Antecedents of co-creation: A structural equation modeling approach to identifying

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ABSTRACT

This research seeks to explore the relationship between consumer brand interactions and co-creation in a social media context. Specifically, the topics of attitude towards the ad, hedonics, and brand commitment are analyzed through structural equation modeling. With consumers flocking to social media during lockdowns and social distancing, the ability for a brand to engage with consumers is more available than ever, and this engagement between a brand and consumers is known to create value for stakeholders. A self-administered survey method was used to collect data. Structural equation modeling (SEM) technique was employed to test the hypotheses. Support was found for the relationship between attitude towards the ad and co-creation, fun and co-creation, and brand commitment and co-creation. Results suggest that it is possible for brands to initiate active co-creation with consumers via social media through fun and inviting ads, thereby creating value for the brand, consumers, and all other stakeholders. This paper focuses on consumers between the ages of 18 and 29 years. These results help to advance the knowledge of co-creation and value creation in the literature and provides actionable information that a brand can utilize when interacting with consumers. Findings from the research shows that positive relationships are shown on co-creation for attitudes toward the add, hedonics, and brand commitment.

Keywords: Co-Creation, Engagement, Value Creation, Consumer brand interaction

INTRODUCTION

Imagine a social media post from online retailer Amazon asking followers to help the brand choose the next style of product that would be available exclusively on the retailer's website. Three weeks later, another social media post from Amazon reveals the product chosen by followers. Amazon asks, followers answer, and the exclusive product chosen is available for consumers to order. This example from Amazon's use of social media shows the value that can be added to a business by encouraging consumers to take an active role with the brand (Grönroos and Voima, 2013; Iglesias and Bonet, 2012; Kennedy and Guzmán, 2017; Vallaster and von Wallpach, 2013). By asking the consumer for guidance on what the brand should become or what products to sell, the brand is hoping the consumer will take an active, engaging role with the future of the business. The ability to engage a consumer beyond the basic transaction into a more interactive relationship has the potential to increase the bond with the consumer. This level of interaction could be considered active co-creation between the firm and consumer, where the consumers provide more value to the firm than a simple transaction (Kennedy and Guzmán, 2017). In sum, the process of a brand engaging with consumers results in the creation of value (Kennedy, 2017).

However, the question still exists about what type of messaging should be used to motivate a consumer to engage in co-creation with a brand. With a few exceptions (notably Frasquet-Deltoro *et al.*, 2019; Kennedy and Guzman, 2016; Roberts *et al.*¸ 2014; Thomas *et al.*, 2020) much consumer research and co-creation focuses on the outcomes of the interaction as opposed to the antecedents. Understanding the outcomes of the co-creative process is essential and is capturing its deserved attention from academia. However, antecedents of the co-creative process need equal attention to truly gain an understanding of multiple strategies firms can implement to induce consumers into the co-creation process. Therefore, this manuscript specifically explores the antecedents of co-creation with the use of social media and quantifying the results through structural equation modeling (SEM).

Co-creation is defined as the process of multiple entities coming together through interactions, sharing, and learning together resulting in value creation (Ind and Bjerke, 2007; Pralahad and Ramaswamy, 2004; Vargo and Lusch, 2004), and occurs in various levels of interactions between participants (Guzman, *et al.*, 2017). In another example, consumers see a branded advertisement through social media. The goal of these branded ads are to entice the consumer to ultimately make a purchase. The brand hopes that through this purchase a relationship can be created with the consumer which leads to brand loyalty and repeat business. In some cases, the consumer is not asked to engage with the brand, but instead is only asked to make a purchase and to consider making additional purchases from the brand in the future. In this scenario, the brand has enlisted the consumer to engage in the most basic level of co-creation, adding value to the brand through the revenue generated from product sales (Guzmán *et al.*, 2019).

The importance of social media to a brand is even more important as the world emerges from the global pandemic. During global lockdowns, 64 percent of social media users are engaging in social commerce directly on the social media platform (Germain, 2022). With consumers making purchases via social media, understanding how a brand can drive consumers to engagement and co-creation is relevant and necessary. Consumers behaviors are different in this post-Covid environment, and what prompted consumers to co-create prior to the pandemic could no longer be as effective. Therefore, this research seeks to update and validate the

literature on the motivations for co-creation from the consumer perspective. Adding to this body of knowledge will enhance the consumer – brand relationship and create value on multiple levels for all stakeholders.

