



Online purchasing behavior model : the exploration of protection motivation theory

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ARTICLE INFO

Article history:

Received Dec 06, 2022

Revised Dec 16, 2022

Accepted Dec 30, 2022

Keywords:

Adaptive Behavior
Coping Appraisal
Consumer Resilience
Customer Satisfaction
E-commerce
Perceived Severity
Threat Assessments

ABSTRACT

This study aims to analyze the motivational theory of protection in Women's fashion in the marketplace in Indonesia during Covid-19. The population in this study are women of the millennial generation who shop for women's fashion at marketplaces in West Sumatra. The sampling method used is non-probability sampling using the purposive sampling technique. The total sample in the study was 130. Hypothesis testing using statistical analysis with two-tailed. The results of the study are that Threat Appraisal has a negative effect on the adaptive behavior of customers who shop online for women's fashion in post-covid-19. Coping Appraisal has a positive effect on the adaptive behavior of customers who shop online for women's fashion in the post-covid-19. The relationship between threat appraisal and adaptive behaviour is negatively moderated by consumer resilience and satisfaction with the retailer's assistive intent on customers who shop online for women's fashion in the post-covid-19.

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INTRODUCTION

As time goes by, everyday life cannot be separated from the use of the internet from waking up to going back to sleep. Where the internet is currently a revolution in the field of informatics (Leiner, Cerf, Clark, Kahn, Kleinrock, Lynch, Postel, Roberts, & Wolff, 2016). Internet use every year there is an increase. This can be in the form of online teaching and learning activities, conducting online transactions, conducting online meetings to conducting online buying and selling transactions. Based on a report from We Are Social, there were 204.7 million internet users in Indonesia as of January 2022. There was an increase of 1.03% from the previous year. Comparison from 2018-2022 there was an increase of 54.25%. While the increase in internet penetration in Indonesia reached 73,

With all current activities using the internet network in carrying out daily activities, many people become addicted to the internet (Internet Addiction). Internet Addiction is a disorder that occurs as a result of Internet use, individuals spend a lot of time on online activities that interfere with other activities such as careers, studies, family relationships, and participation in community

and social activities (Price, 2011). Shopping behavior shopping addiction or compulsive buying is a term for people who experience shopaholics. Internet addiction causes another phenomenon, namely shopping addiction via the internet, namely online shopping. This addictive behavior can be influenced by environmental conditions, physical environment and culture. A culture that continues to develop is one culture that displays adaptive behavior is a shopping culture. Shopping activities are generally carried out to meet the needs of life. However, for some others uncontrolled shopping activities actually have a negative impact.

This is what Koran (2006) says is compulsive shopping, additive buying, excessive buying, shopping addiction and spendaholism. This shopping addiction has increased since the outbreak of covid-19. The impact of Covid-19 has also affected shopping activities, namely the change in shopping from offline to online. Online shopping activities are more in demand because it is easy to make transactions and can be done at home without having to leave the house and meet many people, which of course prevents this transmission of the covid 19 virus. Changes in how people shop during the pandemic have also given rise to the phenomenon of shopping addiction by doing online shopping activities due to internet addiction. The increase in people's online shopping can be seen from the level of e-commerce visitors in Indonesia. According to CNBC Indonesia, several market places in Indonesia have the most consumer visits in 2021.

Table 1. Number of Visits and Ranking on Mobile in 2021

No.	E-Commerce	Traffic Share Januari	Traffic Share March	Number of visitors	Monthly Unique Visitors
1	Tokopedia	32.04%	33.07%	126.4 Million	38.93 Million
2	Shopee	29.78%	29.73%	117 Million	35.74 Million
3	Bukalapak	-	7.79%	31.27 Million	12.83 Million
4	Lazada	-	7.45%	28.20 Million	11.22 Million
5	Blibli	-	4.86%	18.52 Million	9.64 Million

