FACTORS AFFECTING PURCHASE INTENTION OF BANANA
POWDER MIXED WITH STEVIA IN BANGKOK AND
PATHUM THANI PROVINCE

Sutima Sornjakr¹
Nuttapon Srisawat²
Tarakorn Pongpanya³
Panisa Mechinda^{4*}
Purinat Yamakanith⁵

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ABSTRACT

The objectives of this research were to study 1) demographic characteristics affecting purchase intention of instant banana powder mixed with stevia and 2) marketing strategies affecting purchase intention of instant banana powder mixed with stevia among consumers in Pathum Thani Province. It is quantitative research using online questionnaire. The total sample size was 209 selected by purposive sampling. The statistics employed were Percentage, Mean, Standard Deviation, One–Sample t-test, Independent Samples t-test. The results showed that demographic characteristics of people who like to eat instant banana powder live in Bangkok, Pathum Thani and surrounding provinces. Most of them are female (62.07%), under 24 years old (47.78%) and single (48.77%). They have their family income are 18,001-50,000 baht (42.80%). With regards to hypothesis testing, the results indicated that demographic characteristics did not affect consumers' purchasing intention of instant banana powder mixed with stevia. The reason could be the fact that banana power is a commodity product. Thus, all consumers regardless of their gender want for their health. Furthermore, demographic characteristics (income) did not affect consumers' intention to buy because the price of instant banana powder is affordable for both high and low income consumers.

Keywords: Instant Banana Powder, Purchase Intention, Consumption Behavior, Stevia

¹²³⁴ Faculty of Business Administration, Rajamangala University of Technology Thanyaburi, Thailand.

^{*}Corresponding author email: panisa_m@rmutt.ac.th

Introduction

Bananas are considered one of the main crops in this fascinating group of horticultural crops. It is a fruit that Thai people have known for a long time, along with Thailand originating in Southeast Asia. Humans are known to consume food widely. Bananas are one of the most important fruit trees in the world's fruit market, grown in more than 130 countries and planted as a tree in fences or around other planting plots. Kluai Nam Wa has better qualities than other types of bananas and other planting plants in many respects, such as being easy to grow, easy to bear fruit, easy to find varieties, easy to sell, starting to have a higher price, and can also be processed as well (Kham Ai, 2011).

According to Thai herbal textbooks, Kluai Nam Wa can be used to make medicine both raw and cooked. In particular, raw bananas contain tannins, which are astringent substances that can inhibit the growth of bacteria as well. Therefore, protecting the stomach wall and the intestines from germs and spicy things also helps to cure diarrhea (Channgao, 2018). The history of the former Fungkajorn Garden began as a single farming practice but later turned to mixed farming, also known as organic farming without using any chemicals. The garden has a total area of 20 rai and sells organic vegetables, processed food products, namely: 1) Sunbathed Banana and 2) Raw Banana Powder. The problem with Fungkajon Garden is that it is not well known among consumers. The package of instant banana powder is of poor quality and the label is not up to standard. Instant Banana Powder is a new herb that has emerged to help relieve gastritis, gastroesophageal reflux disease, gastric ulcer coating, and diarrhea. It might not inhibit these symptoms but at least cause gastric symptoms to be cured and reduce the need to rely on antibiotics too much (Sirikan, 2020).

From the above information, the study factors, which are product, price, distribution channel, and marketing promotion, that will affect the intention to buy instant banana powder mixed with stevia and create brand awareness, in order to use the information obtained as a guideline for enterprise entrepreneurs to develop or improve marketing strategies in accordance with the needs and behavior of consumers.

Research objectives

- 1. To study demographic characteristics affecting consumers' purchasing intention of instant banana powder mixed with stevia in Pathum Thani province.
- 2. To study marketing strategies that affect consumers' purchasing intentions of instant banana powder mixed with stevia in Pathum Thani province.

Research hypothesis

Hypothesis 1: Demographic characteristics (gender) affecting consumers' purchasing intention of instant banana powder mixed with stevia in Pathum Thani province are different.

Hypothesis 2: Demographic characteristics (income) affecting consumers' purchasing intention of instant banana powder mixed with stevia in Pathum Thani province are different.

