



The Difference of Factors that Influence The Purchase Decision-Making of Flood-Victim Consumers Before and After The Flooding In 2010

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Abstract

The flooding in 2010 has brought a lot of damages to the country and its people, physically, mentally and financially. There have been 3,317,902 households in 64 provinces that were affected by the flooding (TCIJ, 2011).

This research is carried out to study the purchase behavior of consumers who were affected by the flooding. The study is concerned with the judgment and factors that influence the changing behavior in purchasing household products both before and after the flooding situation.

People have their own favorite brands that they believe to have relevant connections between them and the brands. The research will demonstrate whether the choice of brand, after the flood, is still the same or people become more flexible with the choice of brands after the tragedy.

In the research, 500 flood-victim households in 5 flooded province, including Bangkok, Ayuthaya, Saraburi, Nonthaburi, and Nakhonsawan will be involved in the qualitative research and interviews. The sample population consists of flood victims between the age of 30-50 years old. The research also covers 30 household products to provide findings on emotional and rational response tendencies for the brands of the sample products by using Consumer Behavior theories, Process of making decisions to explain the results.

INTRODUCTION

As of 1 December 2011, the World Bank has estimated 1,425 billion baht (US\$ 45.7 Bn) in economic damages and losses due to 2011 flooding. Such an estimate for this disaster means it ranks as the world's fourth costliest disaster as of 2011 surpassed only by the 2011 earthquake and tsunami in Japan, 1995 Kobe earthquake, and Hurricane Katrina in 2005. The national economy has been hurt when factories were flooded and workers were laid off or fired. Not all factories can be expected to reopen which causes significant long term job loss in Central Thailand (Phoonphongphiphat, 2011). Moreover, Thailand's flood helped contribute to a total estimated US\$259 billion in economic losses for the first nine months of 2011 (Cookson and Davies, 2011). Such a major disaster indicates a need to investigate the affected people in order to adjust how marketing strategies should be executed. There is currently a growing amount of evidence indicating that consumers are choosing products or avoiding others based on their impact on the natural



environment. Hence, there is a need to investigate how such floods played an important role in such decision-making. The increasing demand of determining such influence factors are crucial. Hence, it is necessary for marketers to understand the consumer's decision-making and consumer attitude toward the situation. This research study focuses on the factors that influence on consumer decision-making on household products. In addition, this research also studies the relationship between consumer decision making and marketing mix for services and the relationship between consumer attitude and marketing mix for services.

RESEARCH OBJECTIVES

1. To find out how rational and emotional factors have influence on flood victims' purchasing decision in "household products" cluster at the time before the flood and after the flood
2. To analyze the factors that influence the flood victims' buying decision both before and after the flood
3. To find out the effects of marketing mixes implications on purchasing behavior of flood victims
4. To find out what are the needs of victims that should be mentioned

SIGNIFICANCE OF STUDY

This research will be an important tool in assisting marketers and institutional members to understand the natural disaster's victims behavior and their motivations that affect their purchasing behavior both in normal and in crisis time. The findings and the result of this research may also be applied as a guideline for marketers who experience similar situation in the future. Therefore, the findings of the research will be useful in Consumer Behavior study and the public who have interests in this field.

RESEARCH QUESTIONS

The researcher intended to study the factors that influence 2011 flood victims' household consumption behavior. The research aims to focus on the products in "household products" cluster that is consumed within a household. 2011 Flood Victims from 5 different provinces where flood caused a lot of damages are distributed the questionnaire that are composed of the following questions;

Part 1. Personal Information (sex, age, education, salary, occupation)

Part 2. Motivation factors in purchasing of household products before the flooding



Part2.1 Emotional and Rational motivation factors that influence the purchase decision; the questions are

1. You buy products that have promotional campaigns (discounts, free premiums etc)?
2. You buy products because of their quality?
3. You buy products because of their quantity?
4. You buy products because they are necessary
5. You buy products because of their packaging
6. You buy products because they are unique
7. You buy products because of your personal preference
8. You buy products because others' recommendations

Part 2.2: Marketing mix implications that influence the purchase decisions; the questions are inquiring respondents about

1. Quality and standards of products
2. Trust in brands
3. Packaging
4. Lowest price
5. Quantity that worth the price
6. Quality that worth the price
7. Availability and Convenience
8. On-shelf positions
9. Availability in frequently-shopped stores
10. Influence from Medias
11. Promotional campaigns
12. Prize redemption or lucky draw

Part3. Motivations factors in purchasing of household products after the flooding

Part3.1: Emotional and Rational motivation factors that influence the purchase decision. In this part, the set of questions in part 2.1 was used but respondents used their behavior after the flood to answer the questions.



