

Role of Social Network in Defining the Impact of Marketing - Mix on Satisfaction from Food Items at Subsistence Marketplace

* Yukti Sharma
** Reshma Nasreen
*** Amit Kumar

Abstract

The current research study modified the traditional 4Ps (product, price, place, and promotion) of the marketing - mix model in an egalitarian manner for the consumers in subsistence or bottom of the pyramid (BOP) marketplace. For this study, subsistence marketplace was defined as composed of households earning less than ₹ 8000 per month and clustered in slum areas. A survey of such 600 households clustered in six different slum areas of Delhi was conducted. This study constructed the marketing - mix for non-core or compensatory construct of food items. This study not only redefined the marketing - mix, but also determined the impact of identified marketing- mix constructs on purchase satisfaction and analyzed whether the relationship was moderated by BOP consumers' participation in the social network. The key findings emerged in the form of a redefined marketing - mix comprising of : Value of Offer, Convenience, Quality Food, and Social Sources of Information. A significant direct influence of marketing mix variables on purchase satisfaction was observed. The participation in the social network significantly moderated the relationship between consumers' satisfaction and price-mix and promotional-mix elements. This study stressed the need to use the social network for ethical market exchanges. It marks an integral step towards the inclusion of the long-forgotten BOP market in the mainstream, thereby improving their standard of living. This paper makes an original contribution in the direction of the revival of existing Western marketing dynamics and the role of social networks in the context of subsistence marketplace.

Keywords: bottom of the pyramid (BOP) or subsistence marketplace, compensatory construct of food items, marketing - mix, purchase satisfaction, and social network

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Bottom of the pyramid (BOP) market is also known as subsistence marketplace in literature (Elaydi & Harrison, 2010; Viswanathan, Sridharan, & Ritchie, 2008; Viswanathan, Sridharan, & Ritchie, 2010; Weidner, Rosa, & Viswanathan, 2010). The BOP proposition (Prahalad & Hart, 2002; Prahalad, 2004) is based on the assertion that the distribution of money in the world forms a pyramid where the poor people lie at the BOP and represent a significant market opportunity for the entering companies. Over four billion people live at “BOP” with annual per capita income based on purchasing power parity (PPP) in U.S. dollars, which is less than \$1,500 (i.e., almost \$2 per day PPP, 2002) (Prahalad & Hart, 2002).

* *Post Doctoral Research Fellow*, Indian Institute of Management (IIM) Calcutta, Joka, Diamond Harbour Road, Kolkata - 700 104, West Bengal. E-mail : yuktim@iimcal.ac.in, yuktisharma2010@gmail.com

** *Associate Professor*, Department of Management, Jamia Hamdard, Hamdard Nagar, New Delhi - 110 062.
E-mail : drreeshmanasreen2@gmail.com

*** *Assistant Professor*, Department of Commerce, Dyal Singh College (Evening), Lodhi Road, Pragati Vihar, New Delhi - 110 003. E-mail : amitkumar3575@gmail.com

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The BOP proposition emphasized that marketing to the BOP can be profitable for the companies on the one hand, and improve the well-being of BOP consumers on the other hand. It placed two contrasting views of 'welfare of poor' and 'profits for an organization' to go in-hand and thereby, insisted on marketing to the BOP consumers. The conflict brought the economist and the ethicist in a contradictory position, and there emerged two different schools of thoughts - 'BOP Advocates' and 'BOP Sceptics' (Davidson, 2009; Jaiswal & Gupta, 2015). The BOP advocates were in favour of marketing to the BOP, and stressed on the benefits to this segment in terms of expanded product choices at an affordable price (Guesalaga & Marshall, 2008; Prahalad & Hart, 2002). Critics of marketing to the BOP stressed on cognitive and social vulnerabilities of BOP consumers and their possible exploitation because of the low level of literacy and product awareness (Jaiswal, 2008; Karnani, 2009, 2017) and lack of resistance to marketing (Jaiswal & Gupta, 2015).

Therefore, it was insisted that companies, while targeting BOP consumers, should make a distinction between priority or “essential” goods and non-priority goods (Jaiswal, 2008; Jaiswal & Gupta, 2015). Consumption of non-priority bundles or compensatory consumption represents an inconsistency between actions and needs (Gronmo, 1988). This consumption behaviour is often observed in the low-income population of emerging economies (Banerjee & Duflo, 2007; Subrahmanyam & Gomez - Arias, 2008). BOP sceptics further argued that since the option to fulfil lower-order needs is not viable, the poor spend their income on luxury or compensatory products to improve their well-being. Thus, to understand the concept of compensatory consumption, this study empirically investigates the food market and divides consumption of food items at subsistence marketplace into two constructs - core food or items and non-core bundles or compensatory consumption constructs. This study relates to the non-core or compensatory construct of food items and modifies the conventional marketing-mix model to suggest a reliable and valid egalitarian marketing-mix for such food items. Subsistence consumers rely on their social network to mitigate the risk in purchase decisions and use of network members' references on product performance (Chikweche & Fletcher, 2012 ; Viswanathan et al., 2010). Therefore, this research study also determines how social networks moderate the relationship between consumer-centric marketing-mix and purchase satisfaction from the compensatory construct of food items.

