cemerald insight



Marketing Intelligence & Planning

Effects of cognitive and affective trust on online customer behavior Plavini Punyatoya,

Article information:

To cite this document: Plavini Punyatoya, (2018) "Effects of cognitive and affective trust on online customer behavior", Marketing Intelligence & Planning, <u>https://doi.org/10.1108/MIP-02-2018-0058</u> Permanent link to this document: <u>https://doi.org/10.1108/MIP-02-2018-0058</u>

Downloaded on: 15 September 2018, At: 06:26 (PT) References: this document contains references to 51 other documents. To copy this document: permissions@emeraldinsight.com The fulltext of this document has been downloaded 4 times since 2018* Access to this document was granted through an Emerald subscription provided by emeraldsrm:380143 []

For Authors

If you would like to write for this, or any other Emerald publication, then please use our Emerald for Authors service information about how to choose which publication to write for and submission guidelines are available for all. Please visit www.emeraldinsight.com/authors for more information.

About Emerald www.emeraldinsight.com

Emerald is a global publisher linking research and practice to the benefit of society. The company manages a portfolio of more than 290 journals and over 2,350 books and book series volumes, as well as providing an extensive range of online products and additional customer resources and services.

Emerald is both COUNTER 4 and TRANSFER compliant. The organization is a partner of the Committee on Publication Ethics (COPE) and also works with Portico and the LOCKSS initiative for digital archive preservation.

*Related content and download information correct at time of download.

Effects of cognitive and affective trust on online customer behavior

Plavini Punyatoya

Xavier Institute of Management, Xavier University, Bhubaneswar, India

Abstract

Purpose – Although prior works in online retailing have addressed the influence of trust on customer responses, they conceptualized trust as a single dimension. Based on social-psychological literature and sociological literature, this study proposes that consumer trust in an online retailer has two principal forms: cognitive trust and affective trust. The purpose of this paper is to examine various factors influencing the development of each form of customer online trust and the subsequent effect on customer satisfaction (CS) and loyalty intention (LI).

Design/methodology/approach – Survey approach is employed to validate the research model. Data are collected from 334 Indian consumers and using structural equation modeling the causal pathways of the model are investigated.

Findings – The results show that cognitive trust and affective trust are empirically distinguished variables in online retailing context. Cognitive trust and affective trust are found to mediate the relationship between perceived website quality, security and privacy policy, prior-interaction experience, perceived e-tailer reputation and shared value and CS. CS also positively influences LI toward the online retailer.

Practical implications – The paper provides interesting insights about Indian consumers' evaluation of online retailers. These useful insights would enable both international and national online retailers to develop and apply different strategies to improve customer trust, which is a key driver of CS and LI.

Originality/value – Drawing from signaling theory and organizational studies literature, this paper investigates the relationship between different antecedents and affect-based and cognition-based trust in online retailing context. In particular, this is the first study to examine multi-dimensional nature of consumer trust in online retailing context. Besides, this paper clearly shows that cognitive trust and affective trust are the mediating variables that positively affect CS toward online retailers and help in building strong customer LI.

Keywords Customer satisfaction, Affective trust, Cognitive trust, Loyalty intention, Online retailer

Paper type Research paper

1. Introduction

The rapid growth of online retailing has drawn attention of both practitioners and academicians. But this growth has given rise to heavy competition among the e-tailers and with other shopping channels. Thus, customer satisfaction (CS) and loyalty are of immense importance to obtain a competitive advantage. Loyal customers spend more on company products and services, via repeat purchasing, and recommend the organization to other consumers. In such a situation, it is important for e-tailers to understand the factors leading to higher loyalty intention (LI) among online shoppers.

CS is a crucial factor that affects online customer loyalty (Chang *et al.*, 2009). This necessitates the requirement of building strong consumer trust, so that consumers' decision making become easier. This study focuses on the role of consumer e-trust in building CS and LI. Role of trust in online retailing has been acknowledged by other researchers (Chiu *et al.*, 2009; Martin and Camarero, 2009). But in the previous literature trust was conceptualized as a single dimension. Based on social psychological literature (Johnson-George and Swap, 1982; Lewis and Weigert, 1985; Rempel *et al.*, 1985) and organizational studies literature (McAllister, 1995), this study proposed that consumer trust has two dimensions: cognitive trust and affective trust. In the present study, the researcher developed and tested a theoretical model that proposes that e-tailing website characteristics, consumer experience and consumer believability affects consumer trust, which in turn contributes to CS.



Marketing Intelligence & Planning © Emerald Publishing Limited 0263-4503 DOI 10.1108/MIP-02-2018-0058

The author thanks Anurag Satpathy and Arjun Agrawal for their help in online data collection process.

Effects of cognitive and

affective trust

Specifically, this study predicts that cognitive trust and affective trust mediates the relationship between e-tailing website characteristics, consumer experience and consumer believability, and CS. This study also investigated the direct effect of CS on LI. More importantly the current research tries to build conceptual model that links e-tailing website characteristics, consumer experience, and consumer believability with trust, satisfaction and LI.

Some researchers have recognized the multi-dimensional nature of trust. In the field of social-psychology, Rempel *et al.* (1985) discussed about predictability, dependability, and faith as three components of interpersonal trust. McAllister (1995) argued that interpersonal trust has cognitive and affective dimensions. Latter, Johnson and Grayson (2005) posited that trust in consumer-level service relationships has cognitive and affective dimensions. Researchers have argued that e-trust on e-mail service providers has cognition and affective components and they lead to commitment (Ranganathan *et al.*, 2013). Both cognitive and affective studied trust in e-tailing context and distinguished between two principal forms of trust. To the best of researcher's knowledge, no study has attempted to examine the factors leading to cognition and affect-based trust in online retailing. This paper aims to fill this gap in literature by conducting an empirical study on factors influencing the development of each form of e-trust.

2. Literature review

Sociological theory of trust views trust as a function of experience and risk (Luhmann, 1979). Rousseau *et al.* (1998) looked at trust as a psychological state comprising the intention to accept vulnerability based on positive expectations of the intentions or behaviors of another. Researchers from sociology, social-psychology and organizational theory assert that trust has many forms (Johnson-George and Swap, 1982; Lewis and Weigert, 1985; Luhmann, 1979; Rempel et al., 1985; McAllister, 1995). Rousseau et al. (1998) discussed about deterrence-based trust, calculus-based trust and relational trust. In social-psychology literature, developmental progression in the relationship between two individuals is related to different forms of interpersonal trust (Rempel et al., 1985). Luhmann (1979) categorized trust as personal trust and system trust. From a sociological perspective, Lewis and Weigert (1985) saw trust as multi-faceted character. As per them, it has distinct cognitive, emotional and behavioral dimensions. Later, McAllister (1995) and Morrow et al. (2004) distinguished between two forms of trust: cognition-based and affect-based trust. Consistent with the view of Rousseau et al. (1998), this study define consumer trust as a psychological state of online consumers that comprises of the intention to accept vulnerability based on positive expectations of the intentions or behaviors of the e-tailer.