THEORETICAL BACKGROUND

Social Identity Theory

To better understand why consumers develop relationships with brands and contribute in the process of co-creation, social identity theory (SIT) should be examined. Using SIT (Tajfel, 1982; Tajfel and Turner, 1979; 1986; Turner, 1982), consumer behavior researchers have identified that the self-concept has different aspects – the personal identity and social identity. The social identity is the person's concept of self that comes from a membership to a social group (Tajfel, 1981). Consumers strive to create or enhance both a positive personal and social identity, to the point that a person's social groups are viewed favorably in comparison to other social groups (Luhtanen and Crocker, 1992; Tajfel and Turner, 1986).

Consumer-Brand Identification

Within SIT is consumer-brand identification (CBI), which is a consumer's perceived state or feeling of belongingness with a brand (Lam *et al.*, 2013). The concept of CBI emerges from the consumer culture theory of the social relationship model of consumer-brand relationships (Arnould and Thompson, 2005; Fournier, 1998), which posits that consumer pursue identity projects through the symbols and social cues of markets (Belk, 1988; Holt, 2002). Consumers are attracted to organizations that share similar values (Donavan *et al.*, 2004; Schmidt *et al.*, 2022). This level of congruence is needed, but not necessarily sufficient, for consumers to identify with the organization (Lam *et al.*, 2013). Therefore, if the consumer is in a relationship with a brand the brand should take on social meaning for the consumer. The consumer will seek to add value and compare this social relationship with other social relationships the consumer has. In other words, the consumer should seek to add value to the brand so that the consumer's social identity remains positive. With the introduction of CBI, the social aspect of the consumer's experience with the brand is intensified, shifting from a static relationship to a dynamic relationship incorporating attributes of the brand into the consumer's own self, all while evolving over time (Ashforth *et al.*, 2008; Lam *et al.*, 2013).

Scholars acknowledge CBI has an impact on the individual behavior that consumers exhibit, including consumer loyalty (Bhattacharya *et al.*, 1995; Kim *et al.*, 2001), brand preference (Tildesley and Coote, 2009), brand building (Tuskej *et al.*, 2013), hedonics (Büyükdag and Kitapci, 2121; Yoshida *et al.*, 2021), sense of brand community and commitment (Casalo *et al.*, 2008), buying related decision (Ahearne *et al.*, 2005), repurchase intention (Donavan *et al.*, 2006), and positive word-of-mouth (Del Rio *et al.*, 2001; Kim *et al.*, 2001; Kuenzel and Halliday, 2008). Taking the attitude, hedonic, and commitment components of CBI, this paper examines what influence CBI has on as an antecedent to co-creation.

Co-creation

In the early stages of co-creation research, the concept was broadly defined as multiple entities coming together to create value (Prahalad and Ramaswamy, 2004; Vargo and Lusch, 2004). Now nearly 2 decades later, research into co-creation is still popular among academics across multiple disciplines. In the marketing context, research into co-creation seems to be following a digital path examining how consumers interact with other consumers, brands, and smart devices (Balaji and Roy, 2017; Borges-Tiago *et al.*, 2021; Frasquet-Deltoro *et al.*, 2019; Hoffman and Novak, 2018; Kennedy, 2017; Payne *et al.*, 2021; Thomas *et al.*, 2020).

At the foundation of the co-creation literature, which began to gain admittance into current marketing thought in the early 2000s, co-creation research was in the process of formalizing definitions and exploring the construct for what it was and was not. Ind and Bjerke (2007) suggested a more poignant definition, that co-creation takes place when the roles of the company and the consumer converge to create value (Ind and Bjerke, 2007). The idea of convergence allows us to have a clearer understanding of how more than one entity can literally join other entities in this process to create value.

Next, it was suggested that the brand itself was being co-created through these interactions of multiple stakeholders (Gyrd-Jones and Kornum, 2013; Merz *et al.*, 2009; Hatch and Schultz, 2010; Vallaster and von Wallapach, 2013). Examples from this body of research are organizations like Lego, who has long been known to involve consumers in the creation of new sets, colors, and bricks, all which create value for the brand and consumers, in turn creating a new, stronger Lego brand. Vallaster and von Wallapach's (2013) findings support this fluid nature of interaction, as they find that over time participation and resources might vary depending on the strategies and developments among all parties of the co-creative process.

