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CONTENTS

Analyzing the Role of Brand Relationship Dimensions in the Development of Brand Community

* *Prafulla Arjun Pawar*
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Abstract

The development of society proficiently acts as a sign of value creation for the formation of new communities and yields fruitful social arrangements. Usually, these communities are constructed through common concerns and shared values. This paper aimed to explore the role of brand relationship dimensions in the development and enrichment of brand community. The present study also analyzed what a brand community is and examined its importance in brand management. The significance of this research extended with providing a base for the understanding of the consumer - brand relationship, which acts as a crucial tool for the development and enhancement of a brand community. The approach involved the findings of the brand community construct roots and building an association between consumer brand relationship dimensions and brand community. The research focused on the modern concept of marketing domain that is brand community and providing an in-depth theoretical base to comprehend the brand community construct with consumer brand relationship dimensions. Methodologically, this research tested the reliability and validity of all latent constructs of the study. The study performed multiple regression analysis to understand the role of brand relationship dimensions in the development and empowerment of a brand community. The results of the study confirmed that the brand relationship dimensions, including brand loyalty, brand attachment, and brand engagement positively affected the development and enhancement of brand community; however, the role of each dimension was found to be variable. The findings of this study provided significant implications to academicians and managers.

Keywords : Brand community, brand loyalty, brand attachment, brand engagement, brand relationship

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In general, it is noted that people form a community by their common interests and views based on what is significant for each other. It also noted that restriction is not constrained to the benefit of community members ; hence, people tend to select the community in which they can act in a synchronized manner (Tonnies, 2017). In recent studies, the approach of academicians in the management domain has shifted from individualism to communalism (Schau, Muñiz, & Arnould, 2009). Various researchers label the communities in marketing perspective in assorted ways such as consumption communities (Thompson & Coskuner - Balli, 2007), subcultures of consumption (Burg - Woodman & Brace - Govan, 2007), brand communities (Ouwersloot & Odekerker - Schröder, 2008), and brand cults (Acosta & Devasagayam, 2010 ; Pandey, 2009). In the case of a brand community, it is fascinating to recognize that community bonding is based on the linkage values which are provided by the brand to its community members, which in turn creates the attraction among the consumers to build attachment towards the new community (Ahmad & Thyagaraj, 2015). The concept of brand community in

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the marketing area has achieved enormous attention, and modern consumer society considers a brand as a source of social interaction (Zaglia, 2013).

In today's world, saving face is likely to be both an individual and a standard practice undertaken in a brand's communities (Avery, 2012). Also, the consumer's relationship and knowledge of the product itself will change once engaged in the community. The exchange of brand stories and the celebration of the brand's heritage should strengthen the connection between the brand and the consumer. Due to increase in knowledge regarding the brand and the development of social ties with other consumers, brand communities may lead to the formation of favourable strong brand associations (McAlexander, Schouten, & Koenig, 2002). A brand community is a twentieth-century phenomenon, which reflects the power of a social relationship to confirm the value of a brand (Giep & Moriarty, 2009), for example, Harley - Davidson and it is grassroots HOG (Harley Owners Groups), which is one of the most well-known examples of brand community. Muniz and Guinn (2001) found three characteristics of brand communities: consciousness of being connected to other members of a community while being related to the brand ; legitimacy achieved through rituals and traditions that distinguish real members from marginal members ; and oppositional brand loyalties.

The connection between brand community and brand relationship is not well researched in the literature and needs to focus on brand relationship dimensions as a tool for the development of brand community (Raut & Brito, 2014 ; Tsai & Men, 2013). In the light of this, the present research aims to enlighten the brand community construct through the lens of different aspects of brand communities and mainly portrays the role of brand relationship in the establishment of brand community. For understanding the importance of the consumer - brand relationship and brand community, this paper acts as a referring literature and discusses how a brand relationship would play a crucial tool for development and enhancement of a brand community.

Literature Review

Community and society are the two concepts which have been central terms in research theory debates, beneath which social scientists have tried to demonstrate its present form and its comparison with the past as well its effects in the future (Tonnies, 2017). The community concept is based on the assumption that the people in one community enjoy many similarities, including types and styles of their goods as compared to non - community members (Hegmon, 2002). One of the simplest definitions presented by James (2006) for community constructs is a network or group of people who are connected objectively with each other. This connectivity is based on social relations and is not restricted by geological ties, and it can be recognized by their social identity and social practices.

The brand community construct has intrigued the eyes and ears of academicians, who initiated an augmentation in the acceptance of this construct. However, ethnographic and quantitative researchers state that the bonding of brand community and individuals is constituted with how the consumers perceive themselves to be with a brand, a company, its products, and with other consumers (Schau et al., 2009). Every member of each brand community is related to each other and interacts on the platform of tradition, sense of responsibility, patterns of consumption, and perceived similarity (Muniz & Guinn, 2001). Acceleration in brand communication on social media is evidence that consumers use an array of tools and resources on social media to engage with brands (Schivinski, Christodoulides, & Dabrowski, 2016). In branding literature, brand engagement is positioned as an element of brand relationship, which defines the strength of the relationship between consumers and their preferred brands (Keller, 2001; Trehan & Gupta, 2015).

Current approaches in information technology have led to the development of media for self-expression and intelligence sharing. These advances enable users to get valuable information from the Internet rather than offline sources, thereby resulting in the establishment of a variety of online brand communities. An online brand

community is a particular, non - geographically bound community based upon social relationships among admirers of a brand in cyberspace. Due to the online community, markets can observe and record the consumers' group behaviour in a naturalistic environment (Kandpal & Patra, 2013). With respect to the brand community, both online and offline brand communities possess equal importance in brand community management (Wirtz, Ambtman, Bloemer, Horváth, Ramaseshan, Klundert, Canli, & Kandampully, 2013). As the findings of research confirmed the importance, uniqueness, and rapid growth of social media, marketers and researchers should pay particular attention to this phenomenon and examine well-established notions and theories in the social media contexts (Laroche, Habibi, Richard, & Sankaranarayanan, 2012). Utilizing this unique feature of brand communities, bounteous marketers can perform enthusiastically to build a healthy brand community.

(1) Brand Community : In the branding literature, the brand community is presented as a structured set of relationships, consumption activities (Stokburger - Sauer, 2010), and affiliation with others (Keller, 2003). The concept of brand community was initially defined by Muniz and Guinn (2001) as a specialized, non - geographically connected community, and based on a structured set of relationships among admirers or a brand. Keller (2001) elaborated the meaning of brand community and quoted that a brand community exists when consumers feel a kinship or affiliation with other people connected with the brand. On the website of American Marketing Association, brand community is defined as a community formed by attachment to a brand, product, or service. The research attraction towards brand communities initiated from the research of Muniz and Guinn (2001). In their research, they found that brand communities are mostly imagined communities, and represent a form of human association situated within the consumption context.

Furthermore, it has been noted that the brand community is a concept that can strengthen brand engagement (Wirtz et al., 2013). Brand communities carry out essential functions on behalf of the brand, such as sharing information, perpetuating the history and culture of the brand, and providing assistance for decision making (Schouten, McAlexander, & Koenig, 2007). A brand community, from a customer brand experience perspective, is a foundation of brand relationships (Felix, 2012 ; Rawat, 2014 ; Sreejith & Suresh, 2017 ; Sumbly & Siraj, 2019). McAlexander et al. (2002) extended the brand community model explained by Muniz and Guinn (2001) from customer - customer - brand to a customer - centric model of brand community, where the focal customer will be at the centre surrounded by brands, products, customers, and marketers. This model explains the existence and meaningfulness of the community in the customer experience. Schau and Muniz Jr. (2002) studied the self-presentation in computer - mediated environments and consumer participation in brand communities. This investigation provided insights into some of how consumers negotiate membership and involvement in brand communities. Research by Schau and Muniz Jr. (2002) found evidence that there was a significant variability in the extent to which consumers embraced as well as adopted a brand and community and consumers' commitment towards the brands was also found to vary.

McAlexander et al. (2002) researched the impact of brand community integration, customer satisfaction, and customer experience on customer loyalty and found that brand community integration had a direct and indirect effect through customer satisfaction on customer loyalty in case of less experienced and experienced groups of customers. Algesheimer, Dholakia, and Herrmann (2005) found that there are communities that have clear and established links with the brand involved. In other words, it is the relationship a brand community member explicitly developed with the brand. Researchers in brand literature have also classified communities according to the nature of their interaction with each other or their motives for joining the community (Fournier & Lee, 2009). Research done by numerous branding researchers (Laroche et al., 2012 ; Ouwersloot & Odekerken - Schröder, 2008) suggests that there are different objectives of consumers towards joining a brand community. Firstly, users may participate in a brand community because of their need for quality reassurance. Secondly, users may take part in a brand community to express their involvement with the branded product. Lastly, consumers may wish for joint

consumption and, therefore, join a brand community. Users may decide to participate in a brand community because they want to live up to the brand's symbolic functions. In general, interactions between brand community members takes place in two ways - either online or offline. Also, community members interact with an organization through a brand community. Wirtz et al. (2013) identified four dimensions of online brand community - namely brand orientation, Internet-use, funding, and governance. These online brand community drivers may be brand - related, social or functional, as well as potential moderators of the relationship between the products and customers or may play a role of situational factors. Nike found that online brand community interaction between its consumers strengthened the online brand community (Fournier & Lee, 2009).

(2) Brand Community and Brand Relationship Dimensions : In literature, research presents the association of various brand elements with the brand community such as brand engagement (Hollebeek, Glynn, & Brodie, 2014), brand engagement as a self - concept (Sprott, Czellar, & Spangenberg, 2009), and online brand community involvement (Baldus, Voorhees, & Calantone, 2015). A strong brand relationship exists when buyers are willing to invest personal resources in the brand such as time, energy, and money (Keller, 2001). The brand relationship construct has been demonstrated in numerous studies, which confirmed the characteristics of brand engagement in association with the brand community (Evans, 2008 ; Lee, Lee, Taylor, & Lee, 2011 ; Tsai & Men, 2013). Researchers also observed that brand community and brand relationship dimensions are positively influenced by the demographics of consumers (Raut, 2015 ; Raut & Pawar, 2015). According to Muniz and Guinn (2001), brand communities provide a social structure for the relationship between a marketer and a consumer. It is presumed that the brand community would strengthen the bonds with the customers in a much superior fashion (Brogi, Calabrese, Campisi, Capece, Costa, & Di Pillo, 2013). Recent studies have further succeeded in alerting marketers about positive aspects of brand community participation and engagement that ultimately influences the behaviour of a customer in the marketplace (Brodie, Ilic, Juric, & Hollebeek, 2013).

Brand communities are a very efficient tool and support sharing information and culture of the brand and also perpetuating the history and assisting consumers. It also provides a social structure to customer - marketer relationships and significantly influences the customer loyalty (Muniz & Guinn, 2001 ; Marzocchi, Morandin, & Bergami, 2013) and brand engagement (Tsai & Men, 2013). Brand loyalty positively affects the consumer buying behaviour (Kanimozhi & Jayakumar, 2010 ; Kumar & Gogoi, 2011). Brand loyalty (Kumar & Menon, 2017 ; Kumar & Narayanan, 2017 ; Singh, 2018) and brand attachments (Hood & Berger, 2017) are considered as the vital elements of brand equity (Mukherjee & Shivani, 2013 ; Shashikala & Suresh, 2013) which help to strengthen the bond between consumers and their brands. It is also noted that brand loyalty (Kamalaveni, Rajalakshmi, & Kalaiselvi, 2008 ; Shetty, 2010) helps organizations to retain the customers more efficiently (George & Govindan, 2015 ; Jana & Chandra, 2016 ; Nandi & Pattanayak, 2015) and also helps to increase the market share (Agarwal, Kumar, & Gupta, 2011). More significantly, appreciation of the roles of brands in daily lives points towards a brand community perspective that recognizes the network of connections between a brand and consumers. McAlexander et al. (2002) and Sprott et al. (2009) believed that the role of brand engagement and brand community is to strengthen the consumer - brand relationship. The current study examines the literature that focused on brand community and brand relationship together.

Various brand community literature, directly and indirectly, exhibits the association of various branding elements (Baldus et al., 2015 ; Brodie et al., 2013 ; Hollebeek et al, 2014 ; Jang, Olfman, Ko, Koh, & Kim, 2008 ; Schouten et al., 2007) with the brand community construct. In the context of Indian consumers, no rigorous attempt has been made to explore the effect of brand - relationship dimensions on brand community. The gap in the brand community literature is that brand relationship has been considered as a singular construct. In contrast, the present study considers brand relationship as a multidimensional construct and analyzes the meaningful connections between brand relationship dimensions and brand community (Hur, Ahn, & Kim, 2011). The

consideration of Indian consumers to understand the association between brand relationship dimensions and brand community presents the uniqueness of the current research.

Methodology

This investigation aims to discover how the consumer - brand relationship dimensions affect the brand community. The research methodology for the study is divided into two phases, the first phase focuses on the pilot testing. The second phase contains the final data collection and data analysis. A pilot test was directed to identify defects in research design and instrumentation. First, we performed the exploratory factor analysis (EFA) for all the latent variables in the study. The study considered the Keller (2013) scale to measure all latent variables, including brand community, brand loyalty, brand attachment, and brand engagement. For the pilot testing, the sample size was 120 respondents. Further, the questionnaire was restructured and changes were made to enhance the quality of the research instrument and to increase the response rate.

In the second phase, final data collection and data analysis were done. For accomplishing the objectives of the present study, the final data were collected from 400 respondents based on their perceptions towards brand community and brand relationship dimensions. For the survey, a well - structured questionnaire was prepared. From the sampling point of view, the present study used judgmental sampling to improve the sample representativeness. Before getting the responses from the respondents, we made sure that the respondents were members of at least one brand community. The final data collection was done from August - September 2017 with the help of a well-structured questionnaire.

Data Analysis and Results

The Table 1 demonstrates the results of exploratory factor analysis (EFA) and reliability (Cronbach's alpha) statistics. The present study conducts the analysis of measures of the present study's constructs and for this purpose, we run the EFA to test the factor loadings of the observed variables, which prove the consistency of the scale. All observed variables illustrate the goodness of fit with their relative latent variables as the factor loadings of all observed variables is greater than 0.5 (the four observed variables which show the factor loadings less than

Table 1. Exploratory Factor Analysis

Construct	Generated Items	Communalities	Factor Loadings	Cronbach's Alpha
Brand Community	I truly identify with people who use this brand.	.749	.643	.888
	I think as if I almost belong to a society with other users of this brand.	.726	.844	
	This is a brand used by people like me.	.418	.334	
	I feel a deep association with others who use this brand.	.813	.854	
Brand Loyalty	I consider myself loyal to this brand.	.710	.853	.873
	I buy this brand whenever I can.	.617	.841	
	I buy as much of this brand as I can.	.410	.424	
	I only need goods manufactured by this brand.	.427	.446	
	This is the one brand I would wish to purchase.	.619	.822	
	If this brand is not available, it would make difference to me if I had to use another brand.	.641	.728	
	I would go out of my way to use this brand.	.434	.583	

Brand Attachment	I truly love this brand.	.726	.835	.944
	I would really miss this brand if it went away.	.720	.827	
	This brand is extraordinary to me.	.754	.847	
	This brand is beyond a product to me.	.634	.780	
Brand Engagement	I really like to talk about this brand to others.	.643	.670	.837
	I am always concerned in learning about this brand.	.658	.772	
	I would be interested in merchandise with this brand's name on it.	.323	.438	
	I am proud to have others know that I use this brand.	.583	.715	
	I like to visit the website for this brand.	.528	.649	
	Compared with other people, I follow news about this brand closely.	.543	.692	

Sample Size (N) = 400

Kaiser - Meyer - Olkin Measure of Sampling Adequacy = .712

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

0.5 are excluded from further data analysis). The reliability of the measures tested through Cronbach's alpha indicates high reliability of measurement as the value of Cronbach's alpha is greater than 0.7. The exploratory factor analysis, reliability analysis, and multiple regression analysis were performed using SPSS 22.