Conceptual Framework

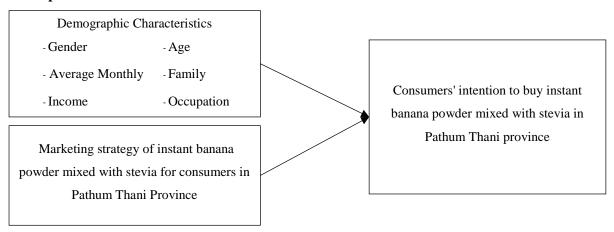


Figure 1 Conceptual framework

Literature review

Demographic theory

Ngamlamom (2015) referred to demographic characteristics as the diversity of a person's background, including gender, age, status, body structure, seniority at work, etc. They will show the history of the individual from the past to the present. In various departments or organizations that consist of employees or personnel at various levels, the differences in behavior and expression are caused by differences in the demographic or background of the individual. Meanwhile, Sereerat (1995) gave the definition of population characteristics as the demographic that consists of gender, age, family status, education level, occupation, and income. It is an important aspect that helps determine the target market.

Purchase intention theory

Apichayasakul (2015) referred to what marketers can study such as consumer brand loyalty or repeat purchase behavior of consumers. Brands can be determined based on the order of brand selection, preference, purchase proportion, and expected situational factors. Meanwhile, Das (2014) stated that purchase intention is an attempt by consumers to purchase goods and services. It depends on many factors such as brand, supplier, and time of purchase. It is an enjoyable experience, such as satisfaction. Purchase intention directly affects the volume of purchases of goods and services from distributors. The purchase intention of the consumer usually occurs after the consumer is aware of the usefulness and the value of products and services. In addition, purchase intention influences outcome of purchasing behavior through the purchase volume.

Marketing Strategy Theory

Kotler (1997) said that marketing strategies means the basis method on which a business unit is used to achieve its marketing objectives. It consists of making decisions in the target market, product positioning, marketing mix, and the level of marketing expenses. From this definition, it indicates a mixture of marketing strategies, which consists of steps, namely, decision-making in the target market, which will decide the correct target, size, structure and behavior of the target market. Those information

must be analyzed first and then the market segmentation is performed to determine the target market selection and analyze product positioning, then determine the marketing mix and costs marketing to suit that target market.

Related research

Petcharasiri (2017) conducted a research study on the herbal use behavior of people in Khao Khitchakut district, Chanthaburi province. The behavior of using medicinal herbs in the sample group was used infrequently in descending order. The herbs are used to treat the respiratory system and gastrointestinal tract, heal the skin, and for urinary tract disease. The use of herbal sachets emphasizes the convenience of using them, reasonable price, and satisfaction with herbs, respectively. The proposal of the people in Khao Khitchakut district is to conserve herbs and establish an herbal club to generate income for people in the community, to publicize the wisdom of using herbal sachets, and to arrange for herbs to be listed in the list of common household drugs, respectively.

The research result also corresponds to MuangChang (2016), which conducted a study on factors related to the behavior of using herbs for self-care of people in Mae Chai district. The study results found that most of the people used herbs for self-care at a low level, 87.7 percent, with 24.53% of the respondents choosing herbs to treat or relieve respiratory symptoms, followed by herbs for treatment or relief of other illnesses such as gastro-intestinal symptoms, skin manifestations, and urinary tract symptoms, respectively. Individual factors were congenital disease and educational level. It was statistically significant at the .05 level. The leading factors were knowledge about the use of herbs in self-care and attitudes towards using herbs for self-care. This was statistically significant at the .05 level. The contributing factor is that the channels for obtaining herbs were statistically significant at the .05 level. At the .05 level, special media coverage and media coverage about the use of herbs were statistically significant.