Roberts *et al.* (2014) sought to uncover the factors that motivate consumers to take part in co-creation innovation processes. The study focuses on online interviews with consumers in the gaming industry and suggests that motives for co-creation in this context can include egocentric motives, altruistic motives, and goal related motives. In a similar vein, Kennedy and Guzmán (2016) study consumers and their motivations to co-create a brand's identity. The study finds five different reasons that a consumer would engage to co-create brand identity, including social, fun, brand identification, communication appeal, and brand commitment.

Now, co-creation research is becoming very specific while focusing on multiple applications. Kennedy *et al.*, (2022) explore co-creation based on gender and personal values. Bu *et al.* (2022) investigate influencer marketing, co-creation, and purchase intention. Cheung *et al.* (2021) look at social media marketing, co-creation, and wearable healthcare technology in China. Thomas *et al.,* (2020) explore fashion, social commerce, and co-creation in the UK through a qualitative study. Recent research on co-creation also looks at broader communities and experiences. Ind *et al.* (2020) examine co-creation in communities by identifying rewards to serve as motives for co-creation. Suomi *et al.*, (2020) look at co-creation in the festival setting, while Fan *et al.*, (2020) explore co-creation and tourism. The body of literature for co-creation is vast, and now supports the work of systematic reviews (Ranjan and Read, 2021), literature reviews (Saha *et al.*, 2021), and bibliometric analysis (Shah *et al.*, 2021).

Influencing and co-creation

To engage in co-creation, a consumer must understand their input has the potential to

impact the brand they are creating with. Previous research in the influence of co-creation suggests there is a positive relationship between the consumer's ability to influence the brand and co-creation (Kennedy and Guzmán, 2017). Not only should the ability for a consumer to influence a brand be present, but the correct motivator must also be used at the correct time (van Kleef *et al.*, 2011).

The ability, or at least the perception of the ability, for a consumer to influence a brand will impact whether that consumer will engage the brand (Baldus *et al.*, 2015; Kennedy, 2017; Kennedy and Guzmán, 2017). Trust and commitment increase as the level of interaction between the consumer and brand increase (Carroll and Ahuvia, 2006; Chahal *et al.*, 2020; Fournier, 1998; Fuchs *et al.*, 2013; Harmeling *et al.*, 2017; Ind *et al.*, 2013). Additionally, a consumer's perception of their ability to influence provides the consumer a reason to engage activity (Leary *et al.*, 2013).

HYPOTHESES DEVELOPMENT

Previous research with consumers and co-creation has shown evidence that antecedents of co-creation could include multiple variables. However, the studies discussed above still leave a gap in the literature for the exploration of co-creation antecedents with replicable data analysis and studies. Further, the concept of co-creation is not one that is static. Consumers, their attitudes, and their causes for motivation changes through time. It is imperative the co-creation body of literature is continually updated as well. Therefore, research seeks to build on the previous studies and bring agreement and clarity to the literature and industry for how to best encourage consumers into co-creative activities using social media as the interactive medium.

Attitude Towards the Ad and Co-creation

Consumers receive their identity through social cues and symbols in the market (Belk, 1988; Holt, 2002), as shown with SIT (Tajfel and Turner, 1979). CBI, or how a consumer identifies with a certain brand, leads to a sense of feeling or belonging to the brand (Lam *et al.*, 2013), and influences brand attitude (Augusto and Torres, 2018), brand extensions (Shokri and Alavi, 2019), and attitude towards the brand (Tuškej *et al.*, 2013). This previous research shows positive associations with consumer attitudes towards the brand, while no work focuses specifically on the ads themselves.