2.1 Dimensions of trust

The cognitive and affective trust together form general trust (Morrow *et al.*, 2004). Trust evolves from a pattern of careful, rational thinking (cognitive-based), coupled with an examination of one's feelings, instincts and intuition (affect-based) (Lewis and Weigert, 1985). Trust is cognition-based when individuals choose who they will trust in which respects and under what circumstances and base this decision on what they believe are good reasons (Lewis and Weigert, 1985). The cognitive process will not develop instantaneously, but only after an individual is able to cognitively process and assess the available evidence (Morrow *et al.*, 2004). As per Luhmann (1979) available knowledge and familiarity is required for trust decisions. In social-psychology, "predictability" is seen as a component of trust (Rempel *et al.*, 1985). Partner's predictability is affected by knowledge about a partner's past behavior, and the degree to which this experience is consistent and stable. Again, social-psychologist Johnson-George and Swap (1982) called "reliableness"

as a dimension of trust, which is related to accumulated knowledge. There must be some amount of reliability, for the trust relationship to exist. Rempel *et al.* (1985) mentioned about "dependability" as a component of trust, which results out of experiences involving risk and personal vulnerability. Rousseau *et al.* (1998) mentioned about calculus-based trust, which results from rational choice that is made based on credible information concerning the intentions or competence of others. Similarly in organizational theory literature, cognition-based trust is a part of interpersonal trust among managers and professionals in organizations (McAllister, 1995). In social-psychology, those trust relationships in which there is a preponderance of cognitive content are designated as cognitive trust (Lewis and Weigert, 1985). In this research, cognitive trust (COGT) is defined as the confidence held by the consumer that the online retailer is dependable, competent and can be relied on to deliver its promises. It is the expectations held by the consumer based on past experience and accumulated knowledge, that the online retailer will not take advantage of him.

While a cognitive process refers to how a person develops "good reasons" that others may be trusted, affective response refers to the "emotional bonds" of trust that exist between parties (Morrow *et al.*, 2004). Trust may be motivated by strong positive affect for the object of trust rather than by good rational reasons or by combination of both. The sociological foundation of trust is also constructed on an emotional base that is complementary to its cognitive base, which is called the affective component of trust (Lewis and Weigert, 1985). Affective trust is about one's instincts, intuitions or feelings concerning whether an individual, group or organization is trustworthy (Morrow et al., 2004). Rousseau et al. (1998) discussed about relational trust, which is related to emotion. As per social-psychologist, this emotional component is present in all types of trust. Rempel et al. (1985) mentioned about "faith" as a component of trust. Faith reflects an emotional security on the part of individuals. It is the feeling that a person or a firm will be responsive and caring despite the vicissitudes of an uncertain future (Rempel et al., 1985). Johnson-George and Swap (1982) also discussed about "emotional trust," which is different from reliableness. This shows that social-psychological literature on trust in close relationships supports this distinction between the two forms of trust. In organizational theory literature, existence of affect-based trust among managers in organizations is empirically proven by McAllister (1995) and Morrow *et al.* (2004). Trusting behavior may be motivated primarily by strong positive affect for the object of trust (Lewis and Weigert, 1985), which is affective trust. In this research, affective trust (AFFT) is defined as the confidence that the consumer places in the online retailer on the basis of instincts, intuitions or feelings generated by the level of care and concern the online retailer demonstrates. It is the emotional bond between the consumer and the firm.

2.2 Research hypotheses

Figure 1 represents the conceptual model showing relationship between the variables and hypotheses about these pathways. Using established theories and previous research findings, the author identified the antecedents of cognitive and affective trust and formulated the research hypotheses.

2.2.1 Website characteristics. Online retailer's website is an important interface between the retailer and the customers. Website characteristics play a critical role in attracting customers and increasing their trust. In this research, perceived website quality (PWQ) and security and privacy policy (SPP) are considered as two aspects of website characteristics. PWQ reflects consumers' overall perceptions of how well they think a website works and looks, particularly in comparison to other sites (McKnight *et al.*, 2002). Previous studies have seen website quality as a composition of different components, which include navigability, graphical style and functionality (McKnight *et al.*, 2002). Based on the definition of



McKnight *et al.* (2002), in this study PWQ is defined as the user's general perception of navigability, aesthetics and functionality of the website.

In case of online retailers, before purchasing the product a consumer cannot access or interpret a product's quality attributes, which leads to asymmetries of information. Researchers used signaling theory to understand how consumers assess product quality when faced with information asymmetries. In the e-commerce context, researchers have studied website quality as a signal that can influence consumer purchase (Wells *et al.*, 2011). Signaling theory has also been applied across different disciplines to understand how one party can signal quality to another, less-informed party, providing the necessary information for a transaction or exchange to be completed (Wells et al., 2011). PWQ acts as a signal and helps consumers to make accurate quality assessments about its products. A high quality website demonstrates the vendor's capability and its sincere interest in its customers, thus it will affect consumers' trust in the company. Xu and Du (2018) have mentioned that system's quality improves customer affinity toward the digital service. Lopez-Miguens and Vazquez (2017) found that quality of the website is a cognitive factor. It is more about cognitive considerations like web navigability, aesthetics and functionality. When a customer finds a good quality online retailing website, it serves as a retrieval cue and generates cognitive trust toward the e-tailer. Thus:

H1. PWQ is positively related to customer's cognitive trust toward the online retailer.

Both IS and marketing researches have studied online retailers' disclosures of privacy and security policies on websites, and its effects on consumers' trust for online shopping. Security on a website refers to the safety of the computer and credit card or financial information (Bart *et al.*, 2005). Security also denotes the presentation of seals of approval on the website which are verified by a powerful third-party (Chang and Fang, 2013). Privacy refers to the protection of individually identifiable information on the internet (Bart *et al.*, 2005). Privacy policies of an online retailer involve the adoption and implementation of a privacy policy, notice and disclosure, choice/consent of consumers, data security and access (Privacyalliance.org, 2014). Chang and Fang (2013) found that SPP of e-tailers is an antecedent of trust. Security of the online transaction of information and

protection of consumer personal information are important determinant of consumer risk perception. Online retailer disclosures of various privacy and security-related practices elevate consumer confidence, decrease consumer's concerns and raises consumer trust. SPP is the cognitive attribute that has an impact on trust. As per signaling theory, e-tailers' security and privacy policies act as a signal and positively affect consumer trust (Martin and Camarero, 2009). Thus, this study hypothesizes:

H2. SPP is positively related to customer's cognitive trust toward the online retailer.

