The Deeper the Well the Colder the Water: The Role of Brand Coolness and Love in the Formation of Consumer’s Engagement with the Lens of S-O-R Approach

Saman Attiq\textsuperscript{a}, Ansir Ali Rajput\textsuperscript{b}, Muhammad Umer\textsuperscript{c}, Hannan Afzal\textsuperscript{d}, Muhammad Sufyan Ramish\textsuperscript{e}, \textsuperscript{a}Associate Professor, Air University School of Management, Air University, Islamabad, Pakistan, \textsuperscript{b}Associate Professor, Department of Management Sciences, Capital University of Science and Technology, Islamabad, Pakistan, \textsuperscript{c}Lecturer, Department of Management Sciences, COMSATS University, Islamabad, Pakistan, \textsuperscript{d}PhD Scholar, University Institute of Management Sciences, PMAS Arid Agriculture University, Rawalpindi, Pakistan, \textsuperscript{e}Visiting Faculty, IoBM Karachi, Pakistan. Email: \textsuperscript{a}saman.attiq@mail.au.edu.pk, \textsuperscript{b}rajput@cust.edu.pk, \textsuperscript{c}m.umer@comsats.edu.pk, \textsuperscript{d}hannanafzal6@gmail.com, \textsuperscript{e}smsufyan@gmail.com

Marketers always strive to make their brands more sophisticated and differentiated to outperform their competitors. One way to do that is to increase brand coolness, a recently conceived construct in marketing literature. This study while integrating stimulus organism response (SOR) model with brand attribution theory has conducted quantitative study to test the outcomes of brand coolness in young users of smart gadgets in Pakistan. A total of 578 respondents participated in this survey study. Data collected through purposive sampling technique was analyzed through structural equation modelling. Results of the study found that brand coolness (stimulus) has a positive impact on brand love (organism). Brand love also mediate the relationship between brand coolness and brand engagement (response). Conclusion of the current study offers very unique theoretical and practical implications by assessing untapped links of brand coolness and its likely outcomes. This study also contributes to consumer wellbeing literature supporting the recent stream of research that is interested in knowing the impact of marketing strategies on consumer’s engagement. Moreover, integration of SOR model with brand attribution theory is another theoretical contribution of this study. Main limitation of the study is its cross-sectional research design and non-random sampling technique. Future research must explore these links in a longitudinal study. This study has also offered some practical implication for marketers and practitioners such that increasing brand coolness not only stimulates positive
emotion (love with brand) among consumers, but it also fosters consumer responses in terms of brand engagement.

**Keywords:** Brand coolness, Brand love, Brand engagement, Smart Gadgets

**Introduction**

In the recent decade, the velocity, variety, and volume of technology products have expanded and products are becoming similar to each other (Tiwari et al., 2021; Ebrahim et al., 2016). The convergence of product characteristics presents challenges both for business and consumers, and while companies find it hard to overcome the confusion. Consumers are bombarded with endless technological products that make it difficult for consumers to choose the technical and functional features of the rival products. For example, standardized technology brand products with small functional and technical variances produce differentiation and selection challenges (Melewar, Lim & Petruzzellis, 2010). Marketers have been in search for certain factor that works as basis for differentiation in technology products.

Recently coined term brand coolness has evolved as attractive discriminator for technological products (Kerner & Pressman, 2007), since it aids customers in product appraisal (Sundar et al., 2014). As a result, in the case of technological products, coolness has become a critical component in achieving companies' product differentiation objectives. Brands that are seen as cool, including as the iMac, iPhone, iPad and iPod (Im et al., 2015), have transformed the parent company’s fortunes. Consumers value the feature of coolness in technology products, as evidenced by such success stories. However, the definition of perceived coolness in technology products’ context is hazy in the literature, and research into the concept has not yet progressed very far.

Marketers and researchers have showed curiosity in studying brand love, which is described as intense feelings toward certain brands, in order to gain a better knowledge of the consumer–brand relationship (Carroll & Ahuvia, 2006). Because of its clear positive results, the value of brand love for service and product brands is well acknowledged in marketing literature. For example, it affects customer loyalty (Bairrada et al., 2018; Coelho et al., 2019), positive WOM (Karjaluoto et al., 2016; Bairrada et al., 2018), willingness to pay (Junaid et al., 2020), active engagement (Bairrada et al., 2019), and commitment (Albert & Merunka, 2013).

Managers and academicians have discovered over time that customer contentment is no longer sufficient to retain loyal and profitable consumers (Pansari & Kumar, 2017). As a result, organizations' goals expanded from relationship marketing to engaging clients in every way possible” (Rosado-Pinto & Loureiro, 2020; Pansari & Kumar, 2017). Marketing has changed its approach to customer management in a similar way, evolving from transactional to relational period, and now to current period of engagement (Pansari & Kumar, 2017). This customer engagement perspective is now reflected in marketing practice and research, as it has
been critical in achieving competitive advantage (Kumar & Pansari, 2016; Alvarez-Milán et al., 2018) by positively affecting significant attitudinal and behavioral consequences such as loyalty, satisfaction (Brodie, Ilic, Juric, & Hollebeek, 2013), and brand usage (Harrigan et al., 2018; Hollebeek et al., 2014).

We have adjusted the stimulus-organism-response framework (S-O-R) to address the research gaps above (Mehrabian & Russell, 1974). The S-O-R framework was used to investigate how brand personality or brand characteristics as stimuli eventually led to positive behaviours. The S-O-R framework is a successful and robust framework for considering the consumer side (Sherman et al., 1997). Based on the theories of S-O-R, and other concepts commonly applied to study brand-related consumer behaviour, we believe that linking the perspectives of S-O-R with other theoretical lenses such as brand personality (Mostafa & Kasamani, 2020), brand coolness theory (Anik et al., 2017), attachment theory (Mostafa & Kasamani, 2020; koo & kim, 2013), triangulation theory of love (kumar et al 2021a; b), brand relationship theory (Laato et al., 2020; Kostritsa et al., 2020; Junaid et al., 2020), could be very useful for giving insight into how brand characteristics affect emotion and engagement behaviour.