The sensory aspect of consumer experience reports that the five senses – taste, touch, sight, hearing, and smell – give the consumer a sense of satisfaction (Brakus *et al.*, 2009; Gentile *et al.*, 2009; Schmitt, 2003). The advertisement shown to a consumer can appeal to the consumer's sensory receptors and encourage the consumer to adopt the requested behaviors made by the brand. A consumer who is shown a message which appeals to their five senses should be more willing to engage in the co-creation process when compared to a consumer who does not see the stimulating ad. Further, the type of communication implemented by a brand has shown to increase the likelihood that consumers will co-create with a brand (Kennedy and Guzmán, 2016). Taking this into consideration and linking co-creation with CIB, consumers that view a message from a brand in a positive light should be more likely to engage in co-creation with that brand. Based on this reasoning, it is hypothesized:

> **H1:** Attitude towards the ad is positively associated with co-creation

Hedonics and Co-creation

The early researchers in consumer behavior discussed that the experience of consumption for consumers includes fantasies, feelings, fun, mood, and emotions which happen subconsciously and are private in nature (Brakus *et al*., 2009; Holbrook and Hirschman, 1982; Schmitt, 2003). The fun activities help to entertain and excite consumers (Kennedy and Guzmán, 2016; Kennedy *et al*., 2022), and helps to engage consumers into online brand communities (Baldus *et al*., 2015). Motivating consumers to engage is activated by tapping into what consumers find interesting (Ryan and Deci, 2000; Roberts *et al*., 2014).

Being fun, or hedonics, is one of core personality traits that a brand should possess (Aaker, 1997). The purpose then, is to create this environment of hedonics to consumers. Further, the offering from the brand should create a positive emotional experience for the consumer, so in turn the consumer will create a positive emotional experience for the brand (Gentile *et al.*, 2009). When seeking to engage consumers, the brand should invite consumers to participate in a fun task. Current research on CBI and hedonics shows a link between consumers enjoying themselves and identifying with the brand (Büyükdag and Kitapci, 2121; Yoshida *et al*., 2021), but do not provide insight into how this relationship may impact co-creation. Therefore, when presented with messaging that is perceived as pleasurable, consumers should be more likely to engage in co-creation with that brand. Therefore, it is hypothesized:

> **H2:** Hedonic interactions are positively associated with co-creation

Commitment and Co-creation

When a consumer becomes affiliated with a brand, the consumer-brand relationship will strengthen over time (Bhattacharya et al., 1995). When consumers are committed to being loyal to the brand, they experience deeper levels of engagement and the willingness to act on behalf of the brand (Merz *et al*., 2018). Being committed to a brand also increases the likelihood that consumers will engage in brand communities (Baldus *et al*, 2015). Having consumers loyal is an asset for a brand to develop, because the outcome of this loyalty has been shown to increase engagement with consumers.

Within the consumer brand choice context, brand recognition (Keller, 1998; Krishnan *et al*., 2013) and brand loyalty (Aaker, 1997; Chaudhuri and Holbrook, 2001; Day, 1976; Tucker, 1964) are identified as being important and valued for consumers. Additionally, there are positive relationships between attractiveness and self-expressive value of brand personality, and this relationship has a direct effect on CIB – leading to brand commitment (Kim *et al.*, 2001). Therefore, drawing on the previous research while combining the commitment with SIT, consumers should be more likely to engage in co-creation with that brand. Therefore, it is hypothesized:

> **H3:** Brand commitment is positively associated with co-creation

These proposed relationships are presented in Figure 1 (Appendix).

RESEARCH METHODOLOGY

Data Collection Procedure

There were a total of 484 responses, of which 344 were usable. The majority of respondents were female (62.8%) with all respondents being between 18-29 years old. In the United States, 84 percent of consumers in this age group have adopted social media, the highest of any age bracket (Pew Research Center, 2021).

Responses were collected through an online self-administered survey of undergraduate students at a large midwestern university in the United States. Participants were first asked a qualiyfing question to determine if s/he used social media. Next, participants were shown a short paragraph about a fictitous fashion company, LCH Clothing (Appendix A), followed by a ficticous social media post from the brand (Appendix A). Then, participants answered questions about their attitude towards the ad, hedonics, brand commitment, and co-creation. A statement was imbedded in the survey instructing the participant to "please select neither agree nor disagree". Correct responses indicated that the respodednts were paying attention.

Measurements

The scale items used for measuring the focal constructs were adopted from existing literature. While adopting the scales, the authors ensured the scales had gone through a rigorous validation process. The scale items for *attitude towards the ad* were adopted from Baker and Churchill (1977); *brand commitment* adapted from Bansal *et al* (2004); hedonics from Dabholkar (1994) and *co-creation* is adapted from Christodoulides *et al* (2012). The responses to the scale items were measured on a 5-point Likert scale anchored between (1) 'Strongly Disagree' to (5) 'Strongly Agree'.