Part3.2: Marketing mix applications that influence the purchase decision. The questions that were used in part 2.2 were used in this section but respondents would their behavior after the flood in answering the questions.

SCOPE AND LIMITATIONS OF THE STUDY

Scope in content

The research studies the factors that affect the decision making in purchasing “household products” before and after the flooding tragedy in 2010. The contents are composed of personal information, motivation factors (rational or emotional), and marketing mix factors that lead to purchasing.

Scope in samples

The research only focuses on flood victims from 5 provinces where the flood caused a lot of damages. The provinces of the study are Bangkok, Ayuthaya, Saraburi, Nonthaburi , and Nakhonsawan. The questionnaires were distributed to only people whose age was between 30-50 years old with different occupations. The reason is to see the effects that happen to the people who have income and make purchase decision of household products.

LITERATURE REVIEW

Consumer Behavior Theory

According to Jacoby (1976), consumer behavior refers to the decision of consumers that includes acquisition, consumption, and disposition of products, services, by human decision-making units over time. Acquiring is the step when obtaining products or services. In this process, consumers will consider factors to own an offering (Hoyer and MacInnis, 2010). Second step is the core step of their behavior which refers to the step when using where consumers actually consume the offering (Holbrook, 1987). The last step of consumer behavior is disposition. Disposition process refers to the step of getting rid of an offering that has been acquired and used (Jacoby, 1977).

Analysis of a model of influences on Consumer Behavior

Marketing mixes; product, price, place and promotion as well as other stimuli have important influences on decision making process in consumers (Perreault, Cannon and McCarthy, 2011). Then, consumers will use the information obtained marketing mixes and other stimuli in analyzing their decision making process which is influenced by economic needs, psychological variables, social influences and purchase situation (Perreault et al, 2011).



For economic Needs, It is said that consumers are “economic buyers” which means their purchasing behavior reflects the greatest satisfaction from their best use of time and money on products or services (Perreault et al, 2011). That means the economy has an effect on consumers’ decision making, hence, consumers who experience the economic recession, are more careful with their spending (Perreault et al, 2011).

Psychological Influences: For psychological variables, they include motivation, perception, learning, attitude, trust, and lifestyle (Perreault et al, 2011). Perreault et al, found that human behavior is motivated by needs and wants (Perreault et al, 2011). Hoyer and MacInnis emphasizes that needs are one of the factors that affect motivation (2010). **Social Influences:** The third influencer in the model of influences on consumer behavior is social influences. This involves family, social class, reference groups and culture (Perreault et al, 2011). Moreover, Andreason (1984) mentioned that life cycle within a family is more likely to change their brand choices and become more careful and skeptical about the marketing implications that are used. Reference groups and culture are also shape consumers’ way of thinking and making decision on various topics.

Purchase situation: The last factor that impacts the decision making on purchasing of consumers is purchase situation which refers to purchase reason, time and surroundings (Perreault et al, 2011)

Consumer Motivation and its Effects

Jacoby (1977) stated that motivation is defined as “an inner state of arousal” directed to achieving an objective. In marketing, consumers can be motivated in the context of acquiring, using, or disposing of an offering (Hoyer and MacInnis, 2010). They said that when consumers have high motivation in an offering, they will pay a lot of attention to it. On the other hand, when consumers have low motivation, they normally devote little effort to make buying decision. The purchase of most common grocery products are categorized in the last group (Hoyer and MacInnis, 2010).

METHODOLOGY

500 flood victims who lived in 5 flooded provinces, including Bangkok, Ayuthaya, Saraburi, Nonthaburi, and Nakhonsawan were interviewed and distributed questionnaires. 600 questionnaires were distributed but only 500 of them were completed and able to be used for calculating the results. The process of distributing questionnaires and interviewing took place from December 2011- January 2012.

