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## Australasian Marketing Journal

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# Investigating the role of social media marketing on value co-creation and engagement: An empirical study in China and Hong Kong

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## ARTICLE INFO

## Article history:

Received 23 July 2019

Revised 3 March 2020

Accepted 26 March 2020

Available online xxx

## Keywords:

Social media marketing

Engagement

Co-creation

Repurchase intention

On-going search behaviour

China

Hong Kong

## ABSTRACT

Despite promising conceptual developments in value co-creation and consumer-brand engagement (CBE), the scholarly attention afforded to the importance of social media marketing (SMM) activities in strengthening consumers' intention for value co-creation and CBE is limited. SMM is conceptualised as a hierarchical construct with five dimensions: entertainment, customisation, interaction, electronic-word-of-mouth (EWOM) and trendiness. This study examines the role of SMM in building value co-creation and CBE, as well as repurchase intention and on-going search behaviour as behavioural responses. Based on primary data from a survey of 392 smartphone users in China and Hong Kong, we use partial least squares – structural equation modelling (PLS-SEM) to test the hypotheses. The findings show that effective SMM strategies lead to the strengthening of value co-creation, CBE, repurchase intention and on-going search behaviour. It is also found that there is a significant difference in the impact of CBE on repurchase intention between China and Hong Kong consumers. These findings contribute to the marketing literature by empirically validating the five elements in the SMM construct, providing intelligence on how SMM can drive value co-creation and CBE. The findings also enrich the marketing literature by showing that value co-creation acts as an antecedent of CBE, driving consumers' behavioural intention, reflected by on-going search behaviour and repurchase intention.

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## 1. Introduction

In the contemporary customer-centric world, the study of service-dominant logic (SDL) has attracted increasing scholarly attention regarding its application in brand-building research through exploring ways of retaining empowered customers (Akaka et al., 2019; Vargo and Lusch, 2008). Value co-creation and consumer-brand engagement (CBE) stand out in research as critical brand-building mechanisms, because of their potential to positively influence customers' behaviour (Hollebeek, 2013; Schivinski et al., 2016). This influence is reflected in the building of customer satisfaction, consumer-brand relationships, customer retention, brand equity and competitive advantage (Nysveen and Pedersen, 2014;

Pansari and Kumar, 2017). Importantly, recognising that these mechanisms can be enhanced by social media marketing (SMM) activities justifies their recognition as a key research priority (Tier 1) in marketing (MSI, 2018). SMM is conceptualised as involving marketing strategies using social media platforms to communicate brand-related information and to manage consumer-brand relationships (Godey et al., 2016; Schultz and Peltier, 2013; Solem and Pedersen, 2016).

The advancement of social media – e.g. Facebook, Instagram, YouTube and WeChat – has prompted scholarly interest in the process of driving value co-creation and CBE through consumer-brand interactions (Abdul-Ghani et al., 2019; Hinson et al., 2019; Hollebeek, 2013). This explains why, amongst various other types of consumer-brand interactional activities, interactions elicited by SMM activity have received considerable scholarly attention, given SMM's apparent power in influencing the behaviours of geographically dispersed consumers (Sitta et al., 2018; Zadeh et al., 2019).

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<https://doi.org/10.1016/j.ausmj.2020.03.006>

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The wide diffusion of social media has changed the means of communication between marketers and customers by encouraging more than 65 million firms to reach customers using social media platforms, offering an effective pathway relative to traditional marketing efforts (Hinson et al., 2019; Kaplan, 2015; Morra et al., 2018). Since brand value is created by marketers and by consumers, the use of social media allows consumers to play active roles in connecting with brands. Brands empower consumers by creating opportunities to co-create brand value in the process of coming up with and sharing ideas with brands and like-minded users (Laroche et al., 2012; Peters et al., 2013). Clearly, how to use social media and SMM to attract and retain empowered customers is an area warranting scholarly attention (Barger et al., 2016; Singaraju et al., 2016).

Reflecting its breakthrough contribution and reach potential, recent estimates of social media refer to a global penetration rate of 42% (Statista, 2018a), with more than 3 billion monthly users (Statista, 2018b) and more than 10% incremental growth per year (Kemp, 2018). Notably, more than 50% of consumers obtain brand-related information by following brand pages (Ismail, 2017), and intend to engage with their relevant brands, by leaving comments or sharing content (Lee, 2018). For example, more than 80% of Fortune 500 companies have adopted SMM as their primary marketing strategy to interact with consumers, thereby co-creating value and fomenting consumer engagement (Hinson et al., 2019; Schivinski et al., 2016). Clearly, social media provides opportunities for marketers to share brand-related information with consumers (Tess, 2013), almost irrespective of their location, leading to value co-creation and CBE opportunities.

Notwithstanding the growing importance of social media and SMM, SMM studies have focused mostly on appeals of user-generated content (Han et al., 2018), on content analysis (Shen and Bissell, 2013), on creative strategies (Ashley and Tuten, 2015) and on consumers' behaviour as part of a social media brand community (Kamboj et al., 2018). This has resulted in limited understanding of the link between SMM strategies and either value co-creation or CBE. Indeed, SMM, co-creation and CBE are typically studied separately, with limited studies looking to empirically link them. This is why understanding how SMM can be used to build value co-creation and CBE, along with its impact on consumers' behavioural intention, stand out as a key research priority, justifying the need for the research reported in this study.

Drawing on service-dominant logic (SDL) theory, this study examines the antecedents and consequences of value co-creation and CBE. More specifically, the study examines CBE by exploring the influence of firm-initiated SMM on consumers' value co-creation process with brands, ultimately leading to on-going search behaviour and repurchase intention. Accordingly, two research questions (RQs) guide this study:

- RQ1. What is the impact of SMM on value co-creation and CBE?  
RQ2. What are the behavioural consequences of CBE?

We address RQ1 by investigating the impact of specific SMM activities on value co-creation and CBE, whilst RQ2 is addressed by examining the impact of CBE on consumers' repurchase intention and on-going search behaviour. In addition, by collecting data from consumers in mainland China and Hong Kong, the study also sheds light on the influence of culture on the issues being examined.

Overall, this study contributes to the marketing literature by offering a comprehensive framework demonstrating how SMM activities influence consumers' value co-creation and CBE, along with repurchase intention and on-going search behaviour. The rest of the paper presents the theoretical background of the study and conceptual model, followed by the methodology and results. The implications for theory and practice are then discussed, followed by limitations and suggestions for future research.

## 2. Theoretical background

### 2.1. Service-dominant logic and co-creation

Vargo and Lusch (2004a) initially proposed SDL to explain a paradigm shift in marketing orientation, fundamentally providing a service-based view of exchange involving businesses/brands, markets and society. In simple terms, SDL contends that products have no embedded value for those who hold them (whether brands or consumers), with value residing on what benefits they (brands or consumers) perceive to gain from their ownership/consumption (Vargo and Lusch, 2004b; Vargo et al., 2008). Encompassing the application of knowledge and skills (competences) for the benefit of a party (<http://sdlogic.net/index.html>), SDL advances a theory of value co-creation between business (brands) and consumers whereby, beyond being simple receivers of brand information, consumers are also value co-creators in the process of value exchange with brands. The propositions of SDL introduce a framework describing how brand value is created, arguing that creation occurs when multiple actors interact to exchange resources. Therefore, value co-creation can be more accurately referred to as brand value co-creation (Vargo, 2009; Vargo and Lusch, 2008).

