

Title: Understanding consumer segmentation and their reliance on online reviews

Abstract:

The use of online reviews among online shoppers has increased significantly in recent years and has reduced uncertainty and risks associated with online shopping. The objective of this research is to identify the segment of online shoppers relying on online reviews. Consumers were classified based on their shopping motivation, trait and online behavior. A quantitative survey involving 375 Indian online shoppers were performed to identify and understand their reliance of online reviews. The findings show that consumer with high price consciousness, value consciousness, brand consciousness and self-esteem rely on online reviews for their online purchases. On the other side consumer who are quality conscious and having online shopping anxiety don't rely on online review. This research adds to the growing literature on consumer information theory and validates the link between consumer shopping motivation and their informational needs.

KEYWORDS: Online review, eWoM, decision-making style, self-esteem, online anxiety, information requirement.

1. Introduction

Online Consumer Reviews (OCR) has shifted the power from seller to buyer and reduced information asymmetry between them. They are also known as electronic Word of Mouth and it has become a strategic marketing tool for businesses and an interesting research area for academics. A systematic review undertaken by (Allen et al., 2014) identified 190 research studies on eWOM and they broadly classified existing literature into four research questions.

1. Why do people talk online?
2. What happens to communicator?
3. Why do people listen?
4. Consequences of eWOM

They also identified potential research areas that requires further exploration. In this research paper, we would like to extend the existing research by asking the research question

Which customers are more likely to listen?

Existing research indicates that customers pay attention to eWOM primarily to reduce dissonance (Burton and Khammash, 2010) transaction costs (Park and Lee, 2008) and risk (Lee, 2014). However, customers are heterogenous in nature and their individual personality traits will play a vital role on their likelihood of relying on eWOM. The heterogenous nature of customers have resulted in the development of sophisticated data mining and analytical tools so that businesses can develop better understanding about its customers such as their likes, behavior, needs and wants etc. In fact, it is becoming a key differentiator amongst businesses as they will be able to provide customized experience. Segmenting and differentiating customer based on their behavior is not new for e.g. Seo & Moon (2016) used cluster analysis to identify three different groups of social

commerce consumers: realistic consumers; passive consumers and innovative brand-preferring consumers. Even internet users were segmented by Barnes et al (2007) into three homogenous groups: reserved information-seekers, open-minded online shoppers, and risk-averse doubters. In the industry side organization like Flipkart, India's leading e-commerce player used consumer behavioral data to segment consumers into multiple groups to target with personalized video ads and provide superior customer experience Business Line (2019). Netflix a leading online content streaming service provider clustered its consumers into taste communities, based on which their machine learning algorithm recommends contents to its consumer Josef Adalian (2018). At a fundamental level, profiling or segmenting can be done based on Consumer's Decision-Making Style (CDMS). It is defined as consumer mental orientation and approach to making choices (Sproles and Kendall, 1986). Although consumers are segmented based on their purchasing behavior, psychological trait and decision-making style (Rezaei, 2015; Niu, 2013) understanding their information requirement is quite challenging for both academician and marketers. In particular, the information search and processing are unique for each segment, as each have different requisite for information acquisition. For example, some consumers search for product information, while others for brand-related information.

Review of extant literature about eWOM indicate that there is a gap in our understanding on who among online shoppers, require information and why they need it. Existing research on CDMS focusses on consumer's demographics differences (Solka et al., 2011) (Anic et al., 2014) ; where as there is little research that explores the relationship between CDMS and their perception about online reviews. Author like Chang, Hsieh, & Lin (2013) and Kang, Johnson, & Wu, (2014) used personality trait and decision-making style to understand individual intention to receive information in brand communities and social networking site. We find it is necessary to explore

this study in online e-commerce website by focusing on additional variables. More over this context has never been applied in a developing country like India.

In this work, a segmented approach is used where consumers are segmented based on their trait (self-esteem), purchase style (CDMS), and online behavior (online shopping anxiety) to understand consumer information acquisition and their reliance on online reviews. We found this to be an appropriate way to differentiate online shoppers. This approach has been adopted and applied in multiple studies to understand consumer behavior (Kara et al., 2009)(Sun et al., 2013). Also this approach was used to understand the difference in consumer decision making among two groups (Hanzaee and Aghasibeig, 2008).

Almost every author has focused their study related to CDMS and eWoM among consumers from developed countries, we preferred to explore and understand consumers in developing countries especially India, since a greater number of online shoppers are emerging from this country and the internet penetration is skyrocketing IBEF (2018) Deloitte (2019). Also, there is huge demographic variation among Indian consumers. And most of them prefer to read online reviews before purchasing (Roy et al., 2018).

This study would be of great value for digital marketer to understand consumers information orientation. The paper is organized as follows. First, literature related to eWoM and decision-making style is discussed. We next present with theory and model development including hypotheses. Then we describe method for data collection and analysis. Finally, we present the results, discuss the findings and conclude with practical and managerial implications along with limitations and future research directions.

2.Literature Review.

2.1 Understanding Electronic word-of-mouth

Electronic word-of-mouth (eWoM) is fundamentally an opinion or customer feedback provided by online users through different platforms. Researchers have developed and used various methods to better understand the usefulness and impact of eWoM. Motivations like altruism, social pressure, brand commitment, involvement and attitude drive consumers to provide feedback or post an online review (Wolny and Mueller, 2013). It has also been seen that customers having personality traits of neuroticism and conscientiousness tend to frequently write reviews (Picazo-Vela et al., 2010).

Individuals require information related to brand and service for their mental assurance, hence they read reviews. Overall consumers find online reviews to be more credible and relevant for their purchase process than market created information in the Internet (Bickart and Schindler, 2001)(Tien et al., 2018). Online reviews act as source of information for customers to avoid uncertainty and reduce dissonance (Burton and Khammash, 2010), it reinforces already-formed product preferences of consumers (Floh et al., 2013). Consumers reliance on reviews increases when perceived risk towards online shopping increases (Lee, 2014). Especially when purchasing expensive products they read more reviews (Maslowska et al., 2017). Online reviews not only brings mental peace but also instigate brand interest among review readers (Xue and Zhou, 2010).

Individual search behavior and their preferences for types of information sources depends upon their characteristics (Furse et al., 1984). As not all consumer process eWoM in a similar way it can differ between individuals based on their information processing tendency and motivation to process information. An individual with high propensity to process information would spend more

time analyzing eWoM and purchase an optimum product (Gupta and Harris, 2010). Similarly, consumer with different motivation to purchase will have different informational needs.

2.2. Classification of consumers

2.3 Based on decision-making style

Consumers can be differentiated and clustered based on their attitude and purchase motivation. Each have different preference and form unique profile. Recent research shows different approach to segment online shoppers (Barnes et al., 2007) and create individual profile based on their primary shopping motivation. Though there are different ways to segment online shoppers but existing literature shows three ways to characterize or segment consumer, viz., based on psychographic/lifestyle (Rohm and Swaminathan, 2004) consumer typology approach (Moschis, 1976) and finally by their characteristic's approach (Westbrook & Black, 1985)(Cowart and Goldsmith, 2007).

Sproles and Kendall (1986) framed the consumer style inventory (CSI) representing different mental approach of consumers based on their decision-making characteristics. The eight characteristics are (1) high-quality consciousness; (2) brand consciousness; (3) novelty-apparel consciousness; (4) hedonistic shopping consciousness; (5) value consciousness; (6) impulsiveness; (7) confusion from over choice and (8) habitual/brand-loyal orientation. Each concept differentiates consumers based on their fundamental and stable mental state. These styles demonstrate consumer's primary motivation for shopping. Once consumer adopts a shopping style, they are relatively stable for an extended period of time (Sproles and Kendall, 1986). Hence, they are suitable for segmentation.

To segment and understand consumer decision making, Consumer Style Inventory (CSI) scale seems to be the most appropriate approach (Akturan et al., 2011), despite this there exist some differences and contradiction among present literature to generalize the understanding of CDMS (Solka et al., 2011). Existing literature on CDMS is fragmented as it focuses on overlapping dimensions and omit few dimensions measured by alternative test, hence it needs more empirical support to get more clarity (Dewberry et al., 2013). Few authors examined consumer durables (Xin et al., 2010) and retailing in general, using CSI original scale (Lysonski and Durvasula, 2013). And few others (Jensen and Grunert, 2014)(Anic et al., 2012) restricted consumer classification to limited segments. Another cross-cultural study restricted it to four segments— fashion-brand conscious consumers, indifferent consumers, recreation seekers, and quality seekers (Akturan et al., 2011). Hence, in order to avoid contradictions and enable generalizability, we have focused on the basic decision-making style which includes value, price, brand, quality consciousness. This study adopts these styles to classify consumers and understand their dependence on online reviews for purchase decisions.