Review of Existing Literature

A literature review of peer-reviewed journal articles on BOP and subsistence markets available in online databases: ABI/INFORM Complete, Emerald Management Xtra, Business Source Premier (EBSCO), EconLIT, ACM Digital Library, Elsevier Science Journal were accessed and analyzed. The study included BOP-related work that has been published in conferences, working papers, and online. This section presents the existing literature available on subsistence buyer behaviour and critical marketing issues and strategies in selling food products to this market.

There exist several opinions on empirically defining the BOP segment (Chikweche & Fletcher, 2012). Various scholars have used the economic basis to define and classify the BOP market (Banerjee & Duflo, 2007 ; Hammond, Kramer, Katz, Tran, & Walker, 2007; Prahalad & Hart, 2002 ; Viswanathan et al., 2008). The four main classifications which have emerged to describe the BOP market are the World Bank global income classification modified by Rangan, Chu, and Pestkoski (2011); the Prahalad and Hart (2002) classification; the Hammond, Kramer et al. (2007) classification; and Viswanathan et al. (2010) classification. However, researchers who considered the BOP market as a consumer with latent needs (Jaiswal & Gupta, 2015; Viswanathan et al., 2010) stressed on use of a socioeconomic basis for defining this segment. Thus, keeping the socioeconomic realities in mind of the subsistence marketplace, for the purpose of the current research, BOP is defined as (Sharma & Nasreen, 2017) households earning less than ₹ 8000 per month (Jaiswal & Gupta, 2015 ; Viswanathan et al., 2010), dwelling in rural villages or urban slums and shantytowns with lack of infrastructure.

(1) Marketing - Mix for Food Items at BOP : Marketing mix, based on the 4Ps framework, enables marketers to focus on specific marketing tasks and thereby, allocate valuable resources towards successful marketing of products (Kotni, 2014). Since the current study involves food retailing, thus literature relates to marketing - mix in food and retailing. To determine the sufficiency of the current state of marketing - mix literature, each element of the marketing - mix is reviewed in the context of food purchase behaviour and thereafter, necessary modifications are suggested to accommodate BOP consumers' needs (Chikweche & Fletcher, 2012).

(i) Product : In the context of current research, product offerings include food items purchased. Sreelata, Narasimham, and Gupta (2016) conducted a survey of 450 households in Delhi and Faridabad (India) to identify the factors influencing the purchase of groceries and consumer goods. The study suggested that this purchase category constituted a major portion of the monthly grocery requirements. Similar findings were suggested in the context of BOP segment, which spent a substantial part of their meagre income on food consumption (Hammond et al., 2007). Even though the BOP segment spent more than 60% of the total income on food items, it was observed that they still bought poor quality goods at higher prices (Chikweche & Fletcher, 2010 ; Viswanathan et al., 2010; Weidner et al., 2010). The literature has highlighted an urgent need to modify the Western model of product offerings based on local needs and requirements of the BOP consumers (Chikweche & Fletcher, 2012 ; Prahalad & Hart, 2002; Viswanathan et al., 2008).

(ii) Price : Given the importance of cost saving, consumers evaluate and compare prices during the process of food purchasing (Nevin & Karakus, 2010). Price sensitivity is a recurring determinant cited in BOP and low-income market's literature (Jaiswal, 2008).

(iii) Place: The Indian retail scenario is dominated by organized and unorganized retail sector (Burlakanti & Srinivas, 2013). Das (2011) conducted a study to determine the effect of retail sales' promotion on consumers' buying behaviour. The study determined the increased penetration of the organized retail sector as it offered a whole assortment of goods and services to consumers under one roof (Das, 2011). The increased penetration and better assortment by the organized retail sector insisted that the unorganized retail sector compete with it using a 'one-time comprehensive shopping' experience (Burlakanti & Srinivas, 2013). In the BOP segment, access to products is hindered by weak supporting infrastructure as well as weak distribution infrastructure (Chikweche & Fletcher, 2012). Viswanathan et al. (2010) suggested that the interaction between BOP consumers and firms was enhanced by both formal and informal distribution channels. The informal distribution channel is often linked to the social network in communities and is many times controlled by authorities (Mahajan & Banga, 2006). These informal distribution systems are common at the BOP where there are weak infrastructures, and lack of capital limits the development of formal marketing systems. Although informal distribution systems provide competition to the formal systems, at times the two supplement each other (Layton, 2007).