There are several reasons why the five provinces were selected as a study area for the research. First of all, they are the areas that were affected by the flood. For Bangkok, it is the capital city of Thailand and it is the business center of the country.



Bangkok is ranked the most densely populated city of Thailand (NSO, 2010). Ayuhtaya, Saraburi, Nonthaburi and Nakhonsawan were also the areas that were badly affected by the flood and the damages caused by the flood after all. The flood has caused a lot of damages and losses to people who lived and/or worked in the areas. Some of the business has to stop due to the flood and the inability of transportation. Some dwellers and workers in the study areas had to evacuate from the areas. A lot of houses and companies as well as factories were flooded. The number of revenue from industrial sectors in the country decrease more than 50% which resulted in the recession in exports and tourism in the country. (Thairat, 2011)

The questionnaire is composed of 3 parts which are;

Part 1: Personal information; gender, age, education, salary per month, and occupation. The data is tabulated in percentage of total respondents.

Part 2: Motivation factors in purchasing of household products before the flooding. In this part, the questions are divided into two parts;

Part 2.1: Motivation factors in buying behavior

The questions are to discover the reasons behind the purchasing of commodity products in households. The results for this part will demonstrate whether consumers use rational and emotional factors in making decision. The first four questions were asked to analyze the rational factors and the last four will examine the emotional factors that are used in decision-making process.

Part 2.2: Marketing mixes that affect buying behavior.

The questions are to disclose the effects that marketing mixes; product, price, place, promotion have towards the decision making process among consumers before the flood happened.

Part 3: Motivations factors in purchasing of household products after the flooding

Part 3.1: Motivation factors in buying behavior.

Part 3.2: Marketing mixes that affect buying behavior.

The questionnaire for part 2 and part 3 were designed on a scale of 1- 5 with 1 as “strongly disagree” to 5 as “strongly agree”.



FINDINGS AND DISCUSSIONS

The study of the differences of factors that influence the purchase decision-making of flood-victim consumers before and after the 2011 flood has the results as the following;

Part1: Personal Information

Gender: 48% of the respondents were male and the other 52% were female

Age: As the condition of the study was that the respondents' age range must be between 30-50 years old as the researcher desired to obtain the information among the consumers who actually purchased the products on their own budget. The result shows that the majority of the respondents (52%) are between 30-40 years old and the group of 41-50 is 48% of the respondents.

Education: 49% of the respondents completed at bachelor degree (49%), then higher than bachelor degree group (26%) and below bachelor degree group (25%) were ranked as the second and the third, respectively.

Salary (per month): The salary of the respondents has ranked from below 10,000 Baht to 40000 or above. The majority of the respondents (31%) have the monthly income of 20001- 30000 baht. The second most salary of the respondents (20%) is 10001-20000 and 40001 or above. The third and fourth ranks are 30001-40000 and below 10000 Baht counted as 19% and 10% respectively.

Occupation: Among the occupations listed in the questionnaire, the majority of the respondents, counted as 30%, are government officers or state enterprise officers. Private business employees, students, business owner or self-employed, management-level employees and homemaker are calculated as 24%, 22%, 18% and 6% respectively.

Part 2: Motivation factors in purchasing of household products before the flooding

Part 2.1: The analysis of motivation factors that affect buying behavior of consumers before the flooding. In this part, we can summarize the results into 2 parts; rational factors and emotional factors. (See table 1)

For rational factors that affect the buying decision, the result shows that consumers' average of the rational factors towards purchasing decision is at the high level at 4.34. The first factor about promotional campaigns such as discounts, prize redeeming, and free premiums has the average evaluation on a scale of 5-1 equal to 4.4. The second rational factor about the price with its quality has the average score of



4.35. The last two factors; price in accordance with its quality and the necessity of consumption, have the average scores equal to 4.21 and 4.41 respectively.