The Table 2 and Figure 1 illustrate the correlation and influence of brand relationship dimensions on brand community, which is 0.690. The coefficient of determination (r^2 =.0.625) confirms that 62.5% variability in brand community is explained by the independent variables including brand loyalty, brand attachment, and brand engagement. Based on the values of the coefficients, it is found that there is a positive relationship between brand

Table 2. Regression Analysis of Brand Relationship Dimensions and Brand Community

Model - 1	Construct	B	Std. Error	Beta	t	t - Sig.
	(Constant)	.312	.191		2.553**	.007
	Brand Loyalty	.344	.034	.043	5.325***	.000
	Brand Attachment	.202	.042	.093	2.248**	.016
	Brand Engagement	.290	.046	.232	6.173***	.000

r = .690, r^2 = .625, F = 84.552, and F Sig. = .000

Dependent Variable: Brand Community

Predictors: (Constant), Brand Loyalty, Brand Attachment, Brand Engagement

Figure 1. Relationship Between Brand Relationship Dimensions and Brand Community

Brand Loyalty — t = 5.325*** — Brand Community

Brand Attachment — t = 2.248**

Brand Engagement — t = 6.173***
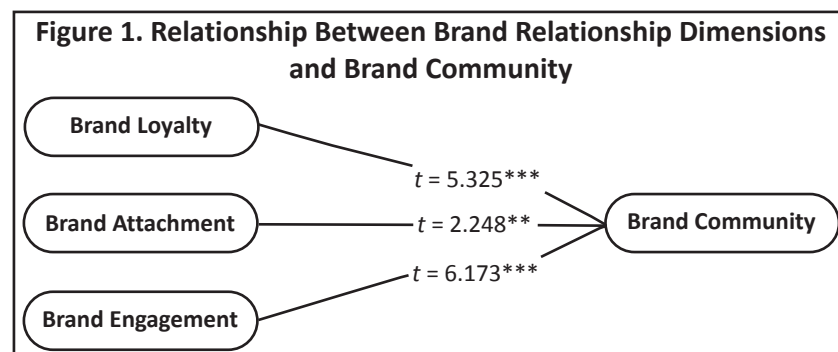
relationship dimensions and brand community. From the regression analysis, it is clear that brand relationship dimensions are firmly and positively associated with the brand community development and enrichment. The value of F statistics of multiple regression model ($F = 84.552$) confirms the goodness of model fit. Regarding the values of tolerance and variance inflation factor (VIF), all values of tolerance are greater than .2, and no values of VIF are greater than 10, so it is confirmed that multicollinearity does not exist in the present study model.

Findings and Discussion

Considering the dimensions of brand relationship, we run EFA for 21 observed variables. For the present study, brand relationship is operationalized with three dimensions, namely brand loyalty, brand attachment, and brand engagement. The EFA results reveal that a total four out of 21 observed variable loadings are less than the selection criteria of items in EFA, as the factor loadings of four items is less than 0.5, one from brand community, two from brand loyalty, and one from brand engagement. The present research also tests the reliability with Cronbach's alpha of the observed variables, and it is recorded greater than 0.7, which confirms the high reliability of the measures of the present research constructs. The regression analysis shows a statistically significant relationship between the brand community and brand relationship dimensions, including brand loyalty (0.344), brand attachment (0.202), and brand engagement (0.290). It is noted that all dimensions of brand relationship show a statistically significant relationship with brand community.

The Figure 1 and regression analysis statistics explore the relationship between the brand community and brand relationship dimensions. It is revealed that there is a statistically significant relationship between brand community and brand relationship dimensions ; so, it is confirmed that all dimensions of brand relationship have an ability to predict the strength of the brand community. The present study findings are highly correlated with the findings of Stokburger - Sauer (2010) that brand relationship positively affects the strength of the brand community. The output of the present study clearly shows that brand loyalty is the most crucial element to build and enhance brand community, and this finding is very similar to the findings of Hur et al. (2011). The positive effect of brand attachment and brand engagement exhibited by the present research is similar to the findings of Brodie et al. (2013). A well - organized brand community is always fruitful for the development of a strong brand and brand loyalty & brand attachment help to enhance the consumer - brand relationship through the development of an effective brand community (Keller, 2001). These findings are quite similar to the present research findings.

Conclusion

In an online social community, loyalty, attachment, and engagement are certainly possible. The online community is measurable and, therefore, fosters participation through which engagement at the individual level occurs. A brand community can maintain and act as a curator for the corporate reputation of a brand, based on which a person may develop or attest to personal loyalty (Evans, 2008 ; Srivastava, 2016). There are few limitations endowed with analyzing the construct of a brand community. The management of a brand community can influence the strategies of the organization by affecting affirmative as well as dissenting results. A brand community is the crucial element of brand communication and also ensures the accomplishment of quality with regards to consumer expectations (Park & McMillan, 2015). The context of brand community bonding is a relationship ; all bonds are relational and developed between relationship parties in time. The strength of the brand community bonds is dependent on the perceptions of the individuals as well as influenced by all other bonds in the brand relationship. The present study proves that the brand relationship dimensions positively affect the brand community ; simultaneously, it also shows that if marketers want to develop an active brand community for their brand, they have to focus on consumer - brand relationship dimensions including brand loyalty, brand attachment, and brand engagement. The

multiple regression analysis shows the effect of each dimension on the brand community, and it is revealed that amongst the brand relationship dimensions, brand loyalty strongly affects brand community as compared to brand attachment and brand engagement.

Managerial Implications

The unique value of brand communities presents novel insights for customer relationship management and related promotion activities. Subsequent to the trend of organizations making the most of customers' constructive word-of-mouth in their marketing suggestions is one step to improve community participation, which may create valuable contributions to organisations' customer relationship marketing. First, the present study provides reliable and validated measures of the brand - relationship dimensions and brand community construct; with this, the managers can measure the level of brand relationship and strength of the brand community of their consumers towards a particular brand. Secondly, the managers can focus on crucial brand relationship elements, which can direct their consumers to join their brand community. Furthermore, the findings of the present study highlight the role of brand relationship dimensions, including brand loyalty, brand attachment, and brand engagement in the development and enrichment of the brand community. Using these key findings, brand managers can prioritize each brand relationship dimensions in the context of their brand. Based on the present research findings, brand managers can execute appropriate branding strategies with the focus on vital brand relationship elements with objective to strengthen their brand community. Hence, companies need to recognize the significant role of brand community and should formulate branding strategies to manage a brand community actively.

Limitations of the Study and Scope for Further Research

The exploratory nature of the study demonstrates two meaningful limitations. First, at the theoretical level, the roots of the brand relationship construct are connected within the extended domain of relationship marketing. Due to this, the operationalization of the brand - relationship construct is not easy. Second is the sample size of the present research as the findings may not be uniform for different geographical regions. Another limitation is that the present study considers few brand relationship elements, particularly brand loyalty, brand attachment, and brand engagement and measures how these elements effect the brand community ; so, consideration of other branding elements such as brand trust and brand satisfaction might lead to a different direction.

For future research, researchers can test existing study models with the help of the measures taken in the present study, which can enhance the generalizability of the present study's findings. Also, it will be interesting to understand the mediating or moderating role of other brand related variables such as brand trust, brand satisfaction, and brand experience as these are also closely related to the brand relationship. It will be helpful to test the existing study model in different circumstances such how the brand relationship affects the brand community in the context of sale of a particular brand. It will also be fascinating to analyze what are the other extrinsic factors which directly affect a brand community.

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Think Before Getting Addicted to Smartphones !

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Abstract

In the present times, individually, everyone, knowingly or unknowingly, has acquired a habit of integrating cell phone usage with their day to day lives. Perpetually, this has developed an addiction towards smartphones. Philanthropists and academicians are inclined towards knowing whether this habit is really an act of updating to make oneself more tech - savvy or whether such a habit makes any value addition to our lives. Henceforth, it was quite essential to investigate the effect of smart cellphone usage on behavioral issues of people and to determine what kind of changes are brought in an individual's psyche and psychology due to excessive usage of smartphones. Previous studies focused more on understanding the different aspects of smartphone usage but rarely tried to determine what happens if anyone uses smartphones in excess. In our research, we established the triangulate relationship between smartphone usage, technostress, and conflict behavior. We determined whether smartphone usage leads to technostress impacting an individual's conflict behavior or whether technostress mediates this relationship. The study was conducted among respondents in the age bracket of 17 - 66 years representing various social strata. This research was quantitative in nature and used SEM to validate the relationship between smartphone addiction, technostress, and conflict behavior. The results of the research concluded that there was a significant impact of smartphone addiction on conflict behavior. This research has strong implications for HR managers to design various OD interventions for employees ; philanthropists/counselors to start movements for youngsters and older people to harmonize their intra-personal issues.

Keywords : smartphone addiction, technostress, conflict behavior, interventions

In developed countries, technology has captivated consumers with it. This charm of technology has persistently allowed people to spend much time on technology than on any other activity (Griffiths, 1999 ; Roberts & Pirog, 2012).

Smartphones have become a chosen product or even a necessity for more and more people. Wang, Xiang, and Fesenmaier (2014) proposed a framework that integrated factors shaping the adoption, use, and impact of smartphones among users. Usage of smartphones has convicted many users to the depth of restlessness, as they themselves cannot keep from looking into their phones after every few seconds/minutes. In India, online

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commerce has taken a good shape and has increased the access to Internet connectivity for smartphone users (Kurup & Jain, 2018). It has been observed that smartphone users have a habit of checking their phones first thing in the morning and the last thing they look at before going to sleep. Oulasvirta, Rattenbury, Ma, and Raita (2012) conducted a research and found that their respondents checked their phones 34 times a day, not because they really needed to check that many times, but because it simply became a habit. Apparently, this habit of using smartphones has manifested a theory that excessive use of phones results in multiple disorders in the human body like stress, conflict behavior, etc. (Bianchi & Phillips, 2005 ; Oulasvirta et al., 2012 ; Takao, Takahashi, & Kitamura, 2009). Eventually, many had contradictory views regarding this theory that the habitual use of smartphone elevates stress for psychological and biological reasons. Brod (1984) coined a word 'technostress' as a modern disease of adaptation caused by an inability to cope with the new computer technologies in a healthy manner, which is amalgamated in this study to point out the stress caused due to smartphone usage (as cited in Prabhakaran & Mishr, p. 131). In late studies, technostress was defined as a phenomenon of end users facing stress due to information and communication overload (Ragu - Nathan, Tarafdar, Ragu-Nathan, & Tu, 2008). Generally, usage of smartphones are drivers of entertainment, relaxation, or way to relieve stress as this kind of usage crops instant enjoyment, but on the other hand, it can also be accompanied by losing volitional control for other important activities (Thomée, Härenstam, & Hagberg, 2011). Lee, Cheung, and Chan (2015) revealed in their research that smartphone use encompasses certain key dimensions of behavioral addiction : salience, mood modification, tolerance, withdrawal, conflicts, etc. India has witnessed a gradual growth among Internet users : from 2.8 billion in 2014 to estimated 6.5 billion in 2020 (Murthy & Kumar, 2015).

Many studies conducted in the past understood and determined the impact of cell phone usage on personality

Table 1. Definitions of Constructs

Variable	Author	Definition
Smartphone Addiction	Bianchi & Phillips (2005); Oulasvirta, Rattenbury, Ma, & Raita (2012) ; Takao, Takahashi, & Kitamura (2009)	Excessive usage and habitual checking on missed calls or messages may result in conflict usage and even lead to mobile phone addiction for smartphone users.
	Davis (2001) ; Charlton & Danforth (2007) ; Turel, Serenko, & Giles (2011)	The hunger for more technology has consequences such as excessive usage of technology, high level of involvement in technology, and finally, technology addiction results in mobile phone addiction.
Technostress	Brod (1984)	Technostress is a modern disease of adaptation caused by an inability to cope with the new computer technologies in a healthy manner.
	Ragu - Nathan, Tarafdar, Ragu-Nathan, & Tu (2008)	Technostress is the phenomenon of end users experiencing stress due to information and communication overload.
	Brillhart (2004)	The explosive growth of end - user computing and networking technologies enhances the severity of technostress.
Conflict	Janssen and Van de Vliert (1996)	Conflict behavior is an individual's intended or displayed outward reaction to the conflict issue experienced.

and psychological variables of behavior (Roberts &Pirog, 2013) and testified that certain psychological traits might influence ability to endure stress or make a person vulnerable to stress.

Review of Literature

This research intends to explore how smartphone addiction leads to stress (technostress) as a result of the massive use of technology (Bianchi & Phillips, 2005; Takao et al., 2009). Many researchers in the past conducted research considering heavy usage of smartphones resulting in behavior disorders by focusing on personality traits as variables to measure. Ragu - Nathan et al. (2008) explored that excessive use of smartphones can lead to technostress and the same can be measured in various dimensions. This research attempts to investigate the relative impact of smartphone usage on technostress and conflict behavior, and also examines whether smartphones have any mediating effect on conflict behavior or not. We have chosen interpersonal conflict, intrapersonal conflict, and professional/academic conflict as three antecedents to measure conflict behavior. The popularity of smartphones has emerged as one of the basic phenomena for one and all across the globe.

In light of the literature found in many research studies that were reviewed, Salomon (1986) and Line, Jain, and Lyons (2011) proposed that smartphone addiction may lead to effects on an individual level. On contrary to these views related to smartphone addictions and its negative effect, many other researchers supported usage of smartphone as a reliver of nervousness and indulging into fun activity for the users (Hirschman, 1992 ; Roberts & Pirog III, 2013 ; Takao et al., 2009).

The globe has become one platform, possibly due to the manner in which technology has introduced itself in various fronts. Mobile phones have connected people from different walks of life to one place anytime. Conversely, there are growing apprehensions for smartphones which actually sometimes take away from social interfaces or interactions. However, mobile applications in smartphones having social media tools and games with Internet facility have increased the usage rate really fast (Zheng & Lionel, 2010). Few antagonistics have strong support for smartphone usage, and according to them, smartphones compliment many functions of every day life, are portable in nature, and offer more enthralled "users value" to consumers (Park & Han, 2013). Massive use of smartphones has apparently become the potential driver to develop an addictive behavior among users, which is evidently inhibiting in their lives.

Many researchers have diagnosed how addiction symptomology even applies to excessive smartphone use like distortion of time spent on phone, behavioral conflicts, and negative effects on our social and work lives (Kwon et al., 2013 ; Line et al., 2011).

Many studies have concluded that the effects of excessive use of smartphones has a significant impact on mental and physical health of an individual. Jenaro, Flores, Gómez - Vela, González -Gil, and Caballo (2007) and Sim, Gentile, Bricolo, Serpelloni, & Gulamoydeen (2012) pointed out in their research that society has witnessed substantial increase of compulsive technology use, which results in cell phone addiction.

In the past, several studies proposed a theory stating that usage of smartphones can interfere in an individual's life to an extent that there is a gradual loss of relationships (Miller - Ott, Kelly, & Duran, 2012 ; McDaniel & Coyne, 2014 ; Sprecher, Hampton, Heinzel, & Felmlee, 2016) also resulting into addiction as well as reduced capacity to enjoy leisure (Janković, Nikolić, Vukonjanski, & Terek, 2016 ; Lepp, Li, Barkley, & Salehi - Esfahani, 2015 ; Mok, Choi, Kim, Choi, Lee, Ahn, & Song, 2014). It is very common in today's time that excessive usage and dependency on technology has proven to be unhealthy for human beings. This has emerged as one of the major causes of being physically or mentally unfit and gives rise to many physical as well as psychological diseases. Many studies have concluded that working at work or on the move using communication technological devices creates technostress. Technostress has a significant influence on work - life conflict as well.

Apparently, there are several apprehensions related to technology adoption and usage, and as a result, there is a

firm belief that work - life boundary and roles have become vague causing inter or intrapersonal conflicts. A study conducted by Elhai, Dvorak, Levine, and Hall (2017) concluded that technostress may result from the use of new technologies even after work and during holidays (e.g., using smartphones for checking emails or continuing to work through a messenger after working hours), thereby influencing job satisfaction and work - life conflict.

Research Gap and Objectives of the Study

As extracted from the review of literature, one can profoundly say that heavy usage of a smartphone has its repercussions in life. Smartphone addiction has its own consequences on an individual's personal and professional life, on his/her health, and sometimes, it impacts one's mental or psychological status very seriously. However, this study tries to investigate in what terms the smartphone addiction can hamper the physical and psychological status of human beings. The core of the study refers to heavy usage of smartphones leading to technostress, and this kind of technological stress may have repercussions on an individual's behavior as well as developing conflict behavior. In anticipating this, many researchers have stated that heavy usage of smartphones also leads to various psychological and physiological issues. In the ensuing section, we focus on few aspects of smartphone usage and the outcomes on individuals facing the issues of technostress and conflict smartphone behavior. The main objective of the study is to find out the relationship between smartphone usage, technostress, and conflict behavior. Along with this, the research majorly focuses on determining whether conflict behavior has any significant impact on an individual's inter/intra or academic/work life or not and if yes, then which out of these three majorly get impacted by this.

The following are the hypotheses framed for this study :

↳ **H1:** Smartphone addiction has a significant effect on creating technostress.

↳ **H2:** Technostress significantly mediates the relationship between smartphone usage and conflict behavior.

↳ **H3:** Smartphone addiction has a significant effect on an individual's conflict behavior.