(iv) Promotion : Since BOP is a media dark area, a firm faces a challenge of lack of adequate communication infrastructure (Chikweche & Fletcher, 2012). The communication media is beyond the affordability of the BOP consumer, and there are frequent power electricity cuts at the subsistence marketplace (Chikweche & Fletcher, 2012). In research conducted at Zimbabwe BOP, it was found that the marketers made more use of "Below the line media" over "Above the line media" (Chikweche & Fletcher, 2012). Above the line media used by marketers included print, radio, TV, Internet, outdoor, and newspapers. Given massive illiteracy and lack of supporting and communication infrastructure, above the line medium was found to be ineffective. However, in implementing the below the line medium, the critical conduit was a social network (Chikweche & Fletcher, 2012).

(2) Compensatory Construct of Food Items : Since the subsistence consumers cannot fulfill their primary needs,

they indulge in compensatory consumption and satisfy their needs by an entirely different set of products with high symbolic value. Compensatory consumption arises, “when an individual feels a need, lack of desire, which cannot be satisfied with primary fulfilment; so, they use alternative means of satisfaction” (p.301, Woodruffe, 1997). To determine the compensatory construct in the food offerings at the subsistence marketplace, a report by National Sample Survey Office (68th Round NSSO, 2014) on Household Consumer Expenditure was analyzed (Government of India, 2014). Based on the report, the food items considered were pronged into two broad categories : (a) core food items: core items are generic and not much brand choices are offered in this category for BOP (Sharma, Nasreen, & Kumar, 2018) ; (b) non - core or compensatory food items: BOP literature has provided many examples for the compensatory construct of food items. Therefore, this study defines non - core or compensatory food items as the components infused by the NSSO 68th round under the head of “beverages, refreshment, and packaged processed food” (Sharma et al., 2018).

(3) Purchase Satisfaction at Subsistence Marketplace : Satisfaction is essential in creating desirable consumer outcomes for manufacturers and retailers. Malik (2011) studied the drivers of retail customer satisfaction and suggested that customer satisfaction provided strategic importance in organized retail outlets of Kurukshetra (India). Hence, it becomes necessary to measure satisfaction. Aaker (1996) suggested that satisfaction measurement should be based on the existing customers - those who have experienced the product or service within a specified time frame.

(4) Participation in Social Networks at Subsistence Marketplace : Social networks are defined as a set of people or organizations connected by a set of relationships such as friendships, who work together, or exchange information to improve their lives (Purvez, 2003). Individual consumer behaviour is influenced by participation in social networks, which shapes the psychological makeup of the users so that they conform to the groups' expectations and norms (Mahajan & Banga, 2006). Few studies demonstrated the fundamental role of social networks in both Bangladesh and South Indian subsistence consumers' lives. The social network participation constituted an effective source of product information than media-based methods such as television and print (Chikweche & Fletcher, 2012; Viswanathan et al., 2008). Banerjee and Duflo (2007) conducted a survey and found that the poor who lived on less than \$2 a day spent 10% of their money on non-primary items.

Based on the comprehensive assessment of research methodologies and paradigms of existing BOP literature, various research gaps have been obtained. The number of conceptual articles in BOP literature lightly exceeded the number of empirical articles (Goyal, Esposito, Kapoor, Jaiswal, & Sergi, 2014). Among the empirical articles, only a few were large - sample studies (Guesalaga & Marshall, 2008), the rest were based on case studies. Lack of empirical studies reflects the difficulty associated with collecting reliable large-sample data at BOP. Out of few empirical studies, the majority used qualitative data. It reflects a significant research gap (Goyal et al., 2014 ; Kolk, Rivera - Santos, & Ruffin, 2014). The BOP framework has expanded horizontally, bringing new dimensions and themes under perspective with the lack of vertical focus on identifying the core themes (Goyal et al., 2014). Therefore, the current research study marks a stepping stone and suggests an integrated BOP theoretical framework, which is generalized using quantitative data. From the review of existing research literature for the BOP market and resulting research gaps, the current study answers the following research questions:

- ✎ **RQ1.** What is the socio - demographic profile of BOP consumers (gender, age, education, and income) in Delhi?
- ✎ **RQ2.** What is the apportionment of consumption spending on the core or essential and non-core or compensatory construct of food items at BOP in Delhi ?
- ✎ **RQ3.** What is the level of participation of BOP consumers in a social network ?

✍ **RQ4.** What is the redefined marketing- mix for non-core or compensatory construct of food items at the BOP market?

✍ **RQ5.** Whether or not 'participation in a social network' moderates the relation between consumer satisfaction and redefined marketing - mix for non-core or compensatory construct food items in Delhi.