2.2.2 Consumer experience. Consumer experience is the prior-interaction experience (PIE) the customer has with an online retailer. Past experiences with a service provider make customer to believe that the service provider will fulfill its promises in future, and increase the perceptions of trust (Ganesan, 1994). Kim and Sullivan (1998) considered brand experience as an experience which resulted from buying or using a specific brand's products or services. Based on the definition of Berry et al. (2006), this study defines PIE as the cumulative perception formed from customer's previous experiences with the online retailer. If the customers are happy and satisfied with previous interaction with a website, they will have a positive trust toward it (Yoon, 2002). To the extent that a consumer has positive impressions of a website and accepts vulnerability, he develops trust with that website (Bart et al., 2005). Prior-experience increases consumer familiarity with an online retailer and positively affects trust (Yoon, 2002). If prior-interactions are satisfactory, it reduces uncertainty and builds trust, which in turn should lead to longer relationship duration (Morgan and Hunt, 1994). PIE helps customers to take rational decision in future. Customers already have accumulated knowledge about the system and processes and it may affect the cognitive trust positively. Rather than using an aggregate approach, some researchers took functional and emotional perspective to describe online experience as customers' cognitive and affective state of experience during online shopping (Lee *et al.*, 2010). Past experience will have both cognitive attributes along with feelings of joy, fear and anger toward service experience from the online retailer. As per social-psychologist, interaction helps individuals to make confident attributions about others (Lewis and Weigert, 1985) and helps in development of affective trust. So, previous interactions are positively related to both consumer's cognition and affect-based trust. Thus:

H3. PIE with the online retailer is positively related to customer's cognitive trust.

H4. PIE with the online retailer is positively related to customer's affective trust.

2.2.3 Consumer believability. Consumer's belief about an online retailer's reputation and value affects trust. In this research, perceived e-tailer reputation (PETR), and shared value (SV) are considered as two aspects of consumer believability. A firm's reputation is the extent to which people believe that the firm is honest and concerned about its customers (Doney and Cannon, 1997). It is an overall perception of the extent to which an organization is held in high esteem or regard (Weiss et al., 1999). In the current research the overall or global perception of a firm's reputation is considered, rather than perceptions of a firm's reputation for specific things. This study defined PETR, as the extent to which people believe that the e-tailer is concerned about its customers and held in high regard. PETR increases customer confidence, acts as an assurance to them, elevates customer trust and leads to higher satisfaction. Reputation leads to increased credibility (Ganesan, 1994; Goldring, 2015) and positively impacts consumer's trust toward the firm through the process of transference (Doney and Cannon, 1997). Using signaling theory, Martin and Camarero (2009) commented that reputation plays an important role in online sales as a sign of product quality, given the absence of salespeople to advise the buyer and given the inability to see, touch and try the products before the purchase. Past experience can provide

evidence of PETR and e-tailer will be perceived as reliable. This indicates the PETR is a positive predictor of cognitive trust. A customer who is not yet sufficiently familiar with a service provider may extrapolate his/her opinions directly from the reputation of the firm (Johnson and Grayson, 2005). PETR is an indicative of e-tailer's empathy and customers will develop a feeling that e-tailer is going the right thing. So, PETR is related to emotional chord of a customer and leads to affective trust. Johnson and Grayson (2005) have also anticipated that a service firm's reputation positively impacts both cognition and affect-based trust. Therefore, the study hypothesizes that:

- H5. PETR is positively related to customer's cognitive trust.
- H6. PETR is positively related to customer's affective trust.

Morgan and Hunt (1994) defined SVs as the extent to which partners have beliefs in common about what behaviors, goals and policies are important or unimportant, appropriate or inappropriate, and right or wrong. Value is the best measure of person-organization fit in organizational settings (Chatman, 1991). In social relationships individuals display higher levels of attraction toward people they perceive to have attitudes similar to their own. When a customer detects elements of similarity in a service provider, it elicits positive affect, leads to development of accommodating attitude toward the service provider (Johnson and Grayson, 2005). Previous researchers in relationship marketing (Morgan and Hunt, 1994) found that SV contribute to the development of trust. Positive and direct relationship between SV and affective trust is proposed by Johnson and Grayson (2005) in service relationships. Customers who perceive e-tailers to be similar to them could expect such firm to hold common beliefs about what behaviors, goals and policies are appropriate. This fosters a belief in customers and gives a feeling that they are able to predict e-tailers future behavior, motivation and intention (Doney and Cannon, 1997). This helps in building emotional trust. In this study, SV is defined as the extent to which customers feel that the he and the online retailer share common interests and values. By perceiving similar values between him and the e-tailer, a consumer will form positive affective trust toward the online retailer. Thus:

H7. SV is positively related to customer's affective trust toward the online retailer.

2.2.4 Relationship between cognitive and affective trust. Trust is a mix of feeling and rational thinking. In social-psychology literature, authors mentioned that no matter how much additional knowledge of an object we may gain, such knowledge alone can never cause us to trust (Lewis and Weigert, 1985). In organizational theory literature, McAllister (1995) mentioned that some level of cognition-based trust is necessary for affect-based trust to develop in working relationships among managers. It is empirically proven by Johnson and Grayson (2005) that a customer's cognitive trust is positively related to a customer's affective trust in a service provider. In case of e-mail service providers, COGT has a direct effect on AFFT (Ranganathan *et al.*, 2013). In this study, the author looked at past research in social-psychology and found that dependability and reliability require less investment of time than faith (Rempel *et al.*, 1985). So, people's baseline expectations for reliability and dependability must be met before they will invest further in relationships (McAllister, 1995). If an online retailer is reliable and dependable, some level of cognitive trust exists. This will help in development of affective trust. Based on the above evidence, it is hypothesized that:

H8. A customer's cognitive trust is positively associated with affective trust toward an online retailer.