The Rationale of the Study and Proposed Model

Today, everyone is keen in keeping himself/herself more updated and connected with the use of technology. People are spending more time on smartphones to get connected with their loved ones than in actually connecting with them in person, resulting into various repercussions out of this usage of technology. These kind of behavioral developments cause imbalances in their personal as well as professional premises. This research contributes to some emerging issues of smartphone usage by probing whether loss in volitional process leads to smartphone addiction and whether this smartphone addiction results in increasing a user's technostress levels, while generational differences are considered in the relationships between smartphone usage and technostress ; in addition, we will also try to find out the impact of technostress on individual behavior in terms of conflict.

Smartphones have now become an integral part of our day to day lives. Studies have provided evidence that if an individual uses a smartphone in excess, he/she will definitely face negative impacts on his/her well - being. Akyildiz, Lee, Vuran, and Mohanty (2006) kept this kind of addiction under the category of behavioral addictions. Technology has its own advantages and disadvantages, and one of them is that excessive use can inculcate behavior of frustration, overburden with work and assigned responsibilities, or even end up in multiple kinds of stress diseases. This kind of physical or behavioral disorder has been named as technostress by researchers. The defining attributes and pragmatic drivers of technostress have been investigated in many research studies conducted in the past. Brod (1984) stated that technostress is a modern disease of adaptation caused by an inability

to cope with the new computer technologies in a healthy manner. Technostress is the phenomenon of end users experiencing stress due to information and communication overload (Ragu - Nathan et al., 2008). The explosive growth of end-user computing and networking technologies enhances the severity of technostress (Brillhart, 2004). Brod (1984), a clinical psychologist, derived a disease called as technostress as an outcome of over usage of technology as well as an inability to deal with information communication technology (ICT) in a healthy manner further resulting into disparaging forces for the employees as well as for companies also (Ayyagari, Grover, & Purvis, 2011). Eventually, in some research, it was stated that technostress even reduces job satisfaction, work commitment, innovation, and productivity.

Many studies have signified the effect of technostress varying across individuals. However, a handful contribution made by Raghu - Nathan et al. (2008) worked on a definite set of measures based on age, gender, literacy, skills, etc. propagating that males undergo more technostress than females ; with growing age, individuals feel more stressed as compared to stress felt in early stages of life ; and computer knowledge and expertise brings more stress for those who have less expertise of the same.

Technostress can be defined as the outcome of excessive usage of information technology and creates stress among users. Like a coin, everything has two sides, so does information technology. Human interaction with information technology may result into many consequences that are negative in nature such as attitude phobia and anxiety pertaining to mobile/smartphone usage, behavioral disorders, etc. (Wright & Cropanzano, 199). Hence, it is very important for one to know the way of managing his/her phone usage as well as preventing technostress into his/her life (Kuo, Chen, Yang, Yang, Yu, & Hu, 2009). Brod (1984) anticipated that when human beings fail to cope with more advanced and upgraded technologies, the probability of having technostress increases. Adding to this, he also averred that technostress is a difficult situation for adaptation caused by the use of recent technology by either people or organizations. Another definition of technostress was given by Arnetz and Wiholm (1997) as being a state of excitement experienced in certain people who are dependent on computers in their work. Contradictory to this, Figueiredo (1994) defined technostress as a kind of computer literacy and acceptance of digital technologies. In much prior research, technostress was defined as one of the aspects of stress pertaining to technological usage. Ayyagari et al. (2011) defined that there are assured characters of technology which are directly proportionate to stress like heavy usability, intrusiveness, and dynamism.

In today's working environment, technology has become an integral part of our functioning. It has been observed that people who are too addictive to technological devices - all their direct or indirect speech is influenced by these kind of devices and their usage. Many times, people sitting around their social or personal group use a smartphone to talk/message, even if they are sitting next to each other. This habit of using a smartphone has severe effect on their physical and mental health. This sometimes gets converted into individual conflict behavior limiting him/her to outperform, disrupts work - life balance, reduces ability to do productive work, and so on. Although studies have been done in the past on determining the effect of over usage of smartphones, and this area has gained significant importance, but still, many aspects are still untouched. This research also attempts to analyze whether smartphones generate technostress and whether this may also result in individual conflict behavior or not.

Hunter and Perreault Jr. (2007) conducted extensive research and reported that use of smartphones has incremental effects on different aspects of an individual's performance, therefore, it is important to investigate the effects of technostress on one's behavior. Some of the research extracts have well explained the way to manage technostress, but many of them have explained that the physiological disorders like mental illness may be followed by psychological disorders like indecisiveness, depression, anxiety, frustration or anger, lack of control and confidence, restlessness, etc.

In a working environment, using a mobile phone while working can result in multitasking and cause technostress that can lead to poor job performance. Similarly, technostress can also affect users' satisfaction.

Lukoff and Gackenbach (2004) mentioned that some individuals use the Internet in dysfunctional ways that leads to social isolation and deteriorating work performance. If technostress accounts for more stress on a more general level, we expect this form of general stress to influence organizational outcomes in the form of decreased job satisfaction.

Research Methodology

(1) Sample and Procedure : The study employed a descriptive research design wherein, a quantitative research methodology was used to test the proposed research model (Figure 1). A structured questionnaire consisting of 31 questions was used to collect data through an online survey. Snowball sampling method was used to collect data from respondents including students, housewives, and working professionals residing in India. A hyperlink to the online questionnaire was sent to 735 respondents via email and the respondents were also requested to forward the questionnaire to their friends, colleagues, and relatives. The data collection process was carried out from December 2017 to February 2018. A total of 325 valid responses were received, indicating a response rate of 44.2%, which was reasonable for studies of this scale. Out of the total participants, 49.5% of the respondents were females and 50.5% were males. The age of the respondents ranged between 17 years to 66 years with mean as 29.8 years and standard deviation as 10.5 years. Out of the total sample, 36% respondents were students, 31.7% were working professionals, and 32.3% were housewives. The sample is an indicative group to test the research model as smartphones are very popular among students and housewives. Moreover, working professionals excessively use smartphones for online shopping while at work. Furthermore, including respondents from all over the country allow for a generalization of findings to represent the overall Indian context.

Figure 1. Proposed Model
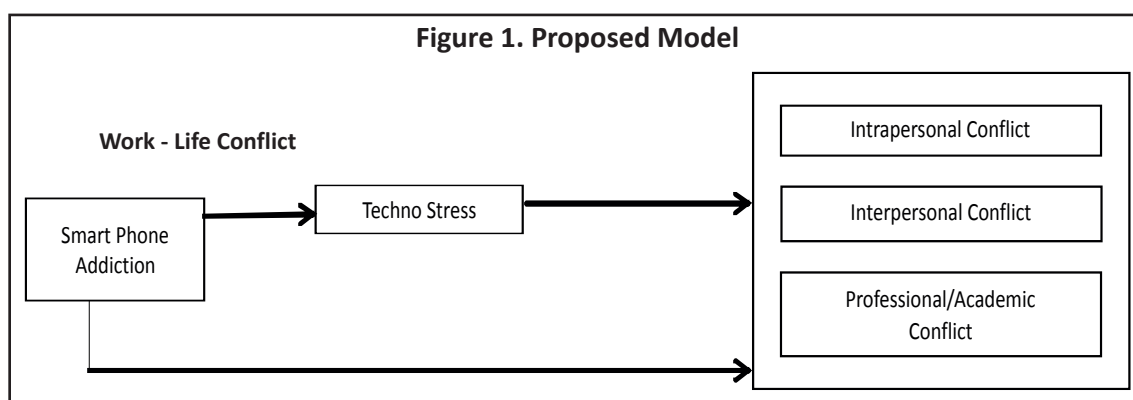
(2) Measurement : The scales for all the constructs of the research model were adapted from previous studies carried out in the context of smartphone addiction and conflict behavior. Specifically, 12 items were used to measure smartphone addiction (SA), which were adapted from Karadağ et al. (2015) and 6 items were adapted from Lee, Cheung, and Chan (2015) to measure technostress (TS). Conflict behavior (CB) is a multidimensional construct including three dimensions namely intrapersonal problems (IntraP), interpersonal problems (InterP), and academic/professional problems (APP). With respect to the adapted measurement items for this construct, three items were used to measure IntraP, four items for InterP, and three items were used to measure the APP. Each item was measured using a 5 - point Likert scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). Apart from these items, three demographic questions (age, gender, and profession) were also included in the questionnaire. Age was measured in years ; whereas, gender and profession were measured using a nominal scale.

The questionnaire was developed and administered in English language and was checked for content validity

Table 2. Descriptive Statistics

Item Code	Item Description	Mean	Standard Deviation	Skewness	Kurtosis
SA1	I miss planned works due to smartphone usage.	2.62	1.177	.327	-.795
SA2	I have a hard time concentrating in class/workplace due to smartphone use.	2.57	1.204	.301	-.911
SA3*	I feel pleasant or excited while using a smartphone.	2.54	1.378	.314	-1.190
SA4*	I am able to get rid of stress with smartphone use.	3.14	1.256	-.232	-.954
SA5	I won't be able to stand without having a smartphone.	2.72	1.331	.230	-1.112
SA6*	I feel impatient and fretful when I am not holding my smartphone.	2.31	1.303	.581	-.830
SA7*	Not being able to use my smartphone would be as painful as losing a friend.	2.76	1.361	.152	-1.181
SA8	I constantly check my smartphone so as not to miss conversations between other people on social media.	2.68	1.205	.257	-.874
SA9**	My fully charged battery does not last for one whole day.	2.82	1.559	.157	-1.468
SA10	I use my smartphone longer than I intend.	2.97	1.231	-.017	-.995
SA11**	I have tried time and again to shorten my smartphone use time, but failed all the time.	2.67	1.206	.266	-.869
SA12**	The people around me tell me that I use my smartphone too much.	2.58	1.292	.265	-1.068
TS1**	I am forced by my smartphone to live with very tight time schedules.	2.37	1.165	.473	-.606
TS2	I am forced to change habits to adapt to new developments in smartphones.	2.38	1.118	.433	-.589
TS3**	I have to sacrifice my personal time to keep current on new smartphone technologies.	2.31	1.183	.649	-.422
TS4	I feel my personal life is being invaded by smartphone technologies.	2.45	1.153	.386	-.734
TS5	I do not find enough time to study and upgrade my technology skills on smartphones.	2.46	1.153	.376	-.747
TS6	I am threatened by people with newer smartphone technology skills.	2.44	1.166	.409	-.740
IntraPP1	Using smartphone causes me sleep deprivation.	2.58	1.337	.206	-1.285
IntraPP2	I experience physical problems (e.g., backache, fatigue, or headache) because of smartphone usage.	2.22	1.206	.741	-.377
IntraPP3	My health gets worse because of using a smartphone.	1.84	.978	1.024	.439
InterPP1**	I miss real life social engagements because of using a smartphone.	2.27	1.293	.758	-.525
InterPP2	I give up or reduce social activities because of using a smartphone.	2.07	1.153	.865	-.177
InterPP3	Others in my life complain about my smartphone usage.	2.22	1.187	.772	-.146
InterPP4	I neglect others (e.g., friends or family) because of using a smartphone.	1.95	1.062	.955	.212
ProfAcadP1	My work or studies suffer because of using a smartphone.	2.47	1.203	.479	-.675
ProfAcadP2	Using a smartphone often interferes with my work or my studies.	2.57	1.138	.404	-.525
ProfAcadP3	I am not able to fulfill my role obligations at my workplace/college because of usage of a smartphone.	2.17	1.082	.829	.153

Note. *SA : Smartphone Addiction, TS : Technostress, IntraPP : Intrapersonal Problems, InterPP: Interpersonal Problem, ProfAcadP: Professional/Academic Problems

Note. **Item was dropped from further analysis.

by experts from a University. Before administering the questionnaire to actual respondents, pilot testing was done with 30 randomly chosen subjects in November 2017. Based on the pilot test results, few items were deleted and a few items were modified in the questionnaire. To avoid skewing of the results, the data collected in pilot-testing was excluded from the final phase of data collection.

Analysis and Results

(1) Descriptive Analysis : The descriptive statistics for each construct in the proposed research model is presented in the Table 2. As reported in Table 2, there is sufficient evidence to support univariate normality of all the items as all values of skewness are below their cutoff point 3 and all kurtosis values are less than 8 (Kline, 2011 ; West, Finch, & Curran, 1995). Moreover, except for few items (SA3, SA4, SA6, SA7, SA9, SA11, and SA12), the critical ratios for both skewness and kurtosis for all items are found to be within the recommended limits of -2 and +2 (Kline, 2011), which indicates support for multivariate normality in the data. However, these items were dropped from further analysis because of their low factor loadings.

(2) Structural Equation Modeling (SEM) : The structural equation modeling (SEM) technique was employed in the study to test the relationships between the constructs within the proposed model. The two-stage SEM approach (Anderson & Gerbing, 1988 ; Schumacker & Lomax, 2010) was used, beginning with the measurement model for testing the reliability and validity of the instrument and then estimating the structural model.

(i) Measurement Model

✥ **Model Fitness :** The measurement model was examined to test the model fitness and to establish the reliability and validity of the model constructs. For testing the model fitness ; firstly, the confirmatory factor analysis (CFA) is conducted with the first order model. The main fit indices including CMIN/df, GFI, AGFI, CFI, NFI, RMR, and RMSEA are tested to evaluate the model fitness. As can be noticed from the Table 2, all the indices could not reach their recommended threshold values in the initial first order CFA model. Therefore, certain reassessments were done so as to increase the model fitness (Anderson & Gerbing, 1988 ; Bagozzi & Yi, 1988). To ensure the indicator reliability, the items (SA3, SA4, SA12, TS3, InterP1) having standardized regression weights (factor loadings) less than 0.4 were dropped (Reinartz, Haenlein, & Henseler, 2009). Apart from this, based on the modification indices, it is observed that SA7 and TS1 have higher unacceptable values. Hence, these items are also removed from the model. Besides, by inspecting standardized residual covariance, SA9 and SA11 are found to have higher values than their recommended threshold level of ±2.58 (Hair, Anderson, Tatham, & Black, 1995). Therefore, these two items are also removed.

After these modifications, the first order CFA model is tested again, and the model fitness improves significantly, as expected. Even though the value of chi-square ($\chi^2 = 391.3$, $DF = 122$, $p = 0.000$) is still significant,

Table 3. Measurement Model

Fit Index	Recommended Value	Initial First Order Measurement Model	Modified First Order Measurement Model	Second Order Model
χ^2	NS at $p < 0.05$	2691.75	391.3	406.55
df	N/A	340	122	126
χ^2 / df	<5	7.917	3.207	3.227
Goodness of Fit Index (GFI)	>0.90	0.643	0.903	0.901
Adjusted Goodness of Fit Index (AGFI)	>0.80	0.574	0.841	0.839
Comparative Fit Index (CFI)	>0.90	0.778	0.960	0.959
Normed Fit Index (NFI)	>0.90	0.754	0.944	0.942
Root Mean Square Residuals (RMR)	<0.10	0.187	0.065	0.068
Root Mean Square Error of Approximation (RMSEA)	<0.08	0.146	0.073	0.075

Table 4. Reliability and Convergent Validity

Construct	Cronbach's Alpha	Composite Reliability (CR)	Average Variance Extracted (AVE)
Smartphone Addiction (SA)	0.935	0.862	0.724
Technostress (TS)	0.956	0.803	0.754
Intrapersonal Problems (IntraP)	0.812	0.788	0.702
Interpersonal Problems (InterP)	0.820	0.769	0.627
Academic/Professional Problems (APP)	0.875	0.768	0.660

Table 5. Discriminant Validity

	SA	TS	IntraP	InterP	APP
Smartphone Addiction (SA)	0.851				
Technostress (TS)	0.524	0.868			
Intrapersonal Problems (IntraP)	0.608	0.607	0.839		
Interpersonal Problems (InterP)	0.551	0.659	0.742	0.791	
Academic/Professional Problems (APP)	0.607	0.604	0.791	0.723	0.813

the remaining fit indices of the modified first order measurement model are found to be within their recommended values (Table 2).

Once the first order CFA model is found to be fit, the second order CFA model is tested by hypothesizing conflict behavior (CB) as a higher order construct based on the three lower order constructs: IntraP, InterP, and APP. All the factor loadings are found to be greater than 0.7, which indicates that CB loads well on its three constructs. As seen in Table 3, the fit indices (except chi-square) of the second order model are found to be within their threshold values, indicating adequate goodness of fit to the data.

✤ **Reliability and Validity :** As shown in Table 4, all the constructs exhibit adequate levels of reliability with Cronbach's alpha coefficients (Nunnally, 1978) and composite reliabilities (Hair et al., 1995) greater than the cut-off point of 0.7. Also, the AVE values of all the constructs are greater than their threshold value of 0.5 (Hair et al., 1995) and all AVE values are less than the corresponding CR values indicating sufficient convergent validity (Table 3). Also, as reported in Table 5, all the correlation estimates between the constructs are found to be less than the maximum level of 0.85 (Kline, 2005) and all the constructs have $\sqrt{AVE}$ greater than their inter-correlation estimates with other corresponding constructs. This provides sufficient evidence to support discriminant validity of the model constructs.

