

# **Antecedent of Webrooming Behavior**

Sekar Yorindasari<sup>1</sup>, Rahab<sup>2</sup>, Weni Novandari<sup>3</sup>

<sup>1\*</sup>Universitas Jenderal Soedirman, <u>sekar.yorindasari@mhs.unsoed.ac.id</u>, Indonesia
<sup>2</sup> Universitas Jenderal Soedirman, <u>rahab@unsoed.ac.id</u>, Indonesia
<sup>3</sup> Universitas Jenderal Soedirman, <u>weni.prihambodo@gmail.com</u>, Indonesia

#### ABSTRACT

Webrooming is shopping behavior by viewing products online but the actual purchases are made in offline stores. Increased internet access makes it easier for consumers to find goods according to their needs. However, several factors can influence consumers in deciding webrooming behavior. Webrooming has been explored from the perspective of consumer motivation, such as information seeking. The research approach was adopted as a theoretical foundation, focusing on information processing and uncertainty reduction. Data obtained by 103 respondents, using multiple regression analysis. The results of the analysis show that the variables Need for Touch and Perceived Usefulness of Online Reviews have a positive and significant effect on webrooming behavior, while Online Purchase Risk Perceived has no effect on webrooming behavior. The findings of this study can be used by marketers to study consumer webrooming behavior so that they can formulate appropriate marketing strategies. The limitation of this study is that this study only has a coefficient of determination only 35.7% of the variables used to examine this webrooming behavior. So for future research, it can be investigated further by adding other variables that affect webrooming behavior, and can add a mediating or moderating role.

Keywords: Webrooming behavior; Need for Touch; Online Purchase Risk Perceived; Perceived Usefulness of Online Reviews

#### 1. Introduction

Webrooming is consumer shopping behavior carried out in offline stores after viewing products online. With the emergence of online shopping centers with the development of the internet, the webrooming phenomenon has become a trend and has received attention. Modern consumers are increasingly making use of complementary online and offline channels to achieve an optimal shopping experience. Webrooming behavior tends to reduce the risk of buying online; as available information helps customers make better decisions. Thus, shopping in the form of webrooming is a very important social phenomenon that is directly related to the survival of online/offline retail companies.

The consumer buying process can use various combinations of online and physical channels to find information about products, corroborate this information and make purchases. According to Forrester Research (2014), webrooming sales are currently five times greater than online sales, and by 2018, 44% of all in-store purchases will be influenced by the Web. The influence of online information on offline purchases is expected to be very significant due to the development of mobile technology. Today, consumers can use their smartphones for social media users towebroom regularly, researching products online before buying them offline (Google Consumer Barometer, 2015).

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Understanding consumers' ever-changing buying journeys is an important step in meeting consumer spending expectations. However, in today's retail environment where online commerce is booming, why do consumers prefer webrooming over pure online shopping. The antecedents of webrooming have been explored from the perspective of consumer motivation, such as information seeking. Santos and Gonçalves (2019) find that consumers primarily utilize webrooming for information processing (i.e., price comparisons) and uncertainty reduction (i.e., choice trust). There is a rather surprising finding that the need to physically inspect the product is not significant in explaining webrooming behavior.

Many factors influence webrooming behavior in consumers, including from Eugene's (2019) study, examining consumers' understanding of webrooming behavior, with the finding that different combinations of product, consumer, and channel factors may interact in different ways to explain differences in webrooming behavior, so that the next researcher uses factors related to consumer products and shopping channels. Furthermore, Eugene (2020), uses the Need For Touch and Perceived usefulness of Online Reviews variables with the results of influencing consumers to do webrooming. Aw, et al. (2020) also uses the Need for touch and Perceived usefulness of online search variables, the results of which Need for touch have a significant effect on webrooming, but the perceived usefulness of online reviews has no effect on webrooming. So that the gap in the results of previous research is used as a research gap for this research. And another variable is added, namely Online Purchase Risk Perceived which can be used as a reason for consumers to do webrooming.

