Transforming destination-based customer engagement to revisit intention through co-creation: findings from SEM and fsQCA

Mir Shahid Satar, Raouf Ahmad Rather, Sadia Cheema, Shakir Hussain Parrey, Zahed Ghaderi and Lisa Cain

Abstract

Purpose — The business ambiguity because of COVID-19 has brought the tourism industry under stress. Using the service-dominant-logic and elaboration-likelihood-model, this study tested the effects of destination-based cognitive, affective and behavioral customer brand engagement (CBE) on customer brand co-creation (CBC). This research also examined the effects of involvement and CBC on customer revisit intention (CRI) during the COVID-19 pandemic. This study also tested the moderating role of customers’ age among the modeled relationships.

Design/methodology/approach — Investigating these matters, a sample of 315 tourists was recruited and adopted a mixed-method approach, including structural equation modeling (SEM) as well as fuzzy set qualitative-comparative analysis (fsQCA).

Findings — SEM results render that CBE’s dimensions exercise different impacts on CBC, which affect revisit-intention. Results ascertain customer involvement’s direct effects on CBC and revisit intention. Multi-group analysis uncovers that consumer age significantly moderates the CBC and CRI relationship, and their effect increases as consumers get older. The fsQCA results revealed more heterogenous combinations to predict CBC and revisit intention.

Research limitations/implications — This study focuses on CBE, CBC and involvement, and contributes unique insight to tourism marketing research; thus, it identifies plentiful opportunities for further research, as summarized.

Practical implications — This study offers key implications for destinations to build tourism/marketing strategies to strengthen the CBE/CBC or tourist/destination—brand relationship.

Originality/value — Though CBE/CBC and involvement are identified as important research priorities, empirically derived insights among these and related factors remain limited in the course of the COVID-19 crisis.

Keywords Customer brand engagement, Customer co-creation, Customer revisit intention, fsQCA, Tourism/destination

Paper type Research paper
Transformando el compromiso del cliente con el destino a intención de revisita mediante la cocreación: resultados a partir de SEM y fsQCA

Resumen
Diseño/metodología/enfoque: Para investigar estas cuestiones, se seleccionó una muestra de 315 turistas y se utilizó un enfoque metodológico mixto que incluía el modelo de ecuaciones estructurales (SEM) y el análisis cualitativo-comparativo de conjuntos difusos (fsQCA).

Objetivo: La confusión empresarial debida a la pandemia del COVID-19 ha sometido al sector turístico a una fuerte tensión. Utilizando la lógica dominante del servicio y el modelo de elaboración de verosimilitud, este estudio examinó los efectos del compromiso cognitivo, afectivo y comportamental del cliente con la marca del destino (CBE) en la cocreación de la marca (CBC). Esta investigación también analizó los efectos de la implicación y la CBC en la intención de revisita (IRC) durante la pandemia COVID-19. Este estudio también evaluó el papel moderador de la edad de los clientes entre las relaciones establecidas.

Conclusiones: Los resultados del SEM muestran que las dimensiones de la CBE ejercen diferentes impactos sobre la CBC, que afectan a la intención de revisita. Los resultados determinan los efectos directos de la implicación del cliente sobre la CBC y la intención de revisita. El análisis multigrupo revela que la edad del consumidor modera significativamente la relación entre el CBC y el IRC, y que su efecto aumenta a medida que los consumidores envejecen. Los resultados del fsQCA revelaron combinaciones más heterogéneas para predecir el CBC y la intención de volver a visitar.

Limitaciones/implicaciones de la investigación: Este estudio se centra en la CBE, la CBC y la implicación, y aporta una visión única a la investigación del marketing turístico, por lo que identifica numerosas oportunidades para futuras investigaciones.

Implicaciones prácticas: Este estudio ofrece implicaciones clave para que los destinos construyan estrategias de turismo/marketing en el fortalecimiento de la relación CBE/CBC o turista/destino-marca.

Originalidad/valor: Aunque la CBE/CBC y la implicación se identifican como importantes prioridades de investigación, las percepciones derivadas empíricamente entre estos factores y otros relacionados siguen siendo limitadas en el transcurso de la crisis del COVID-19.

Palabras clave Compromiso del cliente con la marca, Intención de revisita, Cocreación del cliente, fsQCA, Turismo/destino.

Tipo de papel Trabajo de investigación

1. Introduction

The COVID-19 outbreak has become a global issue, and produced destructive effects on people’s lives relating to psychological well-being, physical health, and economic prosperity (UNWTO, 2021). In such an environment, COVID-19 affects customer behavior, marketing philosophy, business and tourism (Liu et al., 2022). With reference to the marketing and tourism perspectives, COVID-19 has imposed a surprising transformation into how brands perform their businesses and altered customers’ behaviors and attitudes (Karpen and Conduit, 2021).

Over time, researchers have adopted many conventional metrics, including customer’s brand satisfaction, personality, identification or image, to maintain relationships between consumers and destination brands (Kumar et al., 2019; Shi et al., 2022). Because of the global pandemic, rising competition and brand proliferation, destination brands are struggling to maintain and foster long-term relationships with their customers by adopting these traditional metrics (Chen et al., 2021). Research has corroborated the growing
importance of the customer engagement concept amongst researchers and marketers because of its many advantages over traditional marketing metrics (Brodie et al., 2011; Karpen and Conduit, 2021; Pansari and Kumar, 2017). In brand contexts, scholars have coined the term customer brand engagement (CBE) (Hollebeek et al., 2014; Leckie et al., 2017; Rather et al., 2022a), and conceptually considered its role in developing several consumer behavior facets, such as revisit intention or loyalty (Rather and Hollebeek, 2021; Rasoolimanesh et al., 2022).

