Antecedents of Online Shopping Experience: An Empirical Study

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Abstract
Online customer experience (OCE) is an evolving research area due to rapid growth of online retail in India. However, this field lacks empirical research in the Indian context. This study develops a conceptual model of OCE with antecedents, components and outcome variables, and empirically tests it through structural equation modelling using a sample of online shoppers in India. The mediating effect of satisfaction on OCE and moderating effect of gender on OCE are also reported. Results show a good fit between the data and the model. Academic contributions, managerial implications, limitations and further research directions are further discussed.

Keywords: Customer experience, online customer experience, online retail, online satisfaction, online repurchase intention, gender

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Introduction
Online retail has been growing at a very rapid pace in India. According to the ASSOCHAM (Associated Chambers of Commerce and Industry of India) – Resurgent India study (2017), 100 million shoppers will use the online route by 2017 and this channel is estimated to generate $17.52 billion in sales by end of 2018. Growth drivers of this sector include: deep penetration of economically priced web-enabled smartphones, faster and cheaper broadband service in both big metros and smaller cities, and a large internet savvy Indian youth segment (Khare and Rakesh, 2011). According to a Flipkart (Indian origin online marketplace) study (2015), online shopping is dominated by customers in the 25-34 years age group; 69% of the online shoppers are men and 31% are women. Due to the huge growth potential of online retail in a cluttered marketplace, where competition is fierce and customers are fickle, retailers are forced to differentiate their services to survive and thrive. In this backdrop, online customer experience (OCE) has emerged as a strategic differentiator to improve the customer’s “stickiness” to the online retailer leading to desirable marketing outcomes like satisfaction and repurchase intention. According to Forrester’s Customer Experience Index Report (2017), all major India online retailers consider customer experience as a critical business priority and allocate significant marketing budget to address this issue. Few researchers have contributed to OCE research (Novak et al., 2000; Rose et al., 2012; Martin et al. 2015). However, literature review shows knowledge generation in OCE is still emerging and yet to take a concrete shape, which qualifies this construct and the domain fit for further research (Klaus, 2013; Rose et al. 2012; Trevinal and Stenger, 2014; Martin et al. 2015).

Also, customer experience, being a multi-dimensional construct, poses a challenge of specification of antecedents in a particular context. In this backdrop, the goal of this study is to find an answer to the research question which has evolved from the previous discussion: What are the antecedents for a positive online customer experience in the Indian context which, in turn, will be translated into desired marketing outcomes?

Specifically, the key objectives of this study are:
1. Developing a conceptual model of OCE consisting of antecedent, component and consequent variables, and hypothesising interrelationships.
2. Testing the model for reliability and validity to support hypothesised relationships.
3. Testing the mediating effect of satisfaction on OCE.
4. Testing the moderating effect of gender on OCE.

This research contributes to the present body of knowledge in the domain of OCE by incorporating two new OCE antecedents and also testing the moderating effect of gender on OCE in the Indian context. The paper is divided into: literature review of OCE along with its antecedents, component and outcome variables, research methodology, data analysis, discussion which includes theoretical contributions and managerial implications, and finally limitations and scope for future research.

Theoretical background, hypotheses and model development
Customer Experience (CE)
In a fiercely competitive retail environment, the retailer, apart from engaging in product innovation and competitive pricing, should also focus on CE for sustainable competitive advantage (Grewal et al., 2009). Hence, CE has been researched in different product and service contexts: e.g. civil aviation (Chauhan and Manhas, 2014), travel industry (Jauhari, 2010; Gopalan, 2010), DTH industry (Joshi et al., 2014), banking (Rahman, 2006), luxury hotels (Mohsin and Lockyer, 2010), mobile services (Chakraborty and Sengupta, 2013) and modern retail (Jain and Bagdare,
2009; Bagdare and Jain, 2013; Anuradha and Manohar, 2011). While earlier consumer behaviour researchers focused on the information-processing model which assumed the consumer as logical and rational during the purchase process (Bettman, 1979), later studies challenged this purely utilitarian motive and included a hedonic perspective. Holbrook and Hirschman further extended this view by pioneering the “experiential” view of consumption by focusing on symbolic, hedonic and aesthetic factors related to consumption (Holbrook and Hirschman, 1982). This view of consumption helped to explain impulse purchase and compulsive shopping - concepts the earlier view failed to explain.