2.2.5 Customer satisfaction. CS is defined as a person's felt state, either pleasure or discontent, ensuing from comparing a product's perceived performance (or outcome) in

relation to the person's expectations (Kotler *et al.*, 2009). Oliver (1993) discussed about both overall satisfaction which results from overall experience and attribute satisfaction which is based on assessment of performance of individual attributes. The current research considered CS as the overall satisfaction experienced by customers in e-tailing. Based on the definition of Chiu *et al.* (2009), the current study defined CS as customers' rational evaluation and affective response to the overall experience of online shopping. E-tailers require building and maintaining trust with customers to improve relationship quality. Trust leads to overall satisfaction with the relationship through increased cooperation and reduced conflict. The current study also proposes that trust is an antecedent of satisfaction in e-tailing. CS is a consumer's post-purchase evaluation and affective response to the overall product or service experience (Oliver, 1992). Both cognitive trust and affective trust leads to development of CS. In online retailing, CS can result from customers' cognitive evaluation of past experience. As per Crosby *et al.* (1990) CS is an emotional state resulting from a customer's interactions with a service provider over time. So, CS is also generated by the emotional response to the e-tailer due to the encounter. Thus:

- *H9.* A consumer with a high level of cognitive trust in an online retailer will have high amount of CS.
- *H10.* A consumer with a high level of affective trust in an online retailer will have high amount of CS.

2.2.6 Loyalty intention. Brand loyalty is defined as some degree of predispositional commitment toward a brand (Aaker, 1991). Both repeatedly buying a preferred product/ service and positive word-of-mouth are used as the measure of customer loyalty (Chang *et al.*, 2009). Whereas, Chiu *et al.* (2009) have considered only repurchase intention for measuring LI in online shopping context and used LI as a surrogate for actual behavior. This study considered the definition by Chiu *et al.* (2009), who have defined LI as the subjective probability that a customer will continue purchasing products from the online store in the future. The role of satisfaction as a predictor of intention is well established in previous literature. In the online context, it has been found that satisfaction of a consumer generates increased loyalty (Lopez-Miguens and Vazquez, 2017). Christodoulides and Michaelidou (2011) researched on customers of two UK-based e-tailers and found that CS is a key determinant of loyalty. When customers are satisfied with an e-vendor, it will have positive impact on retention (Moriuchi and Takahashi, 2016). Therefore, it is hypothesized that:

H11. CS positively influences LI toward the online retailer.

3. Research methodology

3.1 Measure development

PWQ was measured by five items adapted from McKnight *et al.* (2002). SPP was measured using six items adapted from Martin and Camarero (2009). PIE was measured using three items via seven-point semantic differential scale taken from Ganesan (1994), which was adapted by Johnson and Grayson (2005). PETR was assessed by three items modified from Doney and Cannon (1997) and Johnson and Grayson (2005). Three items for measuring SV were adapted to online purchase context and were based on Johnson and Grayson (2005), who have referred Crosby *et al.* (1990) for developing it. CS was measured by means of a four-item scale based on the Maxham and Netemeyer (2002) scales, adapted to an online context following the work of Chiu *et al.* (2009). Three items were used for measuring cognitive trust were adapted from Ranganathan *et al.* (2013) and Johnson and Grayson (2005). Affective trust was measured using three items adapted

from Johnson and Grayson (2005), McAllister (1995) and Ranganathan *et al.* (2013). The three items used for measuring LI were adapted from Agarwal and Karahanna (2000). PWQ, SPP, PETR, SV, CS, COGT, AFFT and LI were measured using seven-point Likert-type items, with 1 representing strongly disagree and 7 representing strongly agree. Internet usage experience (IE) and online shopping experience (OSE) are studied as control variables.

3.2 Sampling and data collection

The study used survey methodology for data collection. Before conducting the survey, the content validity of the survey questionnaire was ascertained. Data for the main study were collected using paper and pen as well as an online survey from Indian respondents using convenient sampling method. All the respondents were asked one filter question in the beginning of the questionnaire, which was whether they have the experience of shopping online. If they agreed to the above question, they have to give name of one e-tailer which they frequently browse and have shopped at least once from it. These e-tailers were sellers of physical products. The respondent subsequently evaluated the e-tailer, he or she selected, in terms of trust, satisfaction and LI, etc. A combined total of 334 usable responses (194 through the online and 140 through the offline survey) were collected. In case of the online survey, 328 people opened the link and 128 left in the middle after filling less than half of the questions. From the rest 200 people, six persons have no experience of shopping online. So, the remaining 194 usable questionnaires of online survey were used for analysis. In offline survey, the questionnaires were administered over 172 individuals and they were asked to return the completed questionnaire within a week. Among the 147 returned questionnaires, seven had more than three missing values and were also excluded from the data analysis. To minimize the risk of possible desirability bias, demographic information was asked at the end of the questionnaire (Punyatova, 2015). It was optional to provide the name and phone number of the respondents. This ensured protection of respondent anonymity and helped to reduce method biases (Podsakoff et al., 2003). The author assured respondents in the beginning of the questionnaire that there are no right or wrong answers and that they should answer questions as honestly as possible. This reduced evaluation apprehension that can lead to methods effects driven by social desirability, leniency, acquiescence and consistency in responses (Podsakoff et al., 2003). In the final sample, 75 percent of respondents were male. Of the respondents, 42 percent were graduates and 44 percent were postgraduates. 84 percent were aged between 21 and 35 years. In total, 36 percent were students and 30 percent were service holders. In all, 40 percent had a monthly income of more than approximately US\$400 (calculated considering \$1 equals to Rs50). All the respondents have been using internet for more than two years (mean = 9.68 years, SD = 3.50). Nearly all the respondents had more than one year's of e-shopping experience (mean = 3.49 years, SD = 1.78).

4. Analysis and results

To test the hypothesis, structural equation modeling (SEM) using AMOS software was used. First the measurement model of constructs was tested for reliability and validity dimensions. Next, the hypothesized causal relationships were estimated using the structural path model.

4.1 Measurement model

First, exploratory factor analysis (EFA) with principal component analysis method was conducted using SPSS. Table I shows means, standard deviations and results of EFA. A minimum factor loading of 0.5 was taken as the criteria to retain items.

Variables	Mean	SD	Number of items	Percentage of variance extracted	Range of factor loadings	cognitive and
Perceived website quality	5.49	1.24	5	77.38	0.846-0.911	affective trust
Security and privacy policy	5.08	1.33	6	77.70	0.852-0.931	
Prior-interaction experience	5.44	1.34	3	83.19	0.883-0.934	
Perceived e-tailer reputation	5.39	1.22	3	81.65	0.883-0.924	
Shared value	4.72	1.25	3	82.64	0.901 - 0.918	
Cognitive trust	5.32	1.27	3	69.34	0.631 - 0.919	T-11. I
Affective trust	5.07	1.27	3	79.31	0.869-0.915	Mean, standard deviation and exploratory factor
Customer satisfaction	5.39	1.30	4	86.10	0.882-0.946	
Loyalty intention	5.47	1.33	3	89.37	0.931-0.960	
Internet usage experience	9.68	3.49	1	-	-	analysis of the
Online shopping experience	3.49	1.78	1	-	-	study variables

All the items seemed loaded properly on respective variables and retained for future analysis. The variance extracted values were above 50 percent and this showed good reliability and convergent validity of the measurements (Hair et al., 2009). Reliability was also checked using Cronbach's α and all the values were found to be above the acceptable threshold of 0.70, as shown in Table II.