We used S-O-R framework developed by Mehrabian and Russell (1974), because of its predictive power regarding role of brand characteristics (Kumar et al 2021a; b; Laato et al., 2020). Furthermore, we used theoretical reasoning from theory of coolness (Anik et al., 2017) and consumer brand relationship theory (Nikhashemi et al., 2019) to establish causality between relevant constructs. Individual characteristics such as health and environmental consciousness have been studied using the S-O-R framework by marketing researchers (Xu et al., 2014; Kumar et al., 2021a; b). In the context of technology, the current framework conceptualized brand coolness as stimuli. In particular, the stimuli affect the organism's affective process of the consumer, which creates certain behavioral response. Using the S-O-R framework, we assigned coolness as stimuli, brand love as the organism, and brand engagement as the final response.

The examination of the previous literature on brand characteristic has uncovered many research gaps (theoretical, methodological and contextual perspective). First, little research is currently available on the effects of perceived coolness related to branding. This study, which builds on the following gaps, has two main aims: to improve the theoretical grounding of brand coolness from a technological perspective by classifying important dimensions of the construct that can be perceived; and inspecting the formation of brand coolness with reference of certain outcome related to brand, precisely, brand love and brand engagement. Subsequently, researchers have emphasized the need to analyze diverse ways of consumers’ engagement process based on brand characteristics i.e. brand coolness, love, loyalty etc.

Second, prior related literature of brand coolness has focused on cognitive variables e.g. purchase intention (Liu, Li, Wu, & Zhu, (2021), satisfaction (Liu & Mattila, 2019). On the other hand, emotions are dominant construct in developing engagement behaviour (Tiwari et al., 2021) and
Studies on consumer’s emotions related variables (i.e. non-cognitive variables) are less in numbers such as brand love (Tiwari, 2021), passionate desire (Loureiro, Jiménez-Barreto, & Romero, 2020), emotional arousal (Apaolaza, Paredes, Hartmann, & D’Souza, 2021).

Third, furthermore, prior literature investigated the relation among brand love and brand engagement and has acknowledged inconsistent results. Therefore, it requires further exploration to validate their nature of relationship such as love creates brand engagement or vice versa (Lima, 2020; Tran, Muldrow, & Ho, 2020; Machado, Vacas-de-Carvalho, Azar, André, & dos Santos, 2019; Obilo, Chefor, & Saleh, 2021; Kaur, Paruthi, Islam, & Hollebeek, 2020). Mostly literature considered the concept of brand love as response variable. It is highly required to examine extreme positive emotional factors to investigate their processes. Thus, current study examines love as organism between brand coolness and engagement.

Fourth, consumer behavior is multifaceted and challenging. Researchers have recommended that several unidentified causes can originate relationship among brand coolness and outcomes based on strong theoretical support. For example, brand coolness has analyzed with the lens of consumer’s theory of planned behaviour (TPB) (Cha, 2020). As a result, scholars have emphasised the importance of investigating other theoretical approaches, such as the S-O-R theory. This means that scholars have often used brand coolness as brand personality aspects to understand its role from different theoretical perspectives such as in TPB context (Cha, 2020). Similarly, brand characteristics effect multiple constructs such as purchase intention (Liu et al., 2021), brand love (Tiwari et al., 2021), passionate desire (Loureiro et al., 2020), emotional arousal (Apaolaza et al., 2021) and attachment and loyalty (Chen & Chou, 2019). On the same way, brand love as organism open new ways to explore causes and behavioral responses. Previous studies have analyzed brand love as response or outcome (Ali, Dogan, Amin, Hussain, & Ryu, 2021). Many current studies also found strong relationship between love, trust and satisfaction (Amegbe, Dzandu, & Hanu, 2021), symbolic personality, image and brand hate (Kashif et al., 2021; Rodrigues, & Borges, 2021). Finally, several latest studies found social media involvement and communication (Gómez, Lopez, & Molina, 2019), gamification (Xi, & Hamari, 2020) as antecedents of brand engagement. Therefore it is also required the role of other emotions and its process from brand related antecedents of brand engagement.

The existing research on brand coolness has been dominated by qualitative examination for its conceptualization and brand coolness related outcomes. Present literature identified different studies using different dimensions of perceived coolness from one single construct (Dar-Nimrod, et al., 2012), which give an inadequate understanding (Warren et al, 2014; Raptis et al. 2017; Bruun et al., 2016; Sundar et al., 2014). Although some marketing studies also address the theoretical explanation of perceived coolness (Rahman, 2013). Therefore, based on brand coolness construct, less empirical studies are available (Cha, 2020; Liu et al., 2021; Tiwari et al., 2021; Loureiro et al., 2020; Apaolaza et al., 2021; Chen & Chou, 2019).
There are very few studies about coolness that are not done from the point of view of Western developed countries' consumers. In addition, coolness is more subject to cultural differences than previously assumed (Gerber & Geiman, 2012), and as a result, less researches have examined the construct in developing countries. In the context of technology related smart devices, this study proposed that the stimuli should be the brand coolness from which consumers develop strong positive emotion of love. To relate the organism aspect of S-O-R to the chosen stimuli, we focused on brand personality/coolness as stimulus, which we propose cause affective aspect of psychological factor (brand love) as organism and brand engagement as behavioral response. Therefore, this research’s purposes to utilize the concept of brand personality to better understand the consumers’ emotions, attitudes and behaviors. In this context, the impact of brand coolness on brand love and brand engagement are tested. The results of the current study are expected to carry the importance of brand coolness for technology products and reflect the process through which it leads towards achieving brand love and brand engagement. The relevant literature will be presented in the next section. After that, hypotheses will be raised, followed by the portrayal of methods. Thereafter, the outcomes will be analyzed and discussed. Eventually, both theoretical and applied ramifications will be presented.