Development of Hypotheses and Research Framework

Many researchers pursued the relationship between marketing - mix and customer satisfaction (Kadhim, Abdullah, & Abdullah, 2016; Nuseir & Madanat, 2015 ; Thieu, Hieu, Huyen, Binh, & Hoang, 2017). Thus, customer satisfaction forms the basis of marketing strategy because it determines the overall success of a marketer. To achieve an enhanced level of satisfaction, firms can utilize marketing strategies based on product, price, place, and promotion mix (Ebitu, 2014). A study performed in South India at the BOP marketplace indicated the extent to which satisfaction of subsistence consumer was associated with various factors (Viswanathan et al., 2010).

(1) Product and Purchase Satisfaction : Nuseir and Madanat (2015) suggested that product quality leads to satisfaction, thereby helping an organization to secure the competitive edge over competitors and attract potential customers. Other researchers suggested the product differentiation as an important driver of satisfaction of the customers (Ahmed & Rahman, 2015). The product creates and delivers value to end users, and thereby, produces customer satisfaction (Saqib, Khan, & Ahmed, 2013). Therefore, the first research hypothesis in the context of subsistence marketplace is :

✍ **H1 :** Product factor has a positive influence on purchase satisfaction of non - core food products at subsistence marketplace.

(2) Price and Purchase Satisfaction : Food pricing is an essential factor that shapes individual choice. Given the importance of cost saving, consumers examine price while making food purchases (Nevin & Karakus, 2010). A satisfied customer can pay extra with the level of satisfaction remaining unaffected (Saqib et al., 2013). Hence, the following hypothesis is formulated:

✍ **H2 :** A competitive price has a positive influence on purchase satisfaction of non-core food products in subsistence marketplace.

(3) Place/Convenience and Purchase Satisfaction : Place decision includes activities that make products available to target customers and secures the competitive position of an organization. Place aspect allows an organization to satisfy its customers more efficiently (Nuseir & Madanat, 2015). Most researchers agreed that a convenient location increased store patronage via reduced transaction costs (Ali, Kapoor, & Moorthy, 2010). Hence, the following hypothesis is formulated :

✍ **H3 :** Place aspects have a positive influence on purchase satisfaction of non-core food products in subsistence marketplace.

(4) Promotion and Purchase Satisfaction : Promotion allows retailers to bring traffic into stores and generate sales by communicating current offerings to targeted consumers (Dunne, Lusch & Carver, 2010) Further, to get satisfied customers, a firm must educate and communicate with the consumers on how they will be satisfied by its product offerings. The literature suggests that customer satisfaction not only depends on product performance, but also on the interaction with the organization. Therefore, the hypothesis formulated is as follows :

↳ **H4** : The promotional factor has a positive influence on purchase satisfaction of non-core food products in subsistence marketplace.

(5) Moderating Influence of Social Network : Many researchers demonstrated how social factors, such as social influence and social capital, could be used as moderators to determine the strength and direction of antecedents' 'influence on expected outcomes' (Ngai, Tao, & Moon, 2015). In the context of BOP markets, previous studies focused on the influence of social networks on BOP livelihoods (Chikweche & Fletcher, 2012; Viswanathan et al., 2008). In the case of BOP marketplace, there exists a lack of studies which empirically examined the moderating effect of a social network. Therefore, participation in a social network is considered as to be a moderating variable, and the research hypotheses can be stated as follows :

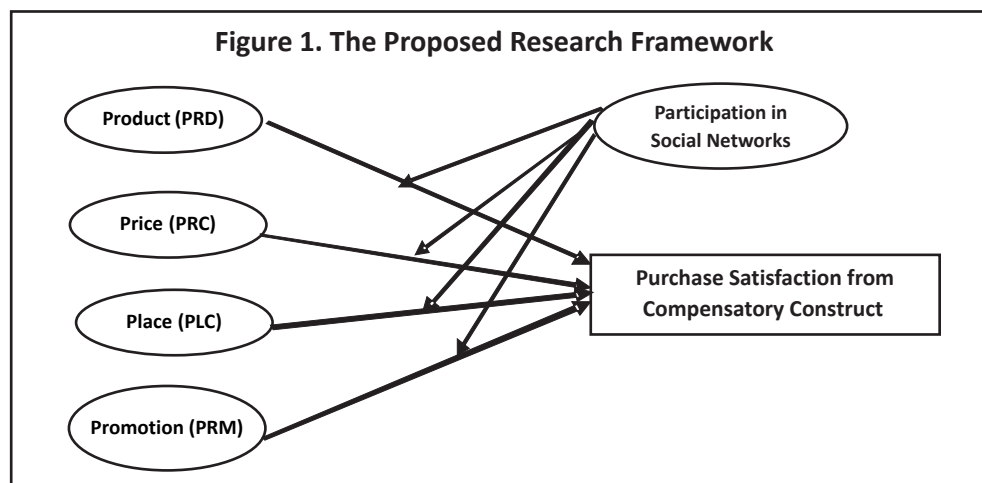
↳ **H5A**: Social network moderates the relation between product factor and consumer satisfaction for the non-core or compensatory food items.