Source: CNBC Indonesia 2021

Table 1 shows that Tokopedia has a higher traffic share in Indonesia in January and March than its competitors, namely Shopee, Bukalapak, Lazada and Blibli 33.07% in March. The total number of monthly visitors during Q1 2021 reached 126.4 million and the total monthly unique visitors reached 38.93 million. In e-commerce, Shopee is in second place with 29.73% traffic in March 2021. Where the percentage of shopee has decreased from 29.78% in January. For the number of shopee visitors in January-March 117 million monthly visits and the number of unique visitors is 35.74 million per month. In E-commerce Bukalapak is recorded as having a traffic share of 7.79% and has a monthly visit of 31, 27 million in the period from January to March 2021 with unique visitors of 12.83 million per month. Lazada has a traffic share of 7.45% in January-March 2021, with lazada monthly visits of 28.20 million and monthly unique visitors of 11.22 million per month. Blibli, which is in the 5th position of e-commerce in Indonesia, has a traffic share of 4.86% in March 2021, with a total number of visits of 18.52 million and monthly unique visitors of 9.64 million.

Theory of protection motivation is a person's desire to protect himself from the dangers that arise when he feels a threat or fear (Melati, 2020). Protection Motivation Theory (PMT) individuals assess threatening events through two cognitive appraisal processes : threat assessment and coping (Rogers, 1975). Perceived severity assesses how seriously a person believes that a threat is life threatening. Perceived vulnerability (perceived vulnerability) is defined as an individual's vulnerability to a disease that threatens him. Response efficacy (response efficacy) is defined as individual expectations that believe in coping responses or recommendations to prevent threats. Self-efficacy (self-efficacy) can be assessed from how confident a person is in responding to prevent threats (Melati, 2020). In addition to assessing a threat and one's coping appraisal, TMP also

influences one's intentions. Intention goals can be measured to identify a person's behavior in the future (Melati, 2020).

With this shopping addiction phenomenon, a pre-survey was conducted regarding shopping behavior. The answers obtained from a total of 30 respondents, namely 90% chose to shop online, 6.7% chose to shop offline and 3.3% chose to shop offline and online. For the fashion shopping category, consumers tend to choose online shopping as much as 80% compared to offline shopping. The pre-survey which was conducted online via the Google form, the e-commerce that was most chosen for online shopping was the Tokopedia platform with 38.9% results, the second being Shopee with 36.7%. And the budget that consumers do in online shopping is less than 500,000. as much as 63.3% of consumers tend to shop for fashion online, namely 66.7%,

When shopping offline during the Covid-19 and pasca Covid 19 periods, people aged 31 and over were susceptible to disease transmission. Based on data on the proportion of Covid-19 deaths by age as of 4 August 2021 (databook, 2022). Another threat that arises for consumers is when consumers are addicted to online shopping and cannot control spending for shopping due to the convenience of making transactions without the need to leave the house. Consumers who make purchases do not plan to buy a particular product or brand, they immediately buy because of their interest in the product at that time (Syafri & Besra, 2019). A phenomenon of a person's addiction in conducting online shopping transactions can be examined through a protective motivational theory approach. The phenomenon that will be examined is regarding individual behavior in shopping online for fashion, especially women's fashion in the market place in Indonesia through the theory of protection motivation.

The threat appraisal integrates perceived vulnerability and severity of risk due to loss of something of value such as health, finances, welfare and social status according to (Safa et al., 2015). One's perception of self-vulnerability that comes from various internal and external factors has an impact on individual intentions (Baker et al., 2005). Based on the results of research from (Cho et al., 2020) regarding dining restaurants, it shows the effect of Threat Appraisal on various aspects of protecting consumer interests. If consumers buy clothes at offline stores, they will be more at risk of contracting COVID-19. Existing literature corroborates the impact of Threat Appraisal on adaptive behavior. Threat appraisal, through both vulnerability and severity, will positively influence consumer adaptive behavior envisioned through increased online clothing purchases. *H1: Threat Appraisal positively affect adaptive behavior.*

According to (Johnston & Warkentin, 2010) self-efficacy and response efficacy increase the likelihood of selecting an adaptive response, while response costs reduce the likelihood. According to (Parkinson et al., 2017) perceptions of self-efficacy have an impact on individual actions in certain forms of behavior. According to (Cho et al., 2020) self-efficacy and response efficacy positively influence individuals' intentions to protect themselves and can be predictors of intentions to adopt certain types of adaptive behavior. Then the consumer has a strong coping appraisal that is imagined through higher self-efficacy and response efficacy. *H2: Coping appraisal positively affect adaptive behavior.*