(ii) Structural Model : After achieving satisfactory results of the measurement model, the constructs are used to examine the structural model for testing the hypothesized relationships. The fit indices of the structural model are found to be as follows: $\chi^2 / df = 3.227$, GFI = 0.989, AGFI = 0.839, CFI = 0.959, NFI = 0.942, RMR = 0.068, and RMSEA = 0.073. The fit indices indicate that the structural model has adequate goodness of fit to the data.

The results of the path coefficients (see Figure 2) indicate that all the hypotheses are supported. Particularly, technostress is found to be significantly affected by smartphone addiction ($\beta = 0.524$, C.R = 9.808, $p < 0.001$) and conflict behavior is found to be significantly affected by technostress ($\beta = 0.470$, C.R = 9.040, $p < 0.001$). Conflict behavior is also significantly influenced by smartphone addiction ($\beta = 0.415$, C.R = 7.583, $p < 0.01$), thereby indicating that technostress partially mediates the relationship between smartphone addiction and conflict

Figure 2. Structural Model Results
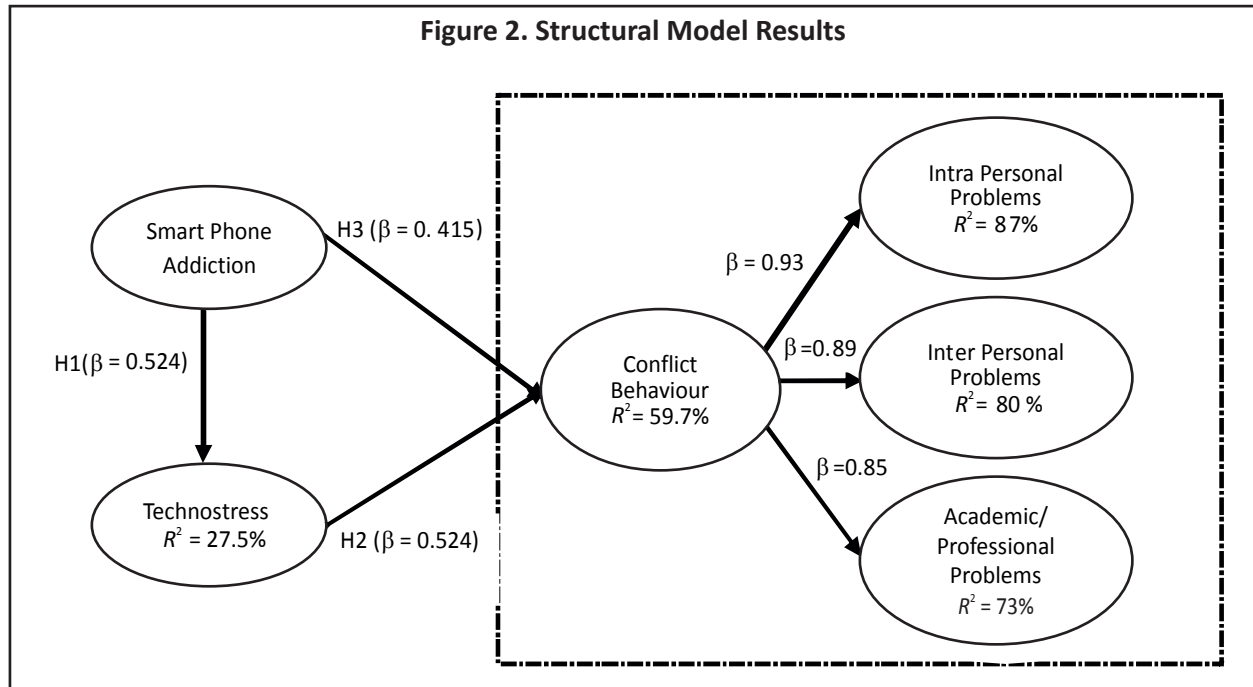
Table 6. Direct, Indirect, and Total Effects

Path	Total Effect	Direct Effect	Indirect Effect
SA->TS	0.524	0.524	...
TS->CB	0.470	0.470	...
SA->CB	0.661	0.415	0.246
SA->IntraP	0.616	...	0.616
SA->InterP	0.591	...	0.591
SA->APP	0.564	...	0.564
TS->IntraP	0.438	...	0.438
TS->InterP	0.420	...	0.420
TS->APP	0.401	...	0.401

Note. *SA: Smartphone Addiction, TS: Technostress, IntraPP: Intrapersonal Problems, InterPP: Interpersonal Problem, ProfAcadP: Professional/Academic Problems, CB: Conflict Behavior.

behavior. Therefore, all the hypotheses H1, H2, and H3 are supported. Moreover, the R^2 values indicate that smartphone addiction explains 27.5% variation in technostress and both smartphone addiction and technostress explain 59.7% variation in conflict behavior. Also, the R^2 values for IntraP, InterP, and APP are found to be 87% 80%, and 73%, respectively, which reflect a good contribution of all three constructs in conflict behavior.

The model is also examined for analyzing the direct effects, indirect effects, and total effects between the constructs. The Table 6 indicates that the total effect of SA on CB is 0.661 out of which the direct effect is 0.415 and indirect effect is 0.246. The indirect effect is attributed to the mediating effect of TS in the relationship between SA and CB. Since the indirect effect is lesser than the direct effect of SA on CB, we can interpret that TS weakly mediates the relationship between SA and CB. Also, the direct effect of SA on TS is more than the direct effect of SA on CB. Further, it can be noticed that the indirect effect of SA on IntraP (0.616) is more than that on InterP

Table 7. Comparative Research Findings

Author	Variables	Outcome Variable	Remarks	Our Findings
Bianchi & Phillips (2005) ; Takao, Takahashi, & Kitamura (2009)	Smartphone, Personality Traits	Behavioral Disorders	Causes behavioral disorders	All past studies were conducted using one variable for their studies ; whereas, our study considered two variables as determinants and also determined the mediating role of one variable on other.
Ragu - Nathan, Tarafdar Ragu - Nathan, & Tu (2008)	Excess usage of smartphones	Technostress	Further this can be measured on different dimensions.	
Salomon (1986) ; Line, Jain, & Lyons (2011)	Smartphone addiction	Individual level	Creates technostress and conflict behavior.	
Hirschman (1992) ; Roberts & Pirog III (2013) ; Takao, Takahashi, & Kitamura (2009)	Conflict Behavior	Reliever of nervousness and indulging into fun.	Smartphones can be a medium for this.	
Hunter & Perreault Jr. (2007)	Smartphone	Individual performances	Significantly impacts individual's performance.	
Our research	**Smartphone**	**Technostress and conflict**	**Technostress mediates the impact of smartphones.**	

(0.591) and APP (0.564). Similarly, the indirect effect of TS on IntraP (0.438) is more than that on InterP (0.420) and APP (0.401). This indicates that out of the three dimensions of conflict behavior (CB), smartphone addiction (SA) and technostress (TS) majorly contribute to intrapersonal problems as compared to interpersonal problems and academic/professional problems.

(3) Comparative Research Findings : A comprehensive analysis of research done in the past and with the present is presented in the Table 7 showing that this study signifies the relationship between smartphone usage, stress (techno), and conflict behavior of an individual.

Discussion and Conclusion

The research purpose is to determine the relationship between smartphone addiction, technostress, and conflict behavior. The data was extracted from 325 respondents from the age group of 17 - 66 years, out of which 49.5% and 50.5% respondents were females and males, respectively. The total percentage of respondents comprised of 36% students, 31.7% working professionals, and 32.3% housewives.

The prominent observations made in the research are : firstly, the results of the research reveal that smartphone addiction is a strong predictor of technostress (Salomon, 1986; Line et al., 2008). Excessive use of smartphones leads to technostress among the users and further leads to conflict behavior. Furthermore, it has also been observed that smartphone usage has a direct impact on users' conflict behavior as well (Kwon et al., 2013.). Apparently, the results also reveal that examining the effect of smartphone addiction on conflict behavior is partially mediated by technostress, and it is found that direct effect of smartphone addiction is more on conflict behavior than the indirect effect. Secondly, on an agreeable note, it is observed that there is a significant impact on conflict behavior on an individual's work-life (Lee et al., 2015). Further, the results also reveal that the effect of conflict behavior is more on the intra-personal problems than inter - personal and academic professional performances. Taken altogether,

the findings of the research indicate that smartphone addiction increases technostress among individuals and further leads to conflict behavior, and eventually, smartphone addiction has a direct effect on individual's conflict behavior ; whereas, there is a lesser mediating effect of technostress on conflict behavior. One interesting finding of the study reveals that conflict behavior has a strong impact on an individual's intra/inter and academic performance (87%, 80%, and 73%, respectively) and intrapersonal issues are one of the major areas where there is a high impact of conflict behavior, which may lead to multiple health hazard issues.

Research Contribution and Managerial Implications

This research significantly contributes to various theoretical aspects of study on smartphone usage and its repercussions on users' mental and health-related issues. In the past, several types of research studies have been done either to investigate the effect of smartphone addiction on creating technostress or to determine whether smartphone addiction leads to conflict behavior or not. This research is different and a step ahead from the previous studies as it not only tries to determine whether there is any significant relationship between smartphone addiction, technostress, and conflict behavior forming a triangular relationship, but also tries to determine the direct and indirect effect of smartphone usage on conflict behavior. Secondly, we also try to investigate if this triangular relationship exists, and whether technostress mediates the effect between smartphone addiction and conflict behavior or not, and if yes, then at what intensity it mediates between smartphone addiction and conflict behavior. Though few studies conducted in the past found the effect of smartphone usage on individual performances, Hunter and Perreault (2007) reportedly said that there was an incremental effect of smartphone addiction on conflict behavior tampering different aspects of performance, but failed to mention the variables of performance. On the other hand, this research not only shows a significant relationship between smartphone addiction and conflict behavior, but also mentions the outcome effect of conflict behavior on performance indicators like interpersonal, intrapersonal, and academic professional performances. Out of these three variables, intrapersonal issues are strongly impacted by conflict behavior. Extending this understanding, the future implications of this research have some worthy suggestions for HR managers to design various OD interventions for employees where some indoor or outdoor recreational activities can help employees to manage their intrapersonal issues. Philanthropists/ counselors can conduct some health checkup camps or workshops for youngsters and older people to balance their intrapersonal problems arising due to smartphone usage.

Limitations of the Study and Scope for Future Research

Apart from useful insights present in the existing research, there are several limitations, which can be addressed in future research. The first limitation of the study is the use of cross-sectional design for investigating the mediating effect of technostress. Establishing a variable as a mediator is a difficult process because causation can be inferred only when many strict assumptions are met, including perfectly reliable measures, correct temporal design, and no omitted confounders (Feldman, Contreras, Karlin, Basolo, Matthew, Sanders, & Serrano, 2016). Therefore, future studies may use longitudinal data to investigate the role of technostress as the mediator of the relationship between smartphone addiction and conflict behavior. Second, the data was not categorically used to determine the demographical impact of smartphones on conflict behavior. There is a possibility that there may be age or sex wise difference on the conflict behavior of an individual. Secondly, we have chosen random sampling; thirdly, the participants may not represent any specific workplace ; so, maybe, there can be a change on the impact of smartphone usage among people working in different types of work cultures, having different nature of work, and industries where they are working.

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A Study of Factors Affecting Consumer Behaviour Towards Electronic Durable Goods

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Abstract

Electronic durable goods have become essential household items to be used regularly in day to day life. The purpose of the present study was to identify and explore major factors affecting consumer attitude and subsequently behaviour towards the purchase of electronic durable goods. The study adopted a cross - sectional research design to accomplish the set objectives. A sample of total 514 respondents was selected from eight cities of Uttar Pradesh using convenience sampling method. Data were collected using a structured questionnaire which was prepared through extensive literature review. Data were analyzed using statistical techniques such as exploratory factor analysis, Mann - Whitney and Kruskal - Wallis tests on SPSS. The results indicated that exploratory factor analysis produced a total of five factors, which were identified as Perceived Quality, Price Consciousness, Brand Consciousness, Perceived Risk, and Advertisement. Moreover, demographic variables were also found influencing consumer behaviour towards electronic durable goods. The study contributed through the identification of significant determinants of purchase behaviour towards electronic durable goods. The findings of the study may be useful for marketers in devising their marketing strategies.

Keywords : Attitude, consumer behaviour, electronic durable goods, factor analysis, purchase intention

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Understanding one's behaviour has always been a challenging and elusive task. For marketers, understanding consumer behaviour has been of strategic importance because all their efforts remain focused on delivering the product and services according to the consumer's expectations. Identifying the needs and wants of the consumers has been the first step in devising a marketing strategy. As consumers, each of us has a vast number of attitudes towards products, services, advertisements, retail stores, etc. Attitudes are all-pervasive, "when we say that we like or dislike someone or something, we are expressing our attitude towards that thing" (Schiffman & Kanuk, 2008, p. 256). Attitudes have been assumed as relatively enduring and long-lasting. Therefore, it became imperative to understand consumers' attitude in order to explain their behaviour, especially in case of high involvement products (such as electronic durable goods).

Unlike impulsive purchases made by consumers for FMCG goods and fashion articles, purchase decisions in case of electronic durable goods have been found to be relatively rational and consumers spend time on searching various information related to the products as it involves huge investment concerning money, and these products

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are not purchased frequently. Therefore, the study of attitude would be useful to understand consumer behaviour as it is considered to be highly correlated with the consumer's purchase intention which, in turn, has been found to be a strong predictor of behaviour (Ajzen & Fishbein, 1980). The present study attempts to identify important factors that affect the consumer's attitude towards electronic durable goods and purchase behaviour.

The Indian electronic goods market has witnessed a rapid growth after globalization of the Indian economy in the year 1991. According to a report of the India Brand Equity Foundation (IBEF) (2015), the Indian electronic durable goods market is the largest growing electronic market in the world and by 2020, it is expected to increase with a CAGR of 66.1% to USD 400 billion from USD 31.6 billion in 2015. However, the domestic market of electronic goods in India is primarily dominated by MNCs, and only 10% of India's consumption is produced internally (Swaminathan, 2014). The report further stated that in the last two decades, Chinese electronic goods production has increased rapidly, and it has become the second largest manufacturer of electronic goods in the world (Swaminathan, 2014). The Indian market is facing immense competition from these Chinese products because of their low prices.

Literature Review

Based on an extensive literature review, the following factors have been identified which affect consumers' attitude and purchase behaviour towards electronic durable products.

(1) Price Consciousness : Price has been reported as one of the most crucial factors while purchasing durable products. Consumers' perception about the price they pay for the products and services they buy plays a crucial role in the purchase decision - making process. Consumers, while purchasing durable goods, take into consideration the reference price, that is, the price benchmarked by the consumers on the basis of their perception of past prices (Zhang & Chiang, 2018). Price along with quality was found to be the most important predictor of consumer intention to purchase electronic goods by Alfred (2013), Kaushal and Kumar (2016), Kaur and Chadha (2014), Landinliana (2012). Rastogi and Chaudhary (2012) also reported price as the most important determinant of purchase behaviour. Vijayalakshmi, Mahalakshmi, and Magesh (2013) found cost - consciousness as one of the predictors of consumer behaviour towards electronic home appliances in Chennai. Saccani, Perona, and Bacchetti (2017) proposed a model to estimate the total cost of ownership of consumer durables, which included the cost incurred from information search to end of life of the product.

(2) Quality : Quality being relative in nature would be perceived differently by different individuals. The meaning of quality has been time - based or situational. American Society for Quality defined quality as the "totality of features and characteristics of a product or service that bear the ability to satisfy stated or implied needs" (American Society for Quality [ASQ], 2013, para 4). According to Zeithaml (1988), perceived quality is not associated with products or brand consumer purchase and use ; instead, it is the consumers' judgment about an entity's or a service's overall excellence or superiority. Thus, the quality of a product or service depends upon a person and how he/she perceives it (Alfred, 2013). Investigating the major determinants of customer loyalty in the Taiwan automobile sector, Chang, Chuang, Chuang, and Lin (2015) found that product quality and service quality were responsible for shaping consumers' satisfaction towards automobiles, which in turn influenced customer loyalty. Some other research studies such as studies conducted by Alfred (2013) ; Coelho, Meneses, and Moreira (2013) ; Kumar and Kaushal (2017) ; Saravanan (2010) ; and Wollenberg and Thuong (2014) also found perceived quality as one of the important determinants of purchase behaviour towards electronic goods.