Recent developments saw the evolution of SDL as a dynamic system, in which value co-creation is coordinated through firm-initiated communication and interaction with consumers to drive consumers' intention to create value for brands (Lusch and Vargo, 2014; Vargo and Lusch, 2016). Accordingly, brands attempt to create brand value by communicating the inherent attributes and benefits to consumers from using multiple media channels, such as print advertisements, their own website, and social media platforms (Hinson et al., 2019; Keller, 2013). For example, upon receiving the branded messages consumers co-create brand value when they provide suggestions for improving the brands, offer solutions for brands to solve identified problems, or become involved in the brands' new product development process (Nysveen and Pedersen, 2014). Ultimately, the consumer-brand interaction process is valuable for brands because it helps them improve the quality of their products (Merz et al., 2018). Hence, brands increasingly focus on how to initiate marketing activities to facilitate the value co-creating process, which reflects the recognised importance of co-creation in marketing (France et al., 2015; France et al., 2018; Prahalad and Ramaswamy, 2004; Vargo and Lusch, 2004a; 2004b).

Co-creation refers to the collaborative (joint) activities between consumers and brands for creating material and symbolic value for both parties (Gummesson et al., 2014). Brands increasingly use social media platforms – e.g. Facebook, Instagram and WeChat – to foster interactive marketing activities that facilitate consumer-brand interactions, driving value co-creation (Ind and Coates, 2013). For example, using Starbucks' Facebook brand page on MyStarbucksIdea.com, consumers can collaborate with Starbucks to co-design products and packages, as well as to offer suggestions on how to improve the Starbucks' products, services and brand image (Lee and Suh, 2016).

The importance of SDL and co-creation explains the increasing scholarly attention on the impact of co-creation activities on consumers' behaviour. For example, examining the value co-creation process in the furniture market recognised the importance of consumer-brand interactions in accumulating and integrating brand knowledge, facilitating subsequent product-quality improvement (Andreu et al., 2010). Similarly, Cossio-Silva et al. (2016) examined the importance of value co-creation in driving consumer loyalty, revealing that consumers' sharing of brand information with others, helping them to use the brand and to provide feedback to brands for improvements, are critical drivers in building consumers' attitudinal loyalty. More recently, Hidayanti et al. (2018) found that social media interaction has

a significant impact on consumers' value co-creation intention, thereby driving customer loyalty.

Overall, the emerging view is that marketers should facilitate consumer-brand interactions to encourage collaboration, thus building strong consumer-brand relationships (Cossío-Silva et al., 2016; Galvagno and Dalli, 2014; Hsieh and Chang., 2016) through value co-creation. This supports calls for further empirical research on co-creation's antecedents and consequents (Chathoth et al., 2016), including firm-initiated social media communication, CBE and its behavioural intentions (France et al., 2015; Hollebeek, 2013). These are areas that remain under-researched, as discussed in the following sections.

## 2.2. Social media marketing (SMM)

Social media refers to online applications, platforms, web tools or technological systems that facilitate collaboration and content sharing between community members (Kaplan and Haenlein, 2010); examples include Facebook, Instagram, LinkedIn, WeChat, Blog and Twitter (Tess, 2013). Social media is regarded as an effective channel in reaching consumers at a lower cost than traditional media, such as print, TV and radio (Iankova et al., 2019), warranting increasing scholarly attention to the importance of SMM activities in the brand-building process (Islam et al., 2017).

Marketers have multiple ways to perform SMM, including the consideration of different messages and activities, resulting in conceptual richness that anchors SMM as a multidimensional concept (Ngai et al., 2015; Pham and Gammoh, 2015). For example, Kim and Ko (2012) empirically investigated the importance of SMM activities for brand building, recommending the use of social media platforms to communicate SMM content that features entertaining, customisation, interaction, electronic word of mouth (EWOM) and trendiness activities. Similarly, Godey et al. (2016) conceptualised SMM as a process used by brands to communicate brand-related information to build consumer-brand relationships, by providing entertaining content, personalised information, interaction, EWOM and trendiness dimensions. More recently, Yadav and Rahman (2017) endorsed SMM as a multidimensional concept, with an influential role in building consumer-based brand equity.

Along with the relevant literature (Algharabat, 2017; Bianchi and Andrews, 2018; Cheung et al., 2019; Godey et al., 2016; Seo and Park, 2018; Yadav and Rahman, 2017), this study also conceptualises SMM as a multidimensional set of brand-initiated activities, comprising five dimensions – entertainment, customisation, interaction, EWOM and trendiness – discussed below.

Entertainment refers to marketers' creation of experiences (such as games, video sharing and participation in contests) that consumers perceive as fun and playful when using social media platforms (Agichtein et al., 2008; Manthiou et al., 2013). Arguably, playful experiences can build a sense of consumer intimacy with the brand, strengthening consumers' engagement with the brand and brand-related purchase intention (Dessart et al., 2015). This is supported by recent findings of a positive association between entertaining content available on social media platforms and brand attitude (Godey et al., 2016; Moro and Rita, 2018; Yoshida et al., 2018), inviting the conclusion that entertaining content can effectively stimulate consumer-brand interactions, as well as strengthen consumers' brand loyalty (Kamboj et al., 2018).

In terms of customisation, it refers to the extent that services are tailored to satisfy consumers' personal preferences, facilitating consumers' effective reach and strengthening perceived brand value (Seo et al., 2018). For example, advances in social media technologies allow brand-message customisation whilst maintaining a dialogue with customers (Miller and Lammas, 2010), creating re-

markable opportunities for brands to reach consumers, strengthening consumer-brand relationships (Kim and Ko, 2012).

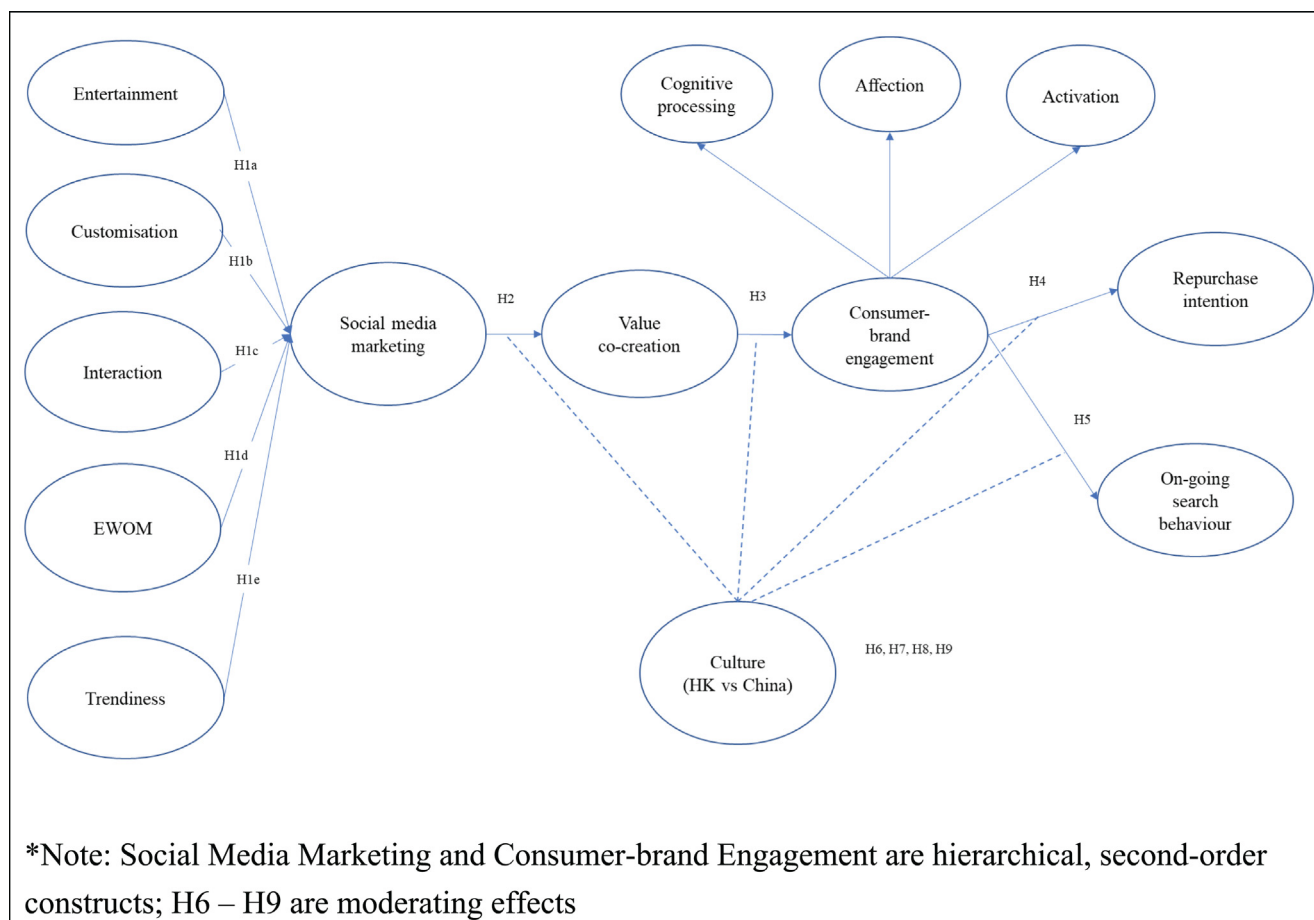
The wide reach of social media strengthens the interaction between brands and consumers (Cheung et al., 2020; Manthiou et al., 2013), enabling brands to create and facilitate two-way communications with consumers, and allowing consumers to exchange their ideas about the brands with like-minded peers (Heggde and Shainesh, 2018; Muntinga et al., 2011). Interaction between consumers and brands is strengthened when brands create spaces (opportunities) on social media for consumers to share and discuss brand-related information (Dessart et al., 2015) whilst building consumers' positive brand perceptions (Godey et al., 2016). Notably, the promising development of social media brand pages can motivate consumers to participate in the interaction by discussing brand stories, attributes and benefits, with their peers, as well as sharing their needs with the brand. Such participation has the potential to strengthen the consumer-brand relationship, leading to positive value-exchange outcomes (Algharabat et al., 2020; Kamboj et al., 2018; Seo and Park, 2018).