#### 2. Literature Review

Specifically, webrooming begins with consumer product information seeking behavior through online channels, followed by information verification, and ends with completing their actual purchase in a physical store, Reid et al. (2016) revealed that, as online channels do not allow full garment evaluation, perceived risk drives webrooming behavior. On the other hand, offline channels allow consumers to physically inspect products and obtain them immediately, which not only reduces uncertainty but also fulfills the need for instant gratification, thereby facilitating webrooming (Arora and Sahney, 2019).

In the existing literature on multi- and cross-channel shopping behavior, the economic perspective tends to predominate. Most researchers assume that consumers rationally evaluate channel-related benefits and costs during different shopping phases, and choose the most optimal combination of channels, i.e. minimize inputs (i.e., time and effort) and maximize outputs (i.e. right purchases, value shopping). (Flavia and Ors, 2019). To further advance the understanding of webrooming behavior, consumer, product, and channel-related factors are considered together in this study.

This approach was adopted, as empirical evidence suggests that individual differences such as dispositional traits can influence consumers' shopping channel preferences (Cho, Workman, 2015; Dholakia et al., 2010). Therefore, the fact that consumers are heterogeneous in shopping channel preferences should not be ignored (Yrjo et al., 2018). Given that previous authors of the shopping literature—whether webrooming or showrooming—have largely ignored the role of consumer nature regardless of its relevance, this presents an important gap that must be addressed (Arora and Sahney, 2019; Ah, 2019; Fernandez et al., 2018).



# 2.1 Literature Review

#### 2.1.1 Need For Touch

The need for touch refers to the tendency of consumers to evaluate product information through the haptic sensory system. The preference for more complete information obtained through the haptic system is directly related to the concept of "need for touch". The importance of the sense of touch has been studied extensively, and findings suggest that consumers rely on information obtained through the sense of touch when making certain purchases (Dholakia et al., 2010; Peck and Childers, 2003). The preference for more complete information obtained through the haptic system is directly related to the concept of "need for touch". As a result, the need for touch has emerged as an important topic in cross-channel behavioral research (Flavian et al., 2016).

#### 2.1.2 Online Purchase Risk Perceived

Prospect theory suggests that consumers tend to avoid risk, and they weigh the losses more than the gains when making decisions in situations of uncertainty (Kahneman and Tversky, 1979). Therefore, the perceived risks of buying online may outweigh the perceived benefits associated with buying online. The notion of perceived risk characterizes expected differences in purchase experience and purpose, as well as potential dissatisfaction with the purchase (Pires et al., 2004). Perceived risk determines shopping channel selection (Wang et al., 2016).

Even when making a purchase on a website, consumers may be aware of various risks and uncertainties (Kim and Kim, 2009). For example, consumers will find it difficult to wait for products to be shipped or provide personal information such as financial information to online retailers at the time of payment (Chatterjee, 2010). Thus, consumers may have distrust of online shopping because of the risks they perceive when making online purchases. Therefore, in this study, the following hypothesis was made to confirm the effect of perceived online search risk and purchase risk on online shopping distrust.

### 2.1.3 Perceived Usefulness of online reviews

Based on the information processing literature, consumers seek information to gain confidence in judgments, purchase decision satisfaction, and reduce purchase risk (Tormala et al., 2008; Zhang and Hou, 2017). It is generally believed that consumers rely on the opinions of others, such as family, friends, and other consumers to get their final purchase decision. The literature has shown that online consumer reviews have emerged as one of the most relevant sources of information in the modern retail environment, especially for younger consumers (Aw, 2020; Hall et al., 2017). However, not all online reviews are equal in terms of quality (Karimi and Wang, 2017), and consumers are more receptive to helpful online reviews.