(Ball & Lamberton, 2015) suggest exploring resilience on the grounds of its important role for consumer/consumption experience. In the context of buying clothes, consumers who face the threat of Covid-19 will differ in the intensity of consumer adaptive behavior depending on consumer resilience. Then the adaptive behavior that is applied depends on the consumer's resilience in a threat situation. *H3: consumer resilience moderates the relationship between threat appraisal and adaptive behavior.*

According to (Konuk, 2018) health and environmental issues can affect consumer decision-making processes. Consumers are willing to buy a product if they feel convinced about the health and ecological aspects (Boobalan & Nachimuthu, 2020). So customer satisfaction with the intention of helping sellers during the covid 19 pandemic will have a negative impact on the relationship

between threat assessment and intention to increase online purchases. *H4: Consumer satisfaction moderates the relationship between Threat Appraisal and Adaptive Behavior.*

RESEARCH METHOD

This study aims to analyze the motivational theory of protection in women's fashion in the market place in Indonesia during Covid-19. The type of research used is explanatory research. The design of this study uses hypothesis testing. The unit of analysis used in this study is the individual, female consumers in the millennial generation age group who shop for women's fashion in market places in Indonesia. The population in this study are women in the millennial generation age group who shop for women's fashion at market places in West Sumatra. The sampling method used in this study was non-probability sampling using a purposive sampling technique. Total sample obtained as much as 130. Data analysis used in this research is descriptive analysis, validity and reliability testing of measuring instruments, model testing and hypothesis testing using Structural Equation Modeling (SEM) with PLS software.

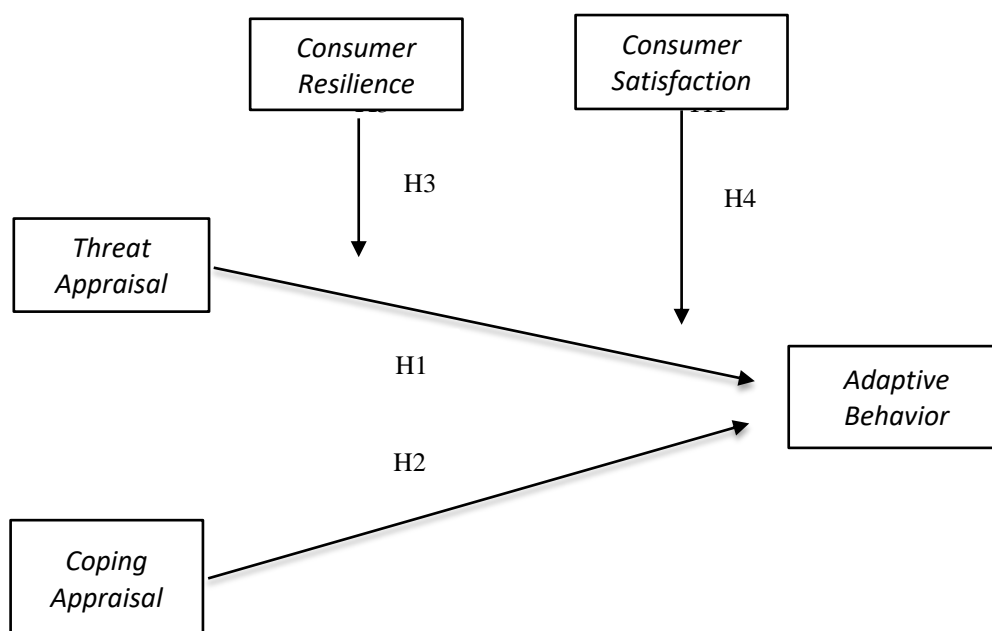


Figure.1 Research Model

RESULTS AND DISCUSSIONS

Characteristics of Respondents

The total number of questionnaires in this study were 130 female respondents who shop for women's fashion products online. Examination of the age of the respondents showed that the majority of respondents are in the age 28 - 31 years as many as 51 people (39,23%). Respondents by occupation are dominated by respondents who work in BUMN as many as 29 people (22,3%). Respondents based on expenditure indicate that most of the respondents have income IDR 5.000.000,- as many as 44 people (33,84%) and the respondent with the lowest income is the income earner < IDR 1,000,000 for 16 people (12,30%).