↳ **H5B**: Social network moderates the relation between price factor and consumer satisfaction for the non-core or compensatory food items.

↳ **H5C**: Social network moderates the relation between place factor and consumers' satisfaction for the non-core or compensatory food items.

↳ **H5D**: Social network moderates the relation between promotional factors and consumer satisfaction for the non-core or compensatory food items.

Based on the current research hypotheses, the following research framework was developed (Figure 1).



Research Context and Methodology

The current research study defines subsistence marketplace as households earning less than ₹ 8000 per month, clustered in the area with a lack of civic infrastructure. Thus, urban slums and shantytowns, clustered with households earning less ₹ 8000 were considered to be the sampling frame. This research study was conducted in high-density slums of Delhi (Capital of India). Delhi comprises of 675 identified slum clusters in 10 zones (Delhi Urban Shelter Improvement Board (DUSIB), 2016).

A well - chalked methodology was employed to conduct the research study. Firstly, for the pre - test, the questionnaires were distributed to 10 eminent professors in related fields. The changes suggested were accommodated in the questionnaire. Integral insights provided were in terms of the definition of BOP consumers, homogeneity in consumption habits of BOP consumers, and stigma of BOP community towards the surveys. Also, 15 respondents were selected by judgmental sampling from the slum area of Uttam Nagar (Delhi). This step facilitated the translation of the survey instrument in local Language (Hindi) and identification of potential problems in the instrument. After that, a pilot study was conducted in slum areas of Mangol Puri and Kathputli colony (urban slums, Delhi) on 100 households. In the pilot study, the reliability of the measured items used in the questionnaire was assessed using the internal consistency test - Cronbach's alpha. Cronbach's alpha estimate value above 0.70 is considered as acceptable (Nunnally, 1978). The final survey instrument with 58 questions was divided into four sections measured on different types of scales: nominal (*yes* or *no* answer) and 5 - point Likert scales. The Section I included questions about demographic profiling and membership in social network, Section

Table 1. Demographic Profile of the Respondents Across Different Slum Areas

Demographics	Categories	Frequency	%
Gender	Male	314	52.3
	Female	286	47.7
Slum Area	MangolPuri	100	16.7
	Kathaputali Colony	100	16.7
	Zakhira	100	16.7
	Nangloi	100	16.7
	Peeragahri	100	16.7
	Tigri	100	16.7
Age (Transformed to Categorical Variable)	Below 24	31	5.2
	25-34	255	42.5
	35-44	243	40.5
	45-54	47	7.8
	55 And Above	24	4.0
Year of Schooling	No Schooling	6	1.0
	Below 4 Years	159	26.5
	Below 8 Years	218	36.3
	Below 12 Years	217	36.2
	12 Years And Above	0	0
Household Income	Below ₹ 2000	6	1.0
	₹ 2001 - ₹ 4000	156	26.0
	₹ 4001 - ₹6000	208	34.7
	₹ 6001- ₹ 8000	230	38.3
Marital Status	Married	588	98.0
	Unmarried	12	2.0
Family Members	0-2	72	12.0
	3-5	411	68.5
	5 above	117	19.5
Ration Card	No Ration Card	221	36.8
	Yellow Ration Card	229	38.2
	Red Ration Card	150	25.0
Participation in Social network	Yes	556	92.7
	No	44	7.3

II was about marketing mix, and Section III asked questions related to level of purchase satisfaction from non-core or compensatory construct of food items.

Data Collection and Sample Characteristics

The urban slums and shantytowns, clustered with households earning less than ₹ 8000 were considered as the sampling frame. Six urban slum areas with high density (Density of the slum/ No. of slum areas) were selected, and from each slum cluster, 100 households earning less than ₹ 8000 were interrogated. A paper-and-pencil questionnaire survey was administered to the slum area respondents. The data from the respondents were collected from May - November 2016. All the slum dwellers were informed about the survey through local leaders, and people were asked to visit Aanganwadi, Ranbasera, and another place of gathering.

The survey instrument was translated into Hindi (local language) so that the answers could be analyzed and interpreted. The time of data collection was chosen carefully. The sample comprised of 600 respondents, coming from six different regions of Delhi. The sample comprised of 286 (47.7%) female and 314 (52.3%) male respondents distributed in six identified slum areas. Within the age group of 25- 44 years, about 83% of the respondents were covered, and on extreme ends, that is, below 24 years and above 55 years, only 5.2% and 4% respondents were included (Table 1).