**Literature Review**

**Brand Coolness**

Coolness has been studied in various fields such as anthropology (Dar-Nimrod et al., 2012), sociology, psychology (Frank, 1997), and marketing (Loureiro, Barreto, & Romero, 2020, Warren et al., 2019). Coolness has mostly been researched as a trait of people and object (Dar-Nimrod, Ganesan, & MacCann, 2018; Warren et al., 2019). Coolness has been studied in terms of its roots (Nancarrow et al., 2002), cultural factors (Frank, 1997), attributes (Rahman, 2013), personality traits (Kim & Park, 2019), and product aspects (Bruun et al., 2016; Sundar et al., 2014). Over the last three decades, the word ‘cool' has evolved into describing the sub-cultural capital of youth culture, originating in American black counter-culture in the 1960s (Pappalepore, Maitland, & Smith, 2014).

Concept of “Cool” is an emotion or feeling regarding a product that is either utilitarian or hedonic (Runyan et al., 2013). Warren and Campbell (2014, p. 544) defined coolness as a dynamic and subjective, socially established positive feature ascribed to cultural objects inferred to be appropriately autonomous. Runyan et al. (2013) investigated how people perceived coolness in technology items and developed a six-factor coolness structure that included functional cool, aesthetic cool, quality cool, personal cool, singular cool, and reference cool. Kim and Part (2019) inspected the perception of coolness for interactive wear devices and proposed a five-factor structure of coolness including perceived usability, attractiveness, originality, utility, and subcultural appeal. Sundar et al. (2014) found that perceived coolness has three facets: subcultural appeal, attractiveness, and originality in their
study on digital gadgets and interfaces. In the real world, a great product or service will always be viewed as original, aesthetically pleasing, and able to become embedded in a subculture. Tiwari et al. (2021) investigated how people perceive coolness in technology products and developed a six-factor coolness structure that included usability, reliability, desirability, attractiveness, rebelliousness, and technological innovation. Considering the features of smart gadgets, this study took five dimensions i.e. reliability, usability, desirability, innovativeness of technology, and attractiveness (Tiwari et al., 2021) to study the brand coolness variable.

Reliability is defined as the capability to keep a commitment and do right thing (Izogo, 2015). The dominating dimension of quality is reliability (Parasuraman et al., 1988). In the literature of coolness, product's perceived coolness has positive relation with quality cool (Runyan et al., 2013). Unreliable-quality brands lose their cool with time. For example, Samsung's image was harmed by reliability concerns with Galaxy S7 model; the brand's standing fell from seventh place in 2015 to 49th place in 2016 (Ismail, 2017). The degree to which users believe that using a specific technological product aids them complete activities more quickly and improves their job performance is referred to as usability (Kim et al., 2014). According to Levy (2006), the fundamental source of a product's coolness is its utility. Sundar et al. (2014) first identified utility as a necessary component of coolness. The usability of technology items determines whether or not they will be used again (Nascimento et al., 2018; Tiwari et al., 2021).

Desirability is defined as a part of person’s own definition that is decided by evaluating how others evaluate themselves (Soloman, 1983). Customers buy goods to influence the way they see themselves by choosing how they want to be seen (Heath & Scott, 1998). According to symbolic interaction theory (Mead, 1934), products are social stimuli. On the other hand, coolness is currently viewed as a status enhancer (Dar-Nimrod et al., 2018) that imparts desirable characteristics to objects to their users (Warren & Campbell, 2014). As a result, stylish products assist customers in establishing a desirable social identity.

According to Loiacono et al. (2002) “Innovativeness of technology is defined as the technical, creative, original, functional aspect of technology products that distinguishes it from its rivals. As individual behavior is guided by the demand for assimilation and the desire for differentiation based on optimal distinctiveness theory (Brewer et al., 2003). People buy an innovative, contemporary product to satisfy their desire to assimilate, or to fit in. Innovative items assist consumers in separating themselves from others who are dissimilar, disliked, and unappealing (Berger & Heath, 2007). As a result, desire for differentiation and usage of innovative products are compatible. Consumers think creative, cutting-edge technology products are cool (Read et al., 2012), and they think innovative brands (Barone & Jewell, 2014). As a result, innovativeness of technology is a major element of brand coolness.

Attractiveness is a publicly desired attribute that helps people achieve coolness (Li et al., 2019). To achieve coolness, an extremely handsome person need less other aspects of coolness (Dar-Nimrod et al., 2018). They use electronics with a higher level of aesthetic appeal to entice users
because of their obvious visual presences (Kim & Park, 2019; Goodman et al., 2013). Socially acceptable style and visual aesthetics make up attractiveness (Sundar et al., 2014). The first of the two parts, aesthetics has a strong relation to coolness (Bruun et al., 2016). Consumers are drawn to things that are visually appealing (Warren et al., 2019).

**Brand Love**

Shimp and Madden's (1988) pioneering work establishes the idea of brand love in marketing literature. The two scholars heavily rely on psychological theories in their work. They extend Sternberg's (1986) interpersonal theory of love to branding and marketing context, proposing that brand love has three facets: commitment, intimacy, and passion (Shimp & Madden, 1988).

