

FACTORS AFFECTING PURCHASE INTENTION FOR VEGETARIAN DIET OF ELDERS IN NORTHEASTERN THAILAND

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ABSTRACT

This research aims to study the factors affecting purchase intention of vegetarian diet of elders in northeastern Thailand. The research methodology of this research is mixed method approach: qualitative and quantitative research, respectively. Primarily, in-depth interviews are conducted with 7 nutritionists and dietitians, and 7 business persons. The data obtained used to create questions for the questionnaire. The sample size of quantitative research are 400 elders in northeastern Thailand. The statistical tools used are percentage, mean, frequency, Independence sample t-test, ANOVA F-test, and Multiple Regression Analysis. The results show that product attribute (brand, packaging, price, claim, appearance, smell and taste) and perceived value (perceived acquisition value and perceived transaction value) have significant effects on purchase intention. However, label and texture have no significant effect on purchase intention. In addition, there is a significant different purchase intention between elders who never purchase vegetarian diet and those who used to purchase before.

Keywords: Vegetarian diet, Purchase intention, Product attribute, Perceived value

Introduction

According to the Department of Older Persons (2003), elder refers to a Thai person aged 60 years or above. The world's population is aging, especially Eastern and South-Eastern Asia. Thailand is one of the Southeast Asian countries that has a lot of elderly people. It has become an 'ageing' society since 2005 and it is expected to become an 'aged' society in the near future. About 16.73% of the total population are aged citizens (Department of Provincial Administration, 2019). Indeed, the region that has the highest number of elders is northeastern Thailand, which is about 3,250,975 elders. Since getting older leads to several diseases, proper eating can be a healthy behavior to prevent them. Moreover, many experts agree that food and health are

connected. Vegetarian diet is one of the most nine popular trends of healthful diet rated by experts. They state that vegetarian diet can lower body weight and suffering from disease, and increase tendency to have long life expectancy (Nordqvist, 2017). Although there are various types of vegetarian food, this research only studies the lacto-ovo-vegetarian one. It is a food that excludes meat, but it can include dairy products and eggs. Eating vegetarian diet regularly and properly helps cure and prevent some diseases, such as high cholesterol, blood pressure, coronary artery disease, some cancers, fat and diabetes. For this reason, the changing of population ageing is a major challenge for many businesses, such as restaurant, because elderly customers will become a massive target market. Kasikorn

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Research (2018) reveals that purchasing healthy food and beverage is one of the purposes of elderly people's spending. Therefore, this research is conducted to study this issue.

Purposes of the Research

1. To study the demographic factors and dining patterns affecting purchase intention for vegetarian diet of elders in northeastern Thailand

2. To study the different purchase intention between elders in northeastern Thailand who never purchase vegetarian diet and those who used to purchase