### 2.1.4 Webrooming Behavior

Webrooming behavior is defined as consumer visits to online stores before buying offline (Flavian, et al., 2016). Attitudes towards webrooming are influenced by the perceived benefits of online search, the perceived benefits of online purchases, and e-distrust (Ou and Sia 2010). Webrooming behavior tends to reduce the risk of buying online; as available information helps customers make better decisions (Flavian, et al., 2016). They narrow down the options before they decide to move to a physical store to complete the buying process.

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Shopping motivation is often related to consumers' desire to satisfy certain needs through the choice of retail format. It has been shown that consumer webrooming behavior is motivated by the need to obtain more comprehensive information, as well as feeling in control of the shopping process (Kang, 2018; Santos and Goncalves, 2019). Apparently, the combination of online search shopping patterns - offline purchases provides consumers with better knowledge and evaluative abilities, thus facilitating optimal purchasing decisions.

# 2.2. Hypothesis Formulation

# 2.2.1 The Effect of Need for Touch on Webrooming Behavior

Consumers with a high need for touch tend to be more confident in their purchase judgments if product information can be obtained from physically touching the product. Consumers with high touch needs tend to switch from online to offline channels during the purchase stage. This can be explained by the fact that the achievement of the right purchase goals by consumers is more prominent at the buying stage (Lester et al., 2006), and haptic evaluation is very important to eliminate risk, so it is evident in the webrooming process. The need for consumer touch drives webrooming behavior, therefore we hypothesize that:

H1: Need for Touch has a positive effect on Webrooming Behavior

### 2.2.2 Influence of Perceived Online Purchase Risk on Webrooming Behavior

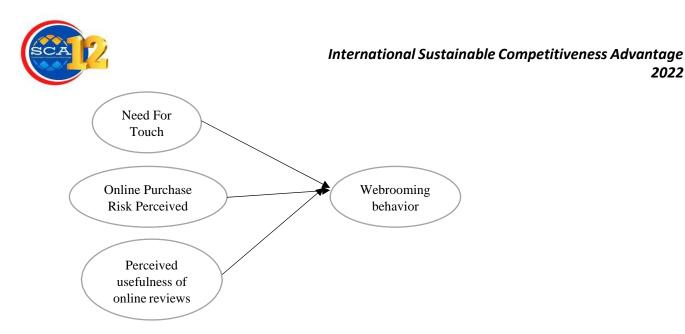
When shopping at an online shopping center rather than in an offline store, consumers may perceive more diverse risks. This could be one of the important factors hindering online purchasing decision making (Kim et al., 2008). In the online shopping process, consumers feel risk when looking for information before buying a product and when actually making a purchase. First, when looking for product information on online websites, the fact that it is difficult to touch or confirm products directly makes consumers feel uncertainty and risk (Kim and Park, 2015). Recent studies have shown that the effects of perceived risk remain prominent even after years of e-commerce implementation, leading consumers to utilize online channels primarily for search purposes, only to switch to physical stores for final purchases (Arora and Sahney, 2019; Santos and Goncalves, 2019). Therefore, we hypothesize that:

H2: Online Purchase Risk Perceived has a positive effect on Webrooming Behavior

### 2.2.3 Effect of Perceived Usefulness of online reviews on Webrooming Behavior

This theoretical proposition was adopted to test whether the perceived usefulness of online reviews is a potentially relevant motivation for the web space. Online reviews are perhaps the most relevant source of information in today's retail environment, especially for today's generation of consumers. Online reviews allow consumers to understand product functions and features, and compare them with those offered by available alternatives, which ultimately reduces uncertainty (Arora and Sahney, 2018) also finding that online reviews can have a positive impact on offline shopping encounters. Therefore, we hypothesize that:

H3: Perceived Usefulness of online reviews has a positive effect on Webrooming Behavior



## 3. Research Methodology

### 3.1 Data Collection

Questionnaires were distributed online. The population in this study are consumers who have done webrooming whose number cannot be known with certainty. Since the number of the population cannot be known with certainty, the number of samples in this study was determined using the estimated interval model. Sampling in this study will be carried out using purposive sampling method, namely the technique of determining the sample based on certain criteria that can provide maximum information.