Data Analysis and Results

Before performing data analysis, data screening was performed to address three main issues - missing values, outliers, and unengaged responses (Hair, Black, Babin, Anderson, & Tatham, 2006). The average consumption spending of the sampled BOP consumers for core and non-core food groups was ₹ 2576.7745 and ₹ 2127.1195, respectively. To examine whether there exists significant variation in consumption and frequency of purchases, Mann Whitney's *U* test (non - parametric test) was applied. Mann Whitney *U* test is performed when a dependent variable (consumption and frequency of purchases) is continuous and independent variable is categorical (core or non - core) with two categories. It is concluded that there exists a significant difference in the average consumption spending and frequency of purchase across the two product categories (Table 2).

Thereby, based on the proposed theoretical framework and hypothesis, SEM (structural equation modelling) technique using IBM AMOS was used to develop a generalized model to evaluate the goodness of fit of structural and measurement model, and to examine the significance level of hypothesis paths. To determine whether social network moderates the relation between consumer-centric 4Ps marketing - mix and purchase satisfaction, hierarchical regression using process macros in IBM SPSS was employed (Hayes, 2012).

(1) Instrument Validity and Reliability : The research model proposed in the study has five constructs. The

Table 2. Hypotheses Testing for Difference in the Monthly Household Spending and Frequency of Purchases Using Mann-Whitney *U* Test

Hypothesis	Independent-Samples Mann-Whitney <i>U</i>	Standardized Mann-Whitney <i>U</i> Test	Wilcoxon <i>W</i>	Sig. (<i>p</i> - value)	Results
The distribution of monthly household consumption spending is the same across categories of food.	2,17,520	9.784	3,80,826	0.000	Reject the null hypothesis.
The distribution of frequency of purchase of food items is the same across categories of food.	9,097	-27.858	1,72,403	0.000	Reject the null hypothesis.

Table 3. Factor Loading for Non - Core or Compensatory Construct of Food Items

Item Code	Description	Quality Product (PRD)	Satisfaction from Non-Core (SAT)	Convenience (PLC)	Value of the Offer (PRC)	Social Sources (PRM)
PRD1	Varieties/ Brands offered	.953				
PRD3	Reasonable quality offered	.935				
PRD4	Freshness of food items	.890				
PRD5	Availability in small quantity/ sachets	.877				
PRD8	Packaging of product	.827				
PRD9	Food label/ Safety mark	.820				
PRD10	Availability of product	.841				
SAT1	I got accurate weighing /quantity		.889			
SAT2	I obtained attractive credit terms		.830			
SAT3	I knew important product features		.745			
SAT4	I paid less than my friends		.836			
SAT5	I was treated fairly		.787			
PLC1	Nearness of the shop/less travelling			.813		
PLC2	Credit facility			.717		
PLC7	Wider choice			.915		
PLC8	Easy return policy of the shopkeeper			.918		
PLC9	Bargaining opportunities			.840		
PRC1	List price (MRP)				.916	
PRC3	Price per unit charged when bought product in small quantity				.890	
PRC4	Discount offered				.921	
PRC5	Availability of product on credit				.926	
PRM1	Packaging					0.809
PRM3	Family/friends					0.879
PRM4	Groups					0.884
PRM5	Neighbours					0.851

construct validity was examined through face validity (content validity), convergent validity, and discriminant validity (Hair et al., 2006). Since the measurement items used in the study were adopted from the existing literature, it satisfies the face validity criteria. CFA was performed using IBM AMOS to check for the convergent validity and discriminant validity of the measurement model.

The constructs represent five variables that are renamed (Table 3). The first factor comprises of seven items and is named Quality Product (PRD) ; the second factor consists of five items and is named Convenience (PLC). The third factor consists of four variables, and is named Value of the Offer (PRC). The fourth factor represents the Social Sources to reach BOP consumers, and the fifth construct represents Satisfaction from Non-Core or Compensatory Food Items (SAT).

The Table 4 provides the results of model fit indices for the measurement model. The value of the fit indices is acceptable and indicates a reasonable fit of the measurement model with the data (Byrne, 2010).