The creation and sharing of EWOM are akin to interaction. EWOM refers to communication by former, actual or potential customers about a brand using social media platforms (Hennig-Thurau et al., 2004). Because it involves consumers' communications about their own experiences and opinions, EWOM is perceived by consumers as highly credible and trustworthy information (Cheung et al., 2019), which explains why consumers increasingly evaluate product attributes by searching the EWOM available on social media platforms (Sijoria et al., 2018). This also explains marketing scholars' appetite for asserting the usefulness of EWOM in building consumer-brand relationships, ultimately shaping consumers' positive attitudinal intention (Kudeshia and Kumar, 2017).

Finally, trendiness refers to the extent to which a brand communicates up-to-date and trendy information (i.e. current 'hot topics') relevant to the brand (Naaman et al., 2011). Arguably, the trendier the information carried by social media brand pages, the more effective these are in increasing consumers' motivation to understand more about the brand (Dessart et al., 2015; Liu et al., 2020). This is why marketers seek to attract consumers' attention by constantly updating social media brand pages – including sharing the latest news about brands, new product development and latest offerings – aiming to build strong and positive consumer brand knowledge (Kim and Ko, 2010).

Along similar research practice (Cheung et al., 2019; Gomez et al., 2019; Kim and Ko, 2012), the five dimensions of SMM activities just discussed – entertainment, customisation, interaction, EWOM and trendiness – collectively combine to form an overall SMM construct, represented in Fig. 1. Accordingly, we conceptualise SMM as a hierarchical, reflective-formative Type II construct. The adoption of the reflective-formative approach is appropriate, because the five SMM dimensions are distinct in nature and not interchangeable (Becker et al., 2012; Diamantopoulos et al., 2008; Jarvis et al., 2003; Sarstedt et al., 2019). That is, the overall SMM strategy may be influenced by one or all five of the components, and a change in one component is not necessarily accompanied by changes in the other components (Carlson et al., 2019a; 2019b; Cheung et al., 2019). For example, marketers may introduce entertaining content without customised content (Cheung et al., 2019).

Conceptualising SMM using a hierarchical, reflective-formative approach allows for meaningful implications to be drawn, helping marketers to understand the impact of specific SMM activities (dimensions) in forming an overall SMM strategy, including their subsequent effect on endogenous variables, such as value co-creation. Along this rationale, the following hypotheses are developed for this study:



**Fig. 1.** Theoretical framework of this study. \*Note: Social Media Marketing and Consumer-brand Engagement are hierarchical, second-order constructs; H6–H9 are moderating effects.

Continue5H1a-a The SMM construct comprises the first-order dimensions of: (a) entertainment, (b) customisation, (c) interaction, (d) electronic word-of-mouth and (e) trendiness.

While there is an abundance of empirical research examining the impact of SMM on consumers' brand knowledge in general (e.g. Godey et al., 2016; Kim and Ko, 2012; Seo and Park, 2018), the literature gives little attention to its impact on value co-creation. Similarly, research examines the link between SMM and value co-creating behaviour (e.g. liking, commenting and sharing) on social media platforms (e.g. De Vries et al., 2012; Liu et al., 2020), but the consequences for value co-creation are typically overlooked. Therefore, empirical research examining the impact of SMM on value co-creation and its consequences is needed, as discussed in the next section.

### 2.3. Value co-creation

The advancement of social media awakened attention to branding-related issues (Ahn et al., 2019), because social media provides a virtual space for consumers to share their brand experiences, acting as an essential driver in brand value co-creation (Luo et al., 2015). For instance, brands can create entertaining content that attracts consumers' attention, driving consumer-brand interactions and strengthening consumers' intention to share their ideas and feedback about the entertaining content (Liu et al., 2020). Brands can also use posts and activities on social media platforms to share their latest news and products with consumers,

inviting them to share their positive experiences with the brand, to provide suggestions for improvements, and to share their ideas about new product development (Lin et al., 2018).

Importantly, customised content tailored to consumers' preferences delivers personalised brand experiences. This facilitates value co-creation by arousing consumers' interests in reading information about the brand, driving their intention to interact with brands on the topics of their personal interest (Cheung et al., 2019). Similarly, EWOM on social media platforms reflects brand users' prior experience, attracting consumers' attention and facilitating their social media interaction with other like-minded users to discuss and review branded products (Seifert and Kwon, 2019). Hence, using interactive brand posts invites consumers to actively participate in brand-related discussions and activities on social media platforms, motivating consumers' resource integration into co-creating brand meaning and value (Gummesson et al., 2010; Simeoni and Cassia, 2019). Since the above interactive processes are considered effective in engaging consumers in a brand's value-creation processes (Singaraju et al., 2016), the following hypothesis is justified:

H2 SMM has a positive effect on value co-creation.

### 2.4. Consumer brand engagement (CBE)

Rooted in the concept of customer engagement (Hollebeek et al., 2014; Kosiba et al., 2018) and applying SDL principles, CBE is conceptualised as consumers' cognitive, emotional and behavioural responses concerned with consumer-brand

interactions (Brodie et al., 2013) and deemed critical in influencing consumer behaviour (Brodie and Hollebeek, 2011). To drive CBE, marketers seek to motivate and empower consumers' voluntary contribution to a focal brand (Harmeling et al., 2017), thus driving consumers' positive perceptions towards the brand (Kosiba et al., 2018).

Recent marketing literature strives to better understand CBE's antecedents (e.g. Gavilanes et al., 2018; Hollebeek, 2018; Leckie et al., 2016), highlighting the importance of consumers' co-creation activities. Focus is on the sharing of consumer-initiated content for brand-value creation (such as discussing consumers' personal needs, their suggestions for improvements and ideas for product development), building consumer-brand relationships and, therefore, CBE (Hsieh and Chang, 2016; Nysveen and Pedersen, 2014).