Carbone and Haeckel (1994) defined CE as “the takeaway impression formed by people’s encounters with products, services, and businesses—a perception produced when humans consolidate sensory information” and opined that CE could act as a differentiator in a competitive market and should be made an integral part of the marketing plan.

Pine and Gilmore (1998) observed that the modern customer lives in an “experience economy” as marketing has evolved from commodities to services to experiences. They suggested that today’s marketing success depends on “staging experiences that sell” and categorised retail customer experience into four types: entertainment, educational, escapist and aesthetic. They also commented that “people have become relatively immune to messages targeted at them. The way to reach your customers is to create an experience within them” (Pine and Gilmore, 2002). Building on this view, Schmitt (1999) coined the term “experiential marketing”, which was a paradigm shift from the conventional focus on the product’s “features-and-benefits”. He proposed that customers are not only governed by ‘cognitive’ thinking but also by ‘affective’ emotions. Interplay of both ultimately create “pleasurable experiences”. The central elements of Schmitt’s framework were: 'Strategic Experience Modules' (experience types) and 'Experience Producers' (experience causing factors). Five types of customer experience were posited by them: sensory experiences (sense), affective experiences (feel), creative cognitive experiences (think), physical experiences, behaviours and lifestyle (act) and social-identity experiences linked to reference groups or culture (relate).

Later, Berry, Carbone and Haeckel (2002) reported that “total customer experience” was a component of the overall value creation process and the firm should plant suitable “clues” in the purchase environment to create the desired emotional aspect of experience. They also argued that superior CE and customer loyalty could be produced through deliberate placement of cognitive and affective signals in the shopping environment (Berry and Carbone, 2007). Other researchers proposed that personalised CE was a critical component of the overall value creation process (Prahalad and Ramaswamy, 2004) and also gave insight into different components of customer experience: sensorial, emotional, cognitive, pragmatic, lifestyle and relational (Gentile et al. 2007).

Owing to the multi-dimensionality of CE, different researchers have attempted to capture its different dimensions; e.g. CE is a customer’s “internal and subjective” response due to the interaction with the firm (Meyer and Schwager, 2007); it is composed of the customer’s cognitive, affective, social and physical responses to the retailer, and future customer experiences will be governed by past customer experiences (Verhoef et al., 2009); CE happens through interaction between the customer and the business at every possible contact point (Grewal et al., 2009). Gentile et al. (2007) incorporated the multiple facets of CE in a comprehensive definition: “The customer experience originates from a set of interactions between a customer and a product, a
company, or part of its organisation, which provoke a reaction. This experience is strictly personal and implies the customer's involvement at different levels (rational, emotional, sensorial, physical and spiritual)

**Online Customer Experience (OCE)**

Businesses as well as past studies have stressed the strategic importance of OCE for a firm's success (Grewal et al., 2009; Rose et al., 2011, Martin et al. 2015). Trevinal and Stenger (2014) have defined online shopping experience as “a complex, holistic, and subjective process resulting from interactions between consumers and the online environment”. Despite different points of view of conceptualising OCE owing to its multi-dimensionality, the common element in all the previous studies is that OCE is a “psychologically subjective response to the e-retail environment”. Hoffman and Novak (1996) first proposed a model of online consumer navigation using 'flow', a psychological motivational construct. Flow is manifested through a feeling of seamless online navigation, intrinsic enjoyment and lack of self-consciousness (Hoffman and Novak, 1996). However, later researchers argued that OCE is not only manifested through flow, but it is composed of two components: cognitive experience and affective experience (Rose et al., 2012; Martin et al., 2015). OCE researchers also pointed out that the lack of availability of OCE literature and differing definitional perspectives of the concept is a major hurdle for research in this field (Rose et al., 2011).

Drawing on extant literature, present research has also hypothesised two components of OCE: a) Cognitive Experience in Online Shopping (CEOS) and b) Affective Experience in Online Shopping (AEOS).