CBE has emerged as a strategic imperative to attain elevated sales increases, brand-based performance, growth, co-creation, promotion, loyalty and resilience to negative brand information (Kumar and Pansari, 2016; So et al., 2021). These arguments are derived from the foundation that engaged consumers are involved in powerful marketing-based activities by performing a crucial role in brand recommendations or referrals (Pansari and Kumar, 2017). Extending the CBE notion to tourism/destinations can assist destination-brand marketers in exploring and understanding means to affect the tourists’ behavior (Bahri-Ammari et al., 2021; Chen et al., 2021; Rather et al., 2021). Tourism has been documented as a discretionary activity, although, researchers put efforts into investigating the tourists’ behavioral patterns (Peco-Torres et al., 2021). In a pandemic context, consumer/brand interactions have been strongly influenced in tourism (Karpen and Conduit, 2021), thereby affecting customers’ brand engagement and behavior/revisit intent (vs pre-pandemic) (Xie et al., 2022). However, thorough investigations into causal exploration and explanation remain limited, exposing a crucial research gap.

Irrespective of this recognition, limited remains known concerning the CBE’s dynamics and consequences/outcomes (Chen et al., 2021; Khan et al., 2022; MSI, 2020; Seyfi et al., 2021; So et al., 2021), exclusively during the pandemic (Xie et al., 2022), which tends to promote unique dynamics against normal contexts (Hollebeek et al., 2021; Karpen and Conduit, 2021; Rather et al., 2022a). For instance, while Seyfi et al. (2021) and So et al. (2021) claim that CBE is helpful in generating customer-based brand satisfaction, loyalty and behavioral intentions, concerned tourists in crises might be mostly propelled by security problems (Liu et al., 2022; Rather, 2022). Further, Rather and Hollebeek (2021) and Khan et al. (2022) recognize the importance of CBE in driving the consumer brand experience. Abbasi et al. (2023) highlight the significance of CBE in building e-WOM behavior, while Yen et al. (2020) argue that CBE develops value co-creation behaviors that, during a pandemic, might be supplemented or (replaced) by variables such as brands’ security/protection. As noted, in view of the pandemic, customer/tourist behavior is prone to exhibit distinctive dynamics (such as showing higher risk perceptions; Liu et al., 2022), which is expected to challenge a few insights claimed within existing research under recurrent market situations and require additional analysis.

Destination-based customer brand co-creation (CBC), which states customers mutually generate value with others, also remains scantily explored (Cheung and To, 2021; Rihova et al., 2018). Regardless, the advancement of additional insights into this notion is likely to better recognize destination-based interactions, thus assisting tourism/destination experience design (Buhalis and Park, 2021). In the destination context, there exists a need to best identify the means by which consumers’ interactions may be optimized to develop specific consumer-based outcomes, like involvement and revisit intention (Prebensen and Xie, 2017; Shi et al., 2022).

Customer revisit intention (CRI) encapsulates the level to which tourism customers revisit the destination and disseminate positive destination-related word-of-mouth recommendations (Shi et al., 2022; Wu, 2015), and is thus crucial for destination marketers and managers (Rasoolimanesh et al., 2022). Although quite limited interest has been devoted to tourism customers’ revisit intention (Rather and Hollebeek, 2021), this is an important issue in rising competitive tourism markets where consumers are increasingly
fickle (Seyfi et al., 2021), as consumers have a vast range of potential destinations to select from (Chen et al., 2021).

Responding to these gaps, this study investigates the CBE’s dynamics/consequences with destination brand context during the pandemic. To sustain relevance in unparalleled pandemic times, tourism marketers thus increasingly understand the need to transform their attention to engaging consumers in all the possible ways to obtain cutthroat benefits in developing relationships among consumers and destination brands (Chen et al., 2021). Broadening existing research (Rather et al., 2022a; Seyfi et al., 2021; Xie et al., 2022), the study addresses customer’s cognitive, affective and behavioral-based CBE and customers’ involvement (CIN) role in deriving CBC, which sequentially affects customer’s CRI during pandemic.

Relatedly, the paper further explores the impact of the customer’s age as a moderating factor that allows better insight between proposed variables (Kim et al., 2021; Rather and Hollebeek, 2021), as only limited studies have included moderating variables to date, particularly during pandemics. Consumers of different age profiles behave/perceive differently pertaining to marketing-related stimuli (Evanschitzky and Wunderlich, 2006; Kautish et al., 2022; Loureiro and Roschk, 2014), generating another vital research gap.

Based on the aforementioned gaps, this study raises three unexplored scientific questions:

Q1. Whether CBE-based affective, cognitive, behavioral-engagement and customer involvement impacts CBC?

Q2. How do customer involvement and CBC affect CRI?

Q3. Is the association between CBC and CRI moderated by customers’ age?

Addressing the aforesaid gaps and research questions, this study assembled the following important theoretical and practical contributions to tourism/destination marketing. Theoretically, this study developed and tested a theoretical framework that analyzed the effects of CBE-based affective, cognitive and behavioral engagement on CBC. This paper also investigated the moderating effect of the customer’s age on the link between CBC and CRI, uncovering a novel managerial insight. In addition to symmetric-based structural equation modeling (SEM), to obtain rich comprehension, fuzzy set qualitative-comparative analysis (fsQCA) was used to spot necessary and sufficient conditions/combinations of CBE dimensions on CBC and CRI.

2. Theoretical framework and hypotheses development

2.1 Service-dominant logic perspective

Service-dominant logic (SDL) perspective has been viewed as a fundamental research paradigm in tourism and marketing research, which offers a service-based understanding of exchange (Blazquez-Resino et al., 2016; Vargo and Lusch, 2004). From an SDL perspective, value might be generated in collaboration with the consumer instead of the brand; thereby, consumer-based brands are advised to involve consumers in value (co)-creation (Lusch and Vargo, 2016). While consumers are involved, they may be converted into direct stakeholders in the value (co)creation process (Buhalis and Park, 2021; Vargo and Lusch, 2004). As mentioned from an SDL-informed perspective, while interacting with tourism brands, tourists may develop a particular valence (or level) of perceived value through interactions (Yen et al., 2020), consequently impacting their future brand-related values, behaviors and attitudes (Ranjan and Read, 2016). For instance, once visitors establish a high level of interaction/s, a favorable effect on their resulting co-creation is predicted. In general, as consumers engage with the tourism brand, co-creation evolves, demonstrating CBE’s strategic consequence (Jaakkola and Alexander, 2014). SDL offers a sound theoretical foundation for the impacts of CBE on destination-brand co-creation,
which subsequently affects customers’ revisit intention (Leckie et al., 2017; Rather et al., 2019).