(3) Brand Name : The brand name has been one of the crucial factors to which consumers give due importance

while purchasing electronic durable products as it involves a considerable amount of money on the purchase of electronic durable goods. Therefore, brand image/brand name has been a critical purchase influencer for the purchase of durable goods (Bhatia, Ali, & Mehdi, 2014). A brand name not just differentiates product offerings of two or more manufacturers/sellers ; instead, it is considered the most valuable asset for a company. It has also been assumed as the element of the relationship between a company and customers (Kotler & Armstrong, 2010). The brand name has a direct influence on the customer's perception of the quality of the offerings. When customers would be satisfied, they would generate word of mouth, and it would attract others to consider and choose the brand (Azad & Safaei, 2012). Kumar and Kaushal (2017) ; Malviya, Saluja, and Thakur (2013) ; Matai and Bhat (2013) ; Srivastava (2014) ; and Vyas (2011) also found brand name to be one of the significant determinants of consumer purchase behaviour towards electronic durable goods.

(4) Perceived Risk : While purchasing electronic durable goods, consumers make a significant investment in the products, so they are concerned about the durability and safety of the products. Therefore, the perceived risk would become a crucial factor while purchasing electronic durable goods. However, perceived risk has been found to be subjective – it might be related to the functionality of the product, durability, or return on investment. Reisinger and Mavondo (2005) defined risk as "exposure to the chance of injury or loss, a hazard or dangerous chance or the potential to lose something of value" (p. 212). Carroll (2009) conceptualized perceived risk as financial risk, time risk, performance risk, physical risk, social and psychological risk. Coelho et al. (2013) found functional and social risk to influence consumers' intention to purchase. Yee and San (2011) found perceived risk as a major factor affecting consumers' choice to purchase an automobile in Malaysia. Kumar and Kaushal (2017) also reported perceived risk as one of the important determinants of consumers' attitude and intention to purchase electronic durable goods. Horvat and Dosen (2013) found a negative correlation between perceived risk and attitude towards private labels.

(5) Advertisement : According to Kotler (1997), "Advertising is a paid form of non-personal presentation and promotion of ideas, goods, or services by an identified sponsor" (p. 637). Advertisements have been found to help marketers not only to inform the consumers about the attributes and features of the products, but also persuading them to buy their products. Therefore, the marketers spent an enormous amount of money using various mass media channels, including new media such as social media. An effective advertisement has been reported to influence the attitude towards brand and purchase intention. The credibility of the advertised source helps to increase believability of the message (Goldsmith, Lafferty, & Newell, 2000) and familiarity under celebrity endorsement plays a crucial role in convincing the consumers to buy products (Chakraborty, 2018). Source credibility comprises of the credibility of the company and endorser who endorse the product. Previous research studies - Kulshreshtha, Bajpai, and Tripathi (2017) ; Rehman, Nawaz, Khan, and Hyder (2014) ; Wollenberg and Thuong (2014) also confirmed that advertisements played a decisive role in convincing and persuading consumers to buy the advertised product.

Objectives of the Study

The primary purpose of the present study is to identify and explore major factors which affect consumers' attitude towards electronic durable goods and subsequently intention to purchase. The study also aims to find out the role of demographic factors affecting consumers' behaviour towards electronic durable goods.

Demographic Factors and Proposed Hypotheses

Along with personal and social factors, consumer behaviour has also been found to be affected by demographic

characteristics of the target consumers. The literature has acknowledged the role of demographic factors on consumers' purchase behaviour (Juyal, 2013 ; Rani, 2012; Rehman et al. 2014 ; Verma, Kumar, & Yadav, 2018 ; Vyas, 2011). Therefore, the following hypotheses are proposed for the present study :

✥ **H1:** There is a significant difference in the mean scores of factors affecting consumer's attitude towards electronic durable goods between male and female respondents.

✥ **H2 :** There is a significant difference in the mean scores of factors affecting consumer's attitude towards electronic durable goods between married and unmarried respondents.

✥ **H3 :** There is a significant difference in the mean scores of factors affecting consumer's attitude towards electronic durable goods among the different age categories.

✥ **H4 :** There is a significant difference in the mean scores of factors affecting consumer's attitude towards electronic durable goods for the respondents having different educational backgrounds.

✥ **H5 :** There is a significant difference in the mean scores of factors affecting consumer's attitude towards electronic durable goods among the respondents with a different occupation.

✥ **H6 :** There is a significant difference in the mean scores of factors affecting consumer's attitude towards electronic durable goods among the respondents with different income levels.

Methodology

The study adopted a cross-sectional research design to accomplish the set objectives. The population of the present study consisted of the consumers living in urban areas in Uttar Pradesh. A sample of total 514 respondents was selected using convenience sampling ; however, an attempt was made to make the sample more and more representative of the population (consumers living in urban areas of Uttar Pradesh). Data were collected from Lucknow, Kanpur, Ghaziabad, Agra, Meerut, Varanasi, Allahabad, and Gorakhpur cities on a proportionate basis. Data were collected through a structured questionnaire which was prepared through an extensive review of literature. The questionnaire consisted of 21 items related to various factors influencing consumer behaviour (as identified from the literature) along with the necessary demographic information. Three items to measure price consciousness were taken from Grewal, Krishnan, Baker, and Borin (1998) ; Sinhaa and Batrab (1999) ; and Cheong and Park (2005). Items to measure perceived quality (4 items) were adapted from Jaafar, Lalp, and Naba (2012). A 5-item scale to measure brand consciousness was taken from Rio, Vazquez, and Iglesias (2001). Four items to measure advertisements were adapted from Jaafar et al. (2012). Finally, a three items scale to measure perceived risk was taken from Richardson, Jain, and Dick (1996) ; Steiner (2004) ; and Jaafar et al. (2012). Respondents were asked to rate their opinions on these statements on a 7 - point Likert scale. Statistical techniques such as exploratory factor analysis, reliability analysis, and non - parametric tests (Mann - Whitney & Kruskal - Wallis) were employed on the data using SPSS 20.0. The study was conducted between April - November 2016.

Data Analysis and Results

(1) Demographic Profile of Respondents : Of the total 514 respondents, 348 (67.7%) were male ; whereas, the rest 166 (32.3%) were females (see Table 1), which shows that the sample was skewed towards male respondents. Majority of the respondents were in the age category of 20 - 29 years (50.4%), 30 - 39 years (21%), and 40 - 49 years (18.5%). Out of the total of 514 respondents, 244 (47.5%) were married and the rest 270 (52.5%) were

Table 1. Demographic Profile of the Sample Respondents

Variable Name	Categories	Frequency	Percentage (%)
Gender	Male	348	67.7
	Female	166	32.3
Age	Under 20	32	6.2
	21-30	259	50.4
	31-40	108	21.0
	41-50	95	18.5
	Above 50	20	3.9
Education	12th or below	55	10.7
	Graduation	202	39.3
	Post-Graduation	220	42.8
	Other	37	7.2
Occupation	Self employed	80	15.6
	Job	239	46.5
	Student	153	29.8
	Unemployed	17	3.3
	Homemaker	25	4.9
Marital Status	Married	244	47.5
	Single	270	52.5
	None	166	32.3
Income in INR	Below 30,000	193	37.5
	30.000 - 60,000	199	23.3
	60,000 - 90,000	22	4.3
	Above 90,000	14	2.7

unmarried, which shows that the sample was approximately equally distributed between the two categories. Furthermore, 46.5% of the total respondents were working (doing job), 29.8% were students, and 15.6% were self - employed ; whereas, a very small part of the sample was unemployed (3.3%) and homemakers (4.9%). Majority of the respondents were either graduates (39.3%) or postgraduates (42.8%) and only 10.7% were 12th pass or below, and the rest 7.2% had other qualifications. Income profile of the respondents shows that 32.3% were not earning as these were either students or unemployed or homemakers. Moreover, respondents having income below ₹ 30,000 were 37.5%, between ₹ 30,000 - ₹ 60,000 were 23.3%, only 4.3% respondents had income of ₹ 60,000 - ₹ 90,000, and 2.7% respondents were earning above ₹ 90,000.

(2) Factor Analysis : Before applying factor analysis, it is desirable to check the underlying assumptions of factor analysis. The first assumption is sampling adequacy or data sufficiency, that is, whether the sample data was adequate to run factor analysis or not. Kaiser - Meyer - Olkin Measure or KMO value of more than 0.7 indicates that the sample is adequate to apply factor analysis (Hair, Black, Babin, & Anderson, 2010). The Table 2 gives

Table 2. KMO and Bartlett's Test

Kaiser - Meyer - Olkin Measure of Sampling Adequacy		0.858
Bartlett's Test of Sphericity	Approx. Chi-Square	4832.82
	Df	210
	Sig.	0

KMO value as 0.858, which is more than the recommended value (0.7). Therefore, the data were sufficient to run factor analysis. Another assumption of factor analysis is that the items or variables should be correlated to each other. In other words, in factor analysis, multicollinearity is desirable (Hair et al., 2010). The Table 2 indicates that Bartlett's test of sphericity (chi-square = 4832.823, df = 210) is significant (p - value <0.05), which confirms that the variables are significantly correlated to each other, which is a pre - requisite for factor analysis.

Communality represents the amount of variance accounted for by the factor solution for each variable (Hair et al., 2010). It is the common variance present in a variable (Field, 2009). The Table 3 provides values of communalities for all the observed variables which shows that communalities for all the variables are more than the threshold value of 0.5 (Hair et al., 2010). Moreover, the factor solution resulting from principal component analysis is rotated using varimax rotation and Eigen value criterion is used to extract the probable factors. The rotated factor solution results in six factors which together explain 69.717% of the total variance (Table 3), which is more than 60% as suggested by Hair et al. (2010).

✤ **Naming the Extracted Factors :** Rotated component matrix results into six factors; however, the sixth factor contains only one variable ("I am willing to buy electronic durable goods even though the price is higher") ; whereas, rest of the factors have either four or five variables. Therefore, it was dropped as it was a single variable factor and explains only 5.26% of the variance and only five factors are considered as extracted out of factor analysis.

✤ **Factor 1 (Brand Consciousness) :** The first factor explains 15.01% of the total variance and contains a total of five variables : "I prefer to buy an internationally recognized brand" (loading = 0.788), "Brand name is a major factor that will influence my decision regarding the purchase of electronic durable goods" (loading = 0.779), "I usually purchase best-selling brands of electronic durable goods" (loading = 0.758), "I prefer to buy a trustworthy brand" (loading = 0.737), "I will only buy my favourite brand" (loading = 0.729). All these five variables are found related to consumer's concern about the brand. Therefore, it is suitable to name this factor as Brand Consciousness.

✤ **Factor 2 (Perceived Quality) :** The second factor explains 14.73% of the total variance and it has four variables - "I don't compromise with the quality of the product" (loading = 0.844), "I think the quality is an important criterion when buying electronic durable goods" (loading = 0.805), "The product which I buy should be of high quality" (loading = 0.781), "I give sufficient time to get quality products when I buy electronic goods" (loading = 0.754) and is named as Perceived Quality because all the four variables are related with the quality aspect of the product.

✤ **Factor 3 (Advertisement) :** Four variables – "My decision to purchase a particular brand is influenced by advertisements" (loading = 0.859), "I think advertisements are important when I buy electronic durable goods" (loading = 0.839), "The messages in advertisements attempt to persuade me to buy electronic durable goods" (loading = 0.828), and "I have trust in the messages given by the advertisements" (loading = 0.795) constitute the third factor and together explain 13.78% of the total variance. All the statements are related to the role and impact of advertisements in influencing and persuading consumers to buy a particular product/brand. Therefore, it seems appropriate to name this factor as Advertisement.

✤ **Factor 4 (Perceived Risk) :** The fourth factor explains 11.98% of the total variance and includes the variables : "I am uncertain which brands provide real value for money in terms of product quality" (loading = 0.780), "The cheapness of some brands suggests to me that they may have some risks, such as low quality" (loading = 0.760), "I think the demonstration of the product can decrease my uncertainty when choosing electronic durable goods" (loading = 0.748), and "When I am considering electronic durable goods, I choose the products very carefully"

(loading = 0.676). All four variables are associated with the consumer's perception of the risk involved in purchasing electronic durable goods. Due to electronic goods being durable in nature and involving high price, consumers try to ensure that they purchase the right product. Based on the nature of these variables, it is suitable to name this variable as Perceived Risk.

Table 3. Details of Extracted Factors : Loadings, Eigen Value, Communality, Variance Explained, Cronbach's Alpha, & AVE

		Factor Loading	Communality	Eigen Value	Variance Explained	Cronbach's Alpha	AVE
Factor 1	I prefer to buy an internationally recognized brand.	0.788	0.646				
Brand Consciousness	Brand name is a major factor that will influence my decision regarding the purchase of electronic durable goods.	0.779	0.653				
	I usually purchase best-selling brands of electronic durable goods.	0.758	0.64	6.165	15.01%	0.847	0.575
	I prefer to buy a trustworthy brand.	0.737	0.696				
	I will only buy my favourite brand.	0.729	0.607				
Factor 2	I don't compromise with the quality of the product.	0.844	0.79				
Perceived Quality	I think the quality is an important criterion when buying electronic durable goods.	0.805	0.734	2.749	14.73%	0.87	0.634
	The product which I buy should be of high quality.	0.781	0.683				
	I give sufficient time to get quality products when I buy electronic goods.	0.754	0.686				
Factor 3 **Advertisement**	My decision to purchase a particular brand is influenced by advertisements.	0.859	0.765				
	I think advertisements are important when I buy electronic durable goods.	0.839	0.77	2.007	13.78%	0.866	0.55
	The messages in advertisements attempt to persuade me to buy electronic durable goods.	0.828	0.729				
	I have trust in the messages given by the advertisements.	0.795	0.699				
Factor 4 **Perceived Risk**	I am uncertain which brands provide real value for money in terms of product quality.	0.78	0.699				
	The cheapness of some brands suggests to me that they may have some risks, such as low quality.	0.76	0.67	1.478	11.98%	0.806	0.55
	I think the demonstration of the product can decrease my uncertainty when choosing electronic durable goods.	0.748	0.623				
	When I am considering electronic durable goods, I choose the products very carefully.	0.676	0.693				
Factor 5 **Price Consciousness**	Price is the most important factor when I purchase electronic durable goods.	0.819	0.744				
	I compare prices of other brands and store brands before I choose one.	0.76	0.658	1.199	8.93%	0.7	0.532
	I buy electronic durable goods because they are worth to use with respect to their prices & usage quality.	0.591	0.588				

Note. AVE - Average variance extracted   **Total Variance Explained (TVE) = 69.71%**

✤ **Factor 5 (Price Consciousness) :** The fifth factor explains 8.93% of the total variance and is named as Price Consciousness because the underlying variables - "Price is the most important factor when I purchase electronic durable goods" (loading = 0.819), "I compare prices of other brands and store brands before I choose one" (loading = 0.760), and "I buy electronic durable goods because they are worth to use with respect to their prices & usage quality" (loading = 0.591) - are related with consumer's concern about the price of the product.

(3) Reliability and Validity : Reliability is defined as the measure of internal consistency. It is the extent to which a variable is consistent in what it is intended to measure (Hair et al., 2010). Cronbach's alpha value of more than 0.7 suggests internal consistency in the construct (Nunnally, 1978). Reliability coefficients for all five factors is more than the recommended value 0.7 (Table 3).

Further, the construct validity is ascertained through convergent and discriminant validity. Convergent validity shows the extent to which indicators of a specific construct converge or have a high proportion of variance in common (Hair et al., 2010). Average variance extracted (AVE) value is more than 0.5 for all five factors (Table 3) which ensures convergent validity (Fornell & Larcker, 1981). Discriminant validity, on the other hand, refers to the extent to which a construct is truly distinct from other constructs (Hair et al., 2010). A commonly used statistical measure of discriminant validity has been the comparison of the AVE value with correlation squared (Fornell & Larcker, 1981). However, in exploratory factor analysis, if the rotated component matrix does not show any cross loading, it indicates that the variables are converging to only one factor which confirms discriminant validity. Also, exploratory factor analysis gives completely uncorrelated factors, which confirm discriminant validity.

(4) Descriptive Statistics of the Extracted Factors : The Table 4 gives the mean and standard deviation of the factors extracted from the exploratory factor analysis. The Table 4 shows that Perceived Quality (Mean = 5.7588, *S.D.* = 1.19643) is the most important factor that influences consumer decision making regarding the purchase of electronic durable goods. Price Consciousness (Mean = 5.4721, *S.D.* = 1.14914) is the second most important factor followed by Brand Consciousness (Mean = 5.2160, *S.D.* = 1.10986), Perceived Risk (Mean = 5.1250, *S.D.* = 1.15071), and Advertisement (Mean = 4.4786, *S.D.* = 1.30536). The Table 4 shows that Advertisement is the least important factor among all the five factors.