**Cognitive Experience in Online Shopping (CEOS)**

Cognitive Experience in Online Shopping (CEOS) refers to conscious information processing leading to problem solving or learning and it is “connected with thinking or conscious mental processes” (Gentile et al., 2007; Rose et al. 2012). CEOS has roots in the concept of online ‘flow’ – a psychological state and motivational construct (Csikszentmihalyi 1975, 1990) that influences experience (Huang 2006) through cognitive processing of the online shopper. Its characteristics are challenge, arousal, attention and telepresence, which led to lowered self-awareness and intense, internal and subjective enjoyment (Hoffman and Novak, 1996).

Novak, Hoffman and Yung (2000) defined online flow as “a cognitive state experienced during online navigation”. Rose et al. (2012) proposed antecedents of CE are telepresence, challenge, skills and interactive speed based on the works done by Novak et al. (2000). But later, Martin et al. (2015) argued that only telepresence and challenge should be used as indicators of CE due to improvement in online shoppers’ skill level and better internet speed. In line with this finding, the present model has considered telepresence and challenge as antecedents of CE.

**H1: CEOS influences satisfaction.**

**Telepresence**

Telepresence, an antecedent of CEOS in this study, refers to the degree to which the consumer feels present in the online domain compared to the real environment. It is characterised by the customer being unaware of the passage of time due to intense involvement in the virtual environment (Hoffman and Novak, 1996; Novak and Hoffman, 2000; Hoffman, 2009). Literature shows CE is significantly increased by telepresence (Mollen and Wilson, 2010) and cognitive experience state in online shopping is also positively influenced by telepresence (Martin et al. 2015; Rose et al., 2012).

Based on extant literature, the present model considers telepresence as an antecedent to the cognitive aspect of online customer experience.

**H1a: Telepresence positively influences CEOS.**
Challenge
Challenge is considered as one of the antecedents of cognitive experiential state (Pelet et al., 2017; Nakamura and Csikszentmihalyi, 2000; Ghani and Deshpande, 1994; Ghani et al. 1991; Trevino and Webster, 1992; Hoffman and Novak, 1996; Rose et al., 2012; Martin et al. 2015) of overall OCE. It refers to a customer's level of anxiety triggered by the perceived complexity related to his/her level of web browsing skill, which may positively influence affect and exploratory behaviour (Novak et al., 2000).

Drawing on extant literature, the present model considers challenge as an antecedent to the cognitive aspect of online customer experience.

H1b: Challenge positively influences CEOS.

Affective Experience in Online Shopping
Though initial research focused only on the cognitive aspect of OCE (Hoffman and Novak, 1996), later researchers conceptualised an affective component as well (Gentile et al, 2007; Rose et al., 2012; Martin et al., 2015). Affective Experience in Online Shopping (AEOS) is a component of overall OCE that “involves one’s affective system through the generation of moods, feelings and emotions” and leads to emotional connection between the customer and the product, service, brand or organisation (Gentile et al, 2007; Rose et al., 2012). The conceptual model for this study is adapted for the Indian scenario by considering two new antecedents for AEOS from Focus Group Discussions with Indian online shoppers. The two antecedents for the AEOS are: (a) prior shopping experience and (b) online retailer credibility.

Based on extant literature, the present model hypothesises affective experience in online shopping (AEOS) positively influences customer satisfaction.

H2: AEOS influences satisfaction.

Previous Shopping Experience
Customers’ previous shopping experience in a specific shopping channel helps to reduce perceived risks related to future purchase using that channel (Dai et al., 2014). Shoppers’ risk perception toward online retail is higher compared to physical retail because the former channel is relatively new and involves use of Internet technology by the shopper (Brunelle, 2009). Hence, to reduce risks and uncertainties, online shoppers evaluate their previous shopping experience – both component-wise and holistically –which influences repurchase intention of shoppers (Ling et al. 2010; Khalifa and Liu, 2007). Apart from favourable marketing outcome, online shoppers also gather more brand knowledge from prior experience which leads to higher level of shopper-expertise and less dependence on external information to judge the trustworthiness of the retailer and more sense of belonging to the online brand community (Shi and Chow, 2015). Research studies on satisfaction in the field of OCE have shown that affective experience, along with cognitive experience, is involved in creation of customer satisfaction (Homburg et al., 2006; Jin and Park, 2006; Khalifa and Liu, 2007; Rose et al., 2012; Martin et al., 2015).