2.2 Customer brand engagement

In the 21st century, CBE has been the theme of various studies, and it is among the prevalent marketing buzz word (Chen et al., 2021; Kumar and Pansari, 2016), and tourism/destination-based research is no exception (Rather and Camilleri, 2019; So et al., 2021; Xie et al., 2022). Derived from a SDL-informed lens, Brodie et al. (2011) define CBE as a psychological state that arises because of interactive consumer experiences toward a focal brand, including tourism destination brands. Expanding this perspective, Hollebeek et al. (2014, p. 154) conceptualize SDL-informed CBE as a “consumer’s positively valenced brand-related emotional, cognitive, and behavioral activity [during or related] to focal consumer-brand interactions,” including tourism/destination brands, revealing its interactive nature (Cheung and To, 2021; Rather et al., 2023), which has excellent implications in tourism (Xie et al., 2022).

To facilitate customer engagement, destination brands and destination marketing organizations (DMOs) are adopting various service design frameworks and practices such as omnichannel/multi-channel approaches (e.g. social media, virtual reality, online/mobile booking systems and gamification) (Harrigan et al., 2019; So et al., 2021). For example, tourism destinations and DMOs such as VisitEngland and Lanzarote Turismo adopt social media channels (Twitter and Facebook) to engage their customers by setting the email addresses of departments and all employees on their website (Mareike, 2015).

2.3 Hypotheses development

2.3.1 Effect of cognitive, affective and behavioral customer brand engagement on customer brand co-creation. Cognitive CBE refers to the consumer’s degree of brand-related thought processing and/or elaboration during brand-based interaction. Affective-CBE states the customer’s level of positive brand-related affect within a specific customer/brand interaction, while behavioral CBE reveals the consumer’s level of effort, energy and time spent on brand interaction (Hollebeek et al., 2014). However, while the significance of CBE/CBC has been formerly associated with different service brand and marketing contexts (Cheung and To, 2021; Prebensen et al., 2015), the combined impacts of affective, cognitive and behavioral CBE on co-creation have yet to be examined, especially in destination brand contexts. For example, in the branding context, France et al. (2015, 2018) verified that consumer engagement is a key factor effecting brand value co-creation. Jaakkola and Alexander (2014) explored CBE’s role in deriving value co-creation within the health-care service system context. Similarly, Yen et al. (2020) examined the effect of consumers’ engagement on their value co-creation (i.e. customer participation behaviors and customer citizenship behaviors) in a restaurant context, while Cheung and To (2021) investigated the impact of customer engagement on the co-creation of services.

Furthermore, Harrigan et al. (2019) corroborated the impact of emotional, cognitive and behavioral-based engagement in shaping customers’ brand usage intent with tourism brands, while Cheung et al. (2021) verified the importance of emotional, cognitive and behavioral-engagement in developing ongoing search behavior and repurchase intention with smart phone users. Thus, when customers allocate cognitive capability by engrossing or concentrating and investing efforts and time on the brand (Leckie et al., 2017; Hollebeek et al., 2019a, 2019b), they are more likely to improve co-creation and their relationship with the focal brand (Abbasi et al., 2023).

As noted, CBE includes a process where consumers contribute time, efforts and resources to the delivery and production of services, thus altering the expectations, preferences,
behaviors and perceptions of all stakeholders (Xie et al., 2022; Yen et al., 2020). Because of the integration of consumers’ positive-brand-linked effect (i.e. affective CBE), brand-related thought processing (i.e. cognitive-CBE) and their effort, time and resources (i.e. behavioral CBE), CBE contributes toward brand co-creation, and thereby all stakeholders (e.g. customers/brands) obtain positive benefits (Abbasi et al., 2022; Jaakkola and Alexander, 2014). It is thus expected that tourists’ uprising resource investments in their brand/firm interactions (i.e. engagement) will generate their heightened interaction-related value co-creation (i.e. feedback, ideas, suggestions, consumer participation, advocacy or information) during the pandemic (Yen et al., 2020; Pansari and Kumar, 2018). The study proposes the following hypotheses (refer Figure 1):

1. Cognitive CBE positively affects brand co-creation with destinations.
2. Affective CBE positively affects brand co-creation with destinations.
3. Behavioral CBE positively affects brand co-creation with destinations.

2.3.2 Effect of involvement on customer brand co-creation. CBC, defined as customer-perceived value arising from collaboration, interaction or customized-brand-related activities with stakeholders (Hollebeek et al., 2019b; Prahalad and Ramaswamy, 2004; Rihova et al., 2018). Following an SDL-informed lens, Merz et al. (2009) define co-creation as generating brand value because of social interactions and network relationships amongst many stakeholders. These definitions entail a process of active interaction between the brand and its consumers to create value (Prahalad and Ramaswamy, 2004).

Customer involvement is defined as a consumer’s psychological state regarding the relevance, value, or importance of a target brand’s service to them (Mittal and Lee, 1989; Yadav et al., 2021), while customer engagement is the result of value obtained after interacting with a brand’s offering (Pansari and Kumar, 2018). Involvement comprises only affective (e.g. pleasure) and cognitive (e.g. interest/importance) dimensions (Zaichkowsky, 1985; Mittal and Lee, 1989), while engagement includes affective, cognitive and behavioral responses to a brand (Hollebeek et al., 2014). When consumers believe that a brand’s (firms) service is important, meaningful, relevant and valuable to them, they will cherish their experiences with service brand (France et al., 2018). Because of positive (favorable)
experiences, consumers are devoted to working with the brand/firm constantly, like participating/actively involved in the co-creation of services, offering more suggestions on service improvements and sharing information with service staff (Prebensen et al., 2013).