2.4 Based on personality trait and online behavior

Apart from CDMS, a consumer can be differentiated or segmented by his/her personality trait and online behavior (Barnes et al., 2007). Earlier literature has already used personality trait to classify customer and understand his/her product choice and brand preferences (Evans, 1959)(Westfall, 1962). Similarly, other online consumer behaviors such as anxiety can be used to differentiate and classify consumers. Studies have used both self-esteem and anxiety to understand how consumers make decisions (Wray and Stone, 2005). Hence for this study, we use self-esteem and anxiety as a mean to understand consumer reliance on online reviews.

3. Theoretical foundation and Hypotheses development

Consumers having mental orientation and preferences towards highly advertised and well-known brands are considered as being brand conscious (Soyeon Shim and Cehrt, 1996). They adopt such direction of shopping to express personal characteristics and preferences through such brands.

Consumers are often confused during their decision-making process and use cues related to brand to take final decisions (Deeter-schmelz et al., 2000). For brand conscious consumers, brand act as a cue to reduce perceived risk (Husic and Cicic, 2009). Also online review acts as an extrinsic cue to extract brand related information and identify potential alternatives (Davis and Agrawal, 2018). And other side online reviews reduce uncertainty in decision-making related to brand (Krishnamurthy and Kumar, 2018).

Consumer are able to extract functional and symbolic aspects of brand through information provided by online reviews (Krishnamurthy and Kumar, 2015). Online reviews help consumers form a perception about brand (Chen and Chen, 2010). It has been shown that online reviews are being used by consumer to evaluate their brand choices (Chakraborty and Bhat, 2018). Thus, a brand conscious consumer would rely on online reviews to extract brand-related information and also to understand how others perceive a particular brand.

H1: Brand consciousness is positively associated with reliance on online reviews.

Primary focus of price conscious consumers is to pay extremely low price for all product and search for discounts and offers. Purchasing product at low price fulfills their emotional and entertainment value (Alford and Biswas, 2002). Compared to customers in developed countries,

the consumer in developing word are more price conscious (Mehta and Dixit, 2016). They are much keen on paying as low price as possible for their purchase. Based on the information processing framework, Kukar-kinney, Walters, & Mackenzie, (2007) suggested that, less price conscious customers search and process less information. On the other hand, high price conscious consumers are cognitively very involved with price and are deeply involved with information. Customer who are price conscious tend to seek opinions from others before purchasing products online (Goldsmith and Horowitz, 2006).

Bad purchase leads to monetary loss, since it is psychologically painful (Maslowska et al., 2017) Price conscious consumer are reluctant to take quick decisions. To alleviate such losses, consumers search and collect information from multiple sources. And online reviews are one such source for price related information (Zhu et al., 2017). Furthermore, consumers price perception towards the product is also influenced by online reviews (Liang and Corkindale, 2019). Hence we expect price conscious consumers to rely on online reviews.

H2: Price consciousness is positively associated with reliance on online reviews.

Value conscious consumer's main focus is to maximize their purchase value. According to Dawra et a., (2015) value consciousness comprises of two relative components - price and quality. Their information search towards the product is inclined to seek both the benefits: price and quality. These consumers are hard to please, being conscious of extracting economic benefit through most purchases (Halepete et al., 2008). They tend to confirm their purchases with as much information as possible. Usually online review from other customers can provide information about the value of a product (Gruen et al., 2006) and it helps consumer to evaluate their purchase decisions. Online

shoppers tend to search and depend on online reviews to evaluate the value of the product they seek to buy. Hence, we expect value conscious consumers to rely on online reviews

H3: Value consciousness is positively associated with reliance on online reviews.

High-quality conscious customers “search for the highest or very best quality in products” (Bates and Mitchell, 1998). They also search for information about product to judge its quality. Consumer find online reviews as additional sources to judge product quality. For example a positive review about a product or service is an indicator of its quality (Kostyra et al., 2016). Consumers usually rely on online reviews when they are uncertain about product quality (Lin and Kalwani, 2018). Online reviews helps the consumer infer product quality and make quick purchase decisions (Cui et al., 2012). Hence, we expect the quality conscious consumer to rely on reviews to extract information related to quality.

H4: Quality consciousness is positively associated with reliance on online reviews.

Self-esteem is a person’s subjective evaluation of self (Zhang, 2009). It is the confidence that people feel about themselves and their decisions, judgments. Both self-esteem and self-confidence are highly correlated (Bearden et al., 2001) (Keng and Liao, 2013). Consumers having higher self-esteem show more confidence in their purchase decisions. Existing research shows people with higher self-confidence search for more information and engage in intensive search activities (Loibl et al., 2009). Consumer with high self-esteem make deliberate and well planned purchasing decisions (Perry and Morris, 2005) and to make such decisions, they must extract reliable information. Also high self-esteem consumer are driven by the intrinsic enjoyment of shopping, which drives them to search for more information related to product (Darley, 1999). They gather

information as a risk reducing strategy and aim to reduce post purchase dissonance (Keng and Liao, 2013). On the other side research shows consumer would rely on online reviews to reduce un-certainty and purchase risk (Malik and Hussain, 2018). Hence, we expect that consumers having high self-esteems would rely on online reviews to gain more confidence in their decisions.

H5: Self-esteem is positively associated with reliance on reviews.

Online shopping Anxiety over here is an emotional and negative feeling towards technology. It is the fear experienced by the consumer when using technology to purchase product (Venkatesh, 2000) (Celik, 2011). Such anxiety reduces customer intention to purchase products from online sites. Furthermore consumers having online shopping anxiety want to reduce the uncertainty component by seeking information about the purchase decision (Locander and Hermann, 1979)(Roselius, 1979). Consumer need information to reduce decision anxiety, which motivates them to seek word of mouth (Lam and Mizerski, 2005). Earlier study shows high anxious people seek more information than less anxious people (Locander and Hermann, 1979). Consumers who seek to reduce uncertainty would usually read online reviews (Lee, 2014). Also, Earlier research by (Srinivasan, 2015) found significant relationship between online shopping anxiety and subjective norms. Hence these consumers are ready to accept others opinion and would prefer to rely on online reviews to reduce uncertainty.

H6: Online shopping anxiety is positively associated with reliance on online reviews.

4.Research Methodology

4.1 Research framework

The review of literature shows that consumer can be segmented based on their shopping motivation. For instance, people who focus more on brand-related attributes could be segmented under brand consciousness. Those who prefer only quality products belong to the segment of quality consciousness. For the present study, we use four different types of consumer decision-making styles. Apart from decision-making style, the study uses online anxiety and self-esteem as other parameters to segment online shoppers. Fig 1 presents the proposed theoretical model based on intense review of prior literature towards online review and customer decision-making style.

<!--Insert Fig 1 here--!>

4.2 Data collection

To test the hypotheses and model a structured online questionnaire was administered targeting online shoppers. Online questionnaires has its own advantages in terms of response time, broader geographical coverage and overall cost (Ilieva et al., 2002)(Green et al., 2003). For ease of reading and to eliminate proximity effects in the questionnaire, each item were separated based on the variables (Podsakoff et al., 2012).

Verified e-commerce user data were collected from a national panel service provider. The database consist of respondent from Tier-1 cities (Delhi,Mumbai,Kolkata,Bangalore,Chennai). Our primary focus was on Major cities of India (Tier-1), since online shopping usage is higher in these cities IAMAI (2017). For our study we randomly chose two tier-1 cities (Bangalore and Chennai) as our sampling frame. Respondents from these cities represent other parts of India as well. Although we cannot make any assertions, there is a high chance that the respondents represent different parts of

India. The database comprised qualified and willing respondents , for accurate and efficient data collection (Deutskens et al., 2006). Further to represent the general ecommerce users, respondents were chosen based on education, age and occupation. After quality check the questionnaires were sent through email to e-commerce users. Before proceeding, once again respondents' consent was taken and at any point of time, they were allowed to quit. As an incentive, respondent were informed about lucky draw for a gift coupon. Previous studies show very low response rate ranged from 1-3% for online surveys (Natarajan et al., 2017). In our case, we sent 25,000 emails to have sufficient number of respondents for the model.

We used survey monkey, a cloud-based survey tool to send questionnaire and collect responses. This study is applicable only to online shoppers who read online reviews. Hence, after the consent statement, we used filter questions to identify respondents who purchase after reading online reviews. Before proceeding to the main questionnaire, respondents were asked to imagine purchasing a headphone of their choice from their preferred website . Since headphone being an experience (Park and Min, 2009) product which needs to be seen and tried to evaluate it. Customer would usually read and depend on online reviews to such product (Gupta and Harris, 2010).

4.3 Sample profile:

Around 614 responses were obtained during the period of data collection. Reflecting a response rate of 2.45%, being standard for email questionnaires. For a total of 614 respondents, 82 respondents who did not make any online purchases in the last three months were eliminated. Then 33 non-engaged and 124 incomplete responses were removed. Finally, the study used 375 complete responses for further analysis. Detailed demographic characteristics of the respondents are illustrated in table 1.