Drawing on existing literature, the present model considers previous shopping experience as an antecedent to the affective aspect of online customer experience.

H2a: Previous Shopping Experience influences AEOS

Retailer Credibility
Retailer credibility is defined as “the extent to which customers believe a firm can design and deliver products and services that satisfy their needs and wants” (Kotler and Keller, 2016). As physical infrastructure and direct interaction with customers are largely absent in online retail, customers face difficulty in gauging the credibility of an online retailer. Unless this issue is addressed, a shopper may have
high risk perception toward the specific retailer and toward the online shopping process in general in terms of reliability, security and privacy. Retailer credibility reduces risk perception, increases trustworthiness of an online retailer and positively influences overall quality perception, perceived usefulness and usage intentions (Featherman et al., 2010; Jarvenpaa et al., 2000). Hence, online retailers put in extra effort to create emotional associations with the shopper by creating perceived retailer credibility, thus driving revisit intention and repurchase intention (Kapoor and Sharma, 2016; Brunelle, 2009; Merrilees and Miller, 2005).

Based on existing literature, the present model considers retailer credibility as an antecedent to the affective aspect of online customer experience.

**H2b: Retailer Credibility influences AEOS**

**Customer Satisfaction**

Customer satisfaction is a subjective, individual-specific and context-specific construct that refers to “judgment that a product or service feature, or the product or service itself, provided (or is providing) a pleasurable level of consumption-related fulfilment, including levels of under- or over-fulfilment” (Oliver, 1997). Satisfaction has been conceived from different viewpoints: one is 'expectancy disconfirmation paradigm' (Oliver and Desarbo, 1988; Tse and Wilton, 1988; Yi, 1990); on the other hand, outcome focus links satisfaction to behavioural reinforcement (Srivastava and Kaul, 2014). Satisfaction research has two popular approaches – one is study of transaction specific satisfaction and another is cumulative or overall satisfaction. Positive customer experience is an antecedent to more satisfaction which in turn, would ensure higher repurchase intention through repeat visits, larger spending and more profit (Grewal et al., 2009).

Research studies on satisfaction in the field of OCE have shown that both cognitive and affective experience are involved in creation of customer satisfaction (Homburg et al., 2006; Jin and Park, 2006; Khalifa and Liu, 2007; Rose et al., 2012; Martin et al., 2015) and customer satisfaction positively influences online repurchase intention (Rose et al., 2012; Martin et al., 2015).

Drawing on available literature, the present research considers satisfaction as a post-consumption evaluation of online shopping experience which incorporates both transaction specific and cumulative components, and influences repurchase intention of shoppers.

**H3: Satisfaction influences Repurchase Intention**

**Repurchase Intention**

Intention is a reliable predictor of actual behaviour according to the Theory of Reasoned Action, the Theory of Planned Behaviour and the Technology Acceptance Model (Ajzen, 1991; Davis et al., 1989; Chen et al., 2015), and repurchase intention is a better measure than behavioural parameters (Ling et al., 2010). Repurchase intention has been found to be a consequence of customer satisfaction in retail research (Seiders et al., 2005).

In online buying, repurchase intention is defined as the “re-usage of the online channel to buy from a particular retailer” (Khalifa and Liu, 2007). Researchers showed evidence of association between OCE, online customer satisfaction and online repurchase intention (Rose et al., 2012; Khalifa and Liu, 2007) which has been found to be a consequence of customer satisfaction in online retail (Ha et al., 2010; Rose et al, 2012; Martin et al, 2015).

Drawing on available literature, it is hypothesised that Repurchase Intention is influenced by Satisfaction.

**Mediating hypothesis: OCE influences repurchase intention through satisfaction.**
Gender - Moderating Variable

Extant literature points out that gender differences exist in online shopping context across various nationalities and cultures (Stafford et al., 2004) with respect to various dimensions of consumers’ shopping attitude and behaviour (Lian and Yen, 2014; Van Slyke et al., 2010; Slyke et al., 2010; Sangram et al., 2009; Rodgers and Harris, 2003; Weiser, 2000).