Firm-initiated value co-creation activities encourage consumers' feedback and ideas about products, an encouragement that is critical in strengthening satisfaction and consumer-brand relationships (Andreu et al., 2010). In support, Hsieh and Chang (2016) found a positive relationship between firm-initiated, brand co-creation activities and CBE, positing that when consumers are active in connecting with the brand during the idea-generation process, they are deeply immersed with the brand and have a strong sense of dedication, hence driving CBE (Carlson et al., 2018). The proposition is that value co-creation process positively influences consumer-brand relationships, thus evoking CBE (Hsieh and Chang, 2016), grounding hypothesis 3:

H2 Value co-creation has a positive effect on CBE.

### 2.5. Repurchase intention

Repurchase intention reflects consumers' loyalty behaviour, denoting their intention to buy the same product from the same firm on more than one occasion (Hellier et al., 2003). Empirical research confirms that consumers' past consumption experience (Kuo et al., 2009) and participation in sharing brand-related information (Carlson et al., 2018) influence the building of brand-loyalty outcomes (Vázquez-Casielles et al., 2017). Hence, highly engaged consumers are deeply involved with their brands of interest and motivated to choose the focal brand as the priority in their decision-making process (Hollebeek, 2013). Congruency with recent research supporting the existence of a positive link between CBE and consumer outcomes, such as purchase intention (Carlson et al., 2019a; 2019b), intention to use (Abdul-Ghani et al., 2018) and repurchase intention (Lee et al., 2019), justifies hypothesis 4:

H2 CBE has a positive effect on repurchase intention.

### 2.6. On-going search behaviour

On-going search behaviour (OSB) refers to customers' regular external search for information that is not associated with the solving of a recognised and immediate purchase problem (Bloch et al., 1986). Empirical research demonstrates the association between consumers' intrinsic motivation and OSB (Beatty and Smith, 1987; Cheung et al., 2018; Schmidt and Spreng, 1996), suggesting that when consumers are interested in the category of specific brands, they are willing to exert considerable cognitive effort in searching for brand- and brand-category-related information (McColl-Kennedy and Fetter, 2001). Arguably, CBE reflects consumers' psychological state concerning their interactive and co-creative experience with brands (Algharabat et al., 2020; Brodie et al., 2011; Carlson et al., 2018), strengthening their interest in the focal brand, and motivating them to search for brand- and brand-category-

related information on an on-going basis (Bloch et al., 2009; Mathwick and Rigdon, 2004; Yeoh, 2005).

Recent research validates the positive associations between CBE and a wide array of consumers' on-going behaviours (e.g. Abdul-Ghani et al., 2019; Harrigan et al., 2015). For example, a focus on marketing practitioners' perspectives found that CBE and customer relationship management (CRM) outcomes are positively related, explaining why consumers search for the brand-related information on an on-going basis (Harrigan et al., 2015). Similarly, Abdul-Ghani et al. (2018) posit that CBE drives consumers' on-going participation in brand-related activities, including on-going usage and intention to experience their favourite brands by on-going search for brand-related information. More recently, Carlson et al. (2019a; 2019b) found that highly engaged consumers are willing to use a brand's webpages to regularly search for brand- and brand-category-related information. The understanding that CBE plays a considerable role in driving consumers' on-going search behaviour, justifies hypothesis 5:

H2 CBE has a positive effect on on-going search behaviour.

### 2.7. Cultural differences

The notion of national culture refers to the patterns of thinking, feeling and acting that are rooted in common values and societal conventions (Nakata and Sivakumar, 2001). A plethora of studies assert the importance of cultural differences amongst countries, and within specific regions within countries (Lin and Ho, 2009; Sin et al., 2003), in conditioning SMM's effectiveness in shaping consumers' behaviour (Barnes et al., 2009; Godey et al., 2016; Khan et al., 2016).

Culture is deemed to moderate the relationship between social media use and consumer-brand relationships in France, in the UK and in the USA (Hudson et al., 2016), and an examination of the impact of SMM on consumers' behavioural responses on social media platforms - including the number of likes, comments and shares, all regarded as engagement behaviours (Muntinga et al., 2011) - identified culture as a partial moderator in Australia, in the UK and in the USA (Khan et al., 2016). In the Asian context, Chen et al. (2016) examined the role of culture in moderating the relationship between social media political information sharing and online democratic engagement (i.e., online activism) in Hong Kong, mainland China, and in Taiwan. They concluded that the Hong Kong respondents participate in online democratic engagement by sharing political information on social media, but this is not the case for the mainland Chinese respondents. An explanation for the inconsistent findings with respect to consumers' behaviour in social media usage is attributable to cultural differences in national contexts (Elliot and Tam, 2014; Khan et al., 2016) and at the regional level, as in the case of Hong Kong and mainland China (Goodrich and de Mooij, 2013).

Research also recognises significant differences in advertising effectiveness relative to the shaping of consumers behaviours in different regions within a country, as in the case of Hong Kong and mainland China (Barnes et al., 2015; Elliot and Tam, 2014). This is also the message conveyed by Hofstede's cultural dimensions, with significant differences in five out of six cultural dimensions for Hong Kong and China, namely: power distance (Hong Kong = 68, China = 80), individualism (Hong Kong = 25, China = 20), long-term orientation (Hong Kong = 61, China = 87), masculinity (Hong Kong = 57, China = 66) and indulgence (Hong Kong = 17, China = 24) (Hofstede Insights, 2018).

Finally, the discussion of cultural differences above identifies moderating effects of culture on the relationship between various forms of SMM and consumers' behavioural intention. However, no research to date has investigated the eventual moderating role of

cultural differences on the impact of SMM on value co-creation and its outcomes in Hong Kong and mainland China. The suggestion is that culture also has a moderating role on the impact of SMM on value co-creation, CBE, on-going search behaviour and repurchase intention as assessed for Hong Kong and China, justifying the following hypotheses:

- H2 Culture moderates the impact of SMM on value co-creation.
- H3 Culture moderates the impact of value co-creation on CBE.
- H4 Culture moderates the impact of CBE on on-going search behaviour.
- H5 Culture moderates the impact of CBE on repurchase intention.

### 3. Methodology

#### 3.1. Population and Sample

Hosted on the online-survey platform Qualtrics, a self-administered online survey in Chinese collected primary data from consumers in Hong Kong and mainland China via a purposive sampling technique, with selection (screening) criteria determined at the outset to ensure collection of valid data, relevant to the study. Target respondents were experienced social media users with a WeChat account in China or a Facebook account in Hong Kong. The focus was on respondents' perceptions because Hong Kong and China are both regarded as social media friendly markets, with high social media penetration rates, as well as with significant knowledge of social media platforms, such as Facebook and WeChat (Chan and Guillet, 2011). The focal product for the research was the smartphone, a product that allows consumers to exert their personalised imagination in meeting their individual needs, facilitating co-creation of value in the usage process and creating a unique brand experience in consumers' minds (Vivek et al., 2012).

#### 3.2. Measurement

Adopted from the literature, items were measured using seven-point Likert scales (1 = strongly disagree, 7 = strongly agree). SMM was modelled as a hierarchical, reflective-formative Type II construct, comprising the first-order dimensions of entertainment, customisation, interaction, EWOM and trendiness (Algharabat, 2017; Duarte and Amaro, 2018; Kim and Ko, 2012). Twelve items measured the five SMM dimensions (Godey et al., 2016).