Following contributions expand on the concept of brand love, focusing more on the marketing and branding environment. Love is a positive emotion that expresses an emotional bond that extends beyond brand preference (Carroll & Ahuvia, 2006; Rossiter, 2012). Ahuvia (2005) is the first to conduct empirical study on the topic, demonstrating that consumers can form significant emotional bonds with a range of consuming objects, including brands. Love is a positive emotion that expresses an emotional bond that extends beyond brand preference (Rossiter, 2012). Following that, Carroll and Ahuvia (2006) propose that brand love is a unidimensional construct that can be quantified using a ten-item scale. Batra et al. (2012), who employed the concept of "prototype" to explain brand love, offer a multi-dimensional interpretation on the term. For them, the term "prototype" best represents complicated phenomena like love, which are difficult to grasp with precise descriptions. In order to validate a multidimensional but broad measure of brand love, Zarantonello et al. (20016) undertook an empirical research in United States, Russia, and Indonesia. They explored five dimensions of brand love in their study i.e. fantasizing and thoughts, pleasure, attachment, self-expression, and idealization.

Insofar as brand love is a pleasant emotion arising from an emotional attachment to a love object, research has sought to determine what elements contribute to the development of this emotion. Brand love was discovered to be influenced by a few brand-related notions. For example, Joshi and Garg (2021) found that image of brand, trust on brand, and brand satisfaction have positive influence on brand love. Other researchers have examined that consumer brand engagement (Rodrigues & Borges, 2021; Tran et al., 2020) consumer brand connection (Tran et al., 2020), and perceived coolness (Tiwari et al., 2021) have positive relation with brand love.

**Brand Engagement**

Customer brand engagement is a brand-related, context-dependent state of mind and motivational, aspect considered by certain levels of behavioral, emotional and cognitive activity regarding brand interactions directly (Hollebeek, 2011). Different academic
disciplines, such as psychology, sociology, political science, and organizational behavior have used the term "engagement" in the past (Brodie et al., 2011). The terms "customer engagement," "consumer engagement," and "brand engagement" first appeared in marketing literature after 2005 (Brodie et al., 2011).

Hollebeek et al. (2014) offered three dimensions of brand engagement that relate to the cognitive, emotional, and behavioral characteristics of engagement in general. First, "cognitive processing" refers as a buyer's level of brand-related thinking processing and elaboration in a specific consumer/brand encounter" (i.e. cognitive brand engagement dimension). Second, "affection" refers to "a consumer's level of positive brand-related affect in a specific consumer/brand contact" (i.e. emotional brand engagement dimension). Third, A third characteristic of activation is "the amount of time, effort, and energy a consumer devotes to a brand during a given consumer/brand encounter" (i.e. behavioral brand engagement dimension).

The intense competition, the enormous amount of product/brand choices and the development of digital technologies have led marketers to realize that customers may contribute to brands/firms in a more frequent and intense way than just purchase (Brodie et al., 2011; Gupta et al., 2018; Kumar & Pansari, 2016). In today's market scenario, characterized by technological developments and social media (Kumar & Pansari, 2016), firms have the opportunity to connect with their customers outside the purchasing context in offline stores (e.g. through blogging or online communities) and customers can easily interact with other customers outside the service consumption (So et al., 2016). In this scenario, customers can contribute to brands/ firms, not only in the form of purchases, but also by referring the brand to other customers, or talking about the brand/ firm on social media, or even giving suggestions and feedback about the company’s goods/services (Gupta et al., 2018). This new marketing era has, indeed, emphasized the need for firms to keep their customers engaged (Kumar & Pansari, 2016).

**Hypotheses Development**

**Brand Coolness with Brand Love and Brand Engagement**

This section looks the numerous coolness results that have been reported in the literature. As per literature, perceived coolness affects many constructs such as attitude (Warren et al., 2019), perceived value (Im et al., 2015), quality (Shin, 2017), satisfaction (Liu & Mattila, 2019), loyalty and attachment (Chen & Chou, 2019). However, there is very few studies are available on brand-related outcomes of coolness. Brand love and brand engagement have developed as prominent notions in (Nikhashemi et al., 2019). Based on consumer-brand relationships literature, researchers found various outcomes of the brand coolness. Tiwari et al. (2021) found that perceived coolness is the strong predictors of brand love in the context of technology products. Lima (2020) found that brand love and coolness are important predictors of brand
engagement. Therefore, few research studies have test the relationship of brand coolness with brand related variables (i.e. brand love and brand engagement). Hence, the current study examines the influence of brand coolness on both constructs (i.e. brand love and brand engagement).

H1: Brand coolness influences the brand Love.
H2: Brand coolness influences the brand engagement.

**Brand Love with Brand Engagement**

For technology products like mobile phones, customers explore the new features and when it is positive; their love for the brand enhances (Palusuk et al., 2019). Brand love has significant impact on multiple constructs such as re-patron aging intention (Vlachos & Vrechopoulos, 2012), purchase behavior (Sarkar & Sreejesh, 2014), repurchase intention (Garg et al., 2015) and brand engagement (Kang, 2015; Bergkvist & Bech-Larsen, 2010).

Engagement is viewed as a tactical need in today's corporate environment for boosting competitive advantage, profitability, and brand performance (Sarkar, 2014). It has become a significant marketing trend (Brodie et al., 2013), although its origins have not investigated well (Hapsari et al., 2017). Consumer engagement is based on customer's emotional and cognitive perceptions (Bowden, 2009). According to Batra et al. (2012), they stated that consumers’ affection for their brands has been connected to frequent interactions, whereas Sarkar and Sreejesh (2014) considered it as a result of positive emotion (brand love). Introducing consumer’s emotional relationship is also suggested as a method for engaging clients (Harmeling et al., 2018). On the basis of literature, we propose the following hypothesis:

H3: Brand love influences brand engagement.