(5) Hypotheses Testing : To compare mean score across categories, non - parametric tests were applied as the data were not following the distribution. The results (Table 5) show that a significant difference is found between male and female respondents only for Advertisement ($p = 0.034 < 0.05$). Therefore, gender is found to influence only one factor, that is, Advertisement. Further, married and unmarried consumers differ in their responses to Advertisement and Perceived Risk only. Moreover, the respondents from different age groups are found to be similar in their responses only on Brand Consciousness & Perceived Quality. Educational background is found to

Table 4. Descriptive Statistics

S.N.	Factor	No of Items	Mean	S.D.
1	Brand Consciousness	5	5.2160	1.10986
2	Perceived Quality	4	5.7588	1.19643
3	Advertisement	4	4.4786	1.30536
4	Perceived Risk	4	5.1250	1.15071
5	Price Consciousness	4	5.4721	1.14914

Table 5. Demographic Analysis : Results of Mann - Whitney & Kruskal - Wallis Tests

		Price Consciousness	Brand Consciousness	Perceived Quality	Advertisement	Perceived Risk
Gender	Mann-Whitney *U* Statistics	28075	28612	25839	25559	27922
	Sig.	0.603	0.862	0.052	0.034	0.539
Marital Status	Mann-Whitney *U* Statistics	30201	30292.5	32880.5	25667.5	29492
	Sig.	0.099	0.114	0.972	0.000	0.039
Age	Kruskal-Wallis Test Statistics	11.209	3.064	4.372	36.527	9.601
	Df	4	4	4	4	4
	Sig.	0.024	0.547	0.358	0.000	0.048
Education	Kruskal-Wallis Test Statistics	1.9	1.788	3.804	6.135	1.114
	Df	3	3	3	3	3
	Sig.	0.593	0.617	0.283	0.105	0.774
Occupation	Kruskal-Wallis Test Statistics	6.757	11.085	3.21	11.956	6.1
	Df	4	4	4	4	4
	Sig.	0.149	0.026	0.523	0.018	0.192
Income	Kruskal-Wallis Test Statistics	6.805	8.468	6.054	4.944	5.846
	Df	4	4	4	4	4
	Sig.	0.147	0.076	0.195	0.293	0.211

have no influence on the respondents' responses to the given factors ($p > 0.05$). However, occupation is found to influence consumers' response to Brand Consciousness and Advertisement. Finally, respondents from different income groups did not differ on either of the factors. Thus, the results show that overall, consumers' responses were influenced by the majority of the demographic factors.

Discussion

The primary objective of the present study is to identify the significant factors that affect consumer behaviour towards electronic durable goods. The results of exploratory factor analysis extracted five factors - Price Consciousness, Brand Consciousness, Perceived Quality, Perceived Risk, and Advertisement. Moreover, on comparing the mean and standard deviation of these factors, Perceived Quality comes out to be the most important factor followed by Price Consciousness, Brand Consciousness, Perceived Risk, and Advertisement. While purchasing electronic durable goods which involve time, money, and efforts, consumers considered quality as the most important criteria. However, the notion of quality has different meanings and interpretations for different consumers. Some might relate quality with the performance of the product or durability of the product. On the other hand, some might perceive timely after sales service as an integral part of the overall quality of the product. Furthermore, Price Consciousness is found to be the second most important factor which indicates that along with quality, price of the product also plays a crucial role in the purchase decision making process. Quality and price have been considered as the two most important determinants of the purchase decision making process by the consumers. These results are consistent with the previous findings of Alfred (2013) ; Rastogi and Chaudhary (2012) ; Kaushal and Kumar (2016) who reported quality and price as the two important factors.

Furthermore, Brand Consciousness is reported as the third important factor affecting consumer behaviour towards electronic durable goods. In the competitive market where companies have been spending a huge amount

of money on creating a favourable brand image, consumers are becoming more brand conscious in their purchase of goods and services. A well - established and trustworthy brand helps consumers to reduce the dissonance while purchasing such products, which require a large amount of investment. The results are in line with previous studies (Kaushal & Kumar, 2016, Malviya et al., 2013, Wollenberg & Thuong, 2014).

Perceived Risk is found as the fourth important factor affecting consumer behaviour. While deciding to purchase a durable product, consumers search for relevant information about the product. Adequate information helps consumers to reduce the perception of risk related to the purchase of a product. The present study also considers perceived risk as an essential determinant of consumer behaviour towards electronic durable goods. These results are consistent with the findings of previous research studies - Horvat and Dosen (2013), Kumar and Kaushal (2017), and Yee and San (2011). Finally, Advertisement is found as the fifth most important factor. The results are in line with the findings of the previous studies (Kulshreshtha et al., 2017 ; Rehman et al., 2014 ; Wollenberg & Thoung, 2014) which illustrate the significant role of company advertising in attracting, convincing, and persuading consumers to buy the products.

Furthermore, the impact of demographic variables is also examined. The findings show that male and female consumers differ in their responses only for Advertisement. The differences in the opinion of married and unmarried respondents is found in case of Advertisement & Perceived Risk and also with respect to the overall attitude and purchase intentions ; whereas, respondents from different age groups are found to have the same response on brand consciousness and perceived quality only. No significant difference is found in the responses of consumers having a different educational background. Occupation is found to influence brand consciousness and advertisement. Finally, income is found to have no influence on either of these factors. These results support the findings of previous research studies (Bhatia et al., 2014; Juyal, 2013; Rehman et al., 2014; Rani, 2012 ; Verma et al., 2018; Vyas, 2010) which reported that demographic factors influenced consumer behaviour.

Conclusion

The study explored five important factors (Price Consciousness, Brand Consciousness, Perceived Quality, Perceived Risk, and Advertisement) which are the main determinants of consumer behaviour while purchasing electronic durable goods. As the electronic durable goods market in India is becoming more and more competitive due to the presence of Indian companies as well as MNCs, consumers are found to become more brand consciousness, price conscious, and quality centric. However, consumers' purchase decision making is also found to be influenced by the perceived risk factor associated with various aspects of the product such as quality, performance, durability, etc. Moreover, consumers' purchase behaviour is also found to be influenced by the demographic factors such as gender, age, income, occupation, marital status, etc.

Implications

The study produces a number of interesting and meaningful practical and managerial implications. The study identifies five significant determinants of purchase behaviour of electronic durable goods. Quality and price are the two most important factors affecting consumers' choice to purchase the products. Thus, companies should put their heart and soul in producing good quality products with possibly zero defects. Since consumers spend more money on durables as compared to FMCG products, so they expect these products to work properly in the long run. Therefore, companies should provide adequate after-sales services to deal with consumer complaints. With the advent of technology, especially the Internet, information is now readily available to the consumers. Before making a purchase decision, consumers may look for various information/product reviews about the product online. They can also very easily compare features along with price of the product with other competitive brands

available in the market. Therefore, companies need to make a balance in the quality and price of the product as consumers are looking for value for money. Companies need to work on developing trustworthy brands so that consumers may trust and believe in the claim they make about the products. The believability of the advertisement message will increase if the message originates from a well known and trustworthy source. Also, consumer's trust in the brand would help them to deal with the issue of risk associated with the purchase. Thus, companies might take benefit from the findings of the study while devising marketing strategies.

Limitations of the Study and Directions for Future Research

The study was conducted with approximately 500 consumers living in eight different cities of Uttar Pradesh, the biggest state of India using convenience sampling. Therefore, the sample may or may not be truly representative of the population. Hence, it will not be appropriate to generalize the findings of the study to entire Uttar Pradesh as it is culturally and linguistically a very diverse state. Further, the study considered only six factors (price consciousness, brand consciousness, perceived risk, perceived quality, advertisement, & demographics), however, consumer behaviour has been affected by a number of factors, including socio - cultural and other environmental factors. Therefore, further studies can be conducted by including more factors. The present study was conducted only on young consumers living in urban and semi-urban areas ; similar studies may be conducted on rural consumers with a different demographic profile.

Acknowledgement

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Consumer Preference Towards Private Label Brands with Reference to Retail Apparel in India

* Sunita Kumar

Abstract

As majority of the present day consumers are considering brands as an important element in their choice of decision making while purchasing, it is pertinent that sellers should capitalize on the type of brands they are offering to consumers. Both private labels and global brands have their own advantages and disadvantages over each other mainly in terms of pricing and quality factors. However, the main motive the consumers are looking forward is to buy a product which would effectively satisfy their requirements. If they find a product which satisfies their needs effectively, they buy it irrespective of whether it is a private label or a global brand. Even the price of the product may not be a major factor in such a case. This study focused on the preference and intention among consumers towards buying of private label products, especially retail apparel products. This study examined the causal relationships between six antecedents of customer perceived preference identified in this study as fashion consciousness, attitude, store image, price, quality, and store loyalty with regard to the purchase intention of private label brand apparels. The model was evaluated using data collected from 292 customers from different malls in Bangalore in 2016 - 17. The findings revealed that customers' attitude played a significant role in their purchase behaviour towards private label brand apparels.

Keywords : private label brands, national brands, customer satisfaction, purchase intention

Private label brands are the brands controlled and owned by wholesalers or retailers for a range of items under special distribution (Abhishek, 2011; Raja & Ali, 2014). Fitzell (1982) described that the private label brands were initially established 100 years ago in the products of coffee and tea. Later, some of the other products were introduced such as milk, bread, eggs, etc. and personal care products and these have achieved enormous growth all over the world. This increasing nature shows that the consumer buying preference of such products is also increasing. It was evidenced from the report of Private Label Marketing Association (PLMA) in 2000 (as cited in Chakraborty, 2013) that around 71% of the customers in United States desired to purchase private label brands, and it reflected that the brands have gained popularity among customers in the retail sector. Some of the available and well - known private label branded products are remedies like aspirin, packaged food products, toilet tissues, hygiene products, paper towels, etc. These products provide better external support for the growth of the economy (Nielsen, 2014). For example, from the global perspective, the private label branded products like fast moving consumer goods achieved 77% of sales value in 2012 ; likewise, the figure was 14% for hygiene and tissue products and 12% for packaged food (Euromonitor Research, 2014).

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Literature Review

Conventionally, private label products come in a white colored package with a black typeface, and can be generally found down the shelf (Kumar & Steenkamp, 2007a). Similar to branded goods, even retailers' products have come up with a good packaging and high quality to impress the customers. Therefore, facilitating the private label fix seems to be the right marketing strategy and customers can enjoy the benefits of buying quality products at low prices, which are standard (considerable pricing with quality products) to premium products (top quality to match the niche of other top brands). Moreover, retailers come up with new concepts that are valuable through source and supply chain efficacies to give lesser cost with good quality (Kumar & Steenkamp, 2007b). Consequently, this facilitated the retailers to attract customers and to sell their products to put off foreign exchange flight. The name of the brand adds value to its products and impresses the customers. Customers get a good image about the products of a particular brand based on the value of the brand name. Private label brands, otherwise referred to as store brands, have witnessed a good growth in the recent years. The expansion of private label brands is motivated by two factors : consumer awareness towards the brands and retailers' motivation for greater profit along with their capability to effectively manage these brands. The market share of the private label brands is increasing in the Indian market. Sales of the private label products in the Indian market have not been at the peak yet. The sales are still growing and are making the Indian market a compelling space to analyze, study, and predict the growth and success of the private label products. Previous research on private label products focused upon the characteristics of the consumers that affected the purchase intention towards a private brand, for example, demographic characteristics (Baltas, 1997; Richardson, 2000), price sensitivity (Garretson, Fisher, & Burton, 2002), and risk aversion (Ailawadi, 2001).

Private label products, otherwise referred to as store brands, are formed by retail owners for attracting customers to their showrooms (Singhi & Kawale, 2010). There is a growing demand for the private label products among customers today ; however, this needs a detailed analysis to comprehend the main aspects that act as a manipulating factor for customer behavior.

This review of literature has discussed multiple facets such as approach, buying behavior, five variables (fashion involvement, price consciousness, value consciousness, past experience, and perceived mass store image) based on customer perception.

Concepts and Definitions

(1) Private Brands : According to Baker (1990) and Sampson and Froehle (2006), the definition of a private brand is that it is a brand for which the copyright is owned only by its producer and not by the retailers, wholesalers, or other liaisons. An end user or a consumer might generally not be aware of the name of the manufacturer as the product will be named by its distributor or retailer's name. Private brands are generally referred to as store brands, private label products, distributor brands, retailer brands, liaison brands, own brands, and trader brands (Sampson & Froehle, 2006). The retail industry dominates the private label brands in terms of publicity, packaging, wholesale prices, and assets of stock (Chen, 2009). Private label products are cheaper than the branded ones, which is the main reason as to why consumers choose them (Walker, 2006), but those who are really brand specific will not opt for private label products because to them, quality matters more than the cost factor (Ailawadi, 2001; Richardson et al., 1996).

(2) Intention : Purchase intention is a planned behavior for a consumer who is interested in shopping a certain product (Ajzen, 1991). As customers get highly attracted to advertisements and brand promotions, manufacturers are ready to spend big amounts on promoting their products. According to Darian and Tucci (2011), the customers'

buying intention depends upon the private label products as the pricing is justifiable for the products they purchase. When a brand wins the loyalty and trust of customers, it is quite easy to make them stick to the brand, as people feel related to the brand and thereby increase the purchase levels (Jin & Suh, 2005).

(3) Apparel Retail Sector in India : The apparel retail sector consists of sale of all men's wear, women's wear, and kids wear, in which the men's wear sector sells men's active wear, casual dresses, accessories, formal dresses, and semi-formal dresses ; the women's wear market sells active wear, casual dresses, accessories, formal dresses, and semi-formal dresses ; while the kids' market sells baby clothing, casual dresses, accessories, formal dresses, and semi-formal dresses for both boys and girls and toddler clothing. Retail selling price (RSP) determines the market value, inclusive of taxes and charges.

(4) Recent Trends in Apparel Retailing in India : Extensive prevalence of Indian culture replicates even in our dressing nature, leading to a wide range of apparel collections. For women, the collections range extensively amidst the common saree to salwar kameez, while men's industry is equally vast with dhoti to lungi. The branded clothing industry is growing at a rapid pace depending on various trading factors such as end of Multi Fibre Arrangement and entry of overseas vendors and apparel manufacturing companies in India leading to the growth and development of the Indian apparel industry. The Indian retail clothing industry has gained enormous importance in the global market. This research aims to analyze the factors based on which the clothing retail and distribution sectors have been transformed in the recent years. The Indian textile and clothing sector proudly boasts of a high level of volume, spread, depth, and competitiveness, which can be competed only by China and not by any other country. Quotas exited at the end of 2004, and with the entry of foreign vendors and clothing manufacturers in the country, and with the growth and development of the Indian apparel sector across the globe, a scrupulous research analysis of the clothing industry is mandatory (Pradhan, 2007).

(5) Theoretical Views : This research requires a customized description of Fishbein and Ajzen's (1975) theory of reasoned action (TRA), and it helps to frame the hypothetical structure for evaluating the attitude and buying behavior of youngsters towards mass - designer line products. The approach and purpose model of customized TRA clearly narrates the buying behavior of customers in different spending modes (Jin & Suh, 2005). Analyzing the teenage customer behavior towards buying behavior and mass designer lines, an approach and purpose model abiding to the rules of the TRA covers five consumer-oriented factors, which are fashion involvement, price consciousness, value consciousness, past experience, and perceived mass store image. Though it is not yet sure whether these five factors strongly manipulate the mass - designer line buying behavior, however, if it does, we need to check if it manipulates directly or indirectly via mass-designer line intentions. Construct oriented debates, as discussed in the projected model and hypothetical support for the imagined association, are listed below.

(6) Previous Studies : The growing importance of the private label brands has influenced a number of research works in the recent years in India and all over the world. These research studies are related to private label brands, consumer investigation, as well as retailer and market factors for success. When broadly categorized, research studies are related to the inspecting motivations and benefits of the private label brands for retailers ; studies of the consumer segment ; studies of consumer perceptions, behavior, and attitudes ; retailer positioning of private label brands ; and the strategic responses of national brand manufacturers. Several different approaches have been made to explain consumer behavior concerning private labels. Most studies examined private label consumer behavior in association with demographic and socioeconomic characteristics. Customers' buying attitudes towards private label products are discussed here in detail with regard to demographic and socioeconomic characteristics and also habitual and behavioral characteristic perspectives (Baltas, 1997). Common factors such as brand exposure,

product pricing and packaging, quality difference, apparent risk, brand value for money, income, and family size are certain basic and essential influencing factors for the purchase of branded label products (Richardson et al., 1996).