Ten items were adopted from Leckie et al. (2016) to measure the multidimensional CBE construct. CBE was operationalised as a hierarchical, Type I reflective-reflective construct featuring cognitive processing, affection and activation as first-order dimensions (Islam et al., 2018). Prior CBE research found a positive correlation amongst the three first-order dimensions (Dwivedi, 2015; Harrigan et al., 2017; Hinson et al., 2019), meaning that when consumers invest cognitive processing efforts in understanding more about their favourite brands, those efforts correlate closely with their positive emotional attachment (i.e. affection) and with their intention to choose the focal brand as their priority in the consumption process (i.e. activation). This positive first-order dimension correlation supports the reflective-reflective Type I operationalisation (Javis et al., 2003). Other recent CBE studies also conceptualise CBE as a hierarchical, reflective-reflective Type I construct, reporting satisfactory results (e.g. Algharabat et al., 2018; Hinson et al., 2019; Islam et al., 2018).

Regarding the behavioural outcomes in the model, the study adopted four items from McColl-Kennedy and Fetter (2001) to measure on-going search behaviour. Three items from Wu et al. (2014) were adopted to measure repurchase intention.

To ensure the content validity of the measurement items, we sought feedback from three marketing experts familiar with SMM research. Feedback on their review of the wording, coverage and appropriateness of the items was used to refine the survey instrument.

#### 3.3. Data Collection

We sent the invitation to potential respondents using email, along with posting the link on several Facebook brand pages in Hong Kong and WeChat brand pages in mainland China. The survey took approximately 10 min to complete and remained available for completion for 12 weeks in early 2019. Given the use of a purposive sampling technique, respondents were restricted to consumers who had purchased the focal product used in this study – a smartphone – along with having experience in using social media platforms and in reading brand-related information on social media platforms. We checked respondents' eligibility using several screening questions, such as "Have you ever bought a smartphone", "Have you ever visited social media platforms, such as Facebook, Instagram and WeChat?" and "Have you ever read information about brands on social media platforms/blogs/forums?".

Of the 485 consumers invited to partake in the survey, 455 were eligible to participate but 63 incomplete responses were discarded. The final sample comprised 392 usable responses from smartphone consumers who were over 18 years old (186 responses from Hong Kong, 206 responses from mainland China), equivalent to an 80.8% participation rate. All respondents were active social-media users – signing in to Facebook or WeChat an average 6–10 times per day – and owned the focal product at the time of data collection. Most of the respondents were female (69.6%), aged 18–25 years (69.4%) and educated at the bachelor's degree level or above (68.6%). Only 42.4% were engaged in full-time work. Checks were done to ensure there were no heterogeneity issues due to different usage rates, gender and late response.

#### 3.4. Data analysis

The study adopted a partial least squares structural equation modelling (PLS-SEM) approach for the data analysis, using the recommended 5000-bootstrap procedure (Hair et al., 2018) in SmartPLS v3.2.8 (Ringle et al., 2015). The repeated-indicator approach was used for the hierarchical, second-order constructs (Becker et al., 2012; Hair et al., 2018), meaning that the indicators of the first-order constructs were repeated to measure the second-order construct.

PLS-SEM is a suitable technique for testing the hypotheses developed in this study for three reasons. First, PLS-SEM is appropriate for a study with prediction-oriented goals and with complex model structures (Haenlein and Kaplan, 2004; Hair et al., 2017); Second, PLS-SEM supports the simultaneous analysis of a conceptual model with both reflective-reflective and reflective-formative hierarchical constructs (Sarstedt et al., 2019); Third, PLS-SEM is suitable for studies with smaller sample sizes (e.g.  $\leq 500$ ) (Hair et al., 2017; Leung et al., 2019).

## 4. Results

#### 4.1. Measurement model

Following the recommended two-step approach (Hair et al., 2018), the measurement (outer) model was assessed first. Evaluation of internal consistency used Cronbach's alpha and composite reliability (CR), achieving a satisfactory level of internal consistency (all values  $> .782$ ). Additionally, all item loadings were significant

**Table 1**  
Outer model results.

Construct	Loading	t-value	Alpha	Composite reliability	AVE
<b>Entertainment</b>			<b>.85</b>	<b>.93</b>	<b>.87</b>
The content found in Brand X's social media seems interesting.	.935	117.82			
It is fun to collect information on products through Brand X's social media.	.926	84.36			
<b>Customisation</b>			<b>.83</b>	<b>.92</b>	<b>.86</b>
It is possible to search for customised information on Brand X's social media.	.929	98.98			
Brand X's social media provide customised services.	.922	68.69			
<b>Interaction</b>			<b>.90</b>	<b>.94</b>	<b>.84</b>
It is easy to convey my opinion through Brand X's social media.	.921	94.13			
It is easy to convey my opinions or conversation with other users through Brand X's social media.	.923	97.51			
It is possible to have two-way interaction through Brand X's social media.	.901	63.06			
<b>Electronic word-of-mouth (EWOM)</b>			<b>.78</b>	<b>.90</b>	<b>.82</b>
I would like to pass information on brands, products or services from Brand X's social media to my friends.	.915	91.74			
I would like to upload content from Brand X's social media on my Facebook page or my blog.	.897	59.56			
<b>Trendiness</b>			<b>.86</b>	<b>.93</b>	<b>.88</b>
Using Brand X's social media is very trendy.	.940	130.48			
The content on Brand X's social media is the newest information.	.931	97.68			
<b>Value co-creation</b>			<b>.91</b>	<b>.93</b>	<b>.73</b>
I often suggest how Brand X can improve its products and services.	.862	54.28			
I often express my personal needs to Brand X.	.875	47.83			
I often find solutions to my problems together with Brand X.	.864	46.26			
I am actively involved when Brand X develops new products.	.877	69.95			
Brand X encourages consumers to create solutions together.	.791	27.20			
<b>Consumer-brand engagement – Cognitive processing</b>			<b>.87</b>	<b>.92</b>	<b>.79</b>
Using this brand get me to think about Brand X.	.803	28.51			
I think about Brand X a lot when I am using it.	.764	29.57			
Using this brand stimulates my interest to learn more about Brand X.	.803	34.21			
<b>Consumer-brand engagement – Affection</b>			<b>.92</b>	<b>.94</b>	<b>.80</b>
I feel very positive when I use Brand X.	.905	77.06			
Using Brand X makes me happy.	.932	117.10			
I feel good when I use Brand X.	.921	96.17			
I am proud to use Brand X.	.819	40.06			
<b>Consumer-brand engagement – Activation</b>			<b>.83</b>	<b>.90</b>	<b>.75</b>
I spend a lot of time using Brand X compared with other brands.	.788	25.60			
Whenever I am using smartphones, I usually use Brand X.	.917	96.10			
I use Brand X the most.	.887	49.24			
<b>On-going search behaviour</b>			<b>.82</b>	<b>.88</b>	<b>.65</b>
I am interested in browsing catalogs, advertisements and articles about smartphones.	.800	29.26			
I am interested in visiting stores, just to look around or get information, rather than to make a specific purchase.	.802	28.61			
I would be interested in reading information about how smartphones can be used.	.808	40.35			
I have compared attributes and characteristics among firms that provide smartphone products.	.805	30.81			
<b>Repurchase intention</b>			<b>.90</b>	<b>.94</b>	<b>.83</b>
The probability that I will use Brand X again is high.	.930	85.59			
I consider myself a loyal customer of Brand X.	.882	45.80			
If I had to do it over again, I would choose Brand X.	.931	108.05			

and exceeded .764, being well above the recommended .70 thresholds (see Table 1). We also assessed the convergent validity of the model using the Average Variance Extracted (AVE). All AVE scores exceeded .646, hence greater than the recommended .50 threshold, and confirming convergent validity (see Table 1).

Using the Fornell and Larcker (1981) criterion (see Table 2), all AVE square roots exceeded the corresponding correlations, satisfying the discriminant validity of the model (Hair et al., 2017). Using the more conservative Heterotrait-Monotrait (HTMT) ratio (Henseler et al., 2015) also confirmed discriminant validity (see Table 3), with all HTMT values smaller than the .90 threshold value (Hair et al., 2017). We also examined multicollinearity by checking the Variance Inflation Factor (VIF) values for all exogenous constructs. All VIF values for all constructs fall below the common 5.0 threshold (Hair et al., 2017), indicating that multicollinearity is not a concern.