**Brand Love as Mediator**

Extensive researches have assessed mediating role of brand love on positive responses of consumers, including forgiveness (Hegner et al., 2017), satisfaction (Santini et al., 2018), identity and commitment (Maxian et al., 2013), and loyalty (Huang, 2017). Khan et al. (2020) also found that brand love is a strong mediator between perceived benefits and brand loyalty and word of mouth in smartphone industry. Junaid et al. (2019) conducted a study on customer engagement of smartphone users. They found that brand love mediate the relationship between engagement and consumption experience of smartphone users. In another study, Tiwari et al. (2021) found that perceived coolness is strong predictor of brand love which sequentially has strong relation with consumer engagement (Juanid et al., 2019). Based on given literature, following hypothesis is proposed:

H4: Brand love mediates the relation among coolness and brand engagement.
On the basis of brand attribution theory and stimulus-organism-response (SOR) model, following research framework is proposed in this study.

![Theoretical Framework](image)

**Figure 1: Theoretical Framework**

**Methodology**

**Sample and Procedure**

The primary data from the respondents was obtained through a survey using a quantitative method. Since survey is used to measure behaviors and evaluate relationships between variables and constructs (Newsted et al., 1998). Furthermore, in social science for measuring behaviors the survey design has been extensively applied (Nielsen et al., 2011). The data was collected from young smart gadgets users through a paper-and-pencil survey at shopping centers, malls, universities and bus stops in Pakistan's major cities (i.e. Islamabad, Rawalpindi, Karachi, Multan, Lahore), where individuals from all over the country reside to seek jobs and education. A focus group was formed with three smartphone and three research scholars (with specialization in marketing) to establish content validity and improve the instrument. Before it was finalized, the questionnaire was pilot tested to confirm its validity and reliability. 70 smart gadget users were included in the pilot study, but they were later omitted from final data inquiry and pilot study’s results exhibited that almost all scales were reliable. The undesirable scales have been altered. Purposive sampling was used to target individuals with specific characteristics that were relevant to the study’s objectives. The respondents’ privacy was protected by the researchers. To further reduce social desirability bias, we emphasized that there are no correct or incorrect responses in order to maintain confidentiality and anonymity (Randall & Gibson, 1990). The survey was conducted in English for a variety of reasons. According to the researchers' previous experience, the smart-gadget user target audience in
Pakistan is largely made up of city-dwelling urban residents who are well-educated and employed in international corporations that demand proficiency in English. These users don't worry about communicating in English, so English communication is not a major issue for them. Second, previous findings have established the fact that English is widely understood in Pakistan (Kashif & Khattak, 2017; Islam et al., 2018). We sent out 800 surveys, and 613 people responded. After eliminating incomplete responses, the final data set contained 578 responses, resulting in a 72% response rate. Table I shows the demographic details of the participants.

### Table I
Sample Characteristics

<table>
<thead>
<tr>
<th>Demographic Category</th>
<th>Percentage (Frequency)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Gender</strong></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>45.3 (262)</td>
</tr>
<tr>
<td>Female</td>
<td>54.7 (316)</td>
</tr>
<tr>
<td>Less than 18 years</td>
<td>5.0 (29)</td>
</tr>
<tr>
<td>Age (In years)</td>
<td></td>
</tr>
<tr>
<td>18-22 years</td>
<td>48.3 (279)</td>
</tr>
<tr>
<td>23-27 years</td>
<td>31.3 (181)</td>
</tr>
<tr>
<td>28-32 years</td>
<td>15.4 (89)</td>
</tr>
<tr>
<td>High School</td>
<td>21.8 (126)</td>
</tr>
<tr>
<td>Professional degree/vocational school</td>
<td>11.6 (67)</td>
</tr>
<tr>
<td><strong>Education</strong></td>
<td></td>
</tr>
<tr>
<td>Bachelors</td>
<td>41.0 (237)</td>
</tr>
<tr>
<td>Masters</td>
<td>20.9 (121)</td>
</tr>
<tr>
<td>Doctorate</td>
<td>4.7 (27)</td>
</tr>
</tbody>
</table>

The characteristics of the sample are presented in this part of research. Thus, gender, age, and education of the 492 persons are considered. The male were 262 and the female were 270. 279 people are between 18 and 22 years of age. 181 are between 23 and 27 years of age, 89 are between 28 and 32 years of age. Most of the people have bachelor level education i.e. 237.

### Measures

All of the constructs have been tailored and conceptualized using established scales. Each of the constructed items was based on various measurement scales, and respondents were asked to rate their agreement on a five-point Likert scale (5 = strongly agree & 1 = strongly agree). Brand coolness is a multi-dimensional variable and was measured through five dimensions i.e. usability, reliability, desirability, innovativeness of technology, and attractiveness. Brand coolness scale is adapted from (Tiwari et al., 2021). Brand love in measured through five dimensions i.e. fantasize and thoughts, attachment, self-expression, pleasure, and idealization. Zarantonello et al. (2016) scale is adapted to measure brand love. Brand engagement is measured through three dimensions i.e. cognitive process, affection, and activation. Hollebeck et al. (2014) scale is adapted for brand engagement.
Data Analysis

We employed structural regression modelling with partial least square (PLS) estimation to examine the structural model. PLS, according to Hair et al. (2017), is an effective technique for performing confirmatory factor analysis (CFA) and regression when checking the measurement and structural model at the same time. Smart-PLS (González et al., 2008) is a modern software, which has been employed to evaluate the measurement and structural model. To conduct the PLS analyses in this study, Smart-PLS 3.3 was used.

Findings

Common Method Bias

In this study, common method variance (CMV) may be a source of concern. As a result, we took some steps to reduce and manage its impact on results. To reduce CMV, we used procedures suggested by Podsakoff et al. (2003). First and foremost, the respondents’ anonymity is safeguarded. Second, to eliminate item uncertainty, we included items from existing literature. Third, the order of the items in the survey was randomized. As a result, we employed Harman’s single factor test and findings demonstrated that a single factor could just explain 37.66 percent of the variance, and that was much less than the 50% cut-off point (Podsakoff et al., 2012). This meant that the data was free of CMB and could be used for statistical analysis.