Validity and Reliability

Validity testing was carried out by 160 respondents with the aim of measuring whether the questionnaire was valid or not. To test convergent validity, the outer loading indicator value > 0.7 is used. Evaluation of discriminant validity can be done using the Average Variance Extracted (AVE) method for latent variables. The AVE value describes the magnitude of the diversity of variables that can be owned by the latent construct. A minimum AVE value of 0.5 indicates a good measure of convergent validity. Discriminant validity is seen by paying attention to the cross loading value. The cross loading value aims to assess the level of discriminatory validity that is adequate for each construct, by comparing the correlations between constructs. The reliability test shows the extent to which the measuring instrument is reliable or trustworthy. The reliability test in this study used the coefficient measurement technique of Composite Reliability and Cronbach Alpha. Composite reliability is considered better if it has a composite reliability value > 0.6. Reliability tests with composite reliability can be strengthened by using the Cronbach alpha value. A variable is declared reliable if it has a Cronbach alpha value > 0.6.

Inner Model

Tabel 2. R-Square Values

	R Square	R Square Adjusted
<i>Adaptive Behavior</i>	0,596	0,576

Source: Data processing from SmartPLS 3.9 (2022)

Based on Table 2 shows that the R-square value is 0.576. shows that the effect of all independent variables on the dependent variable with R2 Adaptive behavior of 0.596. This shows that 59,6% of Adaptive behavior is explained by the variables Threat Appraisal, Coping Appraisal, Consumer Satisfaction, and Consumer Resilience. While the remaining 40.4% is influenced by other variables not explained in this study. If the value of the R-square number is getting bigger, this can show that the independent variable can explain the dependent variable so that the structural equation is getting better.

Hypothesis Testing

Hypothesis testing between variables using bootstrapping techniques through path coefficients aims to identify the result of the formulated hypothesis. Second Order Confirmatory used for the assessment of the significance of the influence between variables will be carried out by a bootstrapping procedure. The bootstrapping procedure uses the entire original sample for resampling. In the resampling bootstrapping method, the significance value used (two-tailed) with the t-value is 1.96.

Table 3. Path Coefficient (T-Values, P-Values)

	Original Sample (O)	Sample Means (M)	Standard Deviation (STDEV)	T Statistics (O/STDEV)	P Values
<i>Threat Appraisal -> Adaptive Behavior</i>	-0.109	-0.102	0.092	1.185	0.236
<i>Copping Appraisal -> Adaptive Behavior</i>	0.799	0.813	0.116	6,900	0.000

Source: Data processing from SmartPLS 3.9 (2022)

Based on Table 3 the direct effect between variables and variables with dimensions, it can be seen that there is an accepted hypothesis. The hypothesis that is rejected is the first hypothesis, namely

Threat appraisal of adaptive behavior. Because it has a P-Values of 0.236 which is greater than the significance level of 0.05 and the T-statistic value of 1.185 is smaller than the T-table of 1.962.

Table 4. Indirect Influence

	Original Sample (O)	Sample Means (M)	Standard Deviation (STDEV)	T Statistics (O/STDEV)	P Values
<i>Threat appraisal -> Consumer Resilience -> Adaptive Behavior</i>	0.066	0.076	0.104	0.635	0.526
<i>Threat appraisal -> Consumer Satisfaction -> Adaptive Behavior</i>	-0.104	-0.105	0.091	1.139	0.255

Source: Data processing from SmartPLS 3.9 (2022)

Based on table 4 it can be seen that there are variables that have t-statistics below 1.96 where all variables are not fully moderated and have no influence on one another. This study examines the indirect effect of threat appraisal to *adaptive behavior* through consumer resilience and *consumer satisfaction* as the moderating variable so that the hypothesis is accepted.

