Factors Influencing the Attitude towards FMCG Purchase in E-Commerce Platform during COVID-19 in Bangkok, Thailand

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Abstract

The fast-moving consumer goods (FMCG) industry is a significant sector that provides products, such as food and beverages, for daily consumption. In line with the stimulus-organism-response (SOR) model, however, consumers that consume the FMCG products are motivated by multitude of factors. Hence, this study aims to analyze the response factor, which is the attitude toward purchasing products from e-commerce platforms. The study was conducted on a non-probability random sampling method, and it collected a total of 400 samples. The sample size was chosen using a method that involves selecting a group of respondents who are Thai consumers and those who use an e-commerce platform for purchasing products. The findings of this study indicated that, novelty-seeking, in-store shopping enjoyment, and fear of diseases were significant determinants of attitude towards FMCG products.

Keywords: *COVID-19, FMCG, Online Shopping, Consumer Behavior*

1. Introduction

The COVID-19 pandemic has significantly transformed consumer behavior patterns, with majority of the consumers orienting towards the use of online e-commerce purchasing platforms. The pandemic-led transformation has continued for the consumers to adopt e-commerce platforms like web-commerce platform, mobile shopping platforms, and/or social media platforms to conduct their purchase (Ryan, 2021). In the Nielsen statistical report by Ryan (2021), it was also stated that, the overall Asian market had experienced a growth of 50% in global e-commerce sales, with Thailand experiencing a 58% overall growth in the use of e-commerce platform during the pandemic period. Some of the FMCG products like water, masks, and instant food has seen a sharp rise in demand for consumer goods, and an exponential increase in household spending. With the need to limit exposure to the virus, consumers are choosing to shop less frequently, and are either buying in bulk or turning to e-commerce to acquire products that they would normally purchase in-store (Hirankasi, 2021; Abrams, 2021).

As a result, e-commerce has seen a significant transformation and acceleration in this period, building upon the shopping experiences it had already brought through digital transformation in recent years. The growing transformation has led for the scholar's interest in identifying and analyzing factors that have a significant influence on the attitude of Thai consumers towards purchasing FMCG products through e-commerce platform of Bangkok, Thailand during the COVID-19 period. The findings of this study are expected to be developed from quantitative research, holding both academic and managerial significance. Firstly, the research is expected to generate important findings that can help researchers identify the factors that significantly impact attitudes towards fast-moving consumer goods (FMCG) products. Hence, a new framework is expected to be developed, with a new theoretical framework that specifically supports the attitude towards FMCG products in Thailand. From a managerial perspective, the study is expected to provide valuable insights for marketers in the FMCG industry, which focuses on the investment in marketing efforts and in shaping attitudes towards FMCG products.

Based on the review of the existing literature and analysis, this study aims to investigate the impact of multitude of factors like novelty-seeking, lack of in-store shopping and in-store shopping enjoyment, shortage of physical supply and fear of diseases on the attitude towards FMCG products. This study approaches the use of a quantitative research strategy to explore the relationship between these variables. Consumer novelty seeking is defined as the search for unique stimuli or novel experiences, which can also refer to the utilization of new brands or items. This concept encompasses both personal and professional aspects of individual stability. The drive to seek out new knowledge is an internal urge that motivates an

individual towards novelty seeking. It is associated with positive views towards technological advancements and impulsive behavior. Novelty-seeking attitudes are linked to seeking out new services that differ from those already offered. These attitudes may help consumers accept new services and are associated with impulsive behavior. Manning et al. (1995) suggest that this behavior is driven by consumers' willingness to try new things. Also, recent remarkable growth of online shopping is a clear indication that it will be a major focus for retailers in the future. This trend suggests that both established businesses and new entrants have a significant market opportunity for expanding e-commerce in the short and long term.