3. To study the product attribute of vegetarian diet affecting purchase intention of elders in northeastern Thailand

4. To study the perceived value of vegetarian diet affecting purchase intention of elders in northeastern Thailand

Conceptual Framework

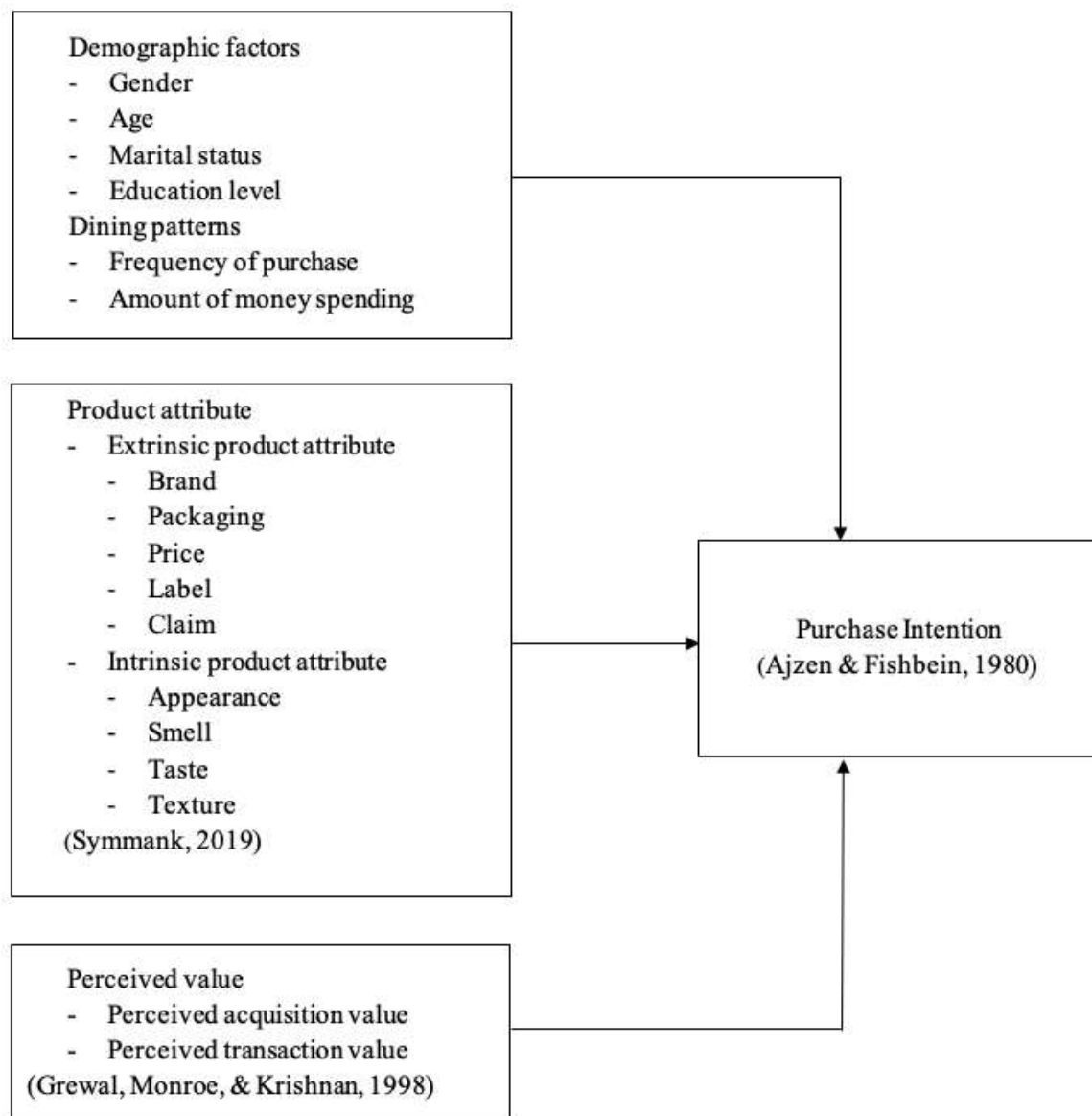


Figure 1 Conceptual framework

Research Scopes

1. Scope of content: independent variables are demographic factors, dining pattern, product attribute, and perceived value, and dependent variable is purchase intention.
2. Scope of population: the qualitative research is conducted with nutritionists, dietitians, and business persons while the quantitative research is conducted with Thai elderly people living in northeastern region.
3. Scope of location: the research is conducted in northeastern Thailand (20 provinces).
4. Scope of the period of time: the in-depth interviews are conducted from May to June 2019 and the questionnaires are distributed and collected from Nov 2019 to Jan 2020.

Research Contributions

This research is conducted to provide the understanding of factors effecting elderly people's intention to purchase vegetarian diet in northeastern Thailand. The results of the research can be used as guidelines for small and medium restaurant owners to create the healthy menu for elders and to formulate attractive vegetarian diet to target elderly customers. Besides, the results can be a reference for future research of scholars.

Methodology

The population of qualitative research is unknown. The researcher has therefore decided to select 7 nutritionists and dietitians and 7 business persons to conduct the in-depth interviews. Each interviewee is interviewed approximately 20 minutes per person. The data is then analyzed into theme and sub-themes.