Measurement Model

In the measurement model, the outer loads are first evaluated. The measurement model's significance is enhanced by checking the observed constructs and their associated items. The outer loading of each item is examined for this reason. Based on the criteria, any item with an outer loading of less than 0.50 is removed (Hair et al., 2019).
<table>
<thead>
<tr>
<th>Constructs</th>
<th>Indicators</th>
<th>Outer Loadings</th>
<th>Mean</th>
<th>S.D.</th>
<th>Kurtosis</th>
<th>Skewness</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Brand Coolness</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reliability</td>
<td>rel1</td>
<td>0.84</td>
<td>3.44</td>
<td>1.21</td>
<td>-0.73</td>
<td>-0.54</td>
</tr>
<tr>
<td></td>
<td>rel2</td>
<td>0.89</td>
<td>3.59</td>
<td>1.17</td>
<td>-0.32</td>
<td>-0.75</td>
</tr>
<tr>
<td></td>
<td>rel3</td>
<td>0.89</td>
<td>3.56</td>
<td>1.08</td>
<td>0.09</td>
<td>0.83</td>
</tr>
<tr>
<td></td>
<td>rel4</td>
<td>0.86</td>
<td>3.54</td>
<td>1.14</td>
<td>-0.19</td>
<td>-0.72</td>
</tr>
<tr>
<td>Desirability</td>
<td>dsr1</td>
<td>0.81</td>
<td>3.34</td>
<td>1.14</td>
<td>-0.57</td>
<td>-0.51</td>
</tr>
<tr>
<td></td>
<td>dsr2</td>
<td>0.87</td>
<td>3.25</td>
<td>1.06</td>
<td>-0.48</td>
<td>-0.42</td>
</tr>
<tr>
<td></td>
<td>dsr3</td>
<td>0.74</td>
<td>2.64</td>
<td>1.29</td>
<td>-1.07</td>
<td>0.30</td>
</tr>
<tr>
<td></td>
<td>dsr4</td>
<td>0.76</td>
<td>2.70</td>
<td>1.26</td>
<td>-1.10</td>
<td>0.23</td>
</tr>
<tr>
<td>Usability</td>
<td>usb1</td>
<td>0.80</td>
<td>3.30</td>
<td>1.11</td>
<td>-0.49</td>
<td>-0.54</td>
</tr>
<tr>
<td></td>
<td>usb2</td>
<td>0.79</td>
<td>3.26</td>
<td>1.14</td>
<td>-0.57</td>
<td>-0.46</td>
</tr>
<tr>
<td></td>
<td>usb3</td>
<td>0.81</td>
<td>3.52</td>
<td>1.07</td>
<td>0.00</td>
<td>-0.75</td>
</tr>
<tr>
<td></td>
<td>usb4</td>
<td>0.82</td>
<td>3.50</td>
<td>1.09</td>
<td>-0.10</td>
<td>-0.71</td>
</tr>
<tr>
<td>Innovativeness of Technology</td>
<td>iot1</td>
<td>0.88</td>
<td>3.28</td>
<td>1.10</td>
<td>-0.55</td>
<td>-0.51</td>
</tr>
<tr>
<td></td>
<td>iot2</td>
<td>0.90</td>
<td>3.25</td>
<td>1.05</td>
<td>-0.37</td>
<td>-0.41</td>
</tr>
<tr>
<td></td>
<td>iot3</td>
<td>0.91</td>
<td>3.27</td>
<td>1.06</td>
<td>-0.51</td>
<td>-0.39</td>
</tr>
<tr>
<td>Attractiveness</td>
<td>atc1</td>
<td>0.85</td>
<td>3.78</td>
<td>1.17</td>
<td>0.63</td>
<td>-1.19</td>
</tr>
<tr>
<td></td>
<td>atc2</td>
<td>0.84</td>
<td>3.60</td>
<td>1.10</td>
<td>0.04</td>
<td>-0.80</td>
</tr>
<tr>
<td></td>
<td>atc3</td>
<td>0.85</td>
<td>3.73</td>
<td>1.08</td>
<td>0.68</td>
<td>-1.09</td>
</tr>
<tr>
<td><strong>Brand Love</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fantasizing and Thoughts</td>
<td>fat1</td>
<td>0.84</td>
<td>3.21</td>
<td>1.11</td>
<td>-0.78</td>
<td>-0.28</td>
</tr>
<tr>
<td></td>
<td>fat2</td>
<td>0.89</td>
<td>3.42</td>
<td>1.08</td>
<td>-0.34</td>
<td>-0.59</td>
</tr>
<tr>
<td></td>
<td>fat3</td>
<td>0.88</td>
<td>3.53</td>
<td>1.07</td>
<td>-0.12</td>
<td>-0.72</td>
</tr>
<tr>
<td>Self-expression</td>
<td>slp1</td>
<td>0.91</td>
<td>3.35</td>
<td>1.12</td>
<td>-0.47</td>
<td>-0.61</td>
</tr>
<tr>
<td></td>
<td>slp2</td>
<td>0.90</td>