<!--Insert table 1 here --!>

4.4 Measurement items:

The items developed for the study are shown in table 2. Considering the objective of the study, we choose seven constructs with 33 questions and further 7 questions to collect demographic details. A seven-point Likert scale were used for all the items ranging from 1 (strongly disagree) to 7 (strongly agree). Compared to five-point Likert scale they are more sensitive and the responses are not unnecessarily skewed (Diefenbach et al., 1993). Although we adapted validated scales for all the variables from previous studies, we felt the need to conduct a pilot study. Before administering the questionnaire to pilot group, it was reviewed by expert. Next, the questionnaire was pre-tested with 50 respondents to make sure they get meaning of each statement. Finally, all inconsistencies were removed to finalize the questionnaire. (Refer Appendix A for the complete questionnaire)

<!--Insert table 2 here --!>

4.5 Common method bias:

As the data were self-reported from different individuals, there was a concern of common method bias (CMB) (Podsakoff and Organ, 1986). Hence to investigate common method bias we performed Harman's single factor test. The test does not reveal any evidence for CMB, as the first factor did not account for a majority of the variance (26.93%). Which shows CMB is less likely to be a serious concern in this study. Also, to eliminate proximity effects in the questionnaire we separated the item based on variables (Podsakoff et al., 2012). The respondents were assured that there is no right or wrong answers and were guaranteed anonymity. This prevented respondents to edit their responses and not fall for social desirability (Podsakoff et al., 2003).

5. Data analysis and results

To test the hypotheses, structural equation modeling with partial least squares (PLS) was used. Compared to covariance based method, PLS is a second-generation multivariate technique and has its own advantages, it is more useful when the focus of research is to predict dependent variable and not confirming previous validated theory (Reinartz et al., 2009). PLS is always preferred when the sample size is low (Wang et al., 2013). PLS follows two-step approach for data analysis. First approach is related to analysis of measurement model, and the second step focuses on testing the causal paths between the constructs. Hence adopting PLS method for this study was more suitable than Covance based.

5.1 Measurement model:

We examined both validity and reliability of the construct in the model. Table 3 depicts Cronbach's alpha value to be greater than .70 showing good internal consistency (Nunnally et al., 1967). Next, the composite reliability (CR) score for all construct is above the desirable level of 0.7. Finally, average variance extract (AVE) is calculated for all factor and the observed score is greater than 0.50(Chin, 1998)(Fornell and Larcker, 1981) fulfilling the conditions for convergent validity. Beside this, the standardized loading for each item is greater than 0.5 (Kline, 2015) and the average loading per factor are greater than 0.7(Hair et al., 1995). Also, the study had two items (ANX 4 and PC 6) with factor loadings below 0.50, which were removed

<!--Insert table 3 here --!>

Discriminant validity were computed by calculating the squared root of AVE values of the respective latent variable, if the value is higher than the correlations value of other latent variable

it signifies Discriminant validity (Fornell and Larcker, 1981). Table 4 presents evidence for model's discriminant validity.

<!--Insert table 4 here --!>

5.2 The Structural model:

After verifying and validating the measurement model, hypothesis testing was carried out using Smart PLS software. Figure 2 shows standardized path coefficients, results of hypothesis testing and the overall variance explained (R^2 value) for the dependent variable. For the model fit indices, the SRMR (Standardized Root Mean Square Residual) value was 0.069, which is within the permissible limits between 0.069 to 0.08. Figure 2 also explains overall explanatory power, and its associated t-value of the path in the structural model. Based on bootstrap resampling procedure the tests of the significance of all paths were done. It was inferred from the result that price consciousness (β 0.206, t 3.406), value-consciousness (β -0.224, t -3.292), self-esteem (β -0.227, t -3.444) and brand consciousness (β -0.105, t -1.974) have significant impacts on reliance on online review, thus supporting H1,H2,H3 and H5. Contradictory to our expectation, quality-consciousness (β -0.012, t -0.206) and online shopping anxiety (β -0.083, t -1.578) doesn't have significant impact of reliance on online reviews, thus rejecting H4 and H6. Summaries of the hypotheses' tests are listed in Table 5.

<!--Insert Figure 2 here --!>

The result shows the overall variance explained by the exogenous variable towards reliance on reviews to be 33 (R^2 value) percent. Also, the adjusted R^2 value for reliance on review were 0.32. Respectively these value shows that the model provides enough explanation of the variances for reliance on reviews in our study's context.

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6. Discussion

This study aimed to understand how consumers with different motivation and behavior would rely on online reviews. Study shows price, value, brand conscious and high self-esteem consumer rely on online reviews. Price conscious consumer focus on low cost and are more involved in their purchases. They would spend more time searching low cost product and would gather more information related to such product.

Furthermore price-conscious customers perform pre-purchase price search for almost all products (Kukar-kinney et al., 2007). They cultivate an internal reference price for all products. Internal reference price is price related information, generated and stored in memory of consumer based on their actual fair monetary transaction (Mayhew et al., 1992). There could be an uncertainty between actual product price and internal reference price as perceived by consumer before purchasing product (Thomas and Menon, 2007). This uncertainty in the assumption of price information could lead to dissonance. In order to clarify or remove such dissonance, they would read reviews.

Secondly, the perception of price as conceived by consumers, could drive the consumer to verify price in their memory by reading reviews. If they find that their perceived price of the product is higher than the original price or if they find reviews to be more positive, they would feel more

satisfied and would take positive purchase decisions. With increase in the price of product, the risk of incorrect assessment increases, especially when they are unaware of the product, hence they search for more information through online reviews.

Research shows brand conscious consumers tend to seek more information about brands (Guy Parrott et al., 2015). For them brand act as a cue for product quality. Such instances drive consumer to adopt online reviews as a reliable source of brand information. Also existing study shows consumer purchase decision related to brand is four times influenced by online reviews (Mahapatra and Mishra, 2017).

Brand conscious consumers give more importance to social status and consider brands as an identity of social status and prestige (Liao and Wang, 2009). They search for brand-related information and would comply with the opinions of others in adopting a brand. These tendencies increase when they lack brand knowledge. (Yang et al., 2017). Before adopting a brand, consumers observe other people's brand preferences and extract information about the brands (Lertwannawit and Mandhachitara, 2012) . This could be a reason why brand-conscious consumers rely on online reviews, just to know others opinion about a brand. Ultimately customer not only get to know others opinion but also extract information related to brand attributes through reviews.

Coming to value conscious part consumers evaluate products and services according to the ratio of perceived benefits and cost (Lin and Wang, 2006). Online reviews could be a source of information about the product and therefore they would rely on reviews to judge its overall value. Earlier research has shown that online reviews tend to provide informational value to online shoppers(Zhou et al., 2017). Reviews are more informative and persuasive when they provide both price and quality information in a single source. This allows consumers to think that they are

gaining value, while shopping. Such informational values could attract value conscious consumers towards online reviews.

Contrary to existing research, our results show quality conscious consumer do not rely on online reviews for their decisions. Most research claim that consumers use online reviews to determine product quality (Hu et al., 2008). But here consumers couldn't extract product quality cues from online reviews, they still need physical experience of product. May be they are skeptical towards reviews, when it comes to judging product quality.

Consumer who are high in self-esteem tend to rely on online reviews. These individuals are more confident in their own choices and have positive attitude towards themselves. They make well-planned, less compulsive purchase decisions (Perry and Morris, 2005). These consumers read reviews as a risk-reducing strategy. They search and extract as much as information possible from multiple sources before making a final decision. Moreover, they would need self-affirmation about their decisions and this could induce them to read more reviews.

An important finding in the study is that consumers with online shopping anxiety do not rely on online reviews. Anxiety being a negative emotion, is usually associated with risk aversion(Chaudhuri, 2001). It was expected to have a positive association as it is common for a consumer to rely on reviews to avoid risk (Lee, 2014). Past research has shown consumer would seek word of mouth when they face decision anxiety (Lam and Mizerski, 2005) but when it comes to online environment our results contradicts earlier findings. Lack of trust with online retailer could be a possible reason(Meng and Chatwin, 2015). Anxious consumers continue to consider the online shopping environment to be associated with inherent risks (Marín Marín et al., 2016).

Hence, consumer who don't trust websites for shopping, would not trust online reviews provided by them.

7. Implication

In today's interactive marketing environment, we know consumer rely on online reviews to purchase products. It is, however, challenging to identify segment of consumer that give importance to online reviews and the kind of information this segment expects of them. There exist different groups of Internet shoppers, each driven by different motivations to shop and requiring different types of information to process and make decision. Understanding these consumer lifestyle and information requirement could help marketer to design effective marketing strategies. All these different homogenous group have different requirement.