The convenience of online shopping has increased customer interest, which has influenced producers and retailers to place more emphasis on this sector for the development and growth of their companies. Online shopping's convenience is becoming more and more popular among Gen Y, which motivates retailers to focus on this domain. Although some people have little knowledge of e-shopping and trust issues with online retailers, they still consider it a convenient way of purchasing. Concerns about not receiving the goods they paid for or whether online retailers deliver the advertised products may arise. Many customers consider visiting a physical store as a time-consuming and difficult process, compared to online shopping where they can access information on pricing, style, packaging, and features from the comfort of their own homes. This is according to Phau et al. (2014), Sulaiman et al. (2007), and Hassan et al. (2014).

The COVID-19 pandemic caused significant changes to the supply chain process and consumption behavior. The limited supply, high demand, and supply chain contraction affected the availability of products. Border closures disrupted international supply chain networks and limited the retail stores, resulting in the rise of e-commerce (Chad, 2021). Many consumers preferred online purchases over visiting departmental or hypermarkets, particularly for Fast-Moving Consumer Goods (FMCG) products. Additionally, the COVID-19 pandemic significantly transformed consumer preferences and behaviors, with many turning to e-commerce due to safety regulations and restrictions.

However, the prevalence of online shopping abandonment remains high, causing a significant loss of sales (Elkind, 2020; Marian, 2021). Despite the growth of e-commerce, traditional brick-and-mortar retail is still important, as many customers prefer in-person experiences and immediacy. According to various studies, a large percentage of consumers still purchase in-store to avoid paying shipping charges. The COVID-19 pandemic has resulted in fear and anxiety among people due to the uncertainty and risk of contracting the virus, leading to changes in consumer behavior. Some people have turned to the internet to learn about the world and adapt to technology, while others still prefer to shop in person. The fear of getting infected has resulted in the growth of ecommerce in 2020. Fear is a crucial factor in determining consumer decisions to use e-commerce. (Al-Maroof et al., 2020; Pakpour & Griffiths, 2020; Raza et al., 2021).

Based on the past research study, it can be found that, an empirical research study that is specific to understanding the attitude towards purchasing FMCG products is currently lacking. More specifically, there is a significant research gap that explores how different COVID-19 based factors has a significant impact on attitude of Thai consumers.

2. Objectives

The objectives of this study are stated as follows.
1) To identify factors that influence the FMCG purchase behavior among consumers in Bangkok, Thailand
2) To analyze factors that impact the attitude towards the purchase of FMCG products among consumers in Bangkok, Thailand
3) To recommend factors to the marketers that influences the consumption of FMCG products among consumers in Bangkok, Thailand.

3. Materials and Methods

Based on the prior discussion of the literature review, the conceptual framework and hypotheses established in this literature is presented as follows.
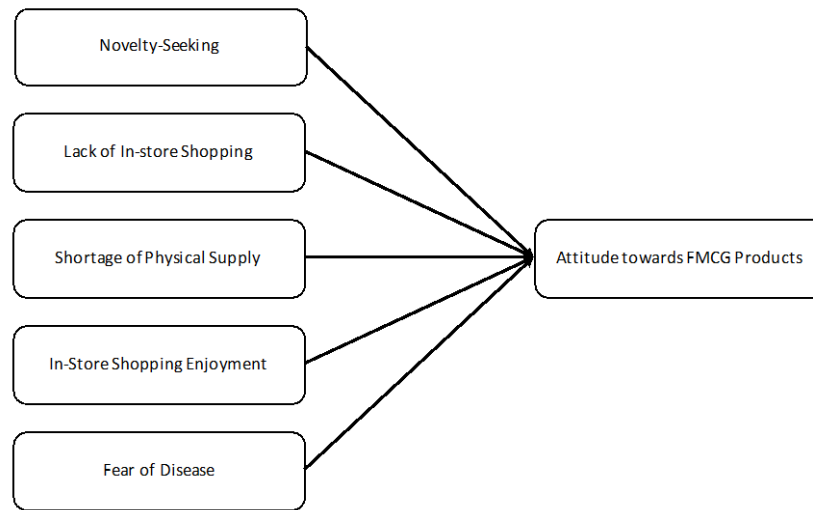
Figure 1 Conceptual Framework