In the confirmatory factor analysis (CFA) model, five model-fit indexes were used to assess the overall goodness of fit. According to Bagozzi and Yi (1988), the normed χ^2 (χ^2 divided by degree of freedom: χ^2 /df) should be less than three for an acceptable model. Comparative fit index (CFI), Tucker Lewis Index (TLI) and Normed Fit Index (NFI) value of 0.90 or more suggests good model fit (Hair et al., 2009). But, for a complex model, NFI value of 0.8 is accepted by previous researchers (Pattanayak et al., 2017). Similarly, root mean square error of approximation (RMSEA) value of 0.08 or less is recommended to get a good fit (Bagozzi and Yi, 1988). The model showed: $\chi^2/df = 2.719$, CFI = 0.936, TLI = 0.922, NFI = 0.904, RMSEA = 0.072. It can be concluded that goodness-of-fit exists for the measurement scale of different constructs.

The convergent validity of the constructs was tested by looking at the values of composite reliability (CR) and average variance extracted (AVE). As per Fornell and Larcker (1981) the AVE for all research constructs should exceed 0.50. As shown in Table II, the AVE of the study's measurable variables was between 0.606 and 0.842. Fornell and Larcker (1981) have also suggested that the CR of measurable variable should be 0.6 or above. As indicated in Table II, the CR of measurable variables is between 0.808 and 0.947. So, both the conditions for convergent validity were satisfied.

Variables	Cronbach's α	Composite reliability (CR)	Average variance extracted (AVE)	
Perceived website quality	0.927	0.928	0.721	
Security and privacy policy	0.942	0.944	0.736	
Prior-interaction experience	0.898	0.902	0.754	
Perceived e-tailer reputation	0.886	0.889	0.728	
Shared value	0.895	0.895	0.740	Tabla II
Cognitive trust	0.735	0.808	0.606	Reliability and
Affective trust	0.869	0.869	0.691	validity analysis of
Customer satisfaction	0.946	0.947	0.819	each measurable
Loyalty intention	0.940	0.941	0.842	variable

4.2 Structural model

Results of the SEM analysis yielded χ^2 /df value of 2.794. The other fit indices were as follows: CFI = 0.923, TLI = 0.910, NFI = 0.885, RMSEA = 0.073. The model fit statistics indicated that the hypothesized model fits the data satisfactorily. The standardized path coefficients were used for interpreting the causal relationships. All the hypotheses were supported in the research model. Figure 2 showed the SEM analysis of the research model.

H1 saying about a positive association between PWQ and COGT was supported ($\gamma = 0.314$, p < 0.001). *H2* predicting a positive association between SPP and OGT was supported ($\gamma = 0.097$, p = 0.031). PIE had a significantly positive effect on cognitive trust ($\gamma = 0.303$, p < 0.001). Thus, *H3* was supported. PIE and AFFT had a significant association ($\gamma = 0.337$, p < 0.001), which supported *H4*. *H5* predicting a positive association between PETR and COGT was supported ($\gamma = 0.330$, p < 0.001). PETR and AFFT had a significant association tassociation ($\gamma = 0.347$, p = 0.065), which supported *H6*. *H7* saying about a positive association between SV and AFFT was supported ($\gamma = 0.143$, p = 0.018). COGT had a positive effect on AFFT ($\beta = 1.453$, p < 0.001). Thus, *H8* was supported. COGT increases CS significantly ($\beta = 1.308$, p < 0.001), which supported *H9*. AFFT and CS had a significant association ($\beta = 0.359$, p = 0.004), which supported *H10*. CS significantly improves LI ($\beta = 0.970$, p < 0.001). Thus, *H11* was supported. In addition, the two control variables – IE (p = 0.224) and OSE (p = 0.133) did not have a significant effect on LI.

4.3 Testing the mediation effects

In the research model PWQ, SPP, PIE, PETR and SV were indirectly affecting CS. Cognitive trust and affective trust were mediating the relationship between the exogenous variables and the outcome variable CS. So, a rival model was built to check the direct effect of COGT and AFFT on CS (Morgan and Hunt, 1994). In the rival model COGT and AFFT would not act as mediators, rather they became similar to the other five antecedents. In previous studies, researchers have also found direct relationship between trust and CS (Bigne and Blesa, 2003; Chiu *et al.*, 2009). So in the rival model the direct effect of both types of trust on satisfaction was tested. The rival model is shown in Figure 3.





Notes: All standardized loadings are significant at p < 0.05. *p < 0.1; **p = 0.224; ***p = 0.133



Additional investigation was undertaken to find out unique contribution of COGT and AFFT (Anderson and Gerbing, 1988). In one alternative model, all constructs were present except affective trust and SV. In the other alternative model, cognitive trust, PWQ, and SPP were not included. Both these are reduced models. SEM was run for all these three models. In the rival model, a non-mediation effect of COGT and AFFT was tested. It was named as Model 2 (NMT), where NMT means no-mediation of trust. The two alternative models were depicted as Model 3 (NAT) and Model 4 (NCT). NAT and NCT indicated no-affective trust and no-cognitive trust models. The research model, Model 1 (RM) was compared to Model 2 (NMT), Model 3 (NAT) and Model 4 (NCT) to check whether it was better than the rival model and the two reduced alternative models. The models were compared in terms of CFI, percentage of the models' hypothesized parameters that are statistically significant, amount of variance explained by the outcome variables, and parsimony normed fit index (PNFI) (Morgan and Hunt, 1994). Value of PNFI should be greater than 0.50, as suggested by Schumacker and Lomax (2010). The SEM fit statistics of the four models were compared in Table III.

