifestyle on willingness to pay. Model 1 revealed that sex, region, and marital status did not significantly affect willingness to pay (Table III). The four main factors of personal lifestyle were incorporated into model 2, and only cost significantly and positively affected willingness to pay ($\beta = 0.316, P < 0.05$). Subsequently, we explored the interference effect of product knowledge on the relationship between personal lifestyle and willingness to pay. The product knowledge factor was incorporated into model 3 to examine the interaction between the variables; the results revealed that the influence of personal lifestyle on

willingness to pay for Himalayan salt was not significantly influenced by product knowledge ($\beta = 0.058, P > 0.05$).

TABLE II: EXPLORATORY FACTOR ANALYSIS OF PERSONAL LIFE STYLE

	Factors				
	Health	Luxury	Sensory	Assessable	Promotion
1. The seasoning I bought is a premium product		.703			
2. I often buy seasonings in stores					.450
3. I will consider my health to choose the food I eat	.631				
4. Product information helps to buy seasoning			.496		
5. I will buy seasonings in specific stores		.591			
6. I believe the more expensive Himalayan salt is of better quality		.808			
7. I will compare product labels to choose the most nutritious food		.485			
8. Eating outside is part of my eating habits			.683		
9. When choosing food, my priority will be food taste			.762		
10. I like to buy seasonings in specialty stores because I can get advice from professionals		.490			
11. I am willing to try to seasoning or receipt introduced from magazine or TV	.598				
12. I often eat natural or healthy food	.812				
13. When I choose the food I eat, I will consider the nutrition value	.863				
14. I like to eat in a healthy restaurant with my friends	.790				
15. I am not interested in buying seasoning*					.616
16. Advertising messages can help to buy better seasonings					-.537
17. I don't mind buying expensive seasoning		.529			
18. I will compare the brand when I buy seasoning	.520				
19. I usually eat frozen and ready-to-eat food at home				.905	
20. Since I don't need to spend time cooking, I will choose ready-to-eat food				.863	
21. Eating is sensory enjoyment (touch, smell, taste and sight)			.642		

TABLE III: EXPLORATORY FACTOR ANALYSIS OF PERSONAL LIFE STYLE

Dependent variables: willing to pay	Model1	Model2	Model3
Step 1			
Constant	2.647***	1.300***	1.300***
Gender	-0.04	-0.03	-0.029
Area	-0.02	-0.02	-0.02
Marriage	0.06	0.02	0.021
Step 2			
Health(H)		0.065	0.065
Luxury(L)		0.316***	0.316***
Sensory(S)		0.024	0.024
Assessable& Promotion (A&P)		-0.031	-0.031
(H)x(L)		0.149	0.149
(L)x(S)		0.075	0.075
(S)x(A&P)		-0.001	-0.001
(H)x(S)		0.072	0.072
(H)x(A&P)		0.02	0.02
(L)x(A&P)		-0.048	-0.048
(L)x(S)x(A&P)		0.006	0.006
(L)x(H)x(A&P)		0.037	0.037
(H)x(S)x(A&P)		0.036	0.036
(L)x(H)x(S)x(A&P)		0.051	0.051
Step 3			
Product Knowledge(PM)			0.058
(PM)x(H)			0.095
(PM)x(L)			-0.046
(PM)x(S)			0.118
(PM)x(A&P)			-0.038
	N=649	N=649	N=649
	R ² =0.006	R ² =0.101	R ² =0.120
	△ R ² =0.001	△ R ² =0.077	△ R ² =0.089

Note: * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

V. DISCUSSION

Because of increased health awareness, consumers have begun to focus on seasoning purchases. Few studies have discussed consumers' seasoning purchase intentions, and the applicability of studies to address a novel and high-priced seasoning (e.g., Himalayan salt) remains questionable. Therefore, this study provided a detailed explanation of consumers' purchase decisions regarding Himalayan salt by addressing product knowledge, personal lifestyle, and willingness to pay. The present results revealed that only cost positively and significantly affected willingness to purchase Himalayan salt, and product knowledge did not significantly influence the relationship between personal lifestyle and willingness to purchase. That is, the higher the advertised cost of Himalayan salt, the more money consumers are willing to spend on it. Improvements in product knowledge did not significantly affect consumers' willingness to pay.

According to the theory of consumer information processing, when consumers' knowledge of a novel product increases, they become more familiar with the product [25], which in turn increases their purchase intention [6]. However, the empirical results of this study revealed that consumers were unwilling to pay a higher price for Himalayan salt despite improved product knowledge. This study adopted the perspective of food imprinting to explain this phenomenon. Because consumers have an established perception that Himalayan salt is a high-priced seasoning, considerable time and effort are required to change consumers' food consumption habits [26]. Because consumers have accepted the "luxury" of Himalayan salt, their perception of Himalayan salt can hardly change.

This study applied literature on personal lifestyle and willingness to purchase to address seasoning purchases. Specifically, when discussing high-priced and novel products, we applied the theory of food imprinting and revealed that short-term external forces (e.g., product knowledge) are ineffective in making any changes when consumers recognize a product as high-priced. Based on the empirical results, the following managerial implications may serve as references for conducting marketing operations: Based on the perspective of food imprinting, managers are suggested to design comprehensive marketing strategies at the initial stage of marketing for a product to leave the preferred impression during consumers' initial exposure to the product. Furthermore, this study identified a positive relationship between the cost of Himalayan salt and willingness to pay. That is, regardless of the completeness of information, consumers still based their purchasing decisions on how expensive a product is. Marketers are advised to advertise the expensiveness of such high-priced, novel food to increase consumers' willingness to pay.

A. Research Limitations and Future Study

Due to that Himalayan salt is a high-priced seasoning that is less affordable to consumers in general, the short-term questionnaire surveys conducted in metropolitan areas of northern, central, and southern Taiwan may have resulted in

common-method variance; thus, the results should be generalized with caution. These results suggested that future studies should include stratification variables applicable to other fields. Furthermore, although various types of seasoning are available, this study only discussed Himalayan salt; therefore, researchers are advised to include other seasoning, such as commercial vinegar, black pepper, and chili sauce, in their research.

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