Marketers can customize their website based on different segments of consumer. They can structure the online reviews with comparative tools to compare both negative or positive reviews. Also, these comparison matrices can be personalized based on each segment. For e.g. consumer should be able to compare two different brand related attributes through reviews at a single point.

Brand managers can highlight reviews related to brand attributes and other brand-related information for the brand-conscious consumer. This could enhance brand image and bring positive attitude towards brand. Reviews have different types of messages, and can provide information on price and quality. Marketers can form clusters of these messages based on message content as suitable or convenient to customers based on their shopping motivation. These strategies could enhance the usefulness of reviews and overall satisfaction towards the website as customers are able to find relevant information easily.

Previous research has shown that consumers exhibit anxiety towards online retailer, when they experience difficulties in navigating the website or see outdated information (Vijayasarathy, 2004). Therefore, the marketer can think of designing web pages with ease of access and navigation, which can help reduce anxiety and increase satisfaction among consumers(Lim et al., 2016).

Companies spend time and resource to gather data about consumer lifestyle and their web browsing behavior to understand and develop individual profiles (Dam and Velden, 2015). These user profiles are used to customize product and targeted more efficiently. Marketer can use current study to understand informational requirement of different segment of online shoppers. They can design recommender system based on online reviews, use data mining to extract product or brand information from reviews and highlight it to online shoppers based on their shopping motivation.

8. Limitation and future research direction

This study is subjects to a few limitations. First, we have adopted convenient sample, in which, our respondents are drawn from a pool of online shoppers in India. Further studies could be performed to generalize the empirical findings in other metro cities or Tier-2 cities (Lucknow, Patna, Jaipur, Salem) in India. Secondly, the study covers limited consumer decision-making styles. It could be extended to test the reliance of online reviews with other decision-making styles. Authors like Ladhari et al (2019) and Barnes et al (2007) have clustered and segmented online shoppers based on other criteria, future researcher could study online review susceptibility of these consumers. Third, researcher could use socio demographic characteristics to understand consumers reliance on online reviews

Studies show that review types and vividness can influence consumer decisions; it would be beneficial to study how it influences different segments of consumers. Future studies can also try

to understand the intention to write reviews among different segments of consumers. It is possible that each segment of consumer would write in a different context; for example, a brand conscious consumer would write more about brand-related attributes.

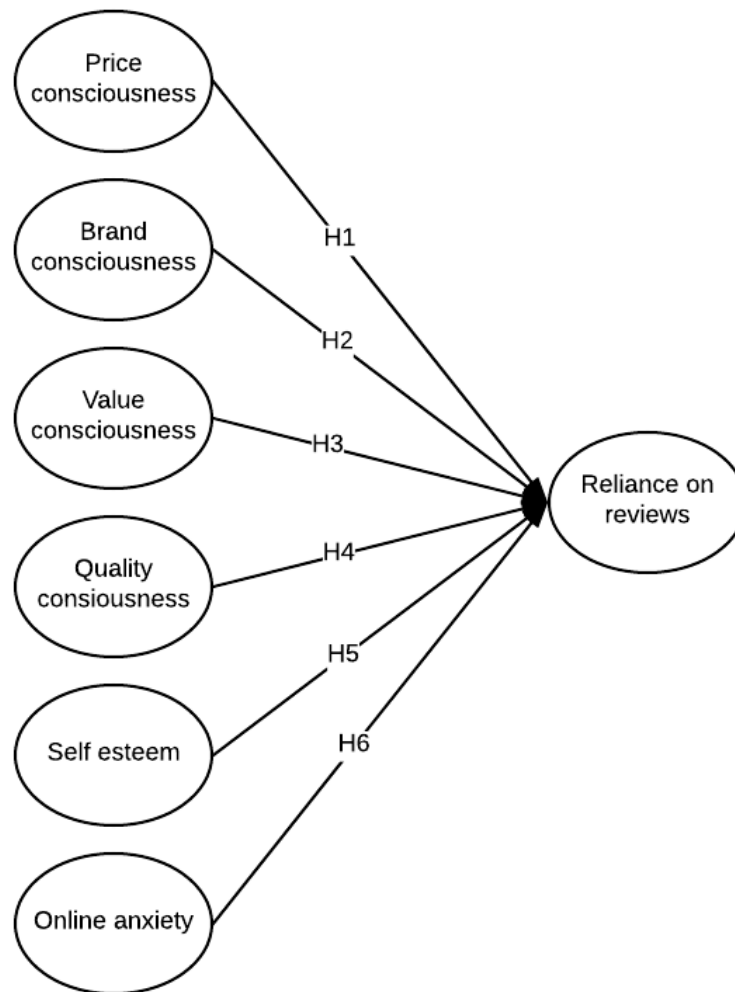


Figure 1: Research framework

Table 1 : Sample profile

| Characteristics | Number
(n=375) | Percentage |
|--|-------------------|------------|
| Gender | | |
| Male | 256 | 68.27% |
| Female | 119 | 31.73% |
| Age | | |
| 16-20 | 25 | 6.67% |
| 21-25 | 27 | 7.20% |
| 26-30 | 118 | 31.47% |
| 31-35 | 115 | 30.67% |
| Above 35 | 90 | 24.00% |
| Highest Educational Qualification | | |
| School or Junior College | 4 | 1.07% |
| Diploma | 23 | 6.13% |
| Undergraduate | 79 | 21.07% |
| Post Graduate | 227 | 60.53% |
| Doctorate | 13 | 3.47% |
| Post Doctorate | 10 | 2.67% |
| Other | 19 | 5.07% |
| Online shopping experience (Months) | | |
| 3(Low Experience) | 16 | 4.27% |
| 6(Low Experience) | 32 | 8.53% |
| 12(High Experience) | 22 | 5.87% |
| 12+ (High Experience) | 305 | 81.33% |
| Internet Usage per day (Hours) | | |
| 0-4 | 121 | 32.27% |
| 4-8 | 128 | 34.13% |
| 8+ | 126 | 33.60% |
| Frequency of online shopping | | |
| Daily (High Frequency) | 8 | 2.13% |
| Weekly (High Frequency) | 68 | 18.13% |
| Monthly (Low Frequency) | 156 | 41.60% |
| Occasionally (Low Frequency) | 143 | 38.13% |

Table 2: Measurement items

| Construct | Source |
|-------------------------------|---|
| Price consciousness (PC) | (Alford and Biswas, 2002)(Sinha and Batra, 1999)(Ailawadi et al., 1998) |
| Brand consciousness (BC) | (Soyeon Shim and Cehrt, 1996)(Nelson and McLeod, 2005)(Yang et al., 2017) |
| Value consciousness (VC) | (Burton et al., 1998)(Anne et al., 2002)(Lichtenstein et al., 1993) |
| Quality consciousness (QC) | (Rezaei, 2015). |
| Self-esteem (SE) | (Sierra et al., 2016) |
| Online shopping anxiety (ANX) | (Meuter et al., 2003) |
| Reliance on Reviews (ROR) | (Mohammed et al., 2016)(Gottschalk and Mafael, 2017) |

| Table 3 : Construct reliability and validity test | | | | |
|---|------------------|-----------------------|----------------------------------|--|
| Construct | Cronbach's Alpha | Composite Reliability | Average Variance Extracted (AVE) | Outer loading |
| ANX | 0.835 | 0.893 | 0.736 | 0.935
0.833
0.799 |
| BC | 0.865 | 0.902 | 0.649 | 0.813
0.829
0.868
0.837
0.665 |
| PC | 0.81 | 0.868 | 0.572 | 0.598
0.847
0.818
0.76
0.733 |
| QC | 0.894 | 0.926 | 0.758 | 0.869
0.879
0.88
0.854 |
| ROR | 0.883 | 0.911 | 0.634 | 0.847
0.883
0.843
0.848
0.627
0.694 |
| SE | 0.872 | 0.912 | 0.722 | 0.879
0.881
0.828
0.81 |
| VC | 0.785 | 0.853 | 0.541 | 0.698
0.753
0.811
0.79
0.605 |
| * Factor loading below 0.5 were eliminated | | | | |

| Table 4: Discriminant validity Test | | | | | | | |
|-------------------------------------|--------|-------|-------|-------|-------|-------|-------|
| Fornell and Larcker Criterion | | | | | | | |
| | AN | BC | PC | QC | ROR | SE | VC |
| AN | 0.858 | | | | | | |
| BC | 0.044 | 0.805 | | | | | |
| PC | 0.017 | 0.208 | 0.756 | | | | |
| QC | 0.047 | 0.435 | 0.377 | 0.871 | | | |
| ROR | 0.056 | 0.266 | 0.436 | 0.4 | 0.796 | | |
| SE | -0.098 | 0.251 | 0.318 | 0.63 | 0.435 | 0.85 | |
| VC | -0.06 | 0.234 | 0.582 | 0.524 | 0.488 | 0.521 | 0.735 |