Table1. The average of the motivation factors that affect buying behavior before the flooding

Factor	Score
<u>1. Rational factor</u>	3.38
1.1 Promotional campaigns (premiums, discounts, redemption of prize)	2.71
1.2 Price is suitable with the quality	3.32
1.3 Price is suitable with the quantity	3.52
1.4 The necessity of consumption	3.95
<u>2. Emotional factor</u>	2.46
2.1 Packaging (beauty and uniqueness)	2.26
2.2 Product's is unique	2.24
2.3 Personal preference	2.73
2.4 Recommendations from others	2.40

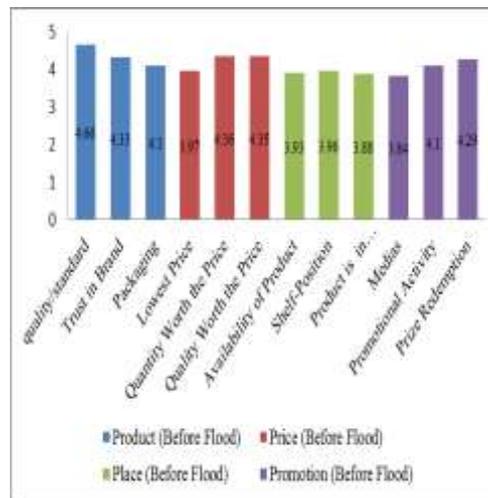
Regarding Emotional factors, the result demonstrates that consumers agree on the emotional factors at the average of 3.91. Questions used to disclose emotional factors are questions about the packaging, uniqueness of product, personal preference and recommendation from others were asked. The average result on a scale of 5-1 equals to 3.98, 3.86, 4.27 and 3.52 respectively. From the result, we can see that consumers are not certain about the emotional factors used in purchasing. However, personal preferences still have high influence on their purchasing behavior.

Part2.2: The analysis of marketing mixes implications that affect buying behavior of consumers before the flooding. (see Figure 1)

Product: The average of total questions used to assess this factor is 4.36. As there are three questions that assess whether the product is the factor of buying decision, here is the result of each question. The evaluation on quality and standards of product is at 4.66. The average of trust of the brand is at 4.33 and the average of the opinion towards the packaging is at 4.1.

Price: The average score from the three questions used to assess pricing motivation factor is 4.23 which means they highly agree with price factor. When looking at each question, the average score of the question about lowest price among the products is 3.97. The average of the factor that quantity worth the price is 4.36 and that the quality worth the price is 4.35.

Figure1. Marketing mix implications that influence buying behavior (After the flood)



Place: The average of result from three questions used to assess this factor is 3.92. The average result of the availability, shelf-position, and the availability of products in the frequently-shopped stores is at 3.93, 3.96 and 3.88 respectively.

Promotional activities: It is found that the average of the opinions towards promotional activities that affect buying decision is 4.08. The average result of each question is as following; 3.84 for reception of information from different Medias, 4.1 for promotional activities and 4.29 for prize redemption or lucky draw activities.

Part 3: The analysis of motivation factors that affect buying behavior of consumers after the flooding.

Table2. The average of the motivation factors that affect buying behavior after the flood

Factor	Score
<u>1. Rational factor</u>	3.38
1.1 Promotional campaigns (premiums, discounts, redemption of prize)	2.71
1.2 Price is suitable with the quality	3.32
1.3 Price is suitable with the quantity	3.52
1.4 The necessity of consumption	3.95
<u>2. Emotional factor</u>	2.46
2.1 Packaging (beauty and uniqueness)	2.26
2.2 Product's is unique	2.24
2.3 Personal preference	2.73
2.4 Recommendations from others	2.40

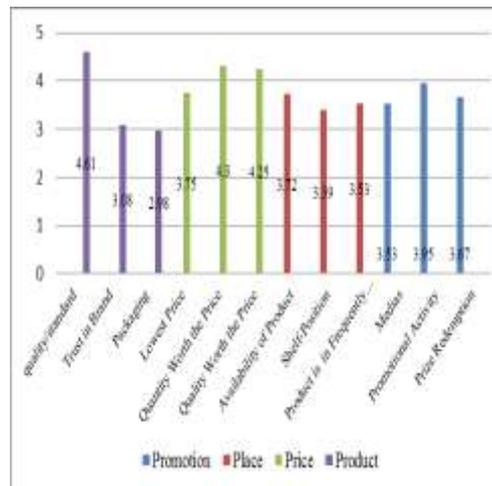
Part 3.1: The analysis of motivation factors that affect buying behavior of consumers after the flooding. In this part, we can summarize the results into 2 parts; rational factors and emotional factors. (see table 2)

The result shows that the average of rational factors that affect purchasing decision is at 3.38. The first factor is that products with promotional campaigns such as discounts, prize redeeming, and free premiums) has the average evaluation on a scale of 5-1 equal to 2.71. The average score on the factor that the price of product is suitable with its quality is 3.32. The last two factors used to assess rational motivations are price in accordance with its quality and the necessity of consumption equal to 3.52 and 3.95 respectively.