Research methodology

This research uses a combination between qualitative research by using in-depth interviews and quantitative research by using a questionnaire to collect data from people who have bought or eaten herbs to relieve gastritis. A total of 209 people of sample group were analyzed by using statistics: 1) descriptive statistics: frequency, standard deviation, percentage; and 2) inferential statistics, reference statistics: One Sample t-test, Independent Sample t-test as follows:

The target population is male and female aged 18 - 74 years, live in Bangkok and Pathumthani. A person who has bought or eaten herbs to relieve gastritis symptoms or gastroesophageal reflux disease by using the formula for calculating the sample in the case of unknown population. The error was 7% and the variance was 50% and the confidence level was 95% as follows.

$$n = \frac{Z^2(PxQ)}{e^2}$$

$$= \frac{1.96^{2}(50*50)}{7^{2}}$$

$$= \frac{3.84(50*50)}{7^{2}}$$

$$= \frac{9,600}{49}$$

$$= 195.92$$

As a result, the sample size was approximately 196. However, in order to achieve the complete and valid data, the researchers distributed 220 online questionnaire (or 10% additional to the required sample size). This resulted in valid 203 sample.

Research results

Objective 1: To study demographic characteristics affecting consumers' purchasing intention of instant banana powder mixed with stevia in Pathum Thani province.

Demographic Characteristics

The general characteristics of the respondents who have bought or eaten herbs to relieve gastritis are as follows: Most of them live in Bangkok (69.95%). In terms of gender, most of them are female (62.07%), male (37.93%). In terms of age, most of them are Gen Z (under 24 years old) (47.78%), Gen Y (aged 24 - 39 years) (28.57%), Gen X (aged 40-55 years) (19.21%) and the Baby Boomer group (age 56-74 years) (4.43%). In terms of status and household characteristics, most of them were single, (48.77%), single married (19.21%), and divorced (0.99%).

In terms of education, most of them had a bachelor's degree or equivalent (59.61%), a bachelor's degree (30.54%), and a higher bachelor's degree (9.85%). With regards to occupation, most of them were students (45.81%), business owners (24.63%), company employees (18.72%), government or state enterprise officers (7.88%), and others (2.96%). In terms of household income/month, most of them earned between 18,001-50,000 baht (42.80%), 18,000 baht or less (39.60%), 50,001-85,000 baht (12.20%), and 85,001 baht or more (5.40%), respectively.

Hypothesis Testing

Hypothesis 1: Consumers who have different demographic characteristic (gender) have different purchase intention instant banana powder mixed with stevia.

Table 1 presents the analysis of consumers' purchasing intention of instant banana powder mixed with stevia in Pathum Thani Province classified by demographic characteristics (gender) using Independent Samples t-test statistics.

Factors Affecting Intention to	Gender	N	Mean	SD	F	Sig.	t	df	Sig.
Buy Instant Banana Powder									(2-tailed)
1. Benefits of instant banana	female	126	4.12	.796	4.377	.038	512	201	.610
powder	male	77	4.18	.928			493	142.231	.623

Table 1 presents the analysis of consumers' purchasing intention of instant banana powder mixed with stevia in Pathum Thani Province classified by demographic characteristics (gender) using Independent Samples t-test statistics. (Cont.)

Factors Affecting Intention to	Gender	N	Mean	SD	F	Sig.	t	df	Sig.
Buy Instant Banana Powder									(2-tailed)
2. Instant banana powder mixed	female	126	4.15	1.012	.121	.729	216	201	.829
with stevia makes you want to	male	77	4.18	.956			219	167.928	.827
buy.									
3. Attractive packaging	female	126	4.45	.776	.588	.444	505	201	.614
	male	77	4.51	.681			521	176.741	.603
4. Attractive labels and logos	female	126	4.52	.735	2.491	.116	.755	201	.451
	male	77	4.43	.895			.720	137.339	.472
5. The price of the product is	female	126	3.46	1.171	.238	.626	-1.428	201	.155
reasonable.	male	77	3.70	1.159			-1.432	161.992	.154
6. There is a service to order	female	126	3.67	1.011	.379	.539	713	201	.477
instant banana powder mixed	male	77	3.78	1.021			711	159.470	.478
with stevia online via Facebook									
Fan page.									
7. There are various promotions	female	126	4.25	.903	.620	.432	.369	201	.713
such as buy 10 times get 1 jar of	male	77	4.21	.800			.380	175.597	.705
raw banana powder free, but if									
you buy 3 jars or more, free									
delivery is available.									