Literature shows that females and males process information differently. Male customers are more prone to shop online than female customers and are confident while shopping online (Khare and Rakesh, 2011; Chou et al., 2010; Hasan 2010; Hashim et al., 2009). They have different risk perceptions (Garbarino and Strailevitz, 2004) and during the pre-purchase phase of online shopping, male customers pay more attention to the functional utility of the product whereas a product’s emotional and social aspects impact female customers more (Dittmar et al., 2004). Also, men find the online shopping process more convenient than women (Chen et al., 2015).

Based on the literature study, the model in this study hypothesises that the gender of respondents has a moderating effect on OCE.

Moderating hypothesis: Gender has a moderating effect on OCE.

Methodology

Survey instrument and measurement

Data for the study was collected through structured questionnaires administered online through a web link resulting in 607 usable filled questionnaires by Indian online shoppers.

Survey instrument was developed from measurement scale items of previous studies. CEOS (Flow) and AEOS scales were adapted from Rose et al. (2012) and antecedents of AEOS i.e. previous experience and retailer credibility were adapted from Chai and Piew (2010) and Featherman et al. (2010) respectively. Lastly, satisfaction and repurchase intention scale items were adapted from Rose et al. (2012).

Analysis

Structural Equation Modelling (SEM) is a powerful statistical tool used extensively in management research particularly to understand marketing phenomena (Bagozzi and Yi, 1988; Fornell and Larcker,
1981; Hooper et al., 2008). This study uses SEM, which is useful in testing theories by examining a series of dependence relationships simultaneously (Kline, 2015; Hair et al. 2013), adopts a confirmatory or hypothesis-testing approach to multivariate analysis of a structural theory (Lei and Wu, 2007; Suhr, 2006; Byrne, 2001) and combines complex path models with latent variables (Hox and Bechger, 2007). Also, group differences in the model can be assessed using SEM (Schumacker and Lomax, 2010). Drawing on extant literature on customer experience (Fornerino et al., 2008; Srivastava and Kaul 2014) and online customer experience (Novak et al., 2000; Khalifa and Liu, 2007; Hausman and Siekpe, 2008; Ganguly and Dash, 2010; Rose et al., 2012; Liu et al., 2015; Martin et al. 2015; Zhang et al., 2016), it was decided to use SEM for data analysis in this study. The two-step approach recommended by Anderson and Gerbing (1992) is followed in the present research. In the first step, the measurement model was examined to ascertain the reliability and validity of the instrument and in the second step, the structural model was assessed.

Reliability and validity of instrument
The research instrument used modified validated measurement scales from previous studies. The scales were adapted for the online retailing context. Modification of the scale items was done based on the findings of pilot testing. All the scale items were rated on a seven-point Likert-scale. The Exploratory Factor Analysis (EFA) was performed using Principal Component Analysis (PCA) and Varimax rotation. The Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy and the Bartlett's test of sphericity were used for sample appropriateness. Factors with Eigen value greater than one were retained and factor loadings with a value greater than 0.50 were considered significant (Hair et al., 2009). Cronbach’s alpha coefficients (greater than 0.7) were used to measure scale reliability and internal consistency.

Measurement model
Confirmatory factor analysis was carried out. The goodness-of-fit indices ($\chi^2$/df = 1.378, RMSEA = 0.025, GFI = 0.944, NFI = 0.945, CFI = 0.984) suggested that the proposed model represents a good fit to the data in Table I. Though the factor loadings of a few indicator items were below the threshold value of 0.7 (Fornell and Larcker, 1981), based on existing literature support and researchers’ call, these were retained for subsequent analysis. The measurement model demonstrates evidence of both convergent validity (AVE>0.50) and discriminant validity (AVE/Corr2 ≥ 1) (Fornell and Larcker, 1981).
### Table I: Convergent and Divergent Validity