Following the elaboration likelihood model (ELM), Zaichkowsky (1985) argued that more-involved customers are more interested in attaining information regarding a service/product than less-involved customers. Consumer involvement toward a brand may likely increase customer's brand co-creation as consumers feel more fulfilled when participating in value (co)-creation (France et al., 2015). Further, based on ELM, consumers who are highly involved and interact with a tourism destination brand can act differently, becoming more active in co-creating value than customers who are less highly involved with the brand/destination (Yadav et al., 2021). Hence, this study posits the following hypothesis:

H4. Customer involvement positively affects brand co-creation with destinations.

2.3.3 Impact of involvement on revisit intent interface. Behavioral intention has been defined as “a stated likelihood to engage in a behavior” (Oliver, 1997, p. 28). Customer’s revisit intention, a key component of behavioral intention, is also defined as the consumer’s intention to re-experience a similar tourism destination/site, product or offering (Shi et al., 2022; Wu, 2015). Involvement’s wider theoretical roots are usually considered to reside in the ELM of persuasion that stems from psychology literature and has been reapplied to the consumer behavior context (Dedeoḡlu et al., 2021; Petty and Cacioppo, 1986; Yadav et al., 2021). In ELM, highly involved consumers are viewed as being motivated to assume elaborate cognitive processing of the key cues provided in marketing communications (Yadav et al., 2021). Instead, low-involved customers likely focus on message cues, which need less extensive cognitive processing, because they lack the motivation to broadly process brand-related messages (Petty and Cacioppo, 1986). That is, high-involved customers think more regarding their brands, process information deeply, search extensively for destination brand-related information, invest more time in making travel decisions and recommend the brand among friends vs low-involved customers (Yadav et al., 2021; Zaichkowsky, 1985).

Existing literature explores the relationship between involvement and tourists’ decision-making (Mathis et al., 2016). This study indicated that, consumers with high levels of involvement are prone to travel more repeatedly than tourists with lower levels of involvement. It has been supported by Prebensen et al. (2013), who asserted that involvement is one of the key predictors of travel decision-making. Additionally, research revealed that the degree of involvement affects the tourists’ satisfaction and loyalty with the travel/service brands (Grissemann and Stokburger-Sauer, 2013). Rooted in these ideas, tourists who are more involved with destinations will likely revisit more than visitors who are less involved toward the destination brand, thus posits the following hypothesis:

H5. Customer involvement positively affects revisit intention with destinations.

2.3.4 Effect of customer brand co-creation on revisit intention. CBC has high relevance in tourism, because of its high interactive nature (Buhalis and Park, 2021; Mohammadi et al., 2021; Prebensen and Xie, 2017). Research has identified many antecedents of loyalty, with customer-based affective commitment, satisfaction, trust, and experience among the more frequent ones (Abbasi et al., 2022; Prebensen et al., 2015; Rasoolimanesh et al., 2022; Rather and Hollebeek, 2019; Schirmer et al., 2019). Although past research has widely used emotional (e.g. affective commitment/experience) and rational (e.g. customer satisfaction/trust) factors to predict customers’ revisit intent/loyalty, it has not widely researched interactional factors (e.g. co-creation) as an antecedent of revisit intention, particularly during the pandemic.

In this limited research, customer co-creation has been shown to spawn a range of favorable brand-related effects, including brand loyalty (Hollebeek and Rather, 2019). Iglesias et al. (2020) establish that customers’ co-creation develops their loyalty to health
insurance services brands. An SDL-informed lens views tourists’ value co-creation as something that brands should sustain to ensure higher service loyalty (Grissemann and Stokburger-Sauer, 2013). When customers’ past experiences with co-creation are pleasant and positive with the destination/brand, they would like to repeat them and revisit the destination (Prebensen and Xie, 2017; Wu, 2015). Past positive/favorable experiences of visiting an attraction/destination develop a tourist’s intent to travel to that focal brand/destination (Iglesias et al., 2020; Rather, 2022). Thus the following hypothesis is proposed:

\[ H6. \text{ Destination-resulting brand co-creation positively affects tourists’ revisit intention with destinations.} \]

2.3.5 Moderating role: customers’ age. Generational theory offers a theoretical perspective to consider age as a key moderator effecting the association between marketing and consumer behavior variables (Li et al., 2014; Mckercher et al., 2020). Generational theory suggests that behaviors and values of each generation are mostly affected by the combined experiences and/or memories throughout their formative years (Li et al., 2014). Research has shown that young generations are more willing to travel (vs older generations), substantiating the significance of exploring their behaviors and values (Li et al., 2014; Mckercher et al., 2020; Schirmer et al., 2019).

Customers of differing generations (young/older) are likely to have distinctive preferences, values, and behaviors (Mckercher et al., 2020; Rather and Hollebeek, 2021). Accordingly, young (vs older) consumers tend to spend a vast amount of time searching for product/brand-linked information (Khan et al., 2020) and depend less on schema (or heuristic)-processing (Yoon). Based on it, consumers’ age has been revealed to impact the relationship between consumer behavior-based factors (Evanschitzky and Wunderlich, 2006). Although the effect of a tourism-customer’s age on their resulting behavioral factors remains tenuous (Mckercher et al., 2020; Rather and Hollebeek, 2021), there is a need for additional study. Along these lines, this study explores customers’ age as a moderator in the CBC and revisit intention relationship, across differing customer’s age profiles (young vs older), hence theorizing the following hypothesis (Figure 1):

\[ H7. \text{ A customer’s age significantly moderates the association between brand co-creation and revisit intention toward tourism destinations.} \]

3. Methodology

3.1 Survey measures

A survey questionnaire was used to assess the modeled factors, using existing measures. To evaluate destination-based CBE, this study used Hollebeek et al.’s (2014) three-dimensional (cognitive, affective and behavioral) scale. CBC was evaluated by a four-item measurement scale modified from Grissemann and Stokburger-Sauer’s (2013) research. This paper deployed customer involvement on Mathis et al. (2016) four-item scale, while revisit intention was assessed with Wu’s (2015) three-item instrument.