#### 3.2 Measures

This study uses indicators to measure the variables Need for touch and Perceived usefulness of online reviews adapted from Eugene (2020), and Online Purchase Risk Perceived from Hyunseung (2016). The data collection method used a questionnaire given to respondents who had the criteria of having done webrooming. The measurement of variables using a Likert scale consists of a standard deviation in the range of 1-5. That is, strongly agree (5), agree (4), neutral (3), disagree (2), disagree at all (1) (Sugiyono, 2010). Furthermore, validity, reliability, and hypothesis testing were carried out.

#### 4. Result

### 4.1 Demographic Statistics

Research on the effect of Need for Touch, Perceived Online Purchase Risk, Perceived Usefulness of Online Reviews on Webrooming Behavior was conducted by distributing questionnaires to respondents who had done webrooming in Purwokerto. The number of respondents collected was 103 with research information related to demographics such as gender, age, last education, occupation and income. The majority of respondents are women as much as 70%, and men as much as 30% with an age range of 20-30 years. The majority are undergraduate graduates and jobs are dominated by private employees, students and entrepreneurs.

4.2 Validity and Reliability Test Table 1. Validity and Reliability Result



Variable	Validity (Sig.)	Reliability (Cronbach's Alpha)	Information	
Need For Touch	Sig. 0.000	0.863	Valid and Reliable	
Online Purchase Risk Perceived	Sig. 0.000	0.846	Valid and Reliable	
Perceived Usefulness of Online Reviews	Sig. 0.000	0.854	Valid and Reliable	
Webrooming Behavior	Sig. 0.000	0.825	Valid and Reliable	

This study tested the validity using Pearson product moment analysis, each variable indicator was correlated with a total score at a significance level of 5% (0.05) then on a variable/construct where the indicator was positive and significant (below 0.05), the indicator could be concluded as valid as an indicator of the variable. The results of the validity test with the Pearson Correlation in this study indicate that each variable used in the study for each indicator correlated with the total score of each variable shows a positive and significant correlation (below 0.05). Thus, it can be concluded that the validity test has met the valid or accurate criteria if the significance is below = 0.05, then all are valid because the value is 0.000.

Furthermore, reliability testing with Cronbach's Alpha test, where a variable or construct is said to be reliable if it gives Cronbach's Alpha value greater (>) than 0.60 (Nunnaly, 1960 in Ghozali, 2009). The results of the reliability test in this study showed that the Cronbach's Alpha value of each variable was greater than 0.60, so it can be concluded that all variables used in this study were reliable.

### 4.3 Multiple Linear Regression Test

Next is the multiple linear regression coefficient and the significance test of the multiple linear regression coefficient as shown in the table below:

No.	Independent Variable	Regression Coefficient	t count	Significance
1	Need for Touch(X1)	0.331	4,766	0.000
2	Online Purchase Risk Perceived(X2)	-0.077	-0.632	0.529
3	Perceived Usefulness of Online Reviews(X3)	0.607	5.076	0.000

Table 2. Summary of multiple regression analysis results

Constant = 8.087Fcount = 18,284

Based on the data in the table, the following multiple regression equation can be made: Y = 8.087 + 0.331X1 - 0.077X2 + 0.607X3

Information:

- Y : Webrooming Behavior
- X1 : Need for Touch
- X2 : Online Purchase Risk Perceived
- X3 : Perceived Usefulness of Online Reviews

### 5. Discussion

The results show that the multiple correlation coefficient R is 0.357. This means that the influence of Need for Touch, Perceived Online Purchase Risk, Perceived Usefulness of Online

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Reviews has an influence on webrooming behavior by 35.7% while the remaining 64.3% is influenced by other factors. The coefficient is significant because after being tested with the F-test, the F value is 18.284 with a significance of 0.000.