<td>3.46</td>
<td>1.05</td>
<td>-0.03</td>
<td>-0.73</td>
</tr>
<tr>
<td></td>
<td>slp3</td>
<td>0.89</td>
<td>3.52</td>
<td>1.06</td>
<td>-0.09</td>
<td>-0.70</td>
</tr>
<tr>
<td>Attachment</td>
<td>att1</td>
<td>0.84</td>
<td>3.21</td>
<td>1.19</td>
<td>-0.89</td>
<td>-0.34</td>
</tr>
<tr>
<td></td>
<td>att2</td>
<td>0.88</td>
<td>3.37</td>
<td>1.10</td>
<td>-0.44</td>
<td>-0.45</td>
</tr>
<tr>
<td></td>
<td>att3</td>
<td>0.89</td>
<td>3.30</td>
<td>1.05</td>
<td>-0.39</td>
<td>-0.42</td>
</tr>
<tr>
<td>Pleasure</td>
<td>ple1</td>
<td>0.91</td>
<td>3.50</td>
<td>1.07</td>
<td>0.01</td>
<td>-0.77</td>
</tr>
<tr>
<td></td>
<td>ple2</td>
<td>0.91</td>
<td>3.49</td>
<td>1.05</td>
<td>-0.13</td>
<td>-0.67</td>
</tr>
<tr>
<td>Idealization</td>
<td>idl1</td>
<td>0.92</td>
<td>3.22</td>
<td>1.22</td>
<td>-0.81</td>
<td>-0.44</td>
</tr>
<tr>
<td></td>
<td>idl2</td>
<td>0.92</td>
<td>3.51</td>
<td>1.15</td>
<td>-0.23</td>
<td>-0.77</td>
</tr>
<tr>
<td><strong>Brand Engagement</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Affection</td>
<td>aff1</td>
<td>0.77</td>
<td>3.29</td>
<td>1.11</td>
<td>-0.53</td>
<td>-0.55</td>
</tr>
<tr>
<td></td>
<td>aff2</td>
<td>0.86</td>
<td>3.40</td>
<td>1.16</td>
<td>-0.60</td>
<td>-0.63</td>
</tr>
<tr>
<td></td>
<td>aff3</td>
<td>0.86</td>
<td>3.49</td>
<td>1.11</td>
<td>-0.23</td>
<td>-0.68</td>
</tr>
<tr>
<td></td>
<td>aff4</td>
<td>0.86</td>
<td>3.36</td>
<td>1.13</td>
<td>-0.48</td>
<td>-0.57</td>
</tr>
<tr>
<td>Cognitive Process</td>
<td>cpr1</td>
<td>0.78</td>
<td>3.51</td>
<td>1.15</td>
<td>-0.27</td>
<td>-0.75</td>
</tr>
<tr>
<td></td>
<td>cpr2</td>
<td>0.75</td>
<td>3.54</td>
<td>1.05</td>
<td>0.07</td>
<td>-0.77</td>
</tr>
<tr>
<td></td>
<td>cpr3</td>
<td>0.78</td>
<td>3.53</td>
<td>1.11</td>
<td>-0.09</td>
<td>-0.77</td>
</tr>
<tr>
<td>Activation</td>
<td>act1</td>
<td>0.90</td>
<td>3.37</td>
<td>1.16</td>
<td>-0.59</td>
<td>-0.53</td>
</tr>
<tr>
<td></td>
<td>act2</td>
<td>0.91</td>
<td>3.42</td>
<td>1.16</td>
<td>-0.66</td>
<td>-0.48</td>
</tr>
<tr>
<td></td>
<td>act3</td>
<td>0.92</td>
<td>3.48</td>
<td>1.14</td>
<td>-0.52</td>
<td>-0.55</td>
</tr>
</tbody>
</table>
After a thorough examination of loadings, the next step is to assess the reliability and validity of all constructs. Two key parameters for evaluating reliability are composite reliability and Cronbach alpha (internal consistency). Cronbach alpha was the first metric used. Cronbach alpha values ranged from 0.91-0.93, indicating a high degree of reliability, i.e. > 0.70 (Hair et al., 2019). The second indicator of internal consistency is composite reliability. All variables' outer loadings were used to measure the composite reliability. The final composite reliability values ranged from 0.93 to 0.94, indicating high reliability i.e. > 0.70 (Hair et al., 2019). Convergent validity may be used to examine the correlation among all items in a construct. The average extracted variance (AVE) is evaluated for convergent validity of all study variables. Variables scored between 0.53 and 0.57 for convergent validity, indicating high convergent validity i.e. > 0.50 (Hair et al., 2019). The findings are shown in Table III.