According to Table 1, all significant values were greater than .05. Thus, it can be concluded that female and male consumers had no difference in mean valves.

Hypothesis 2: Consumers who have different demographic characteristics (income) have different purchase intention of instant banana powder mixed with.

Table 2 Presents the analysis of consumers' purchasing intention of instant banana powder mixed with stevia in Pathum Thani Province classified by demographic characteristics (income) using Independent Samples t-test statistics.

Factors Affecting	income	N	Mean	SD	Levene's Test for Equality T-		T-te	-test for, Equality of		
Intention to buy Instant					of Varia	nces			Mean	ıs
Banana Powder						F	Sig.	t	df	Sig.
										(2-tailed)
1. Benefits of instant	0 - 50,000 baht	168	4.14	.840	Equal variances	.617	.433	219	201	.827
banana powder.					assumed					
	> 50,001 baht	35	4.17	.891	Equal variances			211	47.439	.834
					not assumed					

Table 2 Presents the analysis of consumers' purchasing intention of instant banana powder mixed with stevia in Pathum Thani Province classified by demographic characteristics (income) using Independent Samples t-test statistics. (Cont.)

Factors Affecting	income	N	Mean	SD	Levene's Test for Equality			T-test for, Equality of			
Intention to buy Instant					of Varia	nces			Mean	ıs	
Banana Powder						F	Sig.	t	df	Sig.	
										(2-tailed)	
2. Instant banana powder	0 - 50,000 baht	168	4.18	.943	Equal variances	5.168	.024	.504	201	.615	
mixed with stevia makes					assumed						
you want to buy.	> 50,001 baht	35	4.09	1.197	Equal variances			.432	43.217	.668	
					not assumed						
3. Attractive packaging.	0 - 50,000 baht	168	4.45	.757	Equal variances	1.553	.214	865	201	.388	
					assumed						
	> 50,001 baht	35	4.57	.655	Equal variances			952	54.698	.346	
					not assumed						
4. Attractive labels and	0 - 50,000 baht	168	4.48	.789	Equal variances	.000	.993	024	201	.981	
logos					assumed						
	> 50,001 baht	35	4.49	.853	Equal variances			023	46.893	.982	
					not assumed						
5. The price of the	0 - 50,000 baht	168	3.55	1.131	Equal variances	2.953	.087	.049	201	.961	
product is reasonable.					assumed						
	> 50,001 baht	35	3.54	1.358	Equal variances			.044	44.345	.965	
					not assumed						
6. There is a service to order	0 - 50,000 baht	168	3.73	.989	Equal variances	.924	.338	.366	201	.715	
instant banana powder					assumed						
mixed with stevia online via	> 50,001 baht	35	3.66	1.136	Equal variances			.334	45.357	.740	
Facebook Fan page.					not assumed						
7. There are various	0 - 50,000 baht	168	4.20	.845	Equal variances	2.849	.093	.863	201	.389	
promotions such as buy					assumed						
10 times get 1 jar of raw	> 50,001 baht	35	4.06	1.162	Equal variances			.702	41.796	.487	
banana powder free, but if					not assumed						
you buy 3 jars or more,											
free delivery is available.											

According to Table 2, all significant were greater than .05. Thus, it can be concluded that there were no differences in mean values between consumers who had income less than 50,000 baht and consumers who had income higher than 50,000 baht.

Objective 2: To study marketing strategies that affect consumers' purchasing intentions of instant banana powder mixed with stevia in Pathum Thani province.

Table 3 marketing strategies that affect buying Intention

Marketing strategies that affect purchase intention	$\overline{\mathbf{X}}$	SD	Interpret	Order
Product				
Benefits of instant banana powder	4.14	0.847	agree	3
2. Instant banana powder mixed with stevia makes you want to buy.	4.16	0.989	agree	2
3. Attractive packaging	4.47	0.740	strongly agree	1
4. Attractive labels and logos	3.35	1.199	strongly agree	4
Price				
5. The price of the product is reasonable.	3.55	1.169	agree	1
Distribution				
6. There is a service to order instant				
banana powder mixed with stevia	3.71	1.013	agree	1
online via Facebook Fan page.				
Marketing promotion				
7. There are various promotions such as				
buy 10 times get 1 jar of raw banana	<i>1</i> 10	0.005	0.000.0	1
powder free, but if you buy 3 jars or	4.18	0.905	agree	1
more, free delivery is available.				