To measure face validity, expert interviews were carried out in June 2021 with ten experienced tour operators/guides, which uncovered no issues. Overall, there were 21 rating items for the four constructs used in our model, which were rated on seven-point Likert scales (see the Appendix).

3.2 Research site, sample design and data collection process

The authors selected Jammu and Kashmir (J&K), India for empirical examination owing to many reasons. J&K is known as Heaven on Earth, which includes key and well-known tourism attractions/destinations/sites in India (e.g. Gulmarg, Varinag, Kokernag, etc.). Second, these destinations make a prime contribution to GDP relating to the tourism and travel industries (Parrey et al., 2020; Rather, 2020). Third, India was one of the most affected
countries by the COVID-19 outbreak (Rather, 2021, 2022) demonstrating its importance for the present study.

A purposive sampling method was deployed (Bryce et al., 2016; Seyfi et al., 2021; Xie et al., 2022) to gather survey data from tourists by means of self-administered questionnaires in July–August, 2021 during pandemic times. Purposive sampling method is a commonly used approach in published tourism research (Chen et al., 2021; Rasoolimanesh et al., 2022). It is a non-probability sampling technique in which researchers are not able to acquire a list of all participants in the population (Bryce et al., 2016). To acquire high-quality survey data, the lead investigator and three well-trained research associates approached tourists, while departing the destination/site at diverse exit points (Bryce et al., 2016). First, this study included a screening question, which read: Are you a visitor/tourist here? Only those tourists who responded yes to this question continued to finish the survey instrument. In the survey, respondents were asked to recall their most recent experience at any preferred tourism-destination/site in that area. While a total of 500 completed responses were collected, 315 valid responses were attained. A descriptive assessment revealed that 58% of the visitors were male and 42% female (Table 1).

### 3.3 Data analysis process

This study used mixed analytical techniques integrating SEM and fsQCA in testing the conceptual model (Pappas and Woodside, 2021; Rasoolimanesh et al., 2022). A two-stage SEM technique – a measurement model adopting confirmatory factor analysis or (CFA) and a structural model (Anderson and Gerbing, 1988) – was used. Second, this research adopted fsQCA to identify the essence of complex and causal relationships to attain deeper insights (Pappas and Woodside, 2021; Ragin, 2009). The fsQCA has many benefits over SEM and multiple-regression analysis, because all relations among variables are not linear, simple, or complementary (Pappas and Woodside, 2021; Wu, 2016). In tourism, many existing studies have used a mixture of SEM and fsQCA approaches (Seyfi et al., 2021; Wu, 2016). To conduct the fsQCA approach, fsQCA 3.0 software was used to recognize (identify) sufficient causal configurations (i.e. combinations) of predictors (antecedents) to create desired outcomes, including co-creation and revisit intention (Ragin, 2009).

### 4. Results

#### 4.1 Measurement model

The study developed a CFA model that comprised each of the modeled latent constructs, which included a total of 21 measurement items. The model indicated adequate fit

<table>
<thead>
<tr>
<th>Table 1 Demographic and travel profile</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Demographic item</strong></td>
</tr>
<tr>
<td>Gender</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Age (years)</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Qualification</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Past visit</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

*Source: Analysis by authors*
\( \chi^2 = 259.81, df = 117, \chi^2/df = 2.22; \text{NFI: 0.95; CFI: 0.95; GFI: 0.91; SRMR = 0.41; and RMSEA: 0.058; i.e. NFI, CFI, GFI > 0.90; while SRMR, RMSEA < 0.08; Byrne, 2013; Hu and Bentler, 1999.} \) As revealed in \( \text{Table 2,} \) standardized factor loadings (SFLs) of all items, composite reliability (CR) and their Cronbach's alpha values all surpassed the cut-off value of 0.60, thereby meeting convergent validity and reliability standards (Bozkurt et al., 2023; Hair et al., 2010).

This study further confirms convergent validity, as each latent factor's average variance extracted (AVE) surpassed the critical threshold of 0.50 (Fornell and Larcker, 1981). Subsequently, discriminant validity was assessed by using Fornell and Larcker (1981), the AVE for each factor pair exceeded its respective squared correlations, thereby supporting discriminant validity. \( \text{Table 3} \) presents each factor's standard deviation, mean, AVE and discriminant validity results.

### 4.2 Structural model results

SEM was adopted to investigate the hypothesized relationships. The hypothesized structural model indices are as follows: \( \chi^2 = 291.34; df = 129; \chi^2/df = 2.25, \text{NFI: 0.94; CFI: 0.93; GFI: 0.91; SRMR = 0.044; RMSEA: 0.061,} \) signifying the models' satisfactory fit with the data (i.e. NFI, CFI and GFI > 0.90; while SRMR, RMSEA < 0.08; Byrne, 2013; Hu and Bentler, 1999).

The path coefficients for models anticipated associations are shown in \( \text{Table 4.} \) Initially, as assumed in \( H1, \) cognitive CBE leads to co-creation, exercising a strong influence \( (\beta = 0.58). \)

As expected in \( H2, \) affective CBE generates increased value co-creation, producing a very