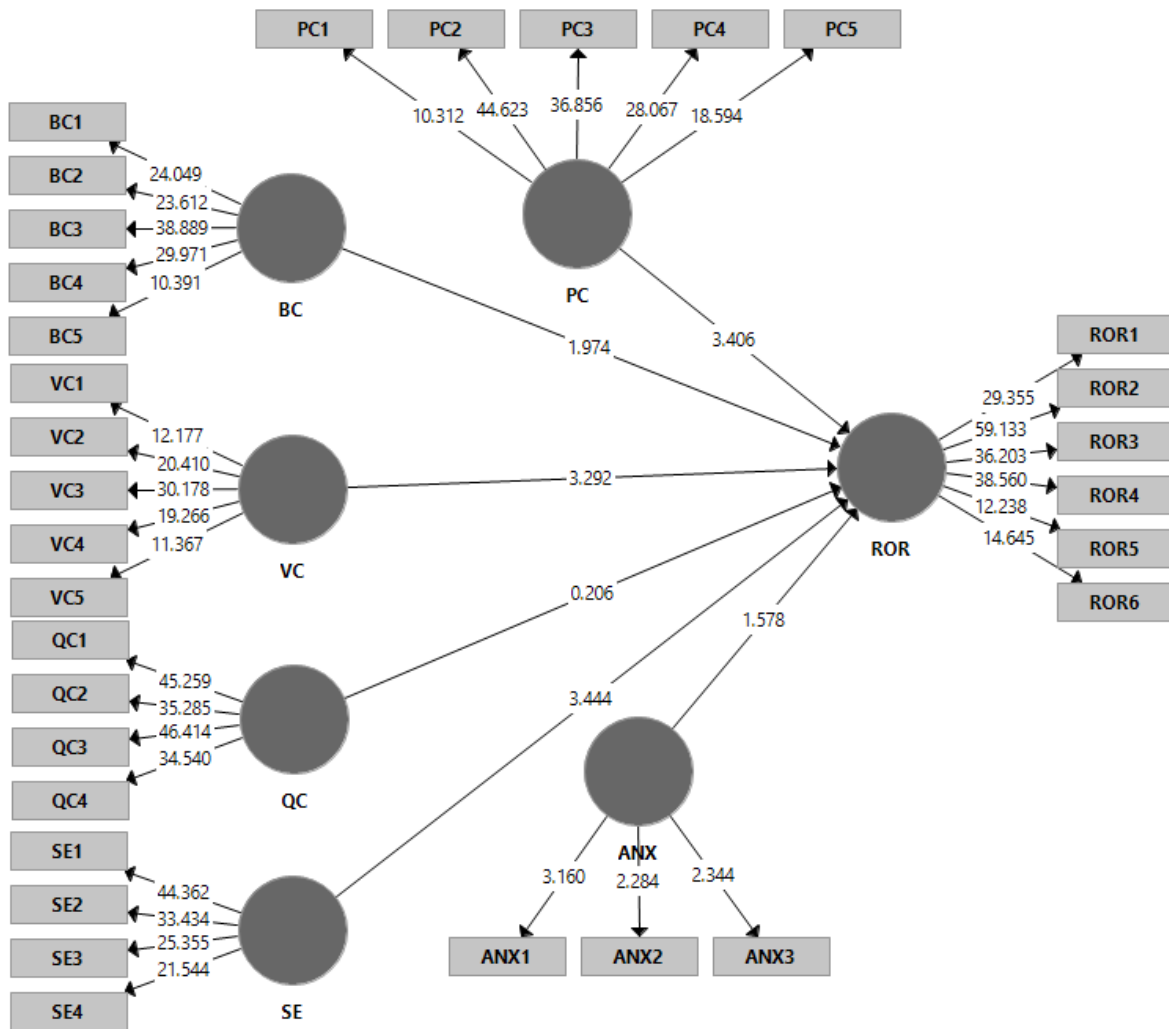


Figure 2: Research model results

| Table 5 : PLS structural equation modeling results | | | | |
|--|---------------------|--------------|----------|---------------|
| Direct effect | β coefficient | t Statistics | p Values | Hypotheses |
| ANX -> ROR | 0.083 | 1.578 | 0.115 | Not Supported |
| BC -> ROR | 0.105* | 1.974 | 0.048 | Supported |
| PC -> ROR | 0.206** | 3.406 | 0.001 | Supported |
| QC -> ROR | 0.012 | 0.206 | 0.837 | Not Supported |
| SE -> ROR | 0.227** | 3.444 | 0.001 | Supported |
| VC -> ROR | 0.224** | 3.292 | 0.001 | Supported |

** $p \leq 0.001$. * $p \leq 0.05$

Appendix A

| Items | Constructs for the study | Authors |
|-------|--|--------------------------|
| | Brand consciousness | |
| BC1 | Sometimes I am willing to pay more money for product because of its brand name. | Nelson and McLeod, 2005 |
| BC2 | Brand names tell me something about the quality of the products | Nelson and McLeod, 2005 |
| BC3 | I think that the well known brands are best for me | (Shim, S., 1996 |
| BC4 | I pay attention to brand names of most products I buy | Nelson and McLeod, 2005 |
| BC5 | I try to stick to certain brand | Yang et al., 2017 |
| | Price consciousness | |
| PC1 | Price is the most important factor when I am choosing a product of category . | Indrajit Sinha, 1999 |
| PC2 | I would always shop at more than one store to find low prices. | (Alford and Biswas, 2002 |
| PC3 | The time it takes to find lower prices is usually worth the effort | (Alford and Biswas, 2002 |
| PC4 | I find myself checking the prices even for small items. | Ailawadi et al ,2001 |
| PC5 | It is important to me to get the best price for the products I buy | Ailawadi et al ,2001 |
| | Quality consciouenss | |
| QC1 | Getting very good quality is very important to me | (Rezaei, S. 2015). |
| QC2 | In general, I usually try to buy the best overall quality | (Rezaei, S. 2015). |
| QC3 | I make a special effort to choose the very best quality products | (Rezaei, S. 2015). |
| QC4 | When it comes to purchasing product, I try to get the very best or perfect choice. | (Rezaei, S. 2015). |
| | Value consciousness | |
| VC1 | When purchasing a product, I always try to maximize the quality I get for the money I spend. | (Garretson, 2002) |
| VC2 | I am very concerned about low prices, but I am equally concerned about product quality | (Burton et al., 1998) |

| | | |
|------|--|-------------------------------|
| VC3 | When shopping, I compare the prices of different brands to be sure I get the best value for the money | (Burton et al., 1998) |
| VC4 | When I buy products, I like to be sure that I am getting my money's worth | (Burton et al., 1998) |
| VC5 | I generally shop around for lower prices on products, but they still must meet certain quality requirements before I buy them | (Lichtenstein, 1993) |
| | Self-esteem | |
| SE1 | I feel that I am a person of worth, at least on an equal plane with others | (Sierra et al., 2016) |
| SE2 | I feel that I have a number of good qualities | (Sierra et al., 2016) |
| SE3 | I am able to do things as well as most other people | (Sierra et al., 2016) |
| SE4 | I take a positive attitude towards myself | (Sierra et al., 2016) |
| | Online shopping anxiety | |
| ANX1 | I feel apprehensive about making purchase through the online shopping websites | (Meuter et al. 2003) |
| ANX2 | I hesitate to shop at online websites for fear of making costly mistakes that I cannot correct) | (Meuter et al. (2003) |
| ANX3 | When shopping at online websites I fear I might lose my personnel and credit card information (when given the opportunity to use technology, I fear I might damage it in some way) | (Meuter et al. 2003) |
| | Reliance on Reviews | |
| ROR1 | Consumer reviews often influence my purchase decision | (Gottschalk and Mafael, 2017) |
| ROR2 | When I buy a product/brand, consumers' online product reviews make me confident in purchasing the product/brands | (Mohammed et al., 2016) |
| ROR3 | I often read other consumers' online product/brands reviews to know what products/brands make good impressions on others | (Mohammed et al., 2016) |
| ROR4 | To make sure I buy the right product/brand, I often read other consumers' online product reviews | (Mohammed et al., 2016) |
| ROR5 | I often consult other consumers' online product/brands reviews to help choose the right product/ brand | (Mohammed et al., 2016) |
| ROR6 | I frequently gather information from online consumers' product reviews before I buy a certain product/brands | (Mohammed et al., 2016) |