The population of quantitative research is 3,250,975 elders (aged 60 years or above). Thus, the sample size is 400 elders calculated by Taro Yamane's formula (Yamane, 1967) at 95% confidence level. Further, the samples

are divided into 2 groups: (1) elders who never purchase vegetarian diet and (2) elders who used to purchase before. The multi-stage sampling is applied by (1) stratifying population into 20 provinces and (2) calculating their proportion to fit the number of sample size. Lastly, (3) the convenience sampling is used to randomly pick out elderly people until it reaches the desired number. The research instrument is questionnaire survey which consists of 4 parts: (1) demographic factors and dining pattern (2) product attribute (3) perceived value and (4) purchase intention. The overall Cronbach's alpha of the question is 0.920 which is a very high-level of reliability. The data obtained is processed in the Statistic package for social science for windows program (SPSS) by Enter method and analyzed by descriptive statistics (percentage, mean, and frequency) and inferential statistics.

Conclusions

The qualitative research results show that elderly vegetarian diet provides both advantage and disadvantage. Owing to the fact that older people mostly have problems with teeth as well as digestion, they can eat less than usual. Moreover, getting older leads to various serious diseases, such as high cholesterol, blood pressure, diabetes, fat, risk of some cancers, and risk of coronary artery disease. However, many nutritionists and dietitians confirm that consuming vegetarian food regularly and properly can help cure and prevent those diseases. Appropriate elderly vegetarian diet should be similar to non-vegetarian one. If it is a take-away food, food packaging should be attractive. Label and claim should provide important information about the food, such as ingredients, nutrients, or health-related condition. Price should be affordable and balance with the quantity. Food appearance should be delectable. Taste

and smell should be neutral. Herbal scent is also favorable for some elders. Although monosodium glutamate is a popular flavor enhancer to bring out the savory taste, it damages health. As a result, restaurant should add it as least as possible. Food texture should be soft so that it is easy to chew, swallow, and digest. Nevertheless, some menu cannot be too soft because it looks mushy. In order to promote customer's perceived value, restaurants should balance between food price and quantity. Customers will perceive value when they realize that they are getting money worth. To satisfy customers, restaurants may pay attention to food taste, price, or service. Some restaurant applies promotional tactics to stimulate sales.

The quantitative research results show that gender, age, marital status, and education level do not affect purchase intention for vegetarian diet. On the contrary, frequency of purchase and amount of money spending per time significantly affect purchase intention. There is also a significant difference purchase intention of elders who never purchase vegetarian diet and those who used to purchase before. Additionally, product attribute (brand, packaging, price, claim, appearance, smell and taste) and perceived value (perceived acquisition value and perceived transaction value) have significant effects on purchase intention. However, label and texture have no significant effect on purchase intention.

Discussions

The research results will be discussed based on the research framework as follows:

First of all, there is no significant different purchase intention for a vegetarian diet of elders in northeastern Thailand who have different gender, age, marital status, and education, at a significance level of 0.05. This means that elderly people in northeastern

Thailand who have different gender, age, marital status, and education levels have similar levels of purchase intention for a vegetarian diet. This result is consistent with the study of Ruangkalapawongse and Ruangkalapawongse (2015) which studied the factors related to purchase intention of functional food for elderly people in Bangkok metropolis. They found that personal factors did not have a significant relationship with purchase intention of functional food products. In terms of dining patterns, there is a significantly different purchase intention for vegetarian diets of elders in northeastern Thailand who have different levels of frequency of purchase and different amounts of money spent per time. Elderly people who have never purchased and paid for a vegetarian diet will have less purchase intention than those who have. This result is consistent with the study of Sangsawang (2016) which confirmed that money spent per time significantly affected purchase intention.

Secondly, product attributes (brand, packaging, price, claims, appearance, smell, and taste) have a significant effect on purchase intention for vegetarian food. Brand attribute has a significant effect on purchase intention for vegetarian food. This result is consistent with the study of Monaco, Cavella, Iaccarino, Mincione, and Masi (2007) which found that brand name was one of the important attributes driving consumer choice.

Packaging attributes have a significant effect on purchase intention for vegetarian diets. Most of the respondents prefer colorful packaging as well as natural packaging. This result is consistent with the study of Younus, Rasheed and Zia (2015) which found that product packaging had a positive correlation and significant effect on purchase intention. Price also has a significant effect on purchase intention for vegetarian diets. Elders in

northeastern Thailand consider purchasing vegetarian diets at affordable prices. This result is consistent with the study of Tsalis (2020) which recently found that price significantly affected intention to purchase of suboptimal food in the near future.