<table>
<thead>
<tr>
<th>Construct and item</th>
<th>SFLs</th>
<th>CR</th>
<th>( \alpha )</th>
</tr>
</thead>
<tbody>
<tr>
<td>Affective-CBE (A-CBE)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ACE 1</td>
<td>0.91</td>
<td>0.912</td>
<td>0.906</td>
</tr>
<tr>
<td>ACE 2</td>
<td>0.87</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ACE 3</td>
<td>0.92</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ACE4</td>
<td>0.88</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cognitive-CBE (C-CBE)</td>
<td></td>
<td>0.836</td>
<td>0.914</td>
</tr>
<tr>
<td>CCE 1</td>
<td>0.90</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CCE 2</td>
<td>0.92</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CCE 3</td>
<td>0.88</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Behavioral-CBE (B-CBE)</td>
<td></td>
<td>0.917</td>
<td>0.923</td>
</tr>
<tr>
<td>BCE 1</td>
<td>0.91</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BCE 2</td>
<td>0.89</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BCE 3</td>
<td>0.82</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Customer brand co-creation (CBC)</td>
<td></td>
<td>0.882</td>
<td>0.896</td>
</tr>
<tr>
<td>CBC1</td>
<td>0.88</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CBC2</td>
<td>0.91</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CBC3</td>
<td>0.89</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CBC4</td>
<td>0.86</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Customer involvement (CIN)</td>
<td></td>
<td>0.844</td>
<td>0.875</td>
</tr>
<tr>
<td>CIN1</td>
<td>0.88</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CIN2</td>
<td>0.89</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CIN3</td>
<td>0.84</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CIN4</td>
<td>0.85</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Customer revisit intent (CRI)</td>
<td></td>
<td>0.912</td>
<td>0.927</td>
</tr>
<tr>
<td>CRI1</td>
<td>0.84</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CRI2</td>
<td>0.91</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CRI3</td>
<td>0.90</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Notes:** SFLs = standard factor loadings; \( \alpha = \text{Cronbach's alpha; CR = composite reliability} \)

**Source:** Authors' work
strong effect ($\beta = 0.64$). While suggested in $H3$, behavioral CBE affects co-creation, emitting a moderate impact ($\beta = 0.37$). Moreover, as estimated in $H4$, customer involvement has a strong effect on co-creation ($\beta = 0.62$). Finally, both involvement and co-creation strongly affect CRI, respectively ($\beta = 0.63; \beta = 0.66$), thus supporting $H5$ and $H6$.

### 4.3 Structural cross-group associations for young/older consumers

Multi-group SEM testing was conducted to inspect the moderating effect of the consumer’s age (Evanschitzky and Wunderlich, 2006; Mckercher et al., 2020; Rather and Hollebeek, 2021), as examined in $H7$. Following Rather and Hollebeek's (2021) research, the study divided the sample into two age sub-groups, i.e. younger consumers (age up to 39; $n = 177$) and older (above 39, $n = 138$), and assessed cross-group measurement invariance to confirm the scales to gauge the similar traits among the two groups (Khan et al., 2020; Kim et al., 2021). A metric invariance test was used to compare the freely estimated models’ fitness with a rival (competing) model in which SFLs were constrained to be equivalent between two subgroups. Our findings showed the existence of metric invariance between sub-groups ($\Delta \chi^2 = 14, \Delta df = 8; p > 0.05$).

This research also investigated SEM-based multigroup models to evaluate the relationships (path coefficients) in two sub-age groups. The multi-group analysis indicated that the model fit of the structural multi-group was reasonably satisfactory: $\chi^2 = 369.25, df = 173; \chi^2/df = (2.13); CFI = (0.95); NFI = (0.95); and RMSEA = (0.071)$. Path coefficients were significantly varied in both subgroups (Table 5). The significant/positive effect of CBC on CRI is low with regard to younger consumers ($\beta = 0.32, p < 0.05$) versus older consumers ($\beta = 0.58, p < 0.05$), as shown in Table 5. Thus, the effect of CBE on CRI was established to be significant across two age groups and became stronger with advancing customer age.
4.4 Fuzzy-set qualitative comparative analysis

As an asymmetric technique, fsQCA identifies necessary and sufficient conditions (or combinations) of predictors to produce a high level of desired outcomes (Pappas and Woodside, 2021; Wu, 2016). An analysis of necessary conditions tests if any causal condition is a necessary condition. Table 6 illustrates five conditions and the outcome implies the presence of three necessary conditions, having consistency above the cut-off of 0.8 (Rasoolimanesh et al., 2022).

The fsQCA results showed four causal combinations or configurations including (Configuration 1: A-CBE*C-CBE; Configuration 2: ~B-CBE*A-CBE; Configuration 3: ~C-CBE*B-CBE; and Configuration 4: BCE*ACE) to develop higher levels of brand co-creation. As per the results, the four configurations were shared by 92% of tourists (solution coverage) and accounted for 95% of brand co-creation (solution consistency), representing a sufficient relationship among co-creation and a specific subset of conditions. Similarly, fsQCA also revealed three causal combinations, including Configuration 1: CBC*CIN; Configuration 2: ~CBC*CIN; and Configuration 3: ~CIN*CBC, to generate higher levels of revisit intention (Table 7). Brand co-creation (CBC) is a core condition among all the three configurations.

5. Discussion and implications

5.1 Discussion

Destination-based CBE and CBC have become imperative areas of interest for marketing and brand marketers (Chen et al., 2021; Kumar and Kaushik, 2020), but little is known concerning the linkage of these and associated constructs in the course of the pandemic (Xie et al., 2022), and hence studied here. This study thereby expands contemporary tourism and marketing research (Rather et al., 2021; Pansari and Kumar, 2018), which suggests further research to investigate CBE/CBC during the pandemic. Using SEM-based findings, all three destination-based cognitive, affective and behavioral CBE dimensions impact CBC. These findings are consistent with Yen et al. (2020) and Jaakkola and Alexander (2014), which corroborated that customer engagement develops brand co-creation with service brands (France et al., 2018).