**Table III**

<table>
<thead>
<tr>
<th></th>
<th>Cronbach α</th>
<th>CR</th>
<th>AVE</th>
<th>BC</th>
<th>BL</th>
<th>BE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brand Coolness</td>
<td>0.93</td>
<td>0.94</td>
<td>0.53</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Brand Love</td>
<td>0.93</td>
<td>0.94</td>
<td>0.56</td>
<td>0.89</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Brand Engagement</td>
<td>0.91</td>
<td>0.93</td>
<td>0.57</td>
<td>0.90</td>
<td>0.91</td>
<td></td>
</tr>
</tbody>
</table>

CR- Convergent Validity, AVE- Average Variance Extracted

Finally, the discriminant validity of all study variables is evaluated. This is done using the Heterotrait-Monotrait (HTMT) method of determining discriminant validity. The HTMT value should be less than 0.95 (Hair et al., 2019). Table III presents the findings, demonstrating the presence of discriminant validity.

**Structural Model**

The variance inflation factor analysis was used as a first step in evaluating multi-collinearity for all constructs. The VIF result was below 5 that is the suggested level by Hair et al. (2017) indicating that there was no multi-collinearity issue. The VIF value for brand love and brand engagement is 4.05 and 4.02 respectively.

At second step, hypotheses were tested. The results showed that all hypotheses are supported; Hypothesis 1 (brand coolness influences brand love) is accepted ($\beta = 0.83$, $p < 0.00$). Hypothesis 2 (brand coolness influences brand engagement) is accepted ($\beta = 0.42$, $p < 0.00$). Hypothesis 3 (brand love influences brand engagement) is accepted ($\beta = 0.49$, $p < 0.00$). The $R^2$ values are 0.70 for brand engagement and 0.77 for brand love. The $Q^2$ (blindfolding) values are 0.37 for brand engagement and 0.33 for brand love that are above zero (Hair et al., 2019). Likewise, hypotheses related to mediating effect, H4 is accepted ($\beta = 0.41$, $p < 0.00$ that demonstrated that brand love mediates the relationship between brand coolness and brand engagement (Table IV).
Table IV
Hypotheses Testing

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Path</th>
<th>Estimate</th>
<th>S.D.</th>
<th>T value</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>H₁</td>
<td>BC → BL</td>
<td>.83</td>
<td>.01</td>
<td>49.57</td>
<td>***</td>
</tr>
<tr>
<td>H₂</td>
<td>BC → BE</td>
<td>.42</td>
<td>.04</td>
<td>10.51</td>
<td>***</td>
</tr>
<tr>
<td>H₃</td>
<td>BL → BE</td>
<td>.49</td>
<td>.04</td>
<td>12.18</td>
<td>***</td>
</tr>
<tr>
<td>H₄</td>
<td>BC → BL → BE</td>
<td>.41</td>
<td>[LCL=.35, UCL=.46]</td>
<td>***</td>
<td></td>
</tr>
</tbody>
</table>

***p<0.001, BC= Brand Coolness, BL= Brand Love, BE= Brand Engagement,

Discussion

Major objective of this study was to recognize how brand coolness contributed in the development of positive outcomes in the consumers. More specifically, while utilizing SOR model and integrating it with brand attribution theory, this study aimed to know the effects of brand coolness measured through usability, reliability, desirability, innovativeness of technology and attractiveness to consumer love with engagement. This study hypothesized that brand coolness will have an impact on brand love and brand engagement. Brand love in turn was hypothesized to have an impact on brand engagement. As the link between brand coolness and brand engagement is further mediated by brand love.

First hypothesis was related to relationship between brand coolness and brand love. Findings of this research supported this hypothesis. This finding indicates that when consumers perceive brands to be more reliable, dependable, unique, useable, and having personal cool features, it will stimulate feelings of love and passion. This finding is in line with Tiwari et al. (2021) who found perceived coolness of the products measured in terms of usability, rebelliousness, reliability, innovativeness, desirability and attractiveness with brand love in smart phone users.
sample drawn from India. Another recent study has also found positive relationship between brand coolness and positive attitude towards brand (Ashfaq, Yun, & Yu, 2021). Literature on the link between brand coolness and brand love is relatively scarce, therefore this study has a good addition to it.

Second hypothesis was related to relationship between brand coolness and brand engagement. Not much studies have been published on this relationship, a study from beauty brands identified the link between brand coolness and consumer engagement (Serras, 2020). Form the theory of brand attribution perspective this finding implies that when people feel love from brand they would talk about it more positively, use it, and share positive feedback with others. (Bıçakcıoğlu et al., 2018; Rodrigues & Brandão, 2021). Another study of social media users also found positive association of brand coolness and brand love and brand engagement (Lima, 2020). This implies that brand coolness has a greater power to stimulate and influence internal processes of consumers to ignite positive attitudes and feelings (Blanco, 2020). This is because coolness is supposed to be the reflection of higher status and perceived prestige that in turn develops positive emotions among consumers (Dar-Nimrod, Ganesan, & MacCann, 2018).

Third hypothesis was related to the link between brand engagement and brand love. Results found that brand love positively impact brand engagement. This finding is again in consistency with the study of Junaid et al. (2019) who found positive link between brand love and brand engagement. Brand love reflects an intense positive feeling towards a brand, engagement is also reflected by dedication, vigor and absorption (Bakker & Schaufeli, 2014), thus consumers’ strong feeling of love will be greatly impacting their engagement with the brand (Junaid et al., 2020; Joshi & Garg, 2021).

Fourth hypothesis was related to mediate role of brand love between brand coolness and brand engagement. This finding was also supported by results of this study. This study has used SOR model, which implies that certain aspects in the environment function. Internal characteristics, brand related elements as stimulus for the organism, which then create a response. Recent research also acknowledges the role of organisms as mediator in the SOR model (Zhu, Kowatthanakul, & Satanasavapak, 2019). Although this link is existing to the literature, brand love has been tested in earlier studies as mediator. For example (Junaid et al., 2019) found that brand love mediate amongst consumption experience and brand engagement.

**Implications, Limitations and Future Directions**

This paper found that brand coolness is positively related to brand love and brand engagement. Brand love is positively related to brand engagement. If marketers and practitioners are able to enhance coolness of brand they can garner brand love through enhancing brand engagement. These findings offer important inferences. Such that brand coolness once developed will have a positive effect on consumer’s perception of brand love and engagement. In other words, if consumers feel that their brands are simple and easy to use, operate and learn, they may develop
the sense of brand considering it wonderful, and they may show happiness, delight, and a passion for the brand. Furthermore, consumer feelings of brand love may be enhanced by increasing the brand reliability in terms of providing services as per promises, performing tasks right every time, and making consumers more dependable on brands. Moreover, when consumers feel strong love for brands, they will not only tend to buy and use that brand, but they will also refer others to purchase this brand, influence their decision making positively and give positive feedback.

Due to short nature of coolness phenomenon, managers are facing challenges regarding coolness, how can we develop cool product? It also makes designers’ work challenging and complex. So, there is need to work proactively on brand coolness. This study framework helps the managers and marketers to evaluate competitors’ products coolness and can design differentiated cool products. Upon our results, cool brands help the companies to create cool images for their products. Differentiated and cool brands create brand love from customer side and further engagement the customers.

This research study has some limitations. First, this nature of this study is cross-sectional. There is need to conduct longitudinal study to see behavioral changes over time. In this study, brand coolness is examined on young consumers. Future studies should focus on other age groups and other demographics segments also. In this study, brand coolness is studied with brand love and brand engagement. Future studies will consider other brand related outcomes such as brand loyalty, brand equity, brand experience and other consumer related outcomes such as customer delight, word of mouth, and consumer well-being. This study focuses on specific technology product i.e. smart gadgets. Future studies can test the model with other products categories and context.