Claims attribute has a significant effect on purchase intention for a vegetarian diet. Most of the respondents want to know whether the food is appropriate for their health condition before consuming it. This result is consistent with the study of Kozup, Creyer, and Burton (2003) which found that health claims significantly affected customer attitudes about the product and their purchase intention. Positive nutritional information, such as reducing risk of disease, also led to a positive attitude towards the product and high intention to purchase.

Appearance has a significant effect on purchase intention for a vegetarian diet. Elders in northeastern Thailand tend to purchase vegetarian food that is similar to non-vegetarian food in terms of appearance. This result is consistent with the research of Curvelo (2019) which confirmed that sensory appeal including appearance and taste affected customer purchase intention of organic food in Brazil.

The smell has a significant effect on purchase intention for vegetarian diets. This result is consistent with the study of Anggie and Haryanto (2011) which found that a favorable scent significantly and positively affected approach behavior, experiential marketing, and purchase intention. Customers would visit the store longer as well as purchase more products when there was a favorable scent.

Taste has a significant effect on purchase intention for vegetarian diets. This result is consistent with the study of Wong, Hsu, and Chen (2018) which found that taste and

texture significantly affected purchase intention for suboptimal food in Taiwan.

However, label attribute and texture attribute have no significant effect on purchase intention for a vegetarian diet.

Lastly, perceived value has a significant effect on purchase intention for vegetarian food.

Perceived acquisition value has a significant effect on purchase intention for a vegetarian diet. This means that a net gain for elders in northeastern Thailand through consuming a vegetarian diet can significantly influence their intention to purchase. Elderly people usually evaluate the total benefits of food that they are consuming. If they realize that they are getting their money's worth for a vegetarian diet, they will highly intend to purchase it.

Perceived transaction value has a significant effect on purchase intention for vegetarian food. This means that satisfaction from consuming a vegetarian diet at a special price deal or reduced sale price can significantly influence intention to purchase for the vegetarian diet of elders in northeastern Thailand. When elderly people purchase vegetarian food at a promotional price, they will perceive additional value beyond that provided by acquisition value and the happiness of knowing that they can save money from a price-deal. This result conforms with the study of Amarukachoke (2015) which studied the factors influencing purchase intention of cup yogurt in Bangkok and found that purchase intention would be high when there were discounts and promotional prices. Therefore, customer purchase intention of cup yogurt was influenced by perceived transaction value between actual selling price and discount price. Lately, Tsalis (2020) studied the relationship between price and purchase intention of suboptimal foods. The finding

showed that promotional prices increased customer intention to purchase.

Recommendations

1. Elderly vegetarian diet should be similar to non-vegetarian one in terms of appearance. The food can be naturally colorful by adding several vegetables, such as purple sweet potato and so on. Some types of restaurants have to decorate food plates to add more value, such as fine dining, casual or family dining, and café or bistro.
2. For fast casual and local vegetarian shop, take-away food should be packed in an attractive packaging. Natural material can be used as a container sometimes, such as banana leaf. However, banana leaf is not suitable for soup. Only fried food and dried food should be packed.
3. Price of elderly vegetarian diet should be affordable. However, it can be set based on cost of production. Fine dining vegetarian restaurants may set higher price due to their premium quality of ingredients.
4. Smell of vegetarian diet for elders should be herbal scent. Some popular herbs are Chinese chives, Thai sweet basil, galangal, turmeric, Ginger, holy basil, garlic, and so on.
5. Taste of vegetarian diet for elders should be similar to non-vegetarian one and be neutral. Restaurant can use soy sauce instead of fish sauce. However, it should be used a little because of high level of sodium.
6. To promote perceived acquisition value, restaurants should promote the benefits getting from eating elderly vegetarian diet,

such as getting better health condition and reducing risk of diseases (high cholesterol, diabetes, coronary artery disease, high blood pressure, and fat). For example. The benefits can be shown on restaurant menus or posters posted at the restaurant. Moreover, balancing between price and quantity of food can help customers perceived acquisition value because they get their money's worth.

7. To promote perceived transaction value, special discount should be given because elderly customers will perceive additional value of vegetarian diet when they can purchase it lower than the actual price. However, the promotional campaign should be simple to understand by elderly customers.