The study findings substantiated that customer involvement significantly affects CBC. This finding is coherent with Rather et al. (2021) and France et al. (2015), which verified that CIN

<table>
<thead>
<tr>
<th>Table 5</th>
<th>Moderating analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hypothesis</td>
<td>Young consumers</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>$H^7$: CBC $\rightarrow$ CRI</td>
<td>$b = 0.32$</td>
</tr>
<tr>
<td>Notes: CBC = customer brand co-creation; CRI = customer revisit intent; $^*p &lt; 0.05$</td>
<td></td>
</tr>
<tr>
<td>Source: Authors’ work</td>
<td></td>
</tr>
</tbody>
</table>

Table 6 Analysis of necessary conditions

<table>
<thead>
<tr>
<th>Outcome: brand co-creation</th>
<th>Consistency</th>
<th>Coverage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Affective-CBE</td>
<td>0.922</td>
<td>0.947</td>
</tr>
<tr>
<td>Cognitive-CBE</td>
<td>0.905</td>
<td>0.926</td>
</tr>
<tr>
<td>Behavioral-CBE</td>
<td>0.841</td>
<td>0.874</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Outcome: revisit intention</th>
<th>Consistency</th>
<th>Coverage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brand co-creation</td>
<td>0.916</td>
<td>0.934</td>
</tr>
<tr>
<td>Involvement</td>
<td>0.885</td>
<td>0.910</td>
</tr>
</tbody>
</table>

Source: Authors’ work
with the brand may likely raise their brand co-creation as they feel more satisfied while participating in value (co)-creation. Empirical findings also verified that customer involvement and CBC significantly influence their revisit intention. Such findings correspond to Mathis et al. (2016) and Prebensen et al. (2013), which validated that involvement is one of the strategic drivers of tourists decision-making.

As another contribution, findings verify the moderating role of customers’ age in effecting the impacts of CBC and revisit intention (Kim et al., 2021; Mckercher et al., 2020). The effect of CBE on CRI was confirmed to be significant across both age groups and became stronger under advanced customer’s age. Finally, as confirmed by fsQCA results, the study identified five necessary conditions and four sufficient combinations of variables to predict visitors’ CBC and revisit intent during the pandemic, which is another intriguing contribution.

### 5.2 Theoretical implications

This research generates various key theoretical implications for tourism and marketing literature. First, though CBE and co-creation are important and top research priorities in marketing (MSI, 2020; Kumar et al., 2019; Rather et al., 2022a), insights into their tourism-based dynamics remain tenuous in the context of destination-brand during the pandemic (Xie et al., 2022; Liu et al., 2022; Pansari and Kumar, 2018). Therefore, this study contributed to the extant literature by developing and testing a theoretical framework that investigates the impact of CBE-based affective, cognitive, behavioral engagement on brand co-creation, which subsequently affects revisit intention during a pandemic. Using SEM-based empirical results, this study corroborates that affective, cognitive, behavioral CBE and involvement have significant/positive effects on brand co-creation. This research also revealed that customer involvement and brand co-creation exert positive effects on revisit intention. The results advance extant CBE research by relating the notions of co-creation, involvement and revisit intention, thereby expanding researchers, including Rather et al. (2022a, 2022b), So et al. (2021), Seyfi et al. (2021) and Yen et al. (2020).

Lacking theoretical agreement about CBE’s complex nature/components, extant published research advised CBE’s further investigation in different contexts/cultures (Peco-Torres et al., 2021; Seyfi et al., 2021; Cheung and To, 2021; So et al., 2021). This study thus answered the aforesaid advice and exposed that elevated affective, cognitive and behavioral CBE further strengthened co-creation and revisit intent during the pandemic. The research empirically validates the findings in tourism/destination literature by exploring the associations linking CBE dimensions, CBC and revisit intention. The fsQCA results

<table>
<thead>
<tr>
<th>Configurations</th>
<th>Raw coverage</th>
<th>Unique coverage</th>
<th>Consistency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brand co-creation = f(A-CBE; C-CBE; B-CBE)</td>
<td>0.793</td>
<td>0.036</td>
<td>0.968</td>
</tr>
<tr>
<td>Conf 1: A-CBE C-CBE</td>
<td>0.864</td>
<td>0.033</td>
<td>0.951</td>
</tr>
<tr>
<td>Conf 2: ~A-CBE A-CBE</td>
<td>0.769</td>
<td>0.034</td>
<td>0.958</td>
</tr>
<tr>
<td>Conf 3: ~C-CBE A-CBE</td>
<td>0.653</td>
<td>0.030</td>
<td>0.942</td>
</tr>
<tr>
<td>Solution coverage: 0.921</td>
<td>Solution consistency: 0.954</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Revisit-intention = f(CBC; CIN)</td>
<td>0.884</td>
<td>0.034</td>
<td>0.943</td>
</tr>
<tr>
<td>Conf 1: CBC CIN</td>
<td>0.663</td>
<td>0.029</td>
<td>0.928</td>
</tr>
<tr>
<td>Conf 2: ~CBC CIN</td>
<td>0.757</td>
<td>0.031</td>
<td>0.921</td>
</tr>
<tr>
<td>Solution coverage: 0.904</td>
<td>Solution consistency: 0.923</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Authors’ work
identified five necessary conditions and four sufficient combinations of variables in predicting CBC and revisit intent during the pandemic. Overall, the study results satisfy key gaps in existing tourism, branding and marketing literature while rendering novel relationships in CBE/CBC and revisiting intent.

This research also contributes to generational theory by exposing the moderating role of customers’ age in the link between CBC and revisit intention (Khan et al., 2020; Schirmer et al., 2019), as little remains acknowledged concerning the dynamics of customers’ moderating role of age, particularly during pandemic. Prior research suggests the importance of consumer age in market segmentation (Brochado et al., 2022; Rather and Hollebeek, 2021), which this study performed in the tourism-pandemic ecosystem, thereby broadening Rather and Hollebeek’s (2021), Khan et al.’s (2020) and Schirmer et al.’s (2019) research, as outlined further in the practical implications. Irrespective of this initial finding, various further research opportunities proliferate (Brochado et al., 2022; Kautish et al., 2022). For instance, what other factors such as brand relationship quality, brand identification and brand/service innovation optimize CBE/CBC, and how do these impacts revisit intention?