The convergent validity is determined by calculating the average variance extracted (AVE) for each of the five constructs. As depicted in Table 5, the measurement items have significant loadings (> 0.7), reflecting the high

Table 4. CFA Results - Model Fit Indices

Model Fit Index	Value
CMIN/DF	02.03
CFI	0.941
IFI	0.942
TLI	0.934
NFI	0.923
RFI	0.913
RMSEA	0.052
RMR	0.051

Note. AGFI- adjusted goodness-of-fit index; GFI-goodness-of-fit index; RMSEA- root mean square error of approximation; NFI -normed fit index; CFI -comparative fit index

Table 5. Results for Convergent Validity Examined Through CFA

Construct		Estimate	Composite Reliability (CR)	Average Variance Extracted (AVE)	Cronbach's Alpha	MSV
PRD	PRD1	.953	0.960	0.772	0.967	.456
	PRD3	.935				
	PRD4	.890				
	PRD5	.877				
	PRD8	.827				
	PRD9	.820				
	PRD10	.841				
PLC	PLC1	.813	0.925	0.712	0.930	.360
	PLC2	.717				
	PLC7	.915				
	PLC8	.918				
	PLC9	.840				
PRC	PRC1	.916	0.953	0.834	0.960	.407
	PRC3	.890				
	PRC4	.921				
	PRC5	.926				
PRM	PRM1	0.809	0.917	0.733	0.920	.245
	PRM3	0.879				
	PRM4	0.884				
	PRM5	0.851				

Note. PRD : Quality Product ; PLC : Convenience ; PRC : Value of the Offer ; PRM : Social Sources

convergent validity of the constructs (Fornell & Larcker, 1981). Also, it can be observed that the AVE for each construct is higher than 0.50. The above conditions reflect that the constructs possess convergent validity. Thus, the results of CFA suggest that the constructs used in the study have convergent validity.

Discriminant validity is established by a comparison of the AVE and the squared inter-construct correlations (MSV) as shown in Table 5. If the AVE values are higher than the squared inter - construct correlations, then it implies distinctiveness of the constructs (Fornell & Larcker, 1981). In Table 5, as depicted, each construct's respective AVE values are higher than the squared inter-construct correlations in comparison with the rest of the constructs. Thus, the constructs used in this study possess discriminant validity.

Construct reliability was measured to examine the internal consistency of the constructs. Construct reliability was calculated by using the following three validity measures: (a) Cronbach's α ; (b) composite reliability; and (c) indicator reliability values.

The Table 5 also provides the composite reliability values and Cronbach's α values. The minimum acceptable value for composite reliability is 0.6 (Fornell & Larcker, 1981), the cut-off value of Cronbach's α is 0.7 (Hair et al., 2006). As can be inferred from the Table 5, the values are well above the cut-off values, and hence, it can be concluded that the measurement items represent their respective latent constructs and there is sufficient internal consistency.

(2) Hypotheses Testing : The hypothesised model with interrelationships among the different constructs was analyzed through SEM technique using IBM AMOS. The results indicate an adequate fit between the data and the model as reflected in Table 6.

The results of hypotheses testing are shown in Table 7. The path coefficients of the SEM along with their p - values provide direct evidence of the acceptance or rejection of the hypotheses. The p - values are associated with the standardized path estimates. According to the results, the H1, H2, H3, and H4 are found to be significant. Their path coefficients are significant at $p < 0.01$.

Table 6. Model Fit Indices of the Conceptual Model

Model Fit Index	Value
CMIN/DF	02.55
CFI	0.945
IFI	0.950
TLI	0.937
NFI	0.928
RFI	0.915
RMSEA	0.055
RMR	0.058

Table 7. Hypotheses Testing of the Conceptual Model

Hypothesis	Hypothesized Paths	Standardized Estimates	p - values	Hypothesis Supported
H1	PRD \rightarrow SAT	0.620	***	YES
H2	PRC \rightarrow SAT	0.589	***	YES
H3	PLC \rightarrow SAT	0.480	***	YES
H4	PRM \rightarrow SAT	0.398	0.003**	YES