The effect of Need for Touch on Webrooming Behavior with a regression coefficient of 0.331, this indicates that the beta coefficient of Need for Touch has a positive coefficient so that it can be stated that the effect of Need for Touch on Webrooming Behavior is a unidirectional effect. The beta coefficient of Need for Touch is stated to have a significant effect on Webrooming Behavior, indicated by t of 4.766 and a significance obtained of 0.000, which is less than 5% (0.05), thus the hypothesis which states that Need for Touch has a positive and significant effect on Webrooming Behavior, accepted

The influence of Online Purchase Risk Perceived on Webrooming Behavior with a regression coefficient of -0.077, this indicates the beta coefficient of Online Purchase Risk Perceived has a negative coefficient so that it can be stated that the influence of Online Purchase Risk Perceived on Webrooming Behavior is a non-unidirectional influence. The beta coefficient of Need for Touch is stated to have no significant effect on Webrooming Behavior, indicated by t of -0.632 and the obtained significance of 0.529, which is more than 5% (0.05), thus the hypothesis which states that Online Purchase Risk Perceived has a positive effect. and significant to Webrooming Behavior, is not accepted.

The effect of Perceived Usefulness of Online Reviews on Webrooming Behavior with a regression coefficient of 0.607, it indicates the beta coefficient of Perceived Usefulness of Online Reviews has a positive coefficient so that it can be stated that the effect of Perceived Usefulness of Online Reviews on Webrooming Behavior is a unidirectional influence. The beta coefficient of Perceived Usefulness of Online Reviews is stated to have a significant effect on Webrooming Behavior, indicated by a t of 5.076 and a significance obtained of 0.000, is less than 5% (0.05), thus the hypothesis which states that Perceived Usefulness of Online Reviews has an effect positive and significant on Webrooming Behavior, accepted.

The results of hypothesis testing indicate that Need for Touch has a positive effect on Webrooming behavior. The results of testing this hypothesis are in line with previous research conducted by Arora and Sahney (2019) which stated that Need for Touch had a positive and significant effect on Webrooming behavior. Consumers who have a high need for touch have an effect on webrooming behavior, so they look for information online and turn to physical stores to ensure the products to be purchased offline.

The results of hypothesis testing indicate that Online Purchase Risk Perceived has no positive and insignificant effect on webrooming behavior. These results are not in accordance with the results of the study of Eugene, et al. (2020) which states that Online Purchase Risk Perceived has an effect on webrooming behavior. That is, in this study consumers are not influenced by the perceived risk of online purchases for webrooming.

The results of hypothesis testing indicate that the Perceived Usefulness of Online Reviews has a positive and significant effect on Webrooming behavior. The results of testing this hypothesis are in line with previous research conducted by Eugene (2019) which stated that the Perceived



Usefulness of Online Reviews had a positive and significant effect on Webrooming behavior. These results mean that the higher the Perceived Usefulness of Online Reviews owned by consumers, the higher the Webrooming behavior. Online reviews have emerged as one of the most credible sources of product information, so consumers take advantage of online reviews to find product information but purchases are still made offline.

### 6. Conclusion

Webrooming presents both opportunities and threats for retailers. Multichannel consumers spend more than those who use one channel to make purchases (Venkatesan et al., 2007). As a result, webrooming can benefit both offline and multichannel retailers who can implementeffective multichannel marketing strategies. On the other hand, webrooming reduces the number of online sales and can potentially encourage free rides across channels, and is thus harmful to pure online and multichannel retailers, respectively. Therefore, to deal with the above-mentioned situations, it is important for all types of retailers to pursue further understanding of webrooming.

### 7. Limitation and Future Research

The limitation of this study is that this study only has a coefficient of determination of 0.357, which means that only 35.7% of the variables used to examine this webrooming behavior, while the remaining 64.3% are influenced by other variables that dominate. So for future research, it can be investigated further by adding other variables that affect webrooming behavior, and can add a mediating or moderating role.

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