5.3 Practical implications

The present study also suggests various practical implications. Tourism/destination practitioners need to use opportunities to investigate all the CBE dimensions – involvement, co-creation and tourists’ revisit intent – linked with customer age to build suitable marketing tactics and approaches during the pandemic. First, it is strategic imperative for destination-brand/marketing managers to recognize the dynamics characterizing consumer-based brand performance indicators, including CBE (Kumar and Pansari, 2016). Understanding the worth of such issues, this research examined the role of CBE-based affective, cognitive, behavioral-engagement, and involvement in deriving brand co-creation, which was established to sequentially effect revisit intention, generating important managerial implications. Tourism marketers thus should consider each tourism/destination interaction as a critical strategic prospect to augment customers’ extensive brand-based co-creation (Assiouras et al., 2019; Buhalis and Sinarta, 2019).

Sample tactics to cultivate customers’ brand co-creation (e.g. co-production) with destination-brands include integrating them in participatory design of their destination (tourism) offerings (e.g. to allow them to contribute new service/product design), while also maintaining novel (e.g. collaborative) destination-brand-related opportunities and innovations (Hollebeek and Rather, 2019; Jaakkola and Alexander 201). Second, results advocate that consumers of differing age profiles show different co-creation and revisit intent, as outlined. Especially, for younger customers, co-creation strongly boosts revisit intention compared to older consumers during pandemics. Therefore, the advancement of co-creation/co-production/value-led interactions looks more promising for young (vs older) consumers of tourism/destination services during the outbreak. In doing so, this research suggests marketers to use technological/brand-related VR/gamification and mobile apps (Rather et al., 2023; Buhalis and Sinarta, 2019) and incites consumers' participation in narrating/exploring the story behind destinations (Yen et al., 2020; Harrigan et al., 2019). As a result, findings substantiate the importance of consumers’ age as a market segmentation variable in brand co-creation tactics/approaches during the pandemic (Rather and Hollebeek, 2021; Khan et al., 2020).

Finally, this study established heterogenous combinations/conditions to predict co-creation and revisit intention following the fsQCA approach, thus advocating managers to nurture visitors’ affective brand-based engagement. Several destination-brands are already operating online/digital customer/brand (destination) communities (e.g. Facebook communities: I love Amsterdam). These customers’ resource investments consecutively expect to arouse their favorable tourism destination/attraction-related reactions (i.e.
Likewise, destination managers need to provide visitor’s destination/site-related quizzes or tourist’s educational-resources/site visits to increase their cognitive/behavioral resource investments. Such findings can offer tourism brands with insights into the execution of CBE-based co-creation strategies for deriving tourists’ revisit intention toward destinations during crises.

5.4 Limitations and scope for further research

Albeit its implications, the present research has many limitations, which develop imperative future research opportunities. Future research might inspect the modeled constructs in alternate nomological frameworks that would include customers’ past (travel) experience, customers trust, word-of-mouth, attitude, self-congruity and satisfaction (Shams et al., 2020; Shi et al., 2022; Vo-Thanh et al., 2022; Xie et al., 2022). Considering CBE/co-creation’s highly interactive nature, this research proposes to conduct more research on these concepts from consumers as well as stakeholders/employee’s view (Cifci et al., 2023; Hollebeek et al., 2022; Rather, 2019). As this article adopted SDL, ELM and generational theory, alternative theoretical perspectives, including social exchange theory, social identity theory and stimulus–organism–response (Islam et al., 2020; Khan et al., 2022; Rather, 2018; Raza et al., 2020), might be operated to comprehend the relations among the modeled factors. For instance, future studies may seek to additionally examine the associations of CBE dimensions, co-creation, involvement and revisit intent across diverse types of contexts (hospitality, restaurants and health care) or other offline/online settings (Yen et al., 2020), which would be in contrast to this study’s results.

References


Further reading


Author affiliations
Mir Shahid Satar is Assistant Professor at the College of Administrative and Financial Sciences, Saudi Electronic University, Riyadh, Saudi Arabia.

Raouf Ahmad Rather is Scientific Independent Researcher, Anantnag, India.

Sadia Cheema is Research Scholar at the Business School, Queensland University of Technology, Brisbane, Australia.

Shakir Hussain Parrey is DST-CSRI Postdoctoral Fellow at the Department of Management Studies, Central University of Kashmir, Ganderbal, India.

Zahed Ghaderi is Assistant Professor at the Tourism Department, College of Arts and Social Science, Sultan Qaboos University, Muscat, Oman.

Lisa Cain is Associate Professor at the Chaplin School of Hospitality and Tourism Management, Florida International University, Miami, Florida, USA.

Appendix: Measurement items

Customer brand engagement (CBE)

Destination-based affective-customer brand engagement (A-CBE)
Visiting the [tourist destination X] makes me extremely happy.
When I visit [tourist destination X], I feel extremely positive.
When I visit [tourist destination X], I feel extremely good.
When I visit [tourist destination X], I feel proud.

Destination-based behavioral-customer brand engagement (B-CBE)
I spent lots of time visiting [tourist destination X] rather than other tourist destinations.
Whenever I am visiting, I generally visit this [tourist destination X].
I visit this [tourist destination X] most.

Destination-based cognitive-customer brand engagement (C-CBE)
Visiting the [tourist destination X] gets me to think regarding it.
When I am visiting the [tourist destination X], I think very much about it.
Visiting the [tourist destination X] stimulates my interest to learn more about it.

**Destination-based customer brand co-creation (CBC)**
I have used my experience from prior visits so as to arrange this visit.
I have been actively involved in co-creation experience.
I have intent to discuss this co-creation experience with [tourist destination X].
I spent a vast amount of time in arranging this visit.

**Customer involvement (CIN)**
I enjoy having a hands-on approach during my visit experience.
I conduct thorough research before going on a visit to [tourist destination X].
I like to be informed of what goes into my travel experience.
I take my time to invest in my visit experience.

**Customer revisit intention**
I will visit the [tourist destination X] in future.
The [tourist destination X] is my first choice among destinations.
I would recommend others to visit [tourist destination X].

**Corresponding author**
Raouf Ahmad Rather can be contacted at: r.raouf18@gmail.com