Model specifications	χ^2	df	χ^2/df	CFI	PNFI	RMSEA	% of statistically significant paths	% of variance explained by CS	% of variance explained by LI
Model 1 (RM) Model 2 (NMT) Model 3 (NAT)	1,506.013 1,451.725 1,100.922 592.609	539 531 365 181	2.794 2.734 3.016 3.273	0.923 0.926 0.930 0.940	0.757 0.750 0.754 0.718	0.073 0.072 0.078 0.082	11 out of 11 (100%) 4 out of 8 (50%) 5 out of 6 (83.3%) 4 out of 5 (80%)	96.2 94.2 95.2 91.7	94.4 94.3 94.2 93.1
Notes: RM, Research model; NMT, no-mediation of trust model; NAT, no-affective trust model; NCT, no-cognitive trust model; CS, customer satisfaction; LI, loyalty intention									

Table III. Comparison of the structural models It was observed that CFA of the rival model (Model 2) is slightly higher than the research model. But only two out of eight paths were supported at p < 0.01 and two out of eight were supported at p < 0.05. In case of the original research model (Model 1), all the hypothesized paths were supported. AFFT was not affecting CS directly ($\gamma = 0.183$, p = 0.111). But it was found out from research model that affective trust mediate the relationship between PIE, PETR, SV and CS. In the two reduced alternative models, it was seen that the PNFI values were less than the research model. RMSEA values were higher compared to Model 1. Percent of variance explained by CS and LI were lesser than in the case of research model. It can be observed from Table III that the research models. The research model fitted the data better than competing models in terms of both the relative predictive power of overall model and the relative number of significant path estimates. In addition, the two control variables did not have a significant effect on LI in case of all the three competing models.

5. Discussion

The study theorized that COGT and AFFT were key mediating variables influencing CS and subsequently LI. The research model was tested using SEM and it was found that the hypothesized antecedents explained 96.6 percent variance in COGT and 90.3 percent variance in AFFT. Even substantial amount of variance in CS (96.2 percent) and LI (94.4 percent) were explained. The study's research model was extreme, which had no direct link or path between the antecedents and CS. So, it was compared with a rival model (Model 2), which had no indirect link between the five antecedents and CS. The goodness of fit measures were acceptable for Model 2, but only 4 paths were supported. Three out of five antecedent variables were found to be having no direct effect on CS. This gave a clear indication that the research model was better in representing reality (Morgan and Hunt, 1994). Second, two reduced alternative models were compared to the research model to test the unique contribution of COGT (Model 3) and AFFT (Model 4). Both these model were found to be not meeting the criteria of normed χ^2 . The value of χ^2/df should be less than 3 (Bagozzi and Yi, 1988), but in case of these models it was more than 3. The PNFI of the research model exceeded the reduced alternative models. Even, Model 4 could not meet the requirement of RMSEA (0.082). This substantiated the research model had a better overall fit. Table III clearly indicated the superiority of full research model over the other models.

Third, the results showed that the e-tailer website characteristics had a strong positive effect on COGT. Both PWQ and SPP have significantly positive influence on cognitive trust. PIE is having positive effect on both COGT and AFFT. Past experiences with a service provider may lead the customer to believe that the service provider will fulfill its promises, and increase the perceptions of trust (Ganesan, 1994). PETR is found to be having strong relationship with COGT and AFFT. This finding is in line with previous study which suggested that favorable firm reputation positively impacts consumer's trust (Doney and Cannon, 1997). SV is found to have significant effect on AFFT. When a customer detects elements of similarity in a service provider, an affective response may result that leads to the development of a positive attitude toward the service provider (Johnson and Grayson, 2005). Fourth, the findings showed that consumer's COGT is positively related to AFFT in an e-tailer. This is because in a relationship some amount of cognitive based trust is necessary for affect-based trust to develop (McAllister, 1995). It was also found that COGT and AFFT are two distinct variables. Results of EFA and CFA showed that the two factors are reliable and valid. Both types of trust are helping in building CS and LI.

6. Implications for theory and practice

Although importance of CS in online retailing is addressed by previous studies, this was the first marketing study to explore effect of two dimensions of trust on CS and LI. The findings indicated that consumer trust on online retailers can be measured in two ways: cognitive trust and affective trust. The findings are consistent with McAllister (1995), who found that some level of cognition-based trust is necessary for affect-based trust to develop. Both the trust dimensions were correlated, but were distinct and unique. In, terms of theory building, this research attempts to develop a theoretical research model by bringing variables from Information systems area and marketing field. The study integrated website characteristics, consumer experience and consumer believability with online consumer behavior. The trust-satisfaction-loyalty linkage was significantly affected by some vital antecedents. Drawing support from signaling theory, this study established the fact that PWQ and SPP acted as signals in online retailing context. Both these acted as extrinsic signals (Chen et al., 2016) and decreased risk of conducting a transaction with an e-tailer and built the online trust. This also indicates that not only marketing- and economics-related variables, but IT-related variables affect online consumer behavior. PIE affected both cognitive and affective trust. Thus, consumer experience deserves more attention in e-commerce research because it has impact on both the trust dimensions. PETR was also linked to both trust measures. SV was found to have significant effect on AFFT. When the consumer finds that there is a similarly between his and the e-tailor's values, interests, and principles, he will develop a positive attitude toward the e-tailer resulting in affective trust. In social psychology literature, a similarly between individuals indicates presence of an attraction between them (Byrne, 1969). In organizational commitment literature, person-organization fit is seen as an important determinant of employee's trust toward the organization (Chatman, 1991). In this research, SV is measured and analyzed from the perspective of online marketing. This study suggests that not only a well-developed website, but consumer's past experience and thoughts affect his trust on online retailers.

This present research holds important implications for IS practitioners, especially for online retailers who seek to foster high quality marketing performance by inducing long-term and repeat sale of products and services. E-tailing industries should appreciate the fact that consumers prefer online retailers with good quality website. This is about incorporating quality into companies' business strategies rather than to only promote and advertise an online retailer sales promotion schemes. This indicates consumers not only want more variety of products and excellent service but also superior quality website from an e-tailer. Website designers should cater to consumer by providing good web interface. A good website quality provides the first experiential taste of the vendor's presence, solidifies initial impression, and builds trust (McKnight et al., 2002). Website developers need to concentrate on the technological characteristics of their websites. If consumers perceive that the website is good in terms of navigability, aesthetics and functionality, they will choose to do future purchase from the same. Concern for security, and privacy associated with providing personal information is high in online retailing due to spatial and temporal separation between consumers and e-tailers. E-tailing companies should pay much attention to SPP because consumers give a lot of importance to the risk associated with an online purchase. Along with that, e-tailers can build good reputation in the market through proper marketing communication, and celebrity endorsement. This will build consumer trust. Online marketers should focus on building long-term relationship with each and every consumer. Many e-tailers have already recognized a crucial role of PIE and are heavily investing in many initiatives to enhance positive, strong and long-lasting consumer experience. Sending notification e-mails, and transactional e-mails, asking for feedback post-purchase, requesting to review a product, asking to rate customer-care executives, and sending promo-codes are some of the examples that can influence consumers. E-tailers should work to build both cognitive and affective trust, as both of them lead to CS.