Suggestions for Future Research

1. Future research should be conducted across Thailand because there are differences in each part of Thailand in terms of demographic factors, dining pattern, and purchase intention. For this reason, the future research will obtain new data to create appropriate vegetarian diet that fits for each area.
2. Future research should study the influences of other independent variables on purchase intention for vegetarian diet of elders, such as health consciousness, environmental concern, attitude, customer knowledge, brand awareness, subjective norm, perceived behavioral control or advertising
3. Future research should be conducted with other populations and sample groups because most of consumers are becoming more health-conscious nowadays.

References

- Ajzen, I., & Fishbein, M. (1980). *Understanding attitudes and predicting social behavior*. Englewood Cliffs, New Jersey: Prentice-Hall.
- Amarukachoke, T. (2015). *Factors influencing purchase intention towards cup yogurt*. Independent Study, Graduate School, Bangkok University.

- Anggie, C., & Haryanto, J. O. (2011). Analysis of the effect of olfactory, approach behavior, and experiential marketing toward purchase intention. *Gadjah Mada International Journal of Business*, 13(1), 85-101.
- Curvelo, I. (2019). Purchase intention of organic food under the influence of attributes, consumer trust and perceived value. *Revista de Gestão*, 26(3), 198-211.
- Department of Older Persons. (2003). *The act on the elderly, B.E. 2546 (2003 A.D.)*. Retrieved from http://www.dop.go.th/download/laws/regulation_th_20160807155130_1.pdf
- Department of Provincial Administration. (2019). *The statistical data of elderly people in Thailand in 2017*. Retrieved from http://www.dop.go.th/download/knowledge/th1580099938-275_1.pdf
- Grewal, D., Monroe, K. B., & Krishnan, R. (1998). The effect of price-comparison advertising on buyers' perception of acquisition value, transaction value, and behavioral intentions. *Journal of Marketing*, 62(2), 46-59.
- Kasikorn Research. (2018). *Elders market: Golden opportunity of Thai SME*. Retrieved from https://www.kasikornbank.com/th/business/sme/KSMEKnowledge/article/KSMEAnalysis/Documents/Aging-Market_SME-Treasure_2018.pdf
- Kozup, J. C., Creyer, E. H., & Burton, S. (2003). Making healthful food choices: The influence of health claims and nutrition information on consumers' evaluations of packaged food products and restaurant menu items. *Journal of Marketing*, 67, 19-34.
- Monaco, R. D., Cavella, S., Iaccarino, T., Mincione, A., & Masi, P. (2007). The role of the knowledge of color and brand name on the consumer's hedonic ratings of tomato purees. *Journal of Sensory Studies*, 18(5), 391-408.
- Nordqvist, C. (2017). *Nine most popular diets rated by experts 2017*. Retrieved from <https://www.medicalnewstoday.com/articles/5847.php>
- Ruangkalapawongse, A., & Ruangkalapawongse, S. (2015). Factors related to decision making to buy functional food products for senior citizens in the Bangkok metropolis. *Suan Dusit Research Journal*, 11(2), 77-94.
- Sangsawang, C. (2016). Factors affecting purchase intention of consumer in collagen dietary supplements Pattaya City. *Sripatum Chonburi Journal*, 13(1), 49-56.
- Symmank, C. (2019). Extrinsic and intrinsic food product attributes in consumer and sensory research: literature review and quantification of the findings. *Management Review Quarterly*, 69(1), 39-74.
- Tsalis, G. (2020). What's the deal? Consumer price involvement and the intention to purchase suboptimal foods: A cross-national study. *Food Quality and Preference*, 79. Retrieved from <https://doi.org/10.1016/j.foodqual.2019.103747>
- Wong, S. L., Hsu, C. C., & Chen, H. S. (2018). To buy or not to buy? Consumer attitudes and purchase intentions for suboptimal food. *International Journal of Environmental Research and Public Health*, 15(7), 1431.

- Yamane, T. (1967). *Elementary sampling theory*. New Jersey: Prentice-Hall.
- Younus, S., Rasheed, F., & Zia, A. (2015). Identifying the factors affecting customer purchase intention. *Global Journal of Management and Business Research: An Administration and Management*, 15(2), 9-14.