Emotional factors that affect the buying decision: the result demonstrates that consumers have the opinion towards the emotional factors at the average of 2.46. Regarding emotional factors in buying decision, questions about the packaging, uniqueness of product, personal preference and recommendation from others were asked. The average result on a scale of 5-1 equals to 2.26, 2.24, 4.73 and 2.4 respectively.

Part 3.2: The analysis of marketing mixes implications that affect buying behavior of consumers after the flooding.(see figure 2)

Figure2. Marketing mix implications that influence buying behavior (After the flood)



Product: The average score of total questions asked to assess this factor is 3.56. As there are three questions that assess whether the product is the factor of buying decision, here is the result of each question. The average score on evaluation on quality and standards of product is at



4.61. The average of trust of the brand is at 3.08 and the average of the opinion towards the packaging is at 2.98.

Price: The average of the result from three questions used to assess pricing motivation factor is 4.1. When looking at each question, the average of the question about lowest price among the products is 3.75. The average on the factor that quantity worth the price is 4.3 and that quality worth the price is 4.25.

Place: The average of result from three questions used to assess this factor is 3.55. The average result of the availability, shelf-position, and the availability of products in the frequently-shopped places is at 3.72, 3.39 and 3.53 respectively.

Promotional activities: It is found that the average of the opinions towards promotional activities that affect buying decision is 3.71. The average result of each question is as following; 3.53 for reception of information from different medias, 3.95 for promotional activities and 3.67 for prize redemption activities.

Comparison of Factors That Influence Purchase Decision-making Before and After the 2011 Flood: (see table 3)

According to the table, rational factors have a high degree of influence on consumers both before and after the flood. However, after the flood, rational factors have a greater influence on consumers than emotional factors. For rational factors, there is a decrease in the average scores for all questions. This might be because consumers were aware of budget and their daily expenditure (Bangkok poll, 2011) However, promotional campaigns average score is the most decreased score among the other rational factors.

In the aspect of emotional factors, there is a dramatic decrease in the average score of after-the-flood decisions in all factors. The average score went down from 3.91 to 2.46. This could be explained that consumers used less emotion in making buying decisions. Interestingly, personal performance became the factor that had the lowest average score among other emotional factors. This could be explained by the economic factor that affects consumer behavior. Furthermore, there were some respondents added that they were more careful about their expenses and their purchasing. They would consider the necessity of the consumption as the first priority when purchasing household products. Some said that they started to save because they needed money in house repairing after the flood. As a result, they became sensitive to price and selective on choices available for household products. The



respondents also mentioned about the amount of products they purchased. They agreed that they bought in fewer amounts than they did before the flood. That was because they rather saved money for the future uses.

Table3. The comparison of the average score of rational factors and emotional factors that affect purchase decision making among flood victims

Factor	Average Score (Before the flood)	Average Score (After the flood)
<u>1. Rational factor</u>	4.34	3.38
1.1 Promotional campaigns (premiums, discounts, redemption of prize)	4.4	2.71
1.2 Price is suitable with the quality	4.35	3.32
1.3 Price is suitable with the quantity	4.21	3.52
1.4 The necessity of consumption	4.41	3.95
<u>2. Emotional factor</u>	3.91	2.46
2.1 Packaging (beauty and uniqueness)	3.98	2.26
2.2 Product's is unique	3.86	2.24
2.3 Personal preference	4.27	2.73
2.4 Recommendations from others	3.52	2.4

The analysis of marketing mixes implications that affect buying behavior of consumers before/ after the flood (see figure 3)