<table>
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<th>Item</th>
<th>Factor Loading</th>
<th>S.E.</th>
<th>C.R.</th>
<th>(AVE &gt;0.5) Convergent Validity</th>
<th>Correlation sq (highest correlation sq between the examined factor and the rest of factors)</th>
<th>Discriminant Validity (AVE/ Inter construct correlation2&gt;1)</th>
<th>Construct Reliability</th>
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<td>0.61</td>
<td>0.059</td>
<td>14.684</td>
<td>(0.52) Yes</td>
<td>0.38</td>
<td>Yes</td>
<td>0.81</td>
</tr>
<tr>
<td>Repurchase</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intention</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RINT1</td>
<td>0.793</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RINT2</td>
<td>0.738</td>
<td>0.051</td>
<td>18.060</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RINT3</td>
<td>0.661</td>
<td>0.053</td>
<td>16.166</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RINT4</td>
<td>0.788</td>
<td>0.050</td>
<td>19.628</td>
<td>(0.58) Yes</td>
<td>0.38</td>
<td>Yes</td>
<td>0.83</td>
</tr>
</tbody>
</table>

Source: Prepared by the authors
**Structural model and hypothesis testing**

The structural model was estimated using AMOS 20 with maximum likelihood estimation. Based on the fit indices ($\chi^2/df = 1.613$, RMSEA = 0.032, GFI = 0.933, NFI = 0.934, CFI = 0.974), there was a good fit between model and observed data (Benter, 1990).

![Figure 2: Structural Model](image)

*Source: Prepared by the authors*

**Full forms of acronyms in the figure**

TP = Telepresence, CHAL = Challenge, CEOS = Cognitive Experience in Online Shopping (Flow), PREV EXP = Previous Shopping Experience, RET CRED = Retailer Credibility, AEOS = Affective Experience in Online Shopping, SAT = Customer Satisfaction, RINT = Repurchase Intention

Also, the structural model is tested along with the hypothesised theoretical relationships. The hypothesis testing results are given in Table 2.

**Table 2: Hypothesis testing and path analysis**

<table>
<thead>
<tr>
<th>Hypothesised path</th>
<th>Standardised path coefficients</th>
<th>CR</th>
<th>P</th>
<th>Interpretation</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1a TP $\rightarrow$ CEOS</td>
<td>.33</td>
<td>6.247</td>
<td>***</td>
<td>Supported</td>
</tr>
<tr>
<td>H1b CHAL $\rightarrow$ CEOS</td>
<td>.24</td>
<td>4.553</td>
<td>***</td>
<td>Supported</td>
</tr>
<tr>
<td>H2a PREV $\rightarrow$ AEOS</td>
<td>.26</td>
<td>5.524</td>
<td>***</td>
<td>Supported</td>
</tr>
<tr>
<td>H2b CRED $\rightarrow$ AEOS</td>
<td>.64</td>
<td>11.039</td>
<td>***</td>
<td>Supported</td>
</tr>
<tr>
<td>H1 CEOS $\rightarrow$ SAT</td>
<td>.07</td>
<td>2.090</td>
<td>0.037*</td>
<td>Supported</td>
</tr>
<tr>
<td>H2 AEOS $\rightarrow$ SAT</td>
<td>.77</td>
<td>14.753</td>
<td>***</td>
<td>Supported</td>
</tr>
<tr>
<td>H3 SAT $\rightarrow$ RINT</td>
<td>.79</td>
<td>15.646</td>
<td>***</td>
<td>Supported</td>
</tr>
</tbody>
</table>

*** = p<0.001  * = p<0.05

*Source: Prepared by the authors*
Test for mediating effect
To examine the significance of the mediation effect of satisfaction on the relationship between OCE and repurchase intention, Sobel’s (1982) test was used. This test gives information on whether the indirect effect of the independent variable on the dependent variable through the mediator variable is statistically significant. The present study hypothesised that satisfaction mediates the relationship between cognitive experience in online shopping (CEOS) and repurchase intention (RINT), and affective experience in online shopping (AEOS) and repurchase intention (RINT). The result of this test showed that the indirect effect of CEOS was found to be 2.026 (significant at p=0.043) and the indirect effect of AEOS was 10.73 (significant at p<0.0001).