The hypotheses that are tested in this study are proposed as follows:

1. H1: Novelty-seeking has a positive significant impact on the attitude towards purchasing FMCG products via e-commerce platform.
2. H2: Lack of In-store shopping has a positive significant impact on the attitude towards purchasing FMCG products via e-commerce platform.
3. H3: Shortage of physical supply has a positive significant impact on the attitude towards purchasing FMCG products via e-commerce platform.
4. H4: In-store shopping enjoyment has a negative significant impact on the attitude towards purchasing FMCG products via e-commerce platform.
5. H5: Fear of disease has a positive significant impact on the attitude towards purchasing FMCG products via e-commerce platform.

The paper employs a quantitative approach to test the relationship between various factors and the attitude towards purchasing FMCG products via e-commerce platforms. The study utilizes an online survey through Google Forms as a research instrument to collect data. The researchers note that online surveys are convenient and provide an accurate way of gathering responses from a wide range of individuals. However, since the survey uses a close-ended questionnaire, there is a risk of receiving randomly or dishonestly provided answers, which cannot be tested until the study is carried out in the field. Krejcie & Morgan (1970) indicated that research papers should have a minimum of 400 respondents. During the survey's data collection phase, the scholar will monitor the responses and the link will close once the required number has been reached. This study will focus on the characteristics that will allow the researcher to collect the most accurate data. The overall sampling group characteristics of the paper is presented as follows:

1. Firstly, the selected group of respondents are those that are from Bangkok, Thailand.
2. Secondly, the selected group of respondents are that use e-commerce platform in shopping for FMCG products.

Out of a minimum of 400 respondents, this study acquired a total of 416 responses, with only 332 respondents left after the screening process was completed. The remaining 332 respondents' data were analyzed using quantitative research approach to test hypotheses related to the effects of different factors on consumer attitudes towards purchasing FMCG products through e-commerce. A multiple regression analysis is conducted to determine the combined impact of factors such as novelty seeking, lack of in-store shopping, shortage of physical supply, seeking of product information, in-store shopping enjoyment, and fear of diseases on consumers' attitudes towards e-commerce. Each of the hypotheses are tested using the multiple

regression analysis, whereby, the researcher emphasizes on utilizing the 3rd and 4th section of this paper using multiple regression analysis. The primary objective of the study is to develop a framework for analyzing quantitative data and examining the relationship between independent and dependent variables.

4. Results and Discussion

This section of the research study provides a detailed overview of the key findings and discussion of the research findings. The findings are presented as follows.

Table 1 Demographic Findings of the Study

Variable	Category	Frequency	%
Gender	Male	48	14.5%
	Female	284	85.5%
Age Group	Eldest (>46 Years Old)	8	2.4%
	Middle (31-45 Years Old)	120	36.1%
	Youngest (20-30 Years Old)	204	61.4%
Education	Graduate	116	34.9%
	Post-Graduate	4	1.2%
	Without a bachelor's degree	212	63.9%

The research paper surveyed a total of 332 respondents, with a significant gender imbalance, where 85.5% of the respondents were male and 14.5% were female. The majority of the respondents were in the youngest age bracket of 20 to 30 years old, accounting for 61.4% of the sample, while the middle age bracket of 31 to 45 years old represented 36.1%. The remaining 2.4% of respondents were over the age of 46. In terms of education, the majority of the respondents (66.9%) did not hold a bachelor's degree, while 34.9% were graduates and only 1.2% had post-graduate qualifications.

Table 2 Place of Work during COVID-19

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	**Completely working from home**	259	78.0	78.0	78.0
	Working at both home and workplace	73	22.0	22.0	100.0
	Total	332	100.0	100.0	

The general findings of this paper suggest that, 78% of the respondents were completely working from home during the COVID-19 period, while 22% were working at home and workplace together.

Table 3 Shopping for FMCG products using e-commerce platform

Did you shop for FMCG products using e-commerce platform during the pandemic?					
		Frequency	**Percent**	**Valid Percent**	**Cumulative Percent**
Valid	**Yes**	332	100.0	100.0	100.0

Similarly, it was seen that, all 100% of the respondents had purchased some form of FMCG products using e-commerce platform during the pandemic period.