DATA ANALYSIS AND FINDINGS

To begin the analysis, the factor structure was checked using Structural Equation Modeling (SEM) procedure (Amos 23). To assess reliability, coefficient alphas for all constructs were computed (Nunnally, 1978). Then, reliability of measures was confirmed through composite reliability indices which were higher than 0.6 (Bagozzi and Yi, 1988). The fit indices denote a good fit ($X^2 = 382.945$, df 194, p < .000, GFI = 0.907, CFI = 0.959, RMSEA = 0.053, RMR = 0.038) and all CRs were significant, shown in Table 1 (Appendix).

Discriminant validity was assessed using Fornell and Larcker's (1981) criteria. The square root of average variance extracted (AVE) for each construct was compared to the shared variance between the construct and all other constructs. For each comparison the explained variance exceeded all combinations of shared variance, confirming discriminant validity, shown in Table 2 (Appendix).

Then, the SEM procedure was used to test the hypothesized relationships by estimating the hypothesized structural model with the measurement model being run simultaneously. The results of the structural model indicate acceptable fit of data ($X^2 = 382.945$, df 194, p < .001, GFI = 0.907, CFI = 0.959, RMSEA = 0.053, RMR = 0.038). The GFI and CFI were above the cutoff value of 0.90 and the RMSEA was above the cutoff value of 0.050. The overall fit indices of the model support a satisfactory fit, and thus the model should be adopted.

Using this model shows that the relationships tested were both significant and positive. Specifically, the relationship between AttAd and co-creation was significant and positive (β = 0.236, p < 0.001), thereby supporting H1. The relationship between hedonics and co-creation (β = 0.321, p < 0.001) and commitment and co-creation (β = 0.194, p < 0.001), were both positive and significant, providing support for H2 and H3 respectively. The results are reported in Table 3 (Appendix). Positive outcomes were found for all hypothesized relationships, showing that CBI and the components of attitude towards the add, hedonics, and commitment are antecedents for co-creation in a social media context.

GENERAL DISCUSSION AND IMPLICATIONS

This paper explores the relationship of CBI and the antecedents of co-creation. The results of the study indicate a positive relationship between attitude towards the ad, hedonics, and commitment. These findings seem indicative of what is happening between consumers and their brands. Market research shows 86 percent of consumers say brands who co-create can be trusted more than brands who do not co-create, and 81 percent say the brands who collaborate with consumers are more authentic than brands who do not collaborate (Wylie-Harris, 2018).

The avenues of engagement between consumers and brands have increased the opportunities for consumer brand interaction on many levels. Through social media, brands can immediately reach hundreds of thousands or millions of consumers with a single post. Developing a deeper understanding for the power of these posts and their ability to encourage consumers to co-create can have a lasting impact on the social media environment. Further, the ability for a brand to engage with consumers leads to value creation. This will result in all stakeholders, not just the brand and their consumers, to benefit from this interaction. This manuscript provides this information be evaluating the theoretical underpinnings of what my interest a consumer in co-creation and then tests these underpinnings against the construct. By empirically evaluating the roles of attitudes, hedonics, and commitments, a very clear path to co-creation is discovered.

The current study combines SIT (Tajfel and Turner, 1979), CBI (Lamb *et al.*, 2013), and co-creation (Prahalad and Ramaswamy, 2004; Vargo and Lusch, 2004) to advance the current understanding of the factors that contribute to consumers entering a co-creative relationship with a brand. The results of this study indicate that CBI is applicable as an antecedent to co-creation.

This study finds a direct positive effect of attitude towards the ad on co-creation, adding to the body of knowledge of co-creation. Consumers will respond to their perception of being able to influence the brand and engage in co-creation. This study provides support that consumer's attitudes have on brand strategies (Andreu *et al.*, 2015). The overall tone and perception of influence of the brand's message to consumers can lead to consumers engaging in co-creation. The attitude towards the ad used by a brand can reinforce the notion that the brand can be influenced, signaling to the consumer that their effort will be rewarded.