From Table 3, the results of the analysis of marketing strategies that affect consumers' purchasing intentions of instant banana powder mixed with stevia in Pathum Thani province, it is found that product marketing strategies (the packaging is attractive) were at the level of strongly agree level with an average value of 4.47.

The results of an analysis of how marketing strategies affected consumers' plans to buy instant banana powder mixed with stevia in Pathum Thani province showed that the price marketing strategy (the price of the product was right) was at the agreed level with an average value of 3.55.

The results of the analysis of marketing strategies affecting consumers' purchasing intentions of instant banana powder mixed with stevia in Pathum Thani province revealed that the distribution marketing strategy (there was an ordering service for instant banana powder mixed with grass. Wan Online via Facebook Fan Page) was at the level of agreement with an average of 3.71.

The results of the analysis of marketing strategies affecting consumers' purchasing intentions of instant banana powder mixed with stevia in Pathum Thani province found that marketing strategies in terms of marketing promotion (there were various promotions such as buy 10 times and get 1 jar of raw banana powder free, but if you buy 3 jars or more, free delivery is provided) were at the agree level with an average of 4.18.

Discuss the results of the research

Regarding the first objective, the aim was to determine whether demographics had any influence on the purchase intention of the consumer's instant banana powder mixed with stevia in Pathum Thani Province. The study found that most consumers lived in Bangkok (70%), most of them were female (62%), and the age of Gen Z (under 24 years) was 47.8%. They had a bachelor's degree or equivalent (59.6%). This is consistent with the findings of Yamphan (2016), who conducted a study on the factors influencing Doi Kham brand processed vegetables and fruits purchase decisions. The research found that most of the respondents live in Bangkok and the age range is between 20-24 years, with bachelor's degrees, status as students, For the characteristics of the household, single (48.8%), student (45.8%), which is consistent with the research of Kaewchinda et al. (2021), which conducted a study on marketing strategies that affect the intention to buy powdered fish products. It was found that most of the respondents were single (64.5%) and most of them were students (27.7%).

From hypothesis 1, demographic characteristics (gender) affecting consumers' purchasing intention of instant banana powder mixed with stevia in Pathum Thani province were different. Mean difference test of factors affecting purchase intention of stevia instant banana powder classified by demographic characteristics (gender), it was found that factors 1, 2, 3, 4, 5, 6, 7 had the sig. values of.610,.829,.614,.451,.155,.477, and .713 respectively, which was greater than .05, indicating that the average of factors affecting the purchase intention of the stevia instant banana powder of males and females was no differences. This is consistent with the research by Na Nakorn (2019), who conducted a study of the environment and motivation affecting efficiency improvement in a coconut processing company organization in Thailand. When classified by gender, position, and income, there were no statistically significant differences.

From the second hypothesis, demographic characteristics (income) affecting consumers' purchasing intentions of instant banana powder mixed with stevia in Pathum Thani province were different. Mean difference test of factors influencing Stevia instant banana powder purchase intention classified by demographic characteristics (income). It was found that factors 1, 2, 3, 4, 5, 6, 7 had Sig. values of .827, .615, .388, .981, .961, .715, .389, respectively, which is greater than .05, indicating that the average of factors affecting the purchase intention of the Stevia instant banana powder of income 0 - 50,000 baht and income of 50,001 baht or more, comparing between income 0 - 50,000 baht and income of 50,001 baht or more, no difference. This is consistent with the research of Sasarom and Prapanpot (2019), who conducted a study on marketing factors affecting the decision to buy processed gourami under packaging in the market of Bang Phli Yai NaiTemple, Bang Phli District, Samut Prakan Province and found that consumers with different incomes had no statistically significant difference in opinions on the importance of marketing mix affecting purchasing decisions.