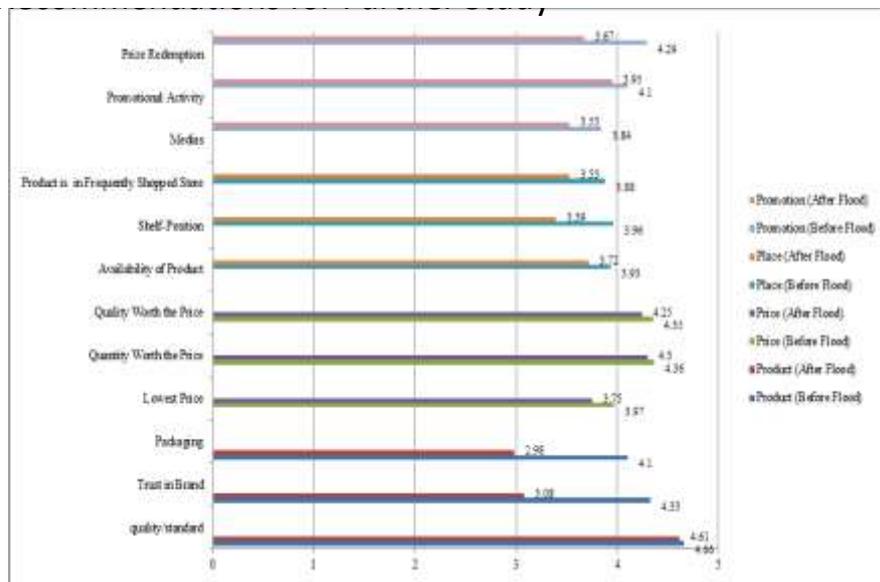
According to the findings; the information indicates that marketing mixes, overall, become less important factors towards buying decision among consumers. The first 'P' which is Product, the average on this factor decreases from 4.66 to 3.56. However, the result demonstrates that "quality and standards" of products are still an important factor in decision making both before and after the flood. On the other hand, "trust in brand" and "packaging" factors that used to be at a high level, before the flood, at 4.33 and 4.1 dramatically dropped, after the flood, to 3.08 and 2.98 respectively. The second 'P' in marketing terms is Price. As the figure shows, price remains the most important factor (both before and after the flood) when considering purchasing household products with the average of 4.17. Regarding to places, the average score for both before and after the flood is slightly different. The score on the factor of availability of products, on-shelf positions, and the availability of products in frequently-shopped stores is ranked from 3.39 to 3.96. However, the opinions towards promotional activities vary, in buying behavior of before and after the flood. However, the average score on the factor "prize redemption or lucky draw activities" after the

flood dramatically decreased from 4.29 to 3.67 while there was only slight decrease in the other factors' average score. From the graph, the result demonstrates that product, price and place are the factors that the flood victims used to consider when making household purchase. However, promotional campaigns became unimportant factor as the average score on this factor dramatically decreases in after-the-flood decision making.

CONCLUSION

The result of the study supports the knowledge of consumer behavior in making purchase decision in normal and crisis time. The study also helps marketers to understand the factors that affect the purchase behavior of people who suffer from natural disaster such the flood in Thailand. In summary, rational factors have high influence in purchase behavior both before and after the flood. On the other hand, emotional factors become less important in decision making when purchasing household products after the flood. Regarding marketing mix implications, product is ranked as the most influential factor, before the flood, in household products purchasing. However, after the flood, price become price become the most influential factor among other marketing mix implications.

Figure3. Comparison of analysis of marketing mixes implications that affect flood victims' buying behavior



The researcher has the following recommendations

1. Study the buying behavior of household products that are divided into different clusters



2. Study consumer behavior in order to gain information about their expectation. So that it will be useful for business in developing or improving their products or services to satisfy the need of consumers.

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APPENDICES

Table1. The average of the motivation factors that affect buying behavior before the flooding

Table2. The average of the motivation factors that affect buying behavior after the flood

Table3. The comparison of the average score of rational factors and emotional factors that affect purchase decision making among flood victims

Figure1. The average score of marketing mix implications that affect buying behavior (Before the flood)

Figure2. Marketing mixes that influence buying behavior (After the flood)

Figure3. Comparison of analysis of marketing mixes implications that affect flood victims' buying behavior