Table 4 Correlation Analysis

		Novelty-Seeking	Lack of (In-store) Shopping	Shortage of (Physical) Support	Fear of Diseases	**Attitude**
Novelty-Seeking	Pearson Correlation	1	.512**	.504**	.426**	**.409****
	Sig. (2-tailed)		.000	.000	.000	**.000**
	N	332	332	332	332	**332**
Lack of (In-store) Shopping	Pearson Correlation	.512**	1	.604**	.554**	**.439****
	Sig. (2-tailed)	.000		.000	.000	**.000**
	N	332	332	332	332	**332**
Shortage of (Physical) Support	Pearson Correlation	.504**	.604**	1	.615**	**.467****
	Sig. (2-tailed)	.000	.000		.000	**.000**
	N	332	332	332	332	**332**
Fear of Diseases	Pearson Correlation	.426**	.554**	.615**	1	**.494****
	Sig. (2-tailed)	.000	.000	.000		**.000**
	N	332	332	332	332	**332**
Attitude	Pearson Correlation	.409**	.439**	.467**	.494**	1
	Sig. (2-tailed)	.000	.000	.000	.000	
	N	332	332	332	332	**332**
**. Correlation is significant at the 0.01 level (2-tailed).						

The correlation matrix was performed to identify the inter-relationship between the chosen variables. It was seen that, the strongest correlation occurred between two variables, that is (a) shortage of support and lack of in-store shopping and (b) fear of diseases and shortage of support. Overall, the correlation was ranked above 0.600. Similarly, the strongest correlation to attitude was found with fear of diseases.

Table 5 Regression Analysis

Model	R	R Square	Adjusted R Square	**Std. Error of the Estimate**
1	.574a	.330	.320	**.19800**

a. Predictors: (Constant), Fear of Diseases, Novelty-Seeking, (In-store) Shopping Enjoyment, Lack of (In-store) Shopping, Shortage of (Physical) Support

ANOVAª

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	6.292	5	1.258	32.099	**.000ᵇ**
	Residual	12.781	326	.039		
	Total	19.073	331			

a. Dependent Variable: Attitude

b. Predictors: (Constant), Fear of Diseases, Novelty-Seeking, (In-store) Shopping Enjoyment, Lack of (In-store) Shopping, Shortage of (Physical) Support

Coefficientsª

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.311	.132		2.356	**.019**
	Novelty-Seeking	.197	.072	.152	2.739	**.007**
	Lack of (In-store) Shopping	.160	.096	.104	1.671	**.096**
	Shortage of (Physical) Support	.109	.068	.108	1.607	**.109**
	(In-store) Shopping Enjoyment	.133	.060	.131	2.221	**.027**
	Fear of Diseases	.235	.062	.234	3.761	**.000**

a. Dependent Variable: Attitude

Based on the regression analysis above, it was seen that, the r-squared value was 0.330 or 33%. This implies that, the selected independent variables could explain 33% of the dependent variable – attitude towards shopping in e-commerce platform for FMCG products. It was also seen that, the significance value for the variable's novelty-seeking, in-store shopping enjoyment and fear of diseases portrayed a significance level of 0.05 and less (0.007, 0.027 and 0.000 respectively).

In the first study, the authors found that fear of disease has a significant impact on consumers' attitudes towards using e-commerce platforms for FMCG products. This finding is supported by previous research that suggests fear is a powerful emotion felt by many during the COVID-19 pandemic (Al-Maroof et al., 2020). As a result of fear, consumers are changing their behavior, including adapting to technology, and avoiding physical stores (Raza et al., 2021). However, the impact of fear on e-commerce adoption is not straightforward, as some consumers still prefer in-store shopping due to factors such as real-life experiences and immediacy (Marian, 2021). As a result, e-commerce has flourished, and fear of disease is expected to play a crucial part in determining customers' decision to use e-commerce. This suggests that e-commerce retailers should consider ways to ease consumers' fears and build trust, such as by implementing safety measures and offering contactless delivery options.