(i) Consumer Preference and Intention to Purchase Private Branded Products in General : Consumers' preferences and intentions are responsible for their choices while shopping private label products (Chaniotakis, Lymperopoulos, & Soureli, 2010) which incorporate factors such as trust in private label products, brand exposure, and supposed financial ability. There are different researchers who have shared their different views of consumer preference and intention to purchase private label branded products.

Private label products are the most important category of product brands which have enjoyed an increased attention in recent years. The Private Label Manufacturers Association (PLMA) stated that the private label products include all the goods that are sold under a retailer's own brand. Private label products are often referred to as own brands, own labels, store brands, in-house brands, distributor brands, or retail brands (Sathya, 2013 ; Raja & Ali, 2014). Raju, Sethuraman, and Dhar (1995) and Sadasivan and Suresh (2011) stated that the private label products must clearly bear only the store's brand name or the name of any other party with whom the store has introduced its store brand program (Tarzijan, 2004).

Chaniotakis et al. (2010) stated that 'the way of thinking' influences consumers' purchase intention as well as perceived perception of their economic situation. Researchers have proven that depending on their current financial ability, customers choose to go for branded or private label products. Private label products can earn customer loyalty by giving sensible pricing offers to the customers so that they are encouraged to make their initial purchase and also simultaneously maintain quality so that customers consider the purchase of the product a considerable value for money they spend. There are various other researchers who have worked on this topic and their studies depicted that the quality of the products influenced the choice of brand for customers than their demographic, emotional, and shopping behavior (Szymanski & Busch, 1987). Both internal and external memory must be able to recollect the private label products when consumers go for shopping and this recollection of memory will happen only when they felt gratified during their previous purchase. Once a customer gets a bad experience with a private label product, the next time, invariably, the thought will pop up in his/her mind and the only way to overcome it is through the pricing factor. When the customers gather and analyze the relevant details, they gain a lot of information, and the choice of brands are evident (Schiffman & Kanuk, 2010). An item that has more customer interest gains more attention than the other items (Hornby, 2005). Perceived private label price and perceived store image, unlike perceived private label quality, positively affect the attitude of customers towards private label quality, and eventually, customer satisfaction (Bawa & Bathurutheen, 2016). Cognitive, affective, and behavioral factors of attitude influence each other strongly as well as the purchase intention of online private label brands (Pangriya & Kumar, 2018). Consumer preferences and intention are responsible for their choices in shopping for private label products (Chaniotakis et al., 2010), which incorporate factors such as trust in private label products, brand exposure, and supposed financial ability.

Private label products can be produced both by retailers and that section of manufacturers for retailers who intend to attain wealth in manufacturing and supply and making effective use of surplus facilities (Baltas, 1997). While conversely, retailers could initiate and expand private label products for gaining high consumer loyalty and productivity through the store's image. According to Narasimhan and Wilcox (1998), the main intention of private label products is to add value for the retailers' negotiating position in contrast with national retailers to increase their brand value in the market. Sales of private label products experienced very limited exposure in the last decade (Levy, Wietz, & Pandit, 2013) and are considered to be second - rate products and duplicate versions of the real national brand products (Vargas - Hernandez & Noruzi, 2011) which is mainly due to the low pricing factor. The competitors have created a strong mindset among the customers that if a product is sold at a low price, it simply

means low quality as well, while the real reason of low pricing is due to nullified branding and promotional cost of private label products. Many studies have been carried out to observe whether consumers prefer buying private label products (Shukla, Banerjee, & Adidam, 2013). Private label products contributed about 17% of retail sales with a growth of 5% annually in the global market (Chandra, 2014 ; Hiscock, 2012), which is an evidence that consumers are accepting private label products. Nowadays, retail outlets perform a quality control check for the private label products to ensure that they abide to the standard guidelines before the products reach the shelves.

Many studies have been conducted previously on the subject of impact of private label products based out of developed and developing countries. These studies focus on the buying behavior of the customers that determines the customers' motivation, perception, choice, and behavior on food products. Munusamy and Wong (2008) ; Bousouki, Zotos, and Masouti (2008) ; and Chaniotakis et al. (2010) analyzed the factors that determined the buying behavior and found that consumers' attitudes and extrinsic & intrinsic factors of the items determined the buying behaviour. Munusamy and Hoo (2008) observed a positive relationship between price and consumers' influence on buying private label products. Therefore, maximum people choose low cost items (Boutsouki et al., 2008). Packaging is a key factor as customers get attracted and impressed by the details given on the outer cover of the product (Ampuero & Vila, 2006). Even advertisements and other promotional activities influence the choice of customers. Several other studies have justified this point on private label product promotions.

Researchers have studied a huge number of vendor traits that manipulate the outlet image, such as variety and quality of products, services and brands, store outlook, behavior and service level of staff, price levels, and depth & frequency of advertisements (Ailawadi & Keller, 2004 ; Burt & Carralero - Encinas, 2000). When it comes to the choice of private label products, it is the extrinsic cues that influence the customers, which leads to more care of packaging of the products. Retailers can benefit from supply chain and selling high volumes. Salesmen face tough challenges in persuading the customers to purchase private label products in spite of the strong bond between the store and salesmen. Intrinsic cues such as quality, risk, and value of the product influence the physical traits, where risk may arise due to uncertainty. Intrinsic factors are related to physical product characteristics where it includes perceived quality, risk, and value. Risk is due to a mistake or uncertainty. Uncertainty happens due to the appearance of the products.

(ii) Price and Price Related Factors : Price is an important factor determining the purchase intention of private label products among consumers (Jayakrishnan, Rekha, & Chaudhri, 2016). Consumers usually prefer purchasing products of lower price, simple packaging, high quality, and even they don't prefer less well-known products that are especially risky because they are not sure about the quality of those products (Sudhir & Talukdar, 2004). That is the reason why consumers perceive private label products as high-risk products. Consumers usually maximize the utility of the products they purchase by avoiding mistakes. On this basis, manufacturer branded products, which are higher in prices are always perceived to be of high quality with lower risk ; hence, consumers consider price and brand to be a very important criteria while determining the quality of a product. There are extensive studies that considered pricing as an important factor among consumers for their purchase intention. These studies are discussed below.

Choi and Coughlan (2004) found that pricing of food product categories such as cookies and soups varied from the pricing of national brands and wholesaler brands because of their varying standards and variable costs. Therefore, retailers must have a separate category for private label products with low pricing as the target market for these items is different from those for branded products. This research did not consider price differential and category price. Méndez, Oubiña, and Rubio (2008) conducted a research in Spain, while Romanuik and Nenycz - Thiel (2013) also conducted their research in Australia and both concluded that private label products are different from other branded products such as Maria cookies, chocolate bars, jams, sliced bread, packet soups, sliced cheese, etc. based on pricing factors.

Jin, Chen, and Sam (2010) conducted a research on the buying behavior of breakfast cereals among customers based out of America from which the study found that people who fell under the lower income bracket were more concerned about the pricing factor and ,therefore, chose private label products ; whereas, the higher income shoppers comfortably chose the national brands.

Nielsen (2014) and McCaskill (2014) observed that three-quarters of global people accepted that the quality of private label brands has increased. The same survey highlighted that the majority of customers (66%) in the Asia - Pacific region bought private label branded products to save money and smart shopping (57%). This highlights that quality and price play a major role in purchase intention of customers towards private label brands. Shukla et al. (2013) carried out a research to focus on the reasonable manipulation of socio-demographic variables such as gender, age, education, income, and family size with related psychographic measures such as deal proneness, price-related deal proneness, end-of-aisle display proneness, impulsiveness, smart-shopper self-perceptions and brand loyalty, and customer's attitude towards private label brands.

Inspite of the availability of exhaustive literature regarding private label brands, the preference and intention of customers to buy private label branded retail apparels is not clear in the Indian context. Hence, the present study attempts to fill this gap.

Methodology

(1) Statement of the Problem : In a phenomenal and competitive world, the consumers' preference towards buying of private label branded products is increasing globally, which is evidenced by more researchers (Bao, Bao, & Sheng, 2011 ; Chandon, Dillao, & Philippe, 2011 ; Nguyen & Gizaw, 2014). However, the preference and intention among consumers towards buying of such branded products is still questionable, especially in retail apparel products. Hence, it is of significance to identify the exact features that the consumers need towards such products. Past studies of consumer behaviour have focused on private label branded products. However, it is restricted in the retail apparel context (Bell, Bryman, & Harley, 2018 ; Chakraborty, 2013). Till date, scanty literature is available in the context of evaluating the factors which include perceived quality, perceived price, perceived risk, perceived value, and store image influence on the consumer intention and preference towards private label branded products of retail apparels in India. Hence, the purpose of this research is to examine the factors which impact the purchase intention and preference towards private label brands with respect to retail apparels in India.

(2) Research Aim and Objectives : The main aim of this research is to identify the factors which impact the purchase intention and preference towards private label brands with respect to retail apparels in India.

The secondary objectives are derived from primary objectives as stated above. The secondary objectives of this research are as follows :

✤ To study the consumer intention and preference in general towards private label brands with reference to retail apparels.

✤ To analyze the influence of socio - demographic parameters (age, gender, income, and other demographic factors) on the level of purchase intention and preference to buy private label branded retail apparels.

✤ To find out the perceived quality, perceived price, perceived risk, perceived value, and store image with consumer intention and preference towards private label branded retail apparels.

✤ To give recommendations to retailers of the Indian apparel industry to get deep insights of consumer's mind with regards to private label brand preference so that the findings would help to enhance the product development opportunities.

(3) Research Questions : Based on the research objectives, the following research questions are framed :

(i) Which factors impact the purchase intention and preference of consumers towards private label brands of retail apparels ?

(ii) How do consumers prefer and perceive in general towards private label branded retail apparels?

(iii) What are all the socio-demographic parameters influencing the consumer's preference and purchase intention to buy private label branded retail apparels?

(iv) How does perceived quality, perceived price, perceived risk, perceived value, and store image influence consumer intention and preference towards private label branded retail apparels?

Analysis and Results

Firstly, the values of composite reliability for SEM model depicted in Figure 1 indicate that the latent variables are in the range of 0.60 and 0.80 (see Table 1). Accordingly, fashion consciousness has a CR value of 0.773 ; price has CR value of 0.711 ; quality has CR value of 0.649 ; store image has CR value of 0.807 ; attitude has CR value of 0.687 ; store loyalty has CR value of 0.616 ; purchase intention has CR value of 0.829 ; and PLB preference has CR value of 0.888. The findings reveal that most of the constructs are very close to the required reliability except for quality and store loyalty.

In continuation, the rule of thumb - average variance extracted (AVE) values should be greater than the corresponding squared inter - construct correlation estimates (SIC) in the model. The Table 2 summarizes accepted and model values obtained for different scenarios. It can be observed from the Table 2 that most major goodness of fit and other indices are within the acceptable range except a few parameters.
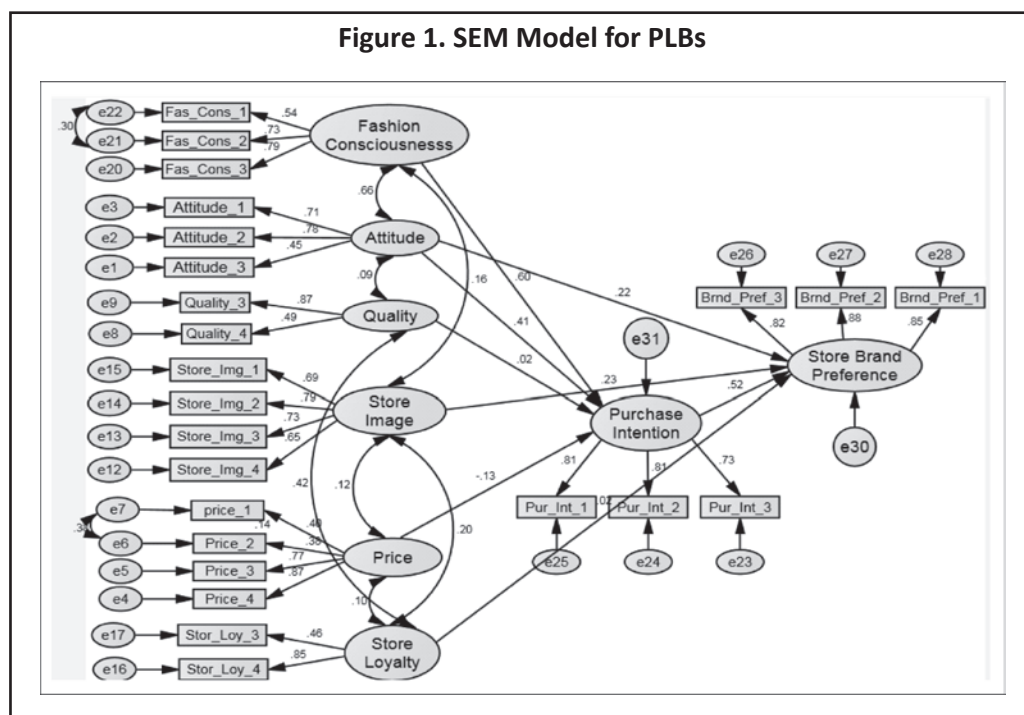

Figure 1. SEM Model for PLBs

Table 1. Reliability and Item Loading Constructs of the SEM for PLBs

Latent Variable	Items**	Standardized Loadings	Composite Reliability*	Cronbach's Alpha	Average Variance Extracted (AVE)
Fashion Consciousness	Fas_Cons_1	0.543	**0.733**	**0.781**	**0.408**
	Fas_Cons_2	0.732			
	Fas_Cons_3	0.787			
Price	Price_1	0.400	**0.711**	**0.730**	**0.301**
	Price_2	0.375			
	Price_3	0.768			
	Price_4	0.867			
Quality	Quality_3	0.870	**0.649**	**0.599**	**0.501**
	Quality_4	0.491			
Store Image	Store_Img_1	0.694	**0.807**	**0.804**	**0.513**
	Store_Img_2	0.786			
	Store_Img_3	0.726			
	Store_Img_4	0.650			
Attitude	Attitude_1	0.713	**0.693**	**0.678**	**0.435**
	Attitude_2	0.783			
	Attitude_3	0.448			
Store Loyalty	Stor_Loy_3	0.458	**0.616**	**0.565**	**0.470**
	Stor_Loy_4	0.850			
Purchase Intention	Pur_int_1	0.812	**0.829**	**0.825**	**0.612**
	Pur_int_2	0.813			
	Pur_int_3	0.730			
PLB Preference	Brnd_pref_1	0.852	**0.888**	**0.892**	**0.725**
	Brnd_pref_2	0.883			
	Brnd_pref_3	0.818			

Note. ** The abbreviations are explained in the Appendix.

Table 2 : GOF and Incremental Indices of SEM structure for PLBs		
Fit Indices	Accepted Value	Model Value
Absolute Fit Measures		
χ2 (Chi-square)		638.192
df (Degrees of Freedom)		235
Chi-square/df (χ2/df)	< 3	2.716
GFI (Goodness of Fit Index)	> 0.9	0.851
RMSEA (Root Mean Square Error of Approximation)	< 0.10	0.077
Incremental Fit Measures		
AGFI (Adjusted Goodness of Fit Index)	> 0.80	0.809
NFI (Normed Fit Index)	> 0.90	0.804
CFI (Comparative Fit Index)	> 0.90	0.865
IFI (Incremental Fit Index)	> 0.90	0.867
RFI (Relative Fit Index)	> 0.90	0.770
Parsimony Fit Measures		
PCFI (Parsimony Comparative of Fit Index)	> 0.50	0.737
PNFI (Parsimony Normed Fit Index)	> 0.50	0.685

Table 3. Squared Inter - Construct Correlations (SIC) Between Constructs

| | AVE | SIC | | | | | | | |
		FC	Price	Quality	SI	Attitude	SL	PI	Preference
Fashion Consciousness	**0.408**	1.00							
Price	**0.301**	0.026	1.00						
Quality	**0.501**	0.017	0.033	1.00					
Store Image	**0.513**	0.075	0.015	0.030	1.00				
Attitude	**0.435**	0.194	0.060	0.033	0.146	1.00			
Store Loyalty	**0.470**	0.022	0.023	0.176	0.060	0.078	1.00		
Purchase Intention	**0.612**	0.702	0.001	0.018	0.167	0.663	0.014	1.00	
Preference	**0.725**	0.044	0.044	0.028	0.218	0.453	0.031	0.591	1.00

The Table 3 shows the AVE estimates and corresponding SIC values, which is supportive evidence for discriminant validity. For example, AVE estimate for quality is 0.501 and corresponding SIC value between fashion consciousness and quality is 0.017, and also, SIC between price and quality is 0.033. Thus, AVE is greater than SIC. Similarly, in case of store loyalty, AVE is 0.435 and the corresponding SIC between fashion consciousness and store loyalty is 0.022 and SIC between price and store loyalty is 0.023. This is an indication of discriminant validity.