Because of the single-source nature of the self-reported data, we assessed the common method bias (CMB) by conducting Har-

man's single-factor test (Podsakoff et al., 2003). The single factor accounted for 41.593% of the variance, hence lower than the 50% threshold, indicating that the questionnaire was not affected by CMB.

Lastly, we assessed the hierarchical constructs. First, we assessed the CBE construct using standard reflective criteria. The first-order loadings of the CBE dimensions were strong ( $\geq .835$ ) and significant ( $p = .000$ ) for the three first-order dimensions, with affection ( $\beta = .936$ ,  $p = .000$ ) the strongest, followed by cognitive processing ( $\beta = .889$ ,  $p = .000$ ) and then activation ( $\beta = .835$ ,  $p = .000$ ). Additionally, the CR (.943) and AVE (.624) of the second-order CBE construct exceeded the recommended thresholds, supporting its reliability and validity. Hence, the study supported modelling CBE as a second-order, reflective-reflective construct.

Second, we assessed the reflective-formative SMM construct by examining the VIF values and  $t$ -values for the first-order constructs. All five first-order SMM dimensions had a significant positive impact on the second-order SMM construct as hypothesised,

**Table 2**  
Discriminant validity of measurement model: Fornell-Larcker criterion.

	1	2	3	4	5	6	7	8	9	10	11	12
1. CBE	<b>0.79</b>											
2. CBE – Activation	0.835	<b>0.866</b>										
3. CBE – Affection	0.936	0.671	<b>0.895</b>									
4. CBE – Cognitive processing	0.889	0.615	0.764	<b>0.889</b>								
5. Value co-creation	0.608	0.518	0.536	0.575	<b>0.854</b>							
6. Customisation	0.414	0.306	0.424	0.356	0.209	<b>0.926</b>						
7. EWOM	0.614	0.441	0.582	0.601	0.553	0.465	<b>0.906</b>					
8. Entertainment	0.381	0.271	0.395	0.332	0.175	0.645	0.415	<b>0.93</b>				
9. Interaction	0.615	0.442	0.609	0.566	0.462	0.534	0.741	0.492	<b>0.915</b>			
10. On-going search behaviour	0.511	0.379	0.454	0.528	0.525	0.268	0.476	0.272	0.397	<b>0.804</b>		
11. Repurchase intention	0.773	0.774	0.702	0.596	0.53	0.326	0.475	0.263	0.516	0.414	<b>0.913</b>	
12. Trendiness	0.678	0.537	0.646	0.61	0.469	0.493	0.719	0.438	0.734	0.471	0.547	<b>0.936</b>

Note: Diagonals (bold) represent the square root of the AVE, while the off-diagonals represent the correlations.

**Table 3**  
Discriminant validity of measurement model: HTMT ratio.

	1	2	3	4	5	6	7	8	9	10	11	12
1. CBE												
2. CBE – Activation	N/A											
3. CBE – Affection	N/A	0.766										
4. CBE – Cognitive processing	N/A	0.725	0.854									
5. Value co-creation	0.654	0.591	0.578	0.642								
6. Customisation	0.471	0.368	0.489	0.419	0.233							
7. EWOM	0.715	0.547	0.684	0.728	0.654	0.573						
8. Entertainment	0.429	0.322	0.45	0.385	0.191	0.769	0.506					
9. Interaction	0.668	0.51	0.668	0.639	0.506	0.616	0.88	0.563				
10. On-going search behaviour	0.58	0.46	0.518	0.625	0.606	0.324	0.596	0.326	0.462			
11. Repurchase intention	0.843	0.893	0.769	0.674	0.579	0.377	0.565	0.299	0.572	0.479		
12. Trendiness	0.756	0.639	0.726	0.708	0.527	0.582	0.876	0.512	0.834	0.562	0.622	

Note: HTMT values < 0.90 indicate a satisfactory result for discriminant validity (Hair et al. 2017).

**Table 4**  
Results of PLS-SEM analysis.

Relationship	Whole sample		Hong Kong		China		Differences	
	Path coefficient	p-value	Path coefficient	p-value	Path coefficient	p-value	Mean Difference	p-value
Value co-creation ( $R^2 = .289$ )								
SMM → Value co-creation	.487	.000***	.498	.000***	.492	.000***	.006	.468
CBE ( $R^2 = .471$ )								
Value co-creation → CBE	.608	.000***	.647	.000***	.576	.000***	.071	.185
Repurchase intention ( $R^2 = .553$ )								
CBE → Repurchase intention	.773	.000***	.658	.000***	.837	.000***	.180	.001***
On-going search behaviour ( $R^2 = .259$ )								
CBE → On-going search behaviour	.511	.000***	.529	.000***	.488	.000***	.042	.325

Note: paths significant at  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .001$ .

with the impact of trendiness on the second-order SMM construct being the strongest ( $\beta = .280, p = .000$ ), followed by EWOM ( $\beta = .275, p = .000$ ), interaction ( $\beta = .268, p = .000$ ), customisation ( $\beta = .207, p = .000$ ) and entertainment ( $\beta = .190, p = .000$ ). Additionally, with all VIF values falling below the recommended 5.0 threshold, ranging from 1.70 to 3.11, this suggests that collinearity amongst the five first-order SMM dimensions is not an issue (Hair et al., 2018). Hence, the results support SMM being modelled as a second-order, reflective-formative construct, being formed by the five first-order SMM dimensions, supporting H1a-e.

4.2. Structural (inner) model

The remaining hypotheses were assessed using the inner (structural) model results, by examining the  $t$ -values, standardised coefficient beta values and coefficient of determination ( $R^2$  value). The results for the whole sample support H2, H3, H4 and H5 (see Table 4 and Fig. 2). In particular, the impact of SMM on value co-creation was strong and significant ( $\beta = .487, p = .000$ ), whilst value co-creation had a significant positive impact on CBE

( $\beta = .608, p = .000$ ), supporting H2 and H3. In addition, CBE had a strong and positive impact on repurchase intention ( $\beta = .773, p = .000$ ) and on-going search behaviour ( $\beta = .511, p = .000$ ), supporting H4 and H5.

The  $R^2$  values were used to evaluate the explanatory power of the conceptual model. The  $R^2$  values for value co-creation, CBE, repurchase intention and on-going search behaviour were .289, .471, .553 and .259 respectively, with an average variance accounted (AVA) being .393. This suggests that the model is good at explaining variation in the target constructs (Chin, 1998).

Additionally, examining the indirect effects amongst the paths revealed that each SMM dimension had a significant indirect effect on value co-creation through the hierarchical SMM construct, with the impact of trendiness on value co-creation being the strongest ( $\beta = .136, p = .000$ ), followed by EWOM ( $\beta = .134, p = .000$ ), interaction ( $\beta = .130, p = .000$ ), customisation ( $\beta = .101, p = .000$ ) and entertainment ( $\beta = .093, p = .000$ ). Collectively, the five SMM dimensions are deemed useful individual drivers of value co-creation. It was also found that SMM had a positive and significant indirect effect on CBE ( $\beta = .296, p = .000$ ), repurchase intention