Table 5. Summary of Hypothesis Testing Results

Hypothesis	Research result	Information
H1: Allegedly Threat appraisal has no effect on Adaptive Behavior	<i>Threat appraisals</i> on Adaptive Behavior influence negatively and significantly	Not Supported
H2: It is suspected that Copping appraisal has an effect on Adaptive behaviour	<i>Copping appraisal</i> on adaptive behavior has a positive and significant effect	Supported
H3 : It is suspected that Threat appraisal moderated by consumer resilience has no effect on adaptive behaviour	<i>Threat appraisals</i> in moderating consumer resilience to the effect of Adaptive Behavior negatively	Supported
H4 : It is suspected that Threat appraisal moderated by consumer satisfaction has no effect on adaptive behaviour	<i>Threat appraisals</i> in moderating Consumer satisfaction on Adaptive Behavior has an effect negatively	Supported

The results of the first hypothesis testing show Threat appraisals negatively and significantly affect Adaptive Behavior. From table 4.23 it can be seen that the effect threat appraisal to Adaptive Behavior with a t-statistic value of 1,185 < t-table value of 1.962 and P-value of 0.236 < significance value of 0.05. In addition, the original sample value (O) indicates that the influence Threat appraisals to adaptive behavior negative value of -0.109. The results of previous research conducted by (Kursan Milakovic & Miocevic, 2022) say that consumer threat assessment does not increase adaptive behavior. Correlation analysis values show a significant and slightly significant relationship between the dimensions of threat assessment and adaptive behavior. Consumers who shop for women's fashion during the Covid-19 pandemic don't think about it.

The second hypothesis shows Copping appraisal positively and significantly influence Adaptive Behavior. From table 4.24 it can be seen that the effect Copping appraisal to Adaptive Behavior with a t-statistic value of 6,900 > t-table value of 1.962 and P-value of 0.000 < significance value of 0.05. In addition, the original sample value (O) indicates that the influence Copping appraisal to adaptive behavior positive value of 0.799. The results of previous research conducted

by (Kursan Milakovic & Miocevic, 2022) Copping appraisal reflects through self-efficacy, response efficacy, and response costs showing the results that the coping appraisal level affects adaptive consumer behavior.

The third hypothesis shows that results threat appraisal moderated by consumer resilience to adaptive behavior. From table 4.25 it can be seen that there is no influence threat appraisal moderated by consumer resilience to adaptive behavior with a t-statistic value of 0.635 < t-table value of 1.962 and a P-value of 0.526 > significance value of 0.05. Then if you look at it, the original sample value (O) has a positive value of 0.066. This research is in line with previous research conducted by (Kursan Milakovic & Miocevic, 2022) which suggests that consumer resilience weakens the relationship between threat assessment and adaptive behavior. Which means the higher the consumer's resilience, the lower the consumer's adaptive behavior through threats.

The fourth hypothesis shows that results no effect threat appraisal moderated by consumer satisfaction towards adaptive behavior seen from table 4.25 with a t-statistic value of 1.139 < t-table value of 1.962 and a P-value of 0.255 > significance value of 0.05. Then if you look at it, the original sample value (O) has a negative value of -0.104. threat appraisal moderated by consumer satisfaction towards adaptive behavior. This research is supported by research conducted by (Kursan Milakovic & Miocevic, 2022) consumer satisfaction with the intention to help the seller shows that consumers who feel that the seller helped them very well during the pandemic show lower intentions to adjust their clothing buying behavior.

CONCLUSION

The results of the study are that Threat Appraisal has a negative effect on adaptive behavior of customers who shop online for women's fashion in post-covid-19 at the market place in West Sumatra. Coping Appraisal has a positive effect on adaptive behavior of customers who shop online for women's fashion in the post-covid-19 market place in West Sumatra. Consumer resilience moderates threat appraisal and adaptive behavior has a negative effect on customers who shop online for women's fashion in the aftermath of Covid-19 at the market place in West Sumatra. Consumer Satisfaction with the intention of helping sellers moderate threat appraisal and coping appraisal has a negative effect on customers who shop online for women's fashion in post-covid-19 at the market place in West Sumatra.