This study also finds a direct positive effect of hedonics and commitment on co-creation, confirming results found in co-creation research (Kennedy and Guzmán, 2016; Roberts *et al.*, 2014). These positive results provide further clarification on how a brand can engage consumers in co-creation. The results support the link to fun and enjoyable tasks and co-creation. Consumers are more likely to engage with brands when the co-creation task is fun an enjoyable Baldus *et al.* (2015), compared to a brand that is perceived as unable to be influenced. With support in previous research, this study shows that consumers are likely to be committed to the

brand and act with the brand when loyalty is high (Merz *et al*., 2018). Further, the findings from this study also support the bringing together of CIB and co-creation (Kim *et al.*, 2001). Loyal consumers are important to the well-being and livelihood of a brand – and these consumers can be activated to a deeper level of commitment through the brand's use of co-creative strategies.

This paper shows the link for the CBI components of attitude towards the ad, hedonics, and commitment as antecedents of co-creation. The theoretical framework of STI is advanced with this work, as is a deeper understanding of the processes within the co-creation phenomena. Co-creation is a scholarly topic which has generated interest for nearly 20 years and is not slowing down. The concept of interaction between groups is inherently mobile. This mobility leads to continuity of new problems to solve within the literature, and this paper helps to further the growth of the idea of co-creation.

This study has important practical implications by informing brands how to engage in value creation with their consumers. The use of social media by adults over the age of 18 in the United States continues to grow. According to a recent study, over 60 percent of adults use platforms like Facebook, Instagram, and Tik Tok daily (Pew Research Center, 2021). Social media is the correct medium for brands to interact with consumers. Therefore, a constant need to review concepts and strategies on how to best interact and entice consumers to co-create is present. This study does just that – it provides current and relevant information for three distinct strategies a brand can use to motivate co-creation.

Brands seeking to involve consumers in a co-creative process should look to making positive impressions on consumers with their social media posts, making the posts appeal to consumers hedonic associations, or draw on consumers commitment to the brand. The social media posts should give consumers the sense that the input being requested is important to the brand, and thereby worthy of consumers time and attention. By focusing on one of these three factors, a brand will invite a co-creative community which will generate value for the brand and consumers.

LIMITATIONS AND FUTURE RESEARCH

As with other research, this study is not without its limitations which can be used to enhance the stream of literature. First, the sample was drawn from respondents between the age of 18 and 29 within the United States. While this group of consumers is large and represents frequent users of social media, further research into other demographics is justified. The results of this study could be limited to this age demographic, whereas a nationally representative sample would have wider reaching effects.

Although the dominant stream of co-creation research is focused on digital behaviors, co-creation is evident in both on and offline environments. This study focuses on co-creation in the digital world of social media, which is a popular method of interaction between consumers and brands. This trend is likely to continue. However, future research could explore the similarities and differences of co-creation between physical and virtual settings. Future research can incorporate additional brands or industries into co-creation research. While this study focuses on a fashion brand in the United States, the stream of research should be extended into service and retail environments.

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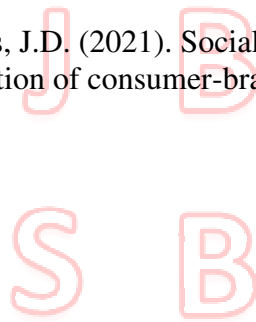
APPENDIX