Regression Results

The regression results are provided in the Table 4. Accordingly, it is observed that among the eight exogenous variables, fashion consciousness has a significant influence (with positive sign) on purchase intention ($\beta = 0.603$; CR = 6.541, $p < 0.01$). Thus, H_3 is asserted. Similarly, price has a significant influence (with negative sign) on purchase intention ($\beta = -0.130$; CR= -2.832, $p < 0.05$), which is valid according to the theory. Thus, H_6 is asserted. Likewise, attitude has a significant influence (with positive sign) on purchase intention ($\beta = 0.412$; CR = 4.243; $p < 0.05$) and brand preference ($\beta = 0.222$; CR = 1.818; $p < 0.10$). Thus, H_1 and H_2 are asserted.

Furthermore, purchase intention is found to be a significant determinant of private label brand preference ($\beta = 0.516$; CR = 4.341; $p < 0.01$). Thus, H_8 is asserted. Finally, store image is found to be directly influencing the purchase behaviour of customers towards private label brands apparels ($\beta = 0.231$; CR = 4.056; $p < 0.01$). Thus, H_5

Table 4. Direct Effect of Research Model : Standardized Regression Weights for PLBs of Apparels

Relationships Between Exogenous and Endogenous			Estimate	S.E.	C.R.	p -Value
Purchase_Intention	<---	Quality	0.024	0.066	0.520	0.603
Purchase_Intention	<---	Fashion cons	0.603	0.079	6.541	0.000***
Purchase_Intention	<---	Price	-0.130	0.030	-2.832	0.005**
Purchase_Intention	<---	Attitude	0.412	0.152	4.243	0.000***
Brand_Prefrence	<---	Attitude	0.222	0.202	1.818	0.069*
Brand_Prefrence	<---	Purchase_Intention	0.516	0.125	4.341	0.000***
Brand_Prefrence	<---	Store_image	0.231	0.067	4.056	0.000***
Brand_Prefrence	<---	Store_Loyalty	0.020	0.045	0.361	0.715

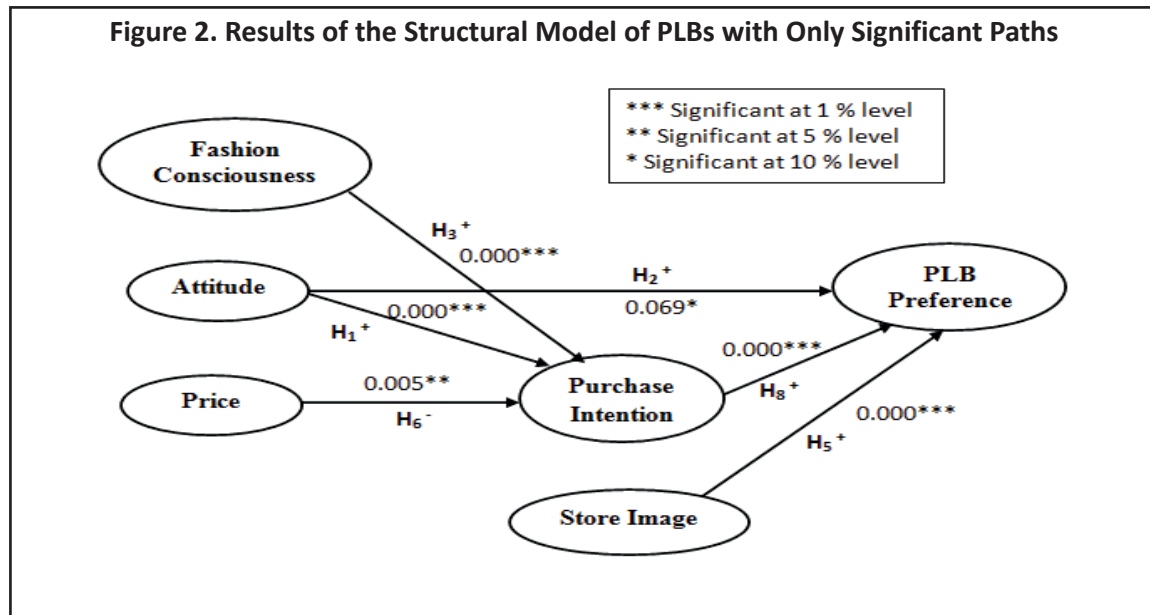*Note.* ***,*, ** significant at 1 %, 5 %, and 10 % levels.

Figure 2. Results of the Structural Model of PLBs with Only Significant Paths

Table 5. Summary of Test Results of the Study Hypotheses

H#	Study Hypotheses	Result
H_1	Perceived attitude has a positive significant influence on purchase intention to buy PLBs.	Supported
H_2	Perceived attitude has a positive significant influence on purchase preference to buy PLBs.	Supported
H_3	Fashion consciousness has a positive significant influence on purchase intention to buy PLBs.	Supported
H_4	Quality has a positive significant influence on the purchase intention to buy PLBs.	Not Supported
H_5	Store image has a positive significant influence on purchase preference of PLBs.	Supported
H_6	Price has a significant and negative influence on purchase intention to buy PLBs.	Supported
H_7	Store loyalty has a positive significant influence on purchase preference towards PLBs.	Not Supported
H_8	Purchase intention of buying has a positive influence on purchase preference towards PLBs.	Supported

is asserted. For better understanding, the results of significantly (statistically) related variables (both endogenous and exogenous) is provided in the Figure 2 for PLBs. Similarly, Table 5 provides the summary.

Understanding the Determinants of Overall Purchase Preference of Private Label Brands in the Future - A Comprehensive Analysis

To understand the influence of various other features (socio-demographic and purchase attitudes) of PLBs on overall intention to buy more PLBs as compared to national brands, I have used an "ordered logistic regression" model with the dependent variable as the intention to buy more PLBs as compared to national brands captured through the structured questionnaire.

The logistic model for several predictor variables is as follows :

$$Pr\ (Y = 1/X_1 = X_1, \ldots \ldots, X_p = x_p) \ = \ \frac{e^{\beta 0 + \beta 1 X1 + \beta 2 X2 + \beta 3 X3 + \ldots + \beta p\ Xp}}{1 + e^{\beta 0 + \beta 1 X1 + \beta 2 X2 + \beta 3 X3 + \ldots + \beta p\ Xp}}$$

The dependent variable is 1 ($Y = 1$), which means the probability of the overall intention to purchase. Since logit coefficients are in log-odd units, they cannot be read as regular OLS coefficients. Hence, the interpretations are based on the odds ratio. As per standard definition, the odds ratio (OR) represents the odds of $Y = 1$ when X increases by one unit. These are the exp (logit coefficient). If the $OR > 1$, then the odds that $Y = 1$ increases. If the $OR < 1$, then the odds that $Y = 1$ decreases. The sign of the logit coefficient corroborates that. A negative sign of the coefficient implies an odds ratio of less than 1 ; whereas, a positive sign implies an odds ratio of greater than 1.

✤ Variables Description

Dependent Variable : Overall intention to purchase more and more private brands in the future.

$$Y_i = \begin{cases} 0 = \text{No intention (rating scores 1 \& 2 combined).} \\ 1 = \text{Somewhat intend to buy (rating score of 3).} \\ 2 = \text{Have a greater intention to buy (rating scores 4 and 5 combined).} \end{cases}$$

Independent Variables

$$\text{Gender} = \begin{cases} 1 = \text{Male} \\ 2 = \text{Female} \end{cases}$$

$$\text{Age} = \begin{cases} 1 = \text{less than 25 years} \\ 2 = \text{25 to 35 years} \\ 3 = \text{35 to 45 years} \end{cases}$$

$$\text{Income} = \begin{cases} 1 = \text{Less than ₹ 5 lakhs} \\ 2 = \text{₹ 6 – ₹ 10 lakhs} \\ 3 = \text{₹ 11 – ₹ 20 Lakhs} \\ 4 = > \text{₹ 20 lakhs} \end{cases}$$

$$\text{Profession} = \begin{cases} 1 = \text{Student} \\ 2 = \text{Education/Teaching} \\ 3 = \text{MNC} \\ 4 = \text{Business} \end{cases}$$

and fashion consciousness, attitude, store image, price, quality, and store loyalty.

As can be seen from the Table 6, among the socio-demographic variables, gender is a significant determinant of overall intention to buy private label brands. In terms of odds ratio, the estimated odds that a female customer *has somewhat intention to buy* and *has a greater intention to buy* combined will decrease by a factor of 0.288 with reference to a male customer. This estimated odd is against the customer having *no intention to buy PLBs* in the future.

Similarly, income is a significant determinant of overall intention to buy a private label brand. In terms of odds ratio, the estimated odds that a higher income customer's *somewhat intention to buy and have a greater intention to buy* combined will decrease by a factor of 0.653 with reference to the lesser income group. In other words, the odds

Table 6. Ordinal Logistic Regression Results – Understanding Overall Purchase Preference for Private Label Brands with Purchase Attitude Dimensions

Independent Variable	Coefficient (B)	Odds Ratio	Robust Std. Error	Z	p-value
Intercept					
Cut_1	9.646				
Cut_2	15.297				
Gender	- 1.243	0.288	0.445	-2.79	0.005*
Age	0.418	1.519	0.247	1.69	0.091
Income	- 0.425	0.653	0.204	-2.09	0.037*
Profession	0.440	1.553	0.156	2.81	0.005*
Fashion Consciousness	0.361	1.435	0.093	3.87	0.000*
Attitude	0.390	1.477	0.125	3.11	0.002*
Store Image	0.280	1.324	0.061	4.53	0.000*
Price	0.081	1.084	0.055	1.47	0.141
Quality	-0.122	0.884	0.115	-1.06	0.289
Store Loyalty	0.056	1.057	0.121	0.46	0.644

of higher income group customers' intention of buying a private label brand in the future decreases as against *no intention to buy* PLBs in the future.

Profession is a significant determinant of overall intention to buy private label brands. In terms of odds ratio, the estimated odds that MNC profession customers' *somewhat intention* and *have a greater intention to buy* combined will increase by a factor of 1.553 with reference to students and teachers.

Now, with regard to dimensions of determinants of preference for PLBs, fashion consciousness, attitude, and store image are found to be statistically significant. With one unit increase in the fashion consciousness dimension score, the estimated odds of customers' *somewhat intention* and *have a greater intention to buy* combined will increase by a factor of 1.453 as against *no intention to buy* PLBs in the future. Likewise, with one unit increase in the attitude dimension score, the estimated odds of customers' *somewhat intention to buy* and have a greater intention to buy combined will increase by a factor of 1.477 as against *no intention to buy* PLBs in the future. Finally, with one unit increase in store image dimension score, the estimated odds of customers' *somewhat intention* and *have a greater intention to buy* combined will increase by a factor of 1.324 as against *no intention to buy* PLBs in the future.

Conclusion

This study examines the causal relationships between six antecedents of customer perceived preference identified in this study as fashion consciousness, attitude, store image, price, quality, and store loyalty with regard to the purchase intention of private label brand apparels. The model is evaluated using data collected from 292 customers from different malls in Bangalore in 2016 - 17. A couple of inferences can be obtained from the findings. Firstly, it is evident that customers' attitude has a significant impact on purchase behavior towards private brand apparels. Hence, developing more designs would increase the customers' attitude positively in purchase of PLBs in the apparel sector. The same holds good even for store image, where the analysis shows statistical evidence that store image has an influence on purchase preference towards private brand apparels. Surprisingly, it emerges from SEM analysis that store loyalty does not influence (statistically) the customers in preferring private brand apparels. Thus, there is an element of caution for the managements that store loyalty is no longer the key

determinant in measuring the purchase behavior of customers. Finally, summarizing briefly, it has emerged that fashion consciousness would lead to purchase intention, which would, in-turn, influence the purchase preference towards private label brand apparels. Thus, there is a need for managements of PLBs to give more emphasis on apparels that are more fashion trendy for better purchase preference by customers.

The major finding of the study is that consumer attitude plays an important role in consumer purchase decision making, which is in line with the results of several older studies (Boutsouki et al., 2008 ; Chaniotakis et al., 2010 ; Munusamy & Hoo, 2008). It is the extrinsic cues, such as store image and fashion consciousness, that influence the customers, which leads to more care of packaging of the products (Ailawadi & Keller, 2004). However, with respect to the finding regarding price as a determining factor in purchase behaviour, the study reveals contrary results to several studies, where a positive relationship was found to be existing (Ailawadi & Keller, 2004 ; Jayakrishnan et al., 2016).

Managerial Implications

Several insights can be drawn out from this study that will be gainful for marketers or store managers to devise strategic plans as well as for academicians for further theoretical improvization. First and foremost, it is clear that customers' attitude plays an important role in the purchase decision making for private brand apparels. On these lines, marketers or store managers should increasingly design strategies that develop and enhance the positive image of their brands in the minds of their customers. The conventional ways of doing so are offering economic incentives such as special discounts, loyalty offers, etc. A creative way of enhancing the image of the brand in the customers' minds is making the customers feel involved with the brand. Co-creation is a newly emerged management initiative that brings different stakeholders together in order to jointly produce a mutually valued outcome. Stakeholders, especially the millennial generation, are drawn to brands that enable them to co-create personalized experiences in partnership with a brand so that they can make them their own.

The study also reveals that fashion consciousness leads to purchase intention which, in turn, influences the purchase preference towards private label brand apparels. In this context, there is need for managements of PLBs to give more emphasis on apparels that are more fashion trendy for better purchase preference of customers. Also, co-creation may be of help with regards to catering to the personalized requirements of fashion conscious consumers.

Limitations of the Study and Scope for Further Research

Future researchers should focus on retail apparels of other regions in India. Further, this study was restricted to convenience sampling, which is a non-probability sampling method. This method does not fortify that each unit will have an equal chance of being selected as probability sampling; hence, such samples are unsafe to chosen biases. Since time constraints are one of the study constraints, therefore, the study used the sample size of 292 respondents. A clearer view of purchase intention and preference towards private label brands would be more consistent if a larger sample size is taken into account as this would generate reduced risk of external validity.

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Appendix

Appendix Table 1A. Number of Variables Included in Each Category

	ATTITUDE
Attitude_1	I buy store private label apparels for gifting others, but for my personal use, I am prone to buy national brands.
Attitude_2	I tend to purchase store brands regularly, but for special occasions or special purposes, I use more of national brand apparels.
Attitude_3	When I buy apparels of store (private) brands, I feel that I am getting a good deal (value) as compared to national brands.
	PRICE
Price_1	Greater price discrimination will often result in going for store (private) brand apparels as compared to national brands.
Price_2	I am very concerned about low price, but I am equally concerned about product quality.
Price_3	When I go for apparel shopping, I compare the prices of different brands to be sure that I get the best value (price and quality) for money.
Price_4	Frequent price discounts of store (brand) apparels will result in choosing private brands over national brands.
	QUALITY
Quality_1	I feel that purchase of store (private) brand apparels is risky because their quality is questionable.
Quality_2	Private label products are as good as national brand apparels.
Quality_3	Sometimes, I try to compromise with quality by selecting inferior brands.
	STORE IMAGE
Store_Img_1	I have an attractive shopping experience with this store.
Store_Img_2	The store carries high quality merchandise.
Store_Img_3	Most of the times, I intend to buy the store brand apparels because of the store image (in term of interiors, friendly salespeople, large variety).
Store_Img_4	The products of this store are good value for money.
	STORE LOYALTY
Stor_Loy_1	My trusted loyalty to a particular store makes me buy apparels manufactured by store brand (for example Shoppers Stop, etc.).
Stor_Loy_2	My trusted loyalty towards private store brands will result in buying store brand apparels even if it they are priced higher than national brands.
Stor_Loy_3	In general, my purchases are highly dependent on price and quality rather than store or brand loyalty.
Stor_Loy_4	If my preferred store brand is not available in the store, I can easily choose another brand.
	FASHION CONSCIOUSNESS
Fas_Cons_1	It is important that my clothes be of the latest style, irrespective of brand (SB/National brand).
Fas_Cons_2	I often try new fashion ideas with store brand products.
Fas_Cons_3	I look for private brand apparel for design and variety.
Fas_Cons_4	I feel more of fashion innovativeness exists with private brands as compared to national brand apparels.
	PURCHASE INTENTION
Pur_int_1	Whenever I buy an apparel of a national brand, I feel that I will purchase the private brand next time.
Pur_int_2	The probability that I would consider buying private brands is high.
Pur_int_3	I have decided to buy private brands whenever possible from this store.
	STORE BRAND PREFERENCE
Brnd_pref_1	Private label brands are good brands compared to national brands.
Brnd_pref_2	I prefer private label brands to national brands.
Brnd_pref_3	I would buy the private brands as compared to national brands.

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