The second study also supports the notion that fear of disease is playing a crucial role in shaping consumer behavior during the pandemic. It has been shown that fear of contracting the virus has led many consumers to avoid physical stores and turn to e-commerce instead (Pakpour & Griffiths, 2020). This has resulted in the growth of e-commerce in 2020, as consumers opt for online shopping to reduce the risk of exposure to the virus (Paterson, 2020). However, the study also suggests that the expansion of e-commerce does not mean the end of traditional brick-and-mortar retail, as many consumers still prefer in-store shopping for reasons such as avoiding shipping charges and seeking real-life experiences (Chad, 2021; Raydiant, 2021). Therefore, it is essential for retailers to provide a seamless omnichannel shopping experience that caters to the preferences of all consumers, whether they prefer to shop online or in-store. Retailers can use technology to bridge the gap between online and offline shopping, such as by offering in-store pickup for online purchases or by providing virtual try-on experiences for online shoppers.

Overall, these studies suggest that fear of disease is a significant factor influencing consumer behavior during the pandemic, and this includes the adoption of e-commerce platforms. However, the impact of fear is not straightforward, and consumers' attitudes towards in-store shopping and e-commerce are shaped by a variety of factors. The findings highlight the importance of understanding consumers' motivations and concerns when developing e-commerce strategies in the current climate.

5. Conclusion

This research paper focuses on identifying and evaluating the key factors that influence the attitude towards the purchase of FMCG products through e-commerce platforms during the COVID-19 pandemic in Bangkok, Thailand. The FMCG industry includes groceries and other products used for everyday consumption and has many competing brands worldwide, each practicing its unique marketing strategy to influence consumer behavior. The study reviews the theory of the stimulus-organism-response model to analyze the response factor, which is the attitude towards purchasing FMCG products through e-commerce platforms. The study developed six hypotheses that each influence the attitude variable positively or negatively. The methodological approach used in this study is a positivist-deductive approach, where the relationship was tested using a quantitative statistical approach. A total of 332 participant's data was collected using a non-probability random sampling strategy, with the selected group of respondents being Thai consumers and users of e-commerce platforms for FMCG products. The analysis was performed using SPSS analysis, with regression and correlation analysis used to analyze the raw data. The study found that the factors that influence the attitude towards FMCG products include the novelty of the product, fear of diseases, and shopping enjoyment. These results can help marketers to develop effective strategies for promoting FMCG products through e-commerce platforms.

This research provides recommendations for FMCG marketers who engage in e-commerce. Firstly, marketers should consider the high degree of novelty-seeking among consumers and its potential impact on purchasing behavior, as factors such as novelty, fear of diseases, and shopping enjoyment significantly impact consumer intent to purchase and attitude towards FMCGs. Secondly, the in-store shopping experience also influences consumption patterns in e-commerce, with the degree of enjoyment positively correlated with the likelihood of purchasing FMCGs online. Therefore, e-commerce platforms should prioritize providing a seamless and enjoyable shopping experience. Lastly, the COVID-19 pandemic has heightened consumers' health and safety concerns, and e-commerce platforms that prioritize customer health and safety are more likely to attract and retain consumers in the current market scenario.

The limitations of the study include its limited generalizability due to its focus on a specific geographic location and period, as well as a small sample size that may limit the statistical power of the analysis. Additionally, reliance on self-reported data may introduce biases that impact the accuracy and

reliability of the findings. To address these limitations, future studies could replicate the research in other contexts and during different time periods to enhance generalizability, as well as use larger sample sizes to increase the statistical power of the study. Future studies could also employ mixed methods approaches to triangulate self-reported data with objective measures, such as behavioral or physiological data, to improve the accuracy and reliability of the findings. Addressing these limitations and undertaking future research in these areas will help to further our understanding of consumer behavior in e-commerce purchases and provide insights for marketers in the fast-moving consumer goods industry.

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