7. Limitations and future research

There are several limitations of this research that should be considered when interpreting its findings. First, this study focused on Indian online consumers only. By conducting cross-cultural studies, more insights can be brought into the picture. Second, this study used cross-sectional data collected in Indian context. The causal relationships need to be further corroborated by longitudinal studies. Third, although this study has analyzed a number of variables which influence cognitive trust and affective trust, it may be likely that several other variables are also vital antecedents of cognition and affect-based trust. This can be explored by the future researchers. An interesting area for future research is to examine the effect of product type, consumer personal values and gender on customer online LI. The current research focused on online retailers selling goods to consumers. Similar work can be conducted in the context of e-tailers providing services and e-tailers selling digital products to consumers and the results can be compared. Fourth, in the current study two trust dimensions are taken as antecedents of online CS. But in real life there will be multiple factors that may affect consumer's satisfaction level. For example, an e-tailer's service quality (Sivapalan and Jebarajakirthy, 2017) and pricing also affect online consumer loyalty. Therefore, future researchers should examine the relative influence of the e-service quality dimensions on consumer's online satisfaction and LI. Fifth, this research looked at the effect of satisfaction on LI. But loyalty can be affected by additional factors. One such antecedent could be switching barrier. since research in online banking context indicated switching barriers exert a positive and direct influence on online loyalty (Lopez-Miguens and Vazquez, 2017). So, further research can be done by considering the effect of switching barrier in online retailing. So, future research could explore other variables for their effect and make the theoretical model more robust.

References

- Aaker, D.A. (1991), Managing Brand Equity: Capitalizing on the Value of a Brand Name, The Free Press, New York, NY.
- Agarwal, R. and Karahanna, E. (2000), "Time flies when you're having fun: cognitive absorption and beliefs about information technology usage", MIS Quarterly, Vol. 24 No. 4, pp. 665-694.
- Anderson, J.C. and Gerbing, D.W. (1988), "Structural equation modeling in practice: a review and recommended two-step approach", *Psychological Bulletin*, Vol. 103 No. 3, pp. 411-423.
- Bagozzi, R.P. and Yi, Y. (1988), "On the evaluation of structural equation models", Journal of the Academy of Marketing Science, Vol. 16 No. 1, pp. 74-94.
- Bart, Y., Shankar, V., Sultan, F. and Urban, G.L. (2005), "Are the drivers and role of online trust the same for all web sites and consumers? A large-scale exploratory empirical study", *Journal of Marketing*, Vol. 69 No. 4, pp. 133-152.
- Berry, L.L., Wall, E.A. and Carbone, L.P. (2006), "Service clues and customer assessment of the service experience: lessons from marketing", *Academy of Management Perspectives*, Vol. 20 No. 2, pp. 43-57.
- Bigne, E. and Blesa, A. (2003), "Market orientation, trust and satisfaction in dyadic relationships: a manufacturer-retailer analysis", *International Journal of Retail & Distribution Management*, Vol. 31 No. 11, pp. 574-590.
- Byrne, D. (1969), "Attitudes and attraction", in Berkowitz, L. (Ed.), Advances in Experimental Social Psychology, Vol. 4, Academic Press, New York, NY, pp. 36-86.
- Chang, H.H., Wang, Y.-H. and Yang, W.-Y. (2009), "The impact of eservice quality, customer satisfaction and loyalty on e-marketing: moderating effect of perceived value", *Total Quality Management & Business Excellence*, Vol. 20 No. 4, pp. 423-443.

- Chang, Y.-S. and Fang, S.-R. (2013), "Antecedents and distinctions between online trust and distrust: predicting high- and low-risk internet behaviors", *Journal of Electronic Commerce Research*, Vol. 14 No. 2, pp. 149-166.
- Chatman, J.A. (1991), "Matching people and organizations: selection and socialization in public accounting firms", Administrative Science Quarterly, Vol. 36 No. 3, pp. 459-484.
- Chen, X., Huang, Q., Davison, R.M. and Hua, Z. (2016), "What drives trust transfer? The moderating roles of seller-specific and general institutional mechanisms", *International Journal of Electronic Commerce*, Vol. 20 No. 2, pp. 261-289.
- Chiu, C.-M., Lin, H.-Y., Sun, S.-Y. and Hsu, M.-H. (2009), "Understanding customers' loyalty intentions towards online shopping: an integration of technology acceptance model and fairness theory", *Behaviour & Information Technology*, Vol. 28 No. 4, pp. 347-360.
- Christodoulides, G. and Michaelidou, N. (2011), "Shopping motives as antecedents of e-satisfaction and e-loyalty", *Journal of Marketing Management*, Vol. 27 Nos 1-2, pp. 181-197.
- Crosby, L.A., Evans, K.R. and Cowles, D. (1990), "Relationship quality in services selling: an interpersonal influence perspective", *Journal of Marketing*, Vol. 54 No. 3, pp. 68-81.
- Doney, P.M. and Cannon, J.P. (1997), "An examination of the nature of trust in buyer-seller relationships", *Journal of Marketing*, Vol. 61 No. 2, pp. 35-51.
- Fornell, C. and Larcker, D.F. (1981), "Evaluating structural equation models with unobservable variables and measurement error", *Journal of Marketing Research*, Vol. 18 No. 1, pp. 39-50.
- Ganesan, S. (1994), "Determinants of long-term orientation in buyer–seller relationships", Journal of Marketing, Vol. 58 No. 2, pp. 1-19.
- Goldring, D. (2015), "Reputation orientation: improving marketing performance through corporate reputation building", *Marketing Intelligence & Planning*, Vol. 33 No. 5, pp. 784-803.
- Hair, J.F., Black, W.C., Babin, B.J., Anderson, R.E. and Tatham, R.L. (2009), *Multivariate Data Analysis*, Pearson Publication, New Delhi.
- Johnson, D. and Grayson, K. (2005), "Cognitive and affective trust in service relationships", Journal of Business Research, Vol. 58 No. 4, pp. 500-507.
- Johnson-George, C. and Swap, W.C. (1982), "Measurement of specific interpersonal trust: construction and validation of a scale to assess trust in a specific other", *Journal of Personality and Social Psychology*, Vol. 43 No. 6, pp. 1306-1317.
- Kim, B.-D. and Sullivan, M.W. (1998), "The effect of parent brand experience on line extension trial and repeat purchase", *Marketing Letters*, Vol. 9 No. 2, pp. 181-193.
- Kotler, P., Keller, K.L., Koshy, A. and Jha, M. (2009), *Marketing Management: A South Asian Perspective*, Prentice-Hall, New Delhi.
- Lee, H.-H., Kim, J. and Fiore, A.M. (2010), "Affective and cognitive online shopping experience: effects of image interactivity technology and experimenting with appearance", *Clothing and Textiles Research Journal*, Vol. 28 No. 2, pp. 140-154.
- Lewis, J.D. and Weigert, A. (1985), "Trust as a social reality", Social Forces, Vol. 63 No. 4, pp. 967-985.
- Lopez-Miguens, M.J. and Vazquez, E.G. (2017), "An integral model of e-loyalty from the consumer's perspective", *Computers in Human Behavior*, Vol. 72, July, pp. 397-411.
- Luhmann, N. (1979), Trust and Power, John Wiley, Chichester.
- McAllister, D.J. (1995), "Affect- and cognition-based trust as foundations for interpersonal co-operation in organizations", Academy of Management Journal, Vol. 38 No. 1, pp. 24-59.
- McKnight, D.H., Choudhury, V. and Kacmar, C.J. (2002), "Developing and validating trust measures for e-commerce: an integrative typology", *Information Systems Research*, Vol. 13 No. 3, pp. 334-359.
- Martin, S.S. and Camarero, C. (2009), "How perceived risk affects online buying", Online Information Review, Vol. 33 No. 4, pp. 629-654.