References

- Ailawadi, K.L., Neslin, S.A., Gedenk, K., 1998. Pursuing the Value-Conscious Consumer : Store Brands Versus. *J. Mark.* 65, 71–89.
- Akturan, U., Tezcan, N., Vignolles, A., 2011. Segmenting young adults through their consumption styles : a cross-cultural study. *Young Consum.* 12, 348–360. <https://doi.org/10.1108/17473611111185896>
- Alford, B.L., Biswas, A., 2002. The effects of discount level , price consciousness and sale proneness on consumers ’ price perception and behavioral intention. *J. Bus. Res.* 55, 775–783. [https://doi.org/10.1016/S0148-2963\(00\)00214-9](https://doi.org/10.1016/S0148-2963(00)00214-9)
- Allen, R., Racherla, P., Bush, V.D., 2014. What We Know and Don ’ t Know About Online Word-of-Mouth : A Review and Synthesis of the Literature. *J. Interact. Mark.* 28, 167–183. <https://doi.org/10.1016/j.intmar.2014.02.001>
- Anic, I.-D., Rajh, E., Bevanda, A., 2012. Decision-making styles of young consumers in Bosnia and Herzegovina. *Young Consum.* 13, 86–98. <https://doi.org/10.1108/17473611211203966>
- Anic, I.-D., Rajh, S.P., Rajh, E., 2014. Antecedents of food-related consumer decision-making styles. *Br. Food J.* 116, 431–450. <https://doi.org/10.1108/BFJ-10-2011-0250>
- Anne, J., Folse, G., Burton, S., 2002. Antecedents of private label attitude and national brand promotion attitude : Similarities and differences attitude : similarities and differences. *J. Retail.* 78, 91–99. [https://doi.org/10.1016/S0022-4359\(02\)00071-4](https://doi.org/10.1016/S0022-4359(02)00071-4)
- Barnes, S.J., Bauer, H.H., Neumann, M.M., Huber, F., Barnes, S.J., 2007. Segmenting cyberspace : a customer typology for the internet. *Eur. J. Mark.* 41, 71–93. <https://doi.org/10.1108/03090560710718120>
- Bates, L., Mitchell, V., 1998. UK Consumer Decision-Making Styles. *J. Mark. Manag.* 14, 199–225. <https://doi.org/10.1362/026725798784959345>
- Bearden, W.O., Hardesty, D.M., Rose, R.L., 2001. Consumer self-confidence: Refinements in conceptualization and measurement. *J. Consum. Res.* 28, 121–134. <https://doi.org/10.1086/321951>
- Bickart, B., Schindler, R.M., 2001. Internet Forums As Influential Sources Of Consumer Information. *J. Interact. Mark.* 15, 31–40. <https://doi.org/doi:10.1002/dir.1014>
- Burton, J., Khammash, M., 2010. Why do people read reviews posted on consumer-opinion portals ? Why do people read reviews posted on. *J. Mark. Manag.* 26, 230–255. <https://doi.org/10.1080/02672570903566268>
- Burton, S., Netemeyer, R.G., Judith, A., 1998. A Scale for Measuring Attitude Toward Private

- Label Products and an Examination of Its Psychological and Behavioral Correlates. *J. Acad. Mark. Sci.* 26, 293–306. <https://doi.org/10.1177/0092070398264003>
- Celik, H., 2011. Influence of social norms , perceived playfulness and online shopping anxiety on customers ' adoption of online retail shopping An empirical study in the Turkish context. *Int. J. Retail Distrib. Manag.* 39, 390–413. <https://doi.org/10.1108/09590551111137967>
- Chakraborty, U., Bhat, S., 2018. The Effects of Credible Online Reviews on Brand Equity Dimensions and Its Consequence on Consumer Behavior. *J. Promot. Manag.* 24, 57–82. <https://doi.org/10.1080/10496491.2017.1346541>
- Chaudhuri, A., 2001. A study of emotion and reason in products and services. *J. Consum. Behav.* 1, 267–279. <https://doi.org/https://doi.org/10.1002/cb.72>
- Chen, Y., Chen, Y., 2010. The Drivers of Green Brand Equity : Green Brand Image , Green Satisfaction , and Green Trust. *J. Bus. Ethics* 93, 307–319. <https://doi.org/10.1007/s10551-009-0223-9>
- Chin, W.W., 1998. The partial least squares approach for structural equation modeling., in: *Modern Methods for Business Research., Methodology for Business and Management.* Lawrence Erlbaum Associates Publishers, Mahwah, NJ, US, pp. 295–336.
- Cowart, K.O., Goldsmith, R.E., 2007. The influence of consumer decision-making styles on online apparel consumption by college students. *Int. J. Consum. Stud.* 31, 639–647. <https://doi.org/10.1111/j.1470-6431.2007.00615.x>
- Cui, G., Lui, H.-K., Guo, X., 2012. The Effect of Online Consumer Reviews on New Product Sales. *Int. J. Electron. Commer.* 17, 39–57. <https://doi.org/10.2753/JEC1086-4415170102>
- Dam, J. Van, Velden, M. Van De, 2015. Online profiling and clustering of Facebook users. *Decis. Support Syst.* 70, 60–72. <https://doi.org/10.1016/j.dss.2014.12.001>
- Darley, W.K., 1999. The relationship of antecedents of search and self - esteem to adolescent search effort and perceived product knowledge. *Psychol. Mark.* 16, 409–427. [https://doi.org/10.1002/\(SICI\)1520-6793\(199908\)16](https://doi.org/10.1002/(SICI)1520-6793(199908)16)
- Davis, J.M., Agrawal, D., 2018. Understanding the role of interpersonal identification in online review evaluation: An information processing perspective. *Int. J. Inf. Manage.* 38, 140–149. <https://doi.org/10.1016/j.ijinfomgt.2017.08.001>
- Deeter-schmelz, D.R., Moore, J.N., Goebel, D.J., 2000. Prestige Clothing Shopping by Consumers : A Confirmatory Assessment and Refinement of the Precon Scale with Managerial Implications. *J. Mark. Theory Pract.* 8, 43–58. <https://doi.org/10.1080/10696679.2000.11501879>
- Deutskens, E., de Ruyter, K., Wetzels, M., 2006. An Assessment of Equivalence Between Online and Mail Surveys in Service Research. *J. Serv. Res.* 8, 346–355. <https://doi.org/10.1177/1094670506286323>
- Dewberry, C., Juanchich, M., Narendran, S., 2013. The latent structure of decision styles. *Pers.*

- Individ. Dif. 54, 566–571. <https://doi.org/10.1016/j.paid.2012.11.002>
- Diefenbach, M.A., Weinstein, N.D., O'Reilly, J., 1993. Scales for assessing perceptions of health hazard susceptibility. *Health Educ. Res.* 8, 181–192. <https://doi.org/10.1093/her/8.2.181>
- Evans, F.B., 1959. Psychological and Objective Factors in The Prediction of Brand Choice Ford Versus Chevrolet. *J. Bus.* 32, 340–369.
- Floh, A., Koller, M., Zauner, A., 2013. Taking a deeper look at online reviews : The asymmetric effect of valence intensity on shopping behaviour. *J. Mark. Manag.* 29, 646–670. <https://doi.org/10.1080/0267257X.2013.776620>
- Fornell, C., Larcker, D.F., 1981. Structural Equation Models With Unobservable Variables and Measurement Error : Algebra and Statistics. *J. Mark. Res.* 18, 382–388. <https://doi.org/10.2307/3151312>
- Goldsmith, R.E., Horowitz, D., 2006. Measuring Motivations for Online Opinion Seeking. *J. Interact. Advert.* 6, 2–14. <https://doi.org/10.1080/15252019.2006.10722114>
- Gottschalk, S.A., Mafael, A., 2017. Cutting Through the Online Review Jungle : Investigating Selective eWOM Processing. *J. Interact. Mark.* 37, 89–104. <https://doi.org/10.1016/j.intmar.2016.06.001>
- Green, P.E., Johnson, R.M., Neal, W.D., 2003. The “Journal of Marketing Research”: Its Initiation, Growth, and Knowledge Dissemination. *J. Mark. Res.* 40, 1–9. <https://doi.org/10.1509/jmkr.40.1.1.19125>
- Gruen, T.W., Osmonbekov, T., Czaplewski, A.J., 2006. eWOM : The impact of customer-to-customer online know-how exchange on customer value and loyalty. *J. Bus. Res.* 59, 449–456. <https://doi.org/10.1016/j.jbusres.2005.10.004>
- Gupta, P., Harris, J., 2010. How e-WOM recommendations influence product consideration and quality of choice : A motivation to process information perspective. *J. Bus. Res.* 63, 1041–1049. <https://doi.org/10.1016/j.jbusres.2009.01.015>
- Guy Parrott, Danbury, A., Kanthavanich, P., 2015. Online behaviour of luxury fashion brand advocates. *J. Fash. Mark. Manag.* 19, 360–383. <https://doi.org/10.1108/EL-01-2014-0022>
- Halepete, J., Iyer, K.V.S., Park, S.C., 2008. Wal-Mart in India: a success or failure? *Int. J. Retail Distrib. Manag.* 36, 701–713. <https://doi.org/10.1108/09590550810890948>
- Hanzaee, K.H., Aghasibeig, S., 2008. Generation Y female and male decision-making styles in Iran : are they different ? *Int. Rev. Retail , Distrib. Consum. Res.* 18, 521–537. <https://doi.org/10.1080/09593960802573443>
- Hu, N., Liu, L., Zhang, J.J., 2008. Do online reviews affect product sales? The role of reviewer characteristics and temporal effects. *Inf. Technol. Manag.* 9, 201–214. <https://doi.org/10.1007/s10799-008-0041-2>
- Husic, M., Cicic, M., 2009. Luxury consumption factors. *J. Fash. Mark. Manag.* 13, 231–245.