The second objective is to study marketing strategies that affect consumers' intentions to buy instant banana powder mixed with stevia in Pathum Thani province. The study found that the product marketing strategy was at a strongly agree level with the attractive packaging (average of 4.47). The

price point was at the agree level, which means that the product's price is appropriate. The distribution was at the agreed level, which is an online ordering service for instant banana powder mixed with stevia via the Facebook Fan page (average of 3.71). The marketing promotion was at the agree level, which is there were various promotions such as buy 10 times get 1 jar of raw banana powder free, but if you buy 3 jars or more, free delivery is available (average of 4.18). This result is consistent with the research of Dinprapha (2006), who studied the factors influencing the decision to buy green products of working people in the Pathumwan area, Bangkok, and concluded that personal internal factors are related to marketing factors (product). The sample group gave the highest importance in terms of price and promotion. The distribution channel is of medium importance and influences the purchase decisions of processed products the most.

Recommendations

- 1. In this study, 209 samples were used. For further research should increase the number of samples to at least 400 people to make the results of the research more accurate.
- 2. In this research, most of the respondents are Gen Z (47.3%) and Gen Y (28.8%). Therefore, the use of this data must be cautious as the Gen Z group may not have the same product preferences as other groups such as Gen X or Baby boomers. To increase generalizability, future research should collect data more form Gen X or Baby boomers.

References

- Apichayasakul, K. (2015). Consumer behavior. Bangkok: Focus Media and Publishing Co., Ltd.
- Das, G. (2014). Linkages of retailer personality, perceived quality, and purchase intention with retailer loyalty: A study of Indian non-food retailing. *Journal of Retailing and Consumer Services*, 21(3), 407-414.
- Dinprapha, T. (2006). Factors influencing the decision to buy green products of people in working age in Pathumwan area, Bangkok. (Master's thesis, National Institute of Development Administration, Thailand).
- Janngao, S. (2018). *Vegetable lovers*. Retrieved from https://www.technologychaoban.com/thai-local-wisdom/article 87469
- Kaewchinda, K., Rodphothong, M., Jaimun, W., Thompool, S., Phomchot, S., & Mechinda, P. (2021). Marketing strategies that affect the purchase intention of Pla-Ra powder products. *Research and Development Journal Suan Sunandha Rajabhat University*, 12(2), 196-216.
- Kham-ai, J. (2011). Effects of photoperiod on growth of Nam Wa bananas under sterile conditions.

 Retrieved from
 - http://www.lib.kps.ku.ac.th/SpecialProject/Horticulture/2554/Bs/JirapanKa/JirapanKaAll.pdf
- Kotler, P. (1997). *Marketing Management: Analysis, Planning, Implementation, and Control* (9th Edition). Prentice Hall: Upper Saddle River.

- Muangchang, W. (2016). Factors Related to Self Treatment with Herbal Remedies of People in Mea Chai District, Phayao Province. (Master's Thesis, Thammasat University, Thailand).
- Na Nakorn. (2019). Environment and motivation affecting efficiency development in company organization, a coconut processing plant in Thailand. *UMT-Poly Journal*, 16(1), 326-333.
- Ngamlamom, W. (2015). *Concepts and theories related to demographic characteristics*. Retrieved from http://learningofpublic.blogspot.com/2015/09/blog-post_11.html?m=1
- Petcharasiri, C. (2017). A Survey of the use of Traditional Herbal Remedies by the Ethnic Chong People of Khaokitchakut District, Chanthaburiprovince. (Master's Thesis, Rambhai Barni Rajabhat University, Thailand).
- Pornnee Yamphan. (2016). Factors Affecting Purchase Decisions for Doi Kham Food Products

 Company Limited Processed Fruits and Vegetables. (Master's Thesis, Thammasat University,
 Thailand).
- Sasarom, S., & Praphanpot, N. (2019). Marketing Factors Influencing the Purchasing Decision of Snakeskin Gourami Processed Products Packaging in Wat Bangpleeyainai Market, Bangplee District, Samut Prakarnprovince. *Journal of Thonburi University*, 12(29S), 184-192.
- Sereerat, S. (1995). *Consumer behavior, Basic Edition*. Bangkok: Pattana Education Publishing House.
- Sirikan. (2020). *Raw banana properties cure stomach disease, acid reflux*. Retrieved from https://goodlifeupdate.com/healthy-body/201715.html