This research has limitations on external factors only such as the research sample in West Sumatra and the lack of understanding of the respondents on the questions in filling out the questionnaire on the Google form in answering all the questions that exist is an obstacle in this study. Future research is expected to be able to examine other factors that can influence Threat Appraisal such as coping appraisal, using the interview method so that the answers given are correct, It is hoped that business actors who have offline fashion stores will also open online fashion stores to keep up with the changing times that are all online through marketplace, are expected to provide hand sanitizer facilities or a place to wash hands to avoid spreading viruses and are expected to always provide promotions promotion of fashion products and updating of fashion products.

References

- Baker, S. M., Gentry, J. W., & Rittenburg, T. L. (2005). Building understanding of the domain of consumer vulnerability. *Journal of Macromarketing*, 25(2), 128-139. <https://doi.org/10.1177/0276146705280622>
- Ball, J., & Lambertson, C. (2015). Rising every time they fall: The importance and determinants of consumer resilience. *Advances in Consumer Research*, 43, 191-196. <http://www.acrwebsite.org/volumes/1019298/volumes/v43/NA-43><http://www.copyright.com/>.
- Boobalan, K., & Nachimuthu, G. S. (2020). Organic consumerism: A comparison between India and the USA. *Journal of Retailing and Consumer Services*, 53(November 2019), 101988. <https://doi.org/10.1016/j.jretconser.2019.101988>
- Cho, M., Bonn, M. A., & Li, J. (2020). Examining Risk-Reduction Behavior Toward Water Quality Among

- Restaurant Guests. *Cornell Hospitality Quarterly*, 61(3), 255–270.
<https://doi.org/10.1177/1938965520919106>
- Johnston, A. C., & Warkentin, M. (2010). Fear Appeals and Information Security Behaviors: An Empirical Study Fear Appeals and Information Security Behaviors: An Empirical Study1. *Source: MIS Quarterly*, 34(3), 549–566. <http://www.jstor.org/stable/25750691%5Cnhttp://about.jstor.org/terms>
- Konuk, F. A. (2018). Price fairness, satisfaction, and trust as antecedents of purchase intentions towards organic food. *Journal of Consumer Behaviour*, 17(2), 141–148. <https://doi.org/10.1002/cb.1697>
- Kursan Milaković, I., & Miočević, D. (2022). Consumer's transition to online clothing buying during the COVID-19 pandemic: exploration through protection motivation theory and consumer well-being. *Journal of Fashion Marketing and Management*. <https://doi.org/10.1108/JFMM-04-2021-0105>
- Melati, I. (2020). Penggunaan Teori Motivasi Perlindungan untuk Menjelaskan Fenomena Panic Buying di Periode Awal Terjadinya Pandemi COVID-19. *Global Business Marketing*.
- Parkinson, J., David, P., & Rundle-Thiele, S. (2017). Self-efficacy or perceived behavioural control: Which influences consumers' physical activity and healthful eating behaviour maintenance? *Journal of Consumer Behaviour*, 16(5), 413–423. <https://doi.org/10.1002/cb.1641>
- Price, H. O. (2011). Internet addiction. *Internet Addiction*, 1–119. <https://doi.org/10.1177/0002764204270278>
- Rogers, R. W. (1975). A Protection Motivation Theory of Fear Appeals and Attitude Change1. *The Journal of Psychology*, 91(1), 93–114. <https://doi.org/10.1080/00223980.1975.9915803>
- Safa, N. S., Sookhak, M., Von Solms, R., Furnell, S., Ghani, N. A., & Herawan, T. (2015). Information security conscious care behaviour formation in organizations. *Computers and Security*, 53, 65–78.
<https://doi.org/10.1016/j.cose.2015.05.012>
- Syafri, H., & Besra, E. (2019). Pengaruh Hedonic Shopping Motivation , Store Atmosphere Dan Sales Promotion Terhadap Impulse Buying (Survey : Pada Konsumen Kosmetik Transmart Kota Padang). *Jurnal Ilmiah Mahasiswa Ekonomi Manajemen*, 4(4), 786–802. <https://doi.org/10.24815/jjimen.v4i4.13279>