Moderating effects of Gender
To test the moderating effect of gender, chi-square values of unconstrained and constrained model are considered and the p value of 0.02 was found statistically significant at 0.05 (Table 3). After it was found that gender moderates the model or groups are different at the model level, each of the paths was analysed using a one-path constrained model. Out of the seven paths, only Retailer credibility AEOS was found to be statistically significant at 95% confidence level i.e. the path differs significantly across groups (Table 4).

Table 3: Result of overall moderating effect

<table>
<thead>
<tr>
<th>Model</th>
<th>Chi-square ($\chi^2$)</th>
<th>df</th>
<th>p-value</th>
<th>Interpretation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unconstrained</td>
<td>1256.617</td>
<td>838</td>
<td>0.020</td>
<td>Groups are different at the model level.</td>
</tr>
<tr>
<td>Fully constrained</td>
<td>1304.571</td>
<td>868</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of Groups</td>
<td>1257.450</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Difference</td>
<td>47.954</td>
<td>30</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Prepared by the authors

Table 4: Result of path by path moderating effect

<table>
<thead>
<tr>
<th>Path constrained</th>
<th>Actual Chi-square value</th>
<th>Interpretation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Telepresence $\rightarrow$ CEOS (Flow)</td>
<td>1257.234</td>
<td>No</td>
</tr>
<tr>
<td>Challenge $\rightarrow$ CEOS (Flow)</td>
<td>1256.865</td>
<td>No</td>
</tr>
<tr>
<td>Previous Experience $\rightarrow$ AEOS</td>
<td>1257.450</td>
<td>No</td>
</tr>
<tr>
<td>Retailer Credibility $\rightarrow$ AEOS</td>
<td>1260.987</td>
<td>Yes</td>
</tr>
<tr>
<td>CEOS (Flow) $\rightarrow$ Satisfaction</td>
<td>1256.967</td>
<td>No</td>
</tr>
<tr>
<td>AEOS $\rightarrow$ Satisfaction</td>
<td>1258.048</td>
<td>No</td>
</tr>
<tr>
<td>Satisfaction $\rightarrow$ Repurchase intention</td>
<td>1256.647</td>
<td>No</td>
</tr>
</tbody>
</table>

Note: Chi-square threshold values: 1259.32 (90% confidence), 1260.46 (95% confidence), 1263.25 (99% confidence)
Source: Prepared by the authors
Discussion
The goal of this study was the conceptual development and empirical testing of a model of OCE by drawing on extant literature and qualitative research. Now, findings of the study as well as implications for academics and practitioners are discussed.

*Theoretical contributions*
The present model adds to knowledge creation by extending the model of Rose et al. (2012) in an emerging economy context. The study validates a measurement scale for the antecedents, components and outcomes of OCE. Also, the model of this study incorporated two new antecedents of AEOS relevant for Indian online shopping viz. previous experience and retailer credibility. Next, unlike earlier studies, statistical significance of the relationship between CEOS and satisfaction was not as pronounced. The difference in finding could be due to cultural difference. The model also tests the mediating effect of satisfaction between both CEOS and repurchase intention, AEOS and repurchase intention, and also the moderation effect of gender on OCE. Through path-by-path analysis, retailer credibility was found to be different between genders.

*Managerial implications*
Online retailing offers both significant opportunities and challenges to both pure play and omni-channel online retailers. This study validates a few variables of earlier OCE studies in the Indian context and also more significantly, empirically tests two new antecedents of OCE. As the findings show retailers' credibility is moderated by gender, online retailers can take this as a cue and can incorporate this insight into their overall value offering, more specifically, in their communication strategies. Also, since this study shows OCE as cumulative over time, the implication for the retailers will be to not only focus on short-time promotional measure, but also on increasing long-term shopper 'stickiness' to their website, which, in reality, is a burning challenge for Indian e-retailers. Further, in this study, researchers focused on OCE across sectors rather than focusing on a particular category of online retailers, which has business implications for online marketplaces.

*Limitations and scope for future research*
The results of the study may not be generalised as it is carried out in a developing country with a less efficient digital infrastructure backbone. Sample selection was not random and consists of mainly the Indian youth. Future studies can focus on better representation of the population and can consider customer loyalty as an outcome variable, which is not considered in this study. Also, in this study, no differentiation of OCE was made in terms of pre-purchase, during-purchase and post-purchase experience.
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