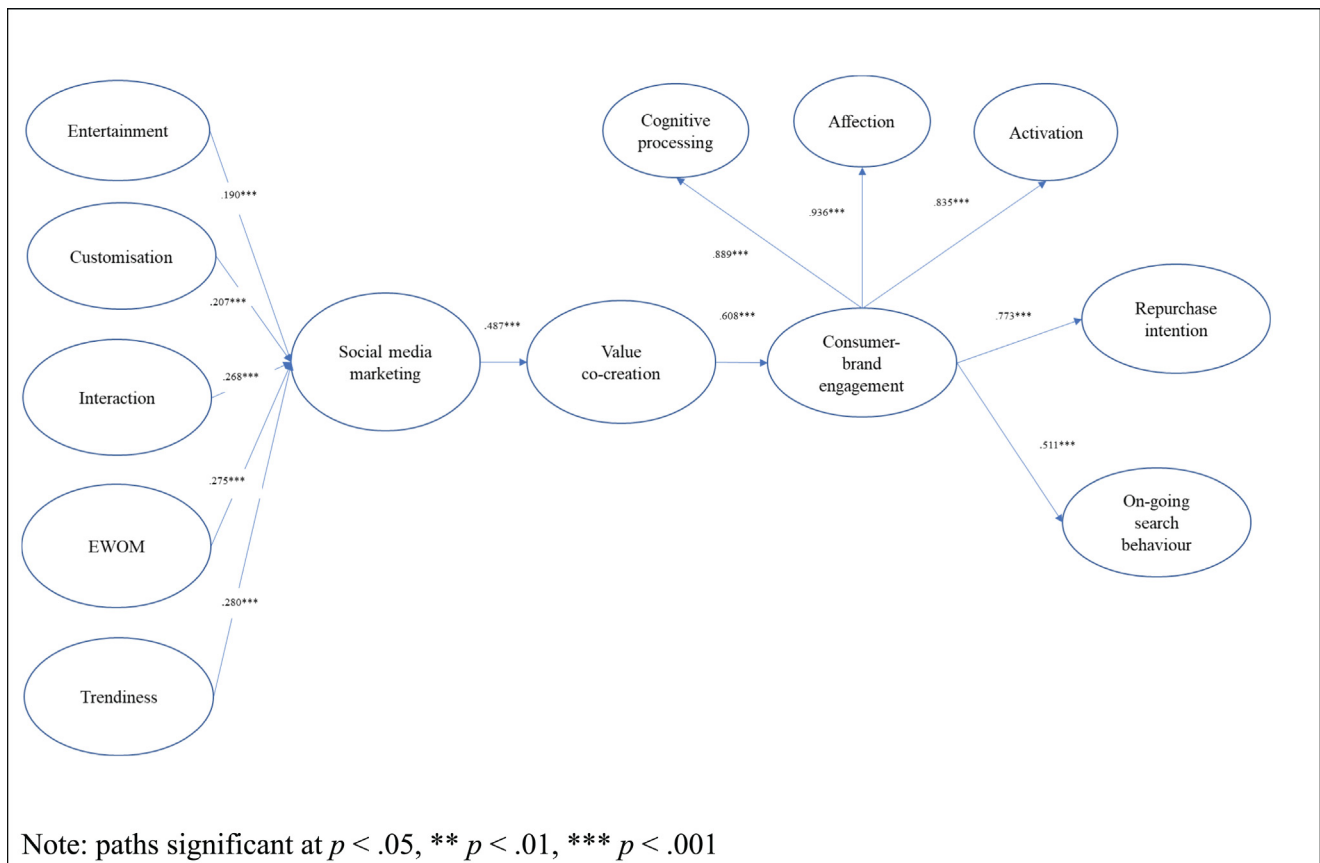


Fig. 2. Results of theoretical model in this study. Note: paths significant at  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .001$ .

( $\beta = .229$ ,  $p = .000$ ) and on-going search behaviour ( $\beta = .151$ ,  $p = .000$ ). The indirect effects of value co-creation on repurchase intention ( $\beta = .470$ ,  $p = .000$ ) and on-going search behaviour ( $\beta = .311$ ,  $p = .000$ ) were strong, positive and significant.

We also assessed the predictive relevance of the structural model using the  $Q^2$  criterion (Hair et al., 2017). The results revealed that the  $Q^2$  values for value co-creation, CBE, on-going search behaviour and repurchase intention exceeded zero, supporting the predictive relevance of the conceptual model (Hair et al., 2017).

Finally, the study examined the path differences for Hong Kong and China using PLS-MGA (multiple group analysis) (see Table 4) to explore cultural differences (Ting et al., 2019). The MGA results revealed a significant difference ( $p < .05$ ) for the relationship between CBE and repurchase intention. In particular, the impact of CBE on repurchase intention is significantly higher in mainland China than in Hong Kong, supporting H8. In contrast, non-significant differences between the two groups were found for the influence of SMM on value co-creation ( $p = .468$ ), the influence of value co-creation on CBE ( $p = .185$ ) and the influence of CBE on on-going search behaviour ( $p = .325$ ); therefore, H6, H7 and H9 were not supported.

## 5. Implications

The marketing literature calls for empirical research to examine the importance of SMM in the brand-building process, capturing how brands can utilise SMM activities to build consumer-brand relationships, strengthening consumers' behavioural intention (Cheung et al., 2019; Godey et al., 2016; Kim and Ko, 2012). To answer these calls, the present study developed a theoretically grounded model examining the role of SMM in driving

value co-creation and CBE, on-going search and repurchase intention in Hong Kong and in mainland China. Substantial theoretical and managerial implications of the research findings are discussed next.

### 5.1. Theoretical implications

Prior studies conceptualised SMM as a multidimensional construct, confirming the importance of SMM in building consumer-based brand equity (Godey et al., 2016; Kim and Ko, 2012; Seo and Park, 2018). But the extant literature overlooked the importance of various SMM activities in forming overall SMM strategies, along with the overall SMM's indirect effects on important marketing constructs, such as value co-creation and CBE. To deal with this, we used a multidimensional, reflective-formative Type II configuration for the SMM construct, adding new insights to the marketing literature (Gomez et al., 2019). We examined the importance of SMM activities in the brand-building process by conceptualising and testing an SMM second-order, reflective-formative Type II model (Cheah et al., 2019; Javis et al., 2003; Sarstedt et al., 2019). Hence, this study contributes empirical support to the conceptualisation of SMM as a Type II hierarchical construct with five distinctive dimensions – entertainment, customisation, interaction, EWOM and trendiness – which form the overall SMM construct. Importantly, the hierarchical SMM construct used in this study can also help explain consumers' behavioural intention by understanding its indirect effects in acting through value co-creation, CBE, repurchase intention and on-going search behaviour.

Additionally, prior SMM research examined SMM influences on dependent variables such as brand love (Algharabat, 2017), consumer-based brand equity (Godey et al., 2016), brand commitment (Seo and Park, 2018), customer loyalty and purchase in-

tention (Yadav and Rahman, 2017). However, how SMM activities drive value co-creation and CBE has not been examined. Hence, this study also contributes a nomological framework linking SMM with value co-creation and CBE, which also accounts for inherent behavioural consequences. The findings advance SMM as a direct driver in the value co-creation process, indirectly influencing CBE, consumers' repurchase intention, and on-going search behaviour. The implication here is that SMM activities are useful stimuli in the brand-building process.

The importance of SMM in the brand-building process is acknowledged in the literature (e.g. Kim and Ko, 2012; Godey et al., 2016; Seo and Park, 2018), but empirical findings are scant on how SMM drives value co-creation and CBE. Thus, this study contributes to the marketing literature by providing a comprehensive framework of the interrelationships between SMM and a range of consequents, including consumers' value co-creation, engagement and behavioural intentions. The findings support the important role played by SMM in driving value co-creation and CBE, ultimately driving on-going search behaviour and repurchase intention.