- Maxham, J.G. III and Netemeyer, R.G. (2002), "Modeling customer perceptions of compliant handling over time: the effects of perceived justice on satisfaction and intent", *Journal of Retailing*, Vol. 78 No. 4, pp. 239-252.
- Morgan, R.M. and Hunt, S.D. (1994), "The commitment-trust theory of relationship marketing", Journal of Marketing, Vol. 58 No. 3, pp. 20-38.
- Moriuchi, E. and Takahashi, I. (2016), "Satisfaction trust and loyalty of repeat online consumer within the Japanese online supermarket trade", *Australasian Marketing Journal*, Vol. 24 No. 2, pp. 146-156.
- Morrow, J.L. Jr, Hansen, M.H. and Pearson, A.W. (2004), "The cognitive and affective antecedents of general trust within cooperative organizations", *Journal of Managerial Issues*, Vol. 16 No. 1, pp. 48-64.
- Oliver, R.L. (1992), "An investigation of the attribute basis of emotion and related affects in consumption: suggestions for a stage-specific satisfaction framework", in Sherry, J. and Sternthal, B. (Eds), Advances in Consumer Research, Vol. 19, Association for Consumer Research, Provo, UT, pp. 237-244.
- Oliver, R.L. (1993), "Cognitive, affective, and attribute bases of the satisfaction response", Journal of Consumer Research, Vol. 20 No. 3, pp. 418-430.
- Pattanayak, D., Koilakuntla, M. and Punyatoya, P. (2017), "Investigating the influence of TQM, service quality and market orientation on customer satisfaction and loyalty in the Indian banking sector", *International Journal of Quality & Reliability Management*, Vol. 34 No. 3, pp. 362-377.
- Podsakoff, P.M., MacKenzie, S.B., Lee, J.Y. and Podsakoff, N.P. (2003), "Common method biases in behavioral research: a critical review of the literature and recommended remedies", *Journal of Applied Psychology*, Vol. 88 No. 5, pp. 879-903.
- Privacyalliance.org (2014), "Guidelines for online privacy policies", available at: www.privacyalliance. org/resources/ppguidelines.shtml (accessed August 27, 2017).
- Punyatoya, P. (2015), "Effect of perceived brand environment-friendliness on Indian consumer attitude and purchase intention", *Marketing Intelligence & Planning*, Vol. 33 No. 3, pp. 258-275.
- Ranganathan, S.K., Madupu, V., Sen, S. and Brooks, J.R. (2013), "Affective and cognitive antecedents of customer loyalty towards e-mail service providers", *Journal of Services Marketing*, Vol. 27 No. 3, pp. 195-206.
- Rempel, J.K., Holmes, J.G. and Zanna, M.D. (1985), "Trust in close relationships", *Journal of Personality and Social Psychology*, Vol. 49 No. 1, pp. 95-112.
- Rousseau, D.M., Sim, B., Bitkin, R.S., Burt, S. and Camerer, C. (1998), "Not so different after all: a cross- discipline view of trust", Academy of Management Review, Vol. 23 No. 3, pp. 393-404.
- Schumacker, R.E. and Lomax, R.G. (2010), A Beginner's Guide to Structural Equation Modeling, Routledge, New York, NY.
- Sivapalan, A. and Jebarajakirthy, C. (2017), "An application of retailing service quality practices influencing customer loyalty toward retailers", *Marketing Intelligence & Planning*, Vol. 35 No. 7, pp. 842-857.
- Weiss, A.M., Anderson, E. and MacInnis, D.J. (1999), "Reputation management as a motivation for sales structure decisions", *Journal of Marketing*, Vol. 63 No. 4, pp. 74-89.
- Wells, J.D., Valacich, J.S. and Hess, T.J. (2011), "What signal are you sending? How website quality influences perceptions of product quality and purchase intentions", *MIS Quarterly*, Vol. 35 No. 2, pp. 373-396.
- Xu, F. and Du, J.T. (2018), "Factors influencing users' satisfaction and loyalty to digital libraries in Chinese universities", *Computers in Human Behavior*, Vol. 83, June, pp. 64-72.
- Yoon, S.-J. (2002), "The antecedents and consequences of trust in online-purchase decisions", Journal of Interactive Marketing, Vol. 16 No. 2, pp. 47-63.

Further reading

Barber, B. (1983), The Logic and Limits of Trust, Rutgers University Press, New Brunswick, NJ.

About the author

Plavini Punyatoya is Assistant Professor of Marketing at the Xavier Institute of Management, Xavier University, Bhubaneswar, India. She received her Doctorate from the Indian Institute of Management, Indore, India. Her current research interests include digital marketing, new product branding, innovative advertising, service quality and green marketing. She has published in *Journal of Brand Management, Marketing Intelligence and Planning, Journal of International Consumer Marketing, Global Business Review, International Journal of Quality and Reliability Management* and International Journal of Business Excellence. Plavini Punyatoya can be contacted at: plavini@ximb.ac.in

For instructions on how to order reprints of this article, please visit our website: www.emeraldgrouppublishing.com/licensing/reprints.htm Or contact us for further details: permissions@emeraldinsight.com