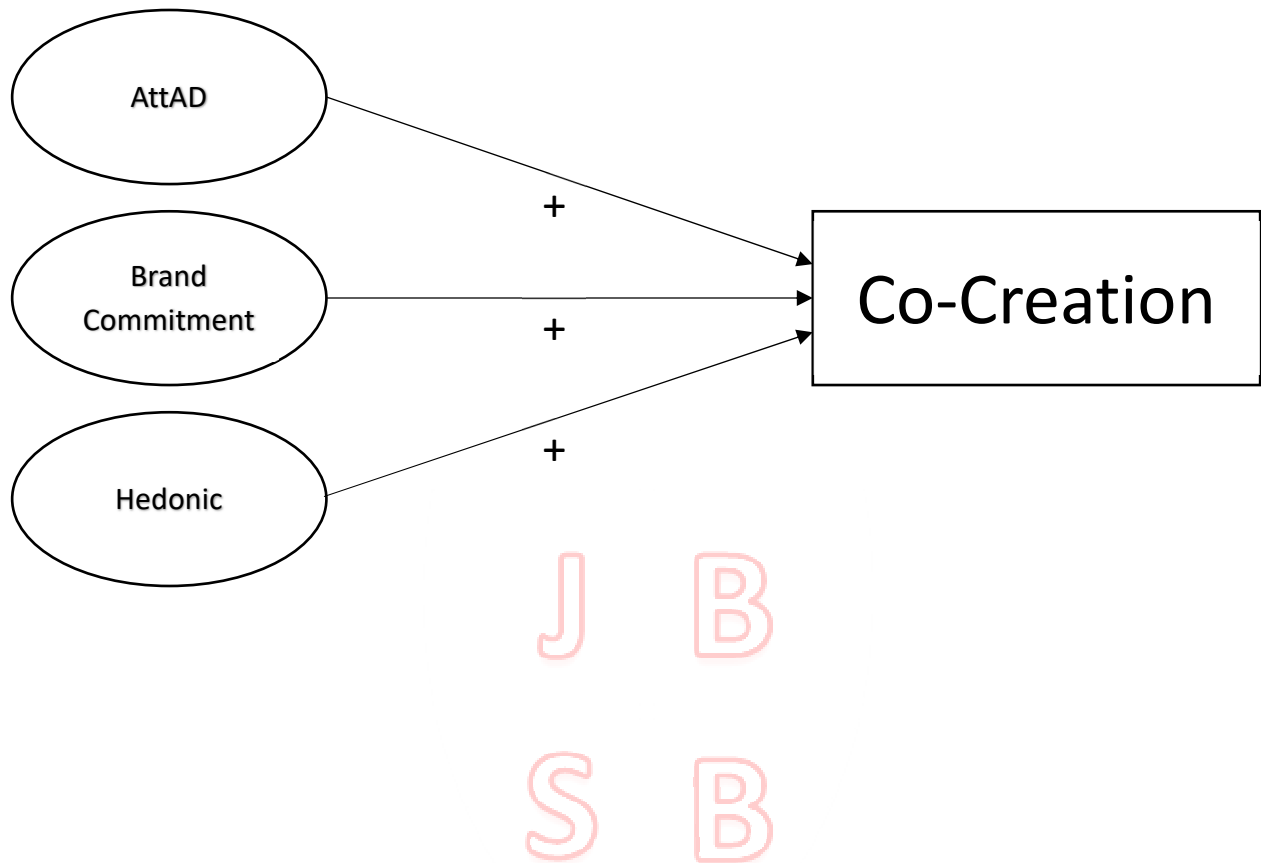Figure 1 Proposed antecedents of co-creation

Table 1 Summary of Cronbach's alphas and CFA results

	Loadings
Attitude Ad (Mean = 2.41, SD = 0.93, α = 0.92)	
1 Post excites me	0.877
2 Post was enjoyable	0.833
3 Post appeals to me	0.886
4 Post was attractive	0.788
5 Post was refreshing	0.792
Co-creation (Mean = 3.83, SD = 0.86, α = 0.91)	
1 Company is easy to understand	0.807
2 Brand is easy to recognize	0.865
3 Company has positive identity	0.814
4 Company is committed to providing quality service	0.797
5 Company responds to customer suggestions	0.780
Hedonics (Mean = 3.80, SD = 0.86, α = 0.93)	
1 Helping shape a brand would be enjoyable	0.868
2 Helping shape a brand will be fun	0.937
3 Helping shape a brand will be entertaining	0.864
4 Helping shape a brand will be interesting	0.849
Brand Commitment (Mean = 3.59, SD = 0.95, α = 0.87)	
1 I feel like part of the Fun Fashion family	0.895
2 I feel a strong sense of belonging to Fun Fashion	0.824
3 I feel emotionally attached to Fun Fashion	0.785

Notes: All factor loadings are standardized and significant at *p* < .01

Table 2 Intercorrelations of the constructs

	BC	AttAd	CC	Hedonics	CR
BC	0.699				0.874
AttAd	-0.224	0.699			0.921
CC	0.228	0.268	0.661		0.907
Hedonics	0.160	0.178	0.423	0.775	0.932

Table 3 Results of hypothesis testing

Hypothesis	Relationship	Standardized Coefficients	p-value	Validation
H1	AttAd on CC	0.236*	< 0.001	Supported
H2	Hedonics on CC	0.321*	< 0.001	Supported
H3	Commitment on CC	0.194*	< 0.001	Supported
* Significant at 95% CI				
Global Fit Indicies: Chi Sq 382.945, df 194, p < .000, GFI 0.907, CFI 0.959, RMSEA 0.053				