In terms of the growing importance of SDL in the marketing literature, empirical studies on value co-creation and CBE attracted increasing scholarly attention (Harrigan et al., 2015; Hidayanti et al., 2018; Quach and Thaichon, 2017). Having noted the importance of value co-creation and CBE for the brand-building process, their interrelationship has not been conclusively established. While earlier studies recognised the intertwined nature of value co-creation with CBE (Hollebeek, 2013; Hollebeek et al., 2014), more recent research argued that value co-creation and CBE must be considered as clearly independent constructs in the brand-building process (France et al., 2018; Quach et al., 2019). Accordingly, France et al. (2015) identified CBE and co-creation as two distinct concepts, because CBE reflects consumers' intrinsic motivation in engaging with brand-related activities, driving consumers to be involved in value co-creating behaviours. More recently, France et al. (2018) empirically confirmed that CBE is a critical driver of value co-creation, strengthening consumers' perceived value of a brand. In this context, the present study adds to the marketing literature by theoretically arguing for, and empirically validating, value co-creation as an antecedent of CBE. This justifies the importance of consumers' value co-creating behaviours in driving CBE, thereby strengthening consumers' behavioural intention. In other words, value co-creation facilitates discussions between consumers and brands, such as product improvements and new product development, which are influential in driving CBE.

In terms of ongoing search behaviour, extant literature empirically confirms the importance of value co-creation and CBE in driving consumers' behavioural intention, including brand loyalty (Algharabat et al., 2020), brand equity (Hepola et al., 2017), positive referrals (Islam and Rahman, 2016), purchase intention (Islam et al., 2017) and repurchase intention (Lim et al., 2019). We contribute to the branding literature by linking CBE with ongoing search behaviour, confirming that highly engaged consumers are regularly active in searching for brand-related information.

A further theoretical contribution is made in terms of cross-cultural examination of antecedents and consequents of CBE and co-creation. This study advances theoretical understanding in this area by using multi-group analysis (MGA) to provide insights on the differences between Hong Kong and mainland China within its conceptual model (Chen et al., 2016). We found that the impact of CBE on repurchase intention was stronger for mainland Chinese consumers, suggesting that CBE plays a more important role in affecting repurchase intention in mainland China than in Hong Kong. Since SMM plays a considerable role in building CBE, we conclude that SMM plays a more important role in stimulating the behavioural response of Chinese consumers than that of Hong Kong consumers.

In summary, our findings contribute to marketing literature in the area of SDL and SMM, by introducing a framework describing how brand value is created. We posited that value co-creation occurs when multiple actors interact together to exchange resources, driving CBE and, ultimately, strengthening consumers' behavioural intention. The findings forward value co-creation and CBE as central themes for SDL, being conceptualised as important concepts for brand building. Because SMM is regarded as a set of firm-initiated drivers in the process of value co-creation and engagement, it is confirmed as an antecedent of the SDL process. The findings also support repurchase intention and on-going search behaviour as behavioural consequences of the SDL process.

## 5.2. Managerial implications

From a managerial perspective, the findings of this study call on marketers to consider strengthening consumers' on-going search behaviour and repurchase intention by deploying SMM strategies that facilitate value co-creation and CBE.

Marketers should start by deploying SMM strategies that encourage consumers to create unique benefits for the brand and for themselves, promoting CBE by active participation in the value co-creation process. Implied in the conceptualisation of SMM as a hierarchical, reflective-formative construct with five dimensions is the suggestion that each of those dimensions can contribute to overall SMM strategic effectiveness. Hence, the recommendation is for marketers/brands to consider, in their respective contexts, how each dimension can contribute to the overall SMM success, enabling the timely development of suitable activities supported by a discerning allocation of resources to support those strategies.

For example, our findings highlight trendiness as the most influential dimension of the overall SMM strategy. Accordingly, marketers might consider developing content about trendy 'hot' topics, along with news and brand updates using social media platforms. Additionally, thought might be given to strategic updating of their social media brand pages – i.e. on Facebook, WeChat and Instagram – ensuring they communicate the latest news and brand-related offerings. The aim is to attract consumers' attention, motivating them to spend more cognitive effort to better understand the focal brand (Moro and Rita, 2018; Zolkepli and Kamarulzman, 2015).

Marketers' attention should also be directed to becoming familiar with the EWOM available on social media platforms. This allows them to become acquainted with consumers' value contributions, as well as to develop intelligence to facilitate and promote peer-to-peer interactions as well as consumer-brand interactions (Chu et al., 2018). To foster consumer engagement with the brand, marketers may consider developing and offering interactive content using social media platforms. For example, marketers can provide quality live streaming and online chat rooms, encouraging and possibly rewarding active consumer engagement with the brand and like-minded peers, possibly generating useful feedback and ideas for existing and new products. Clearly, the EWOM available on these social media platforms should be monitored, assessed and acted upon, especially in the case of consumer reviews and comments relevant to the focal brand performance. Positive comments might justify pushing the positive messages, perhaps by providing acknowledgements and sharing across the various online channels, such as product-review platforms, brand website and their stores. By doing so, consumers will understand the merits of their contribution to the focal brand, becoming more actively engaged with the brand on the social media platforms. In the case of negative reviews, marketers should seek to improve their real or perceived performance, whilst providing empathetic feedback to demonstrate their understanding of consumers' problems, while also offering supportive services or compensation that addresses the identified problems. Taken collectively, marketers can benefit by regarding

both positive and negative EWOM as opportunities for them to interact with consumers enthusiastically, aiming at strengthening consumer-brand relationships.

Although entertainment and customisation dimensions appear to be of lesser importance, they are still essential pillars of the overall SMM strategy. As such, marketers should consider displaying content that is both trendy and entertaining, such as photos, videos and games on social media platforms, along with incorporating personalised information for consumers. Overall, the aforementioned actions are deemed to be useful in driving consumers' intention to co-create value for brands and for themselves.

Additionally, this study shows that value co-creation drives CBE and strengthens consumers' intention to engage in regular on-going search for brand-related information and to repurchase the same brand. This implies that marketers should take measures to encourage consumers to be engaged in value co-creation activities available on social media platforms (Algharabat et al., 2020). As noted earlier, marketers may consider offering rewards and discounts to those who share interesting brand-related messages, along with offering sweepstakes and contests to encourage consumers to share their positive brand experiences on social media platforms.

Finally, this study demonstrates that CBE is more influential in driving repurchase intention in mainland China than in Hong Kong. As such, we suggest global marketers to allocate more resources in preparing SMM activities for consumers in mainland China in order to drive CBE, and thereby strengthens repeated purchases and attitudinal loyalty.

### 5.3. Conclusion, limitations and future research

This study reveals that the SMM elements are predictors of consumers' value co-creation intention and CBE, influencing consumer behaviours. While extant research mostly examines the conceptualisation of value co-creation intention and CBE, this study offers a new perspective by positing that SMM elements are predictors of consumers' value co-creation intention and CBE. In the contemporary business world, brands realise that social media is one of the most important marketing tools, making it crucial to understand the role played by SMM in the brand-building process. To this end, this study explored the role of SMM in driving consumer-brand relationships and consumers' behavioural intention. The conclusion is that SMM is an important driver of value co-creation, with ensuing effects on CBE, on-going search behaviour and repurchase intention.

Referring to the limitations, the study is cross-sectional in nature and features a sample of respondents from Hong Kong and mainland China. Future research might consider adopting a longitudinal research design to foster understanding of the effects of SMM on value co-creation over time, and to consider distinct settings to test the model in various cross-regional/national cultural contexts. Moreover, although this study assessed differences in the effects of SMM between Hong Kong and mainland China, Hofstede's cultural dimensions were not included as constructs in the study, limiting the comprehensiveness of this comparison. Thus, future research might include measurement items to assess the perceptions of cultural dimensions, such as Hofstede's, to act as a manipulation check of respondents' cultural perceptions.

In terms of research design and methodology, this study relied on self-reported survey data to test the proposed model. Future research may wish to consider using secondary data to assess the impact of SMM on sales revenue and consumers' on-going search frequency to test the explanatory power of the model for a real-world phenomenon. Finally, this study focused only on SMM usefulness in the brand-building process; future research might seek to compare the relative impact of SMM and traditional market-

ing elements, so as to identify which marketing variables are more useful.

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