<https://doi.org/10.1108/13612020910957734>

- Ilieva, J., Baron, S., Healey, N.M., 2002. Online surveys in marketing research: Pros and cons. *Int. J. Mark. Res.* 44, 361–376. <https://doi.org/10.1177/147078530204400303>
- Jensen, B.B., Grunert, K.G., 2014. Price Knowledge During Grocery Shopping : What We Learn and What We Forget. *J. Retail.* 90, 332–346. <https://doi.org/10.1016/j.jretai.2014.01.001>
- Kara, A., Rojas-Mendez, J. I., Kucukemiroglu, O., Harcar, T., 2009. Consumer preferences of store brands : Role of prior experiences and value. *J. Targeting, Meas. Anal. Mark.* 17, 127–137. <https://doi.org/10.1057/jt.2009.6>
- Keng, C., Liao, T., 2013. Self-confidence , anxiety , and post-purchase dissonance : a panel study. *J. of Applied Soc. Psychol.* 43, 1636–1647. <https://doi.org/10.1111/jasp.12116>
- Kostyra, D.S., Reiner, J., Natter, M., Klapper, D., 2016. Decomposing the effects of online customer reviews on brand, price, and product attributes. *Int. J. Res. Mark.* 33, 11–26. <https://doi.org/10.1016/j.ijresmar.2014.12.004>
- Krishnamurthy, A., Kumar, S.R., 2018. Electronic word-of-mouth and the brand image: Exploring the moderating role of involvement through a consumer expectations lens. *J. Retail. Consum. Serv.* 43, 149–156. <https://doi.org/10.1016/j.jretconser.2018.03.010>
- Krishnamurthy, A., Kumar, S.R., 2015. Exploring the formation of consumer expectations. *J. Cust. Behav.* 14, 7–31. <https://doi.org/10.1362/147539215X14267608004005>
- Kukar-kinney, M., Walters, R.G., Mackenzie, S.B., 2007. Consumer responses to characteristics of price-matching guarantees : The moderating role of price consciousness. *J. Retail.* 83, 211–221. <https://doi.org/10.1016/j.jretai.2006.01.001>
- Lam, D., Mizerski, D., 2005. The Effects of Locus of Control on Word - of - mouth Communication The Effects of Locus of Control on Word-of-mouth Communication. *J. Mark. Commun.* 11, 215–228. <https://doi.org/10.1080/1352726042000333180>
- Lee, Y., 2014. Impacts of decision-making biases on eWOM retrust and risk-reducing strategies. *Comput. Human Behav.* 40, 101–110. <https://doi.org/10.1016/j.chb.2014.08.002>
- Lertwannawit, A., Mandhachitara, R., 2012. Interpersonal effects on fashion consciousness and status consumption moderated by materialism in metropolitan men. *J. Bus. Res.* 65, 1408–1416. <https://doi.org/10.1016/j.jbusres.2011.10.006>
- Liang, W.K., Corkindale, D., 2019. How eWord of Mouth valences affect price perceptions. *Int. J. Mark. Res.* 61, 50–63. <https://doi.org/10.1177/1470785318788469>
- Liao, J., Wang, L., 2009. Face as a Mediator of the Relationship between Material Value and Brand Consciousness. *Psychol. Mark.* 26, 987–1001. <https://doi.org/10.1002/mar>
- Lichtenstein, D.R., Ridgway, N.M., Netemeyer, R.G., 1993. Price Perceptions and Consumer Shopping Behavior: A Field Study. *J. Mark. Res.* 30, 234. <https://doi.org/10.2307/3172830>
- Lim, Y.S., Heng, P.C., Ng, T.H., Cheah, C.S., 2016. Customers ' online website satisfaction in

- online apparel purchase : A study of Generation Y in Malaysia. *Asia Pacific Manag. Rev.* 21, 74–78. <https://doi.org/10.1016/j.apmr.2015.10.002>
- Lin, H.-C., Kalwani, M.U., 2018. Culturally Contingent Electronic Word-of-Mouth Signaling and Screening: A Comparative Study of Product Reviews in the United States and Japan. *J. Int. Mark.* 26, 80–102. <https://doi.org/10.1509/jim.17.0016>
- Lin, H., Wang, Y., 2006. An examination of the determinants of customer loyalty in mobile commerce contexts. *Inf. Manag.* 43, 271–282. <https://doi.org/10.1016/j.im.2005.08.001>
- Locander, W.B., Hermann, P.W., 1979. The Effect of Self-Confidence and Anxiety on Information Seeking in Consumer Risk Reduction. *J. Mark. Res.* 16, 268–274. <https://doi.org/10.2307/3150690>
- Loibl, C., Cho, S.H., Diekmann, F., Batte, M.T., 2009. Consumer Self-Confidence in Searching for Information. *J. Consum. Aff.* 43, 26–55.
- Lysonski, S., Durvasula, S., 2013. Consumer decision making styles in retailing : evolution of mindsets and psychological impacts. *J. Consum. Mark.* 30, 75–87. <https://doi.org/10.1108/07363761311290858>
- Mahapatra, S., Mishra, A., 2017. Acceptance and forwarding of electronic word of mouth. *Mark. Intell. Plan.* 35, 594–610. <https://doi.org/10.1108/MIP-01-2017-0007>
- Malik, M.S.I., Hussain, A., 2018. An analysis of review content and reviewer variables that contribute to review helpfulness. *Inf. Process. Manag.* 54, 88–104. <https://doi.org/10.1016/j.ipm.2017.09.004>
- Marín Marín, M.H., Castellanos Galeano, F.J., Martínez Hernández, L.J., 2016. Customer online shopping anxiety within the Unified Theory of Acceptance and Use Technology (UTAUT) framework. *Asia Pacific J. Mark. Logist.* 28, 278–307. <https://doi.org/10.1108/APJML-05-2015-0077>
- Maslowska, E., Malthouse, E.C., Viswanathan, V., 2017. Do customer reviews drive purchase decisions ? The moderating roles of review exposure and price. *Decis. Support Syst.* 98, 1–9. <https://doi.org/10.1016/j.dss.2017.03.010>
- Mayhew, G.E., Winer, R.S., Mayhew, G.E., Winer, R.S., 1992. An Empirical Analysis of Internal and External Reference Prices Using Scanner Data. *J. Consum. Res.* 19, 62–70. <https://doi.org/10.1086/209286>
- Mehta, R., Dixit, G., 2016. Consumer decision making styles in developed and developing markets : A cross-country comparison. *J. Retail. Consum. Serv.* 33, 202–208. <https://doi.org/10.1016/j.jretconser.2016.09.002>
- Meng, K., Chatwin, C., 2015. Online consumer decision-making styles for enhanced understanding of Macau online consumer behavior. *Asia Pacific Manag. Rev.* 20, 100–107. <https://doi.org/10.1016/j.apmr.2014.12.005>
- Meuter, M.L., Ostrom, A.L., Jo, M., Roundtree, R., 2003. The influence of technology anxiety