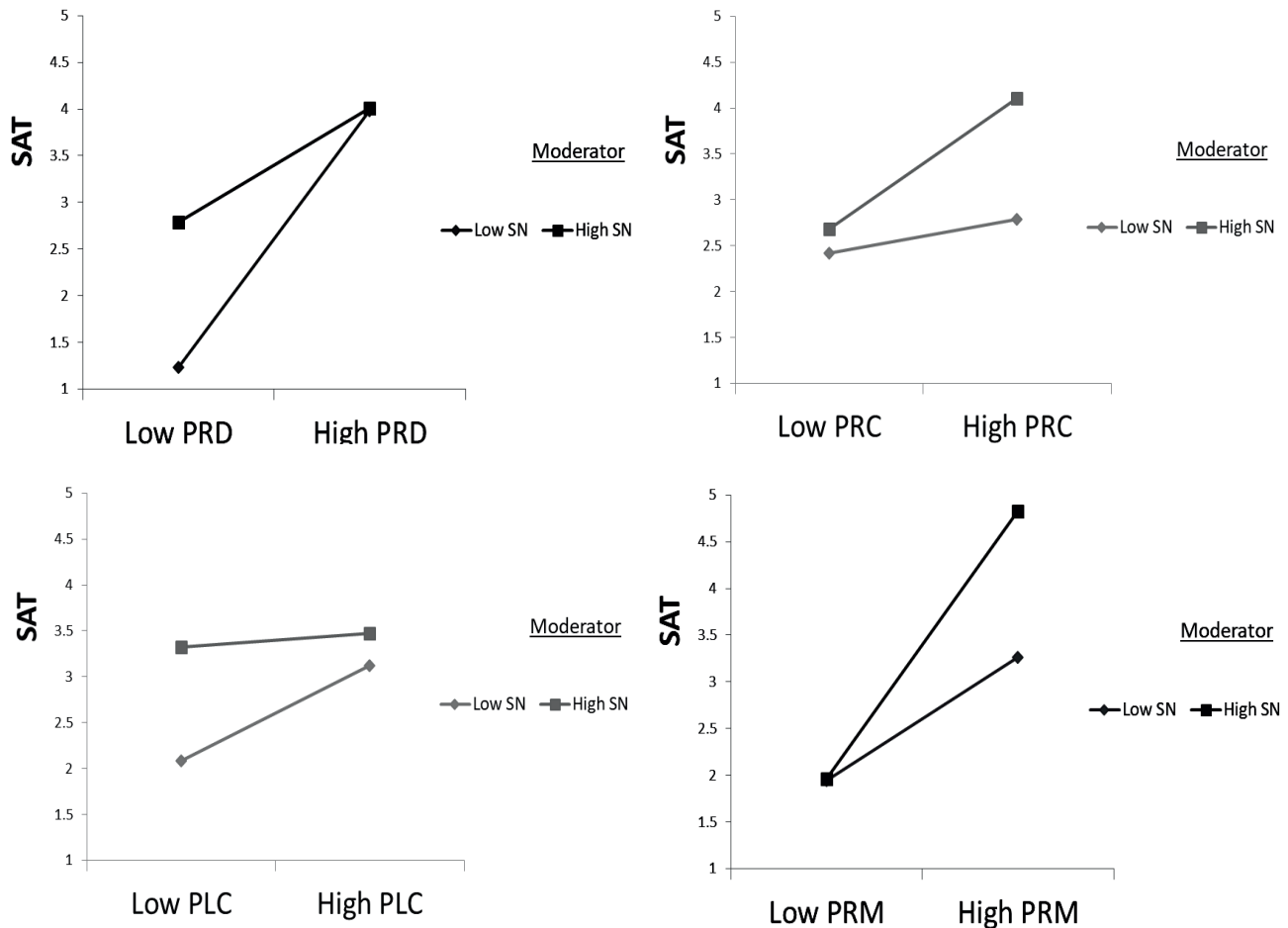
Note. ***Path coefficients significant at 0.01% level of significance.

(3) Moderating Effect of Social Network : After determining the main effects, the moderating effects were tested (Table 8). The moderation effect of social network on the relationship between consumer's satisfaction and marketing - mix variables can be established through the assertion that the relationship changes as the moderating

Table 8. Results of Moderated Regression Analysis

Variables	Standardized Estimates	p - value	Sig
PRD	0.620	0.002	***
PRC	0.589	0.0018	***
PLC	0.480	0.005	***
PRM	0.398	0.000	***
SN	0.0793	0.8472	Not Significant
PRD*SN	-0.462	.1820	Not Significant: SN dampens the positive relationship between PRD and SAT.
PRC*SN	0.2633	0.0084	** SN strengthens the positive relationship between PRC and SAT.
PLC*SN	-0.2210	0.1476	Not Significant: SN dampens the positive relationship between PLC and SAT.
PRM*SN	0.388	0.0356	** SN strengthens the positive relationship between PRM and SAT.

Figure 2. Interaction Effects of Social Networks on the Relationship Between Marketing - Mix Variables and Satisfaction



variable changes. To test the moderation, the process option with Model with hierarchical multiple regression analysis was conducted (Hayes, 2012). To avoid likely problematic high multicollinearity with the interaction term, the variables were centered, and an interaction term between separate marketing - mix variables and social network was created. Next, the moderator term between consumer's satisfaction and marketing-mix variables was added to the regression model.

A positive sign for the β coefficient indicates that Social Network (SN) strengthens the positive relationship between Price (PRC) and Satisfaction (SAT) as well as Promotion (PRM) and Satisfaction (SAT) (Figure 2). Thus, the findings support the hypothesis H5B and H5D. The remaining two interaction effects (Social Network * PRD, Social Network * PLC) are not found to be statistically significant. Therefore, hypotheses H5A and H5C are not supported (Figure 2).

Discussion and Implications

The current study fills various research gaps found