- on consumer use and experiences with self-service technologies. *J. Bus. Res.* 56, 899–906. [https://doi.org/10.1016/S0148-2963\(01\)00276-4](https://doi.org/10.1016/S0148-2963(01)00276-4)
- Mohammed, A.A., Ilkan, M., Sahin, P., 2016. eWOM , eReferral and gender in the virtual community. *Mark. Intell. Plan.* 34, 692–710. <https://doi.org/10.1108/MIP-05-2015-0090>
- Moschis, G.P., 1976. Social Comparison and Informal Group Influence. *J. Mark. Res.* 13, 237–244. <https://doi.org/10.1177/002224377601300304>
- Natarajan, T., Balasubramanian, S.A., Kasilingam, D.L., 2017. Understanding the intention to use mobile shopping applications and its influence on price sensitivity. *J. Retail. Consum. Serv.* 37, 8–22. <https://doi.org/https://doi.org/10.1016/j.jretconser.2017.02.010>
- Nelson, M., McLeod, L., 2005. Adolescent brand consciousness and product placements: awareness, liking and perceived effects on self and others. *Int. J. Consum. Stud.* 29, 515–528. <https://doi.org/10.1111/j.1470-6431.2005.00429.x>
- Niu, H., 2013. Cyber peers ’ influence for adolescent consumer in decision-making styles and online purchasing behavior. *J. Appl. Soc. Psychol.* 43, 1228–1237. <https://doi.org/10.1111/jasp.12085>
- Park, C., Min, T., 2009. Information direction , website reputation and eWOM effect : A moderating role of product type. *J. Bus. Res.* 62, 61–67. <https://doi.org/10.1016/j.jbusres.2007.11.017>
- Park, D., Lee, J., 2008. eWOM overload and its effect on consumer behavioral intention depending on consumer involvement. *Electron. Commer. Res. Appl.* 7, 386–398. <https://doi.org/10.1016/j.elerap.2007.11.004>
- Perry, V.G., Morris, M.D., 2005. Who Is in Control ? The Role of Self-Perception , Knowledge , and Income in Explaining Consumer Financial Behavior. *J. Consum. Aff.* 39, 299–313.
- Picazo-Vela, S., Chou, S.Y., Melcher, A.J., Pearson, J.M., 2010. Why provide an online review? An extended theory of planned behavior and the role of Big-Five personality traits. *Comput. Human Behav.* 26, 685–696. <https://doi.org/10.1016/j.chb.2010.01.005>
- Podsakoff, P.M., Mackenzie, S.B., Lee, J., Podsakoff, N.P., 2003. Common Method Biases in Behavioral Research : A Critical Review of the Literature and Recommended Remedies. *J. Appl. Psychol.* 88, 879–903. <https://doi.org/10.1037/0021-9010.88.5.879>
- Podsakoff, P.M., MacKenzie, S.B., Podsakoff, N.P., 2012. Sources of Method Bias in Social Science Research and Recommendations on How to Control It. *Annu. Rev. Psychol.* 63, 539–569. <https://doi.org/10.1146/annurev-psych-120710-100452>
- Podsakoff, P.M., Organ, D.W., 1986. Self-Reports in Organizational Research: Problems and Prospects. *J. Manage.* 12, 531–544. <https://doi.org/10.1177/014920638601200408>
- Reinartz, W., Haenlein, M., Henseler, J., 2009. An empirical comparison of the efficacy of covariance-based and variance-based SEM. *Int. J. Res. Mark.* 26, 332–344. <https://doi.org/10.1016/j.ijresmar.2009.08.001>

- Rezaei, S., 2015. Segmenting consumer decision-making styles (CDMS) toward marketing practice : A partial least squares (PLS) path modeling approach. *J. Retail. Consum. Serv.* 22, 1–15. <https://doi.org/10.1016/j.jretconser.2014.09.001>
- Rohm, A.J., Swaminathan, V., 2004. A typology of online shoppers based on shopping motivations. *J. Bus. Res.* 57, 748–757. [https://doi.org/10.1016/S0148-2963\(02\)00351-X](https://doi.org/10.1016/S0148-2963(02)00351-X)
- Roselius, T.E.D., 1979. Consumer Rankings of Risk Reduction Methods. *J. Mark.* 35, 56–61. <https://doi.org/10.1177/002224297103500110>
- Roy, G., Datta, B., Mukherjee, S., 2018. Role of electronic word-of-mouth content and valence in influencing online purchase behavior. *J. Mark. Commun.* 00, 1–24. <https://doi.org/10.1080/13527266.2018.1497681>
- Sierra, J.J., Badrinarayanan, V.A., Taute, H.A., 2016. Explaining behavior in brand communities : A sequential model of attachment , tribalism , and self-esteem. *Comput. Human Behav.* 55, 626–632. <https://doi.org/10.1016/j.chb.2015.10.009>
- Sinha, I., Batra, R., 1999. The effect of consumer price consciousness on private label purchase. *Int. J. Res. Mark.* 16, 237–251. [https://doi.org/10.1016/S0167-8116\(99\)00013-0](https://doi.org/10.1016/S0167-8116(99)00013-0)
- Solka, A., Jackson, V.P., Lee, M., 2011. The influence of gender and culture on Generation Y consumer decision making styles. *Int. Rev. Retail. Distrib. Consum. Res.* 21, 391–409. <https://doi.org/10.1080/09593969.2011.596554>
- Soyeon Shim, Cehrt, K.C., 1996. Hispanic and Native American Adolescents : An Exploratory Study of Their Approach to Shopping. *J. Retail.* 72, 307–324.
- Sproles, G.B., Kendall, E.L., 1986. A Methodology for Profiling Consumers ' Decision-Making Styles. *J. Consum. Aff.* 20, 267–279.
- Srinivasan, R., 2015. Exploring the Impact of Social Norms and Online Shopping Anxiety in the Adoption of Online Apparel Shopping by Indian Consumers. *J. Internet Commer.* 14, 177–199. <https://doi.org/10.1080/15332861.2015.1008891>
- Sun, C., Su, S., Huang, J., 2013. Cultural value , perceived value , and consumer decision-making style in China A comparison based on an urbanization. *Nankai Bus. Rev. Int.* 4, 248–262. <https://doi.org/10.1108/NBRI-07-2013-0026>
- Thomas, M., Menon, G., 2007. When Internal Reference Prices and Price Confidence Expectations Diverge : The Role of. *J. Mark. Res.* 44, 401–409.
- Tien, D.H., Amaya Rivas, A.A., Liao, Y.K., 2018. Examining the influence of customer-to-customer electronic word-of-mouth on purchase intention in social networking sites. *Asia Pacific Manag. Rev.* <https://doi.org/10.1016/j.apmr.2018.06.003>
- Venkatesh, V., 2000. Determinants of Perceived Ease of Use : Integrating Control , Intrinsic Motivatio and Emotion into the Technology Acceptance Model. *Inf. Syst. Res.* 11, 342–365. <https://doi.org/10.1287/isre.11.4.342.11872>

- Vijayasathy, L.R., 2004. Predicting consumer intentions to use on-line shopping : the case for an augmented technology acceptance model. *Inf. Manag.* 41, 747–762.
<https://doi.org/10.1016/j.im.2003.08.011>
- Wang, N., Shen, X., Sun, Y., 2013. Transition of electronic word-of-mouth services from web to mobile context : A trust transfer perspective. *Decis. Support Syst.* 54, 1394–1403.
<https://doi.org/10.1016/j.dss.2012.12.015>
- Westbrook, R.A., Black, W.C., 1985. A motivation-based shopper typology. *J. Retail.* 61, 78–103.
- Westfall, R., 1962. Psychological Factors in Predicting Product Choice. *J. Mark.* 26, 34–40.
<https://doi.org/10.1177/002224296202600207>
- Wolny, J., Mueller, C., 2013. Analysis of fashion consumers' motives to engage in electronic word of mouth communication through social media platforms. *J. Mark. Manag.* 29, 562–583. <https://doi.org/10.1080/0267257X.2013.778324>
- Wray, L.D., Stone, E.R., 2005. The Role of Self-esteem and Anxiety in Decision Making for Self versus Others in Relationships. *J. Behav. Decis. Mak.* 18, 125–144.
<https://doi.org/10.1002/bdm.490>
- Xin, J., Arnold, M.J., Pereira, A., Yu, J., 2010. Chinese consumer decision-making styles : A comparison between the coastal and inland regions. *J. Bus. Res.* 63, 45–51.
<https://doi.org/10.1016/j.jbusres.2009.01.010>
- Xue, F., Zhou, P., 2010. The Effects of Product Involvement and Prior Experience on Chinese Consumers' Responses to Online Word of Mouth. *J. Int. Consum. Mark.* 23, 45–58.
<https://doi.org/10.1080/08961530.2011.524576>
- Yang, K., Kim, J., Kim, Y., 2017. The effect of brand consciousness on interpersonal influences , brand values , and purchase intention : Cases for American and Korean college students. *J. Glob. Fash. Mark.* 8, 83–97. <https://doi.org/10.1080/20932685.2016.1274665>
- Zhang, L., 2009. An Exchange Theory of Money and Self-Esteem in Decision Making. *Rev. Gen. Psychol.* 13, 66–76. <https://doi.org/10.1037/a0014225>
- Zhou, X., Song, Q., Li, Y., Tan, H., Zhou, H., 2017. Examining the influence of online retailers ' micro-blogs on consumers ' purchase intention. *Internet Res.* 27, 819–838.
<https://doi.org/10.1108/IntR-09-2016-0258>
- Zhu, D.H., Ye, Z.Q., Chang, Y.P., 2017. Understanding the textual content of online customer reviews in B2C websites : A cross-cultural comparison between the U . S . and China. *Comput. Human Behav.* 76, 483–493. <https://doi.org/10.1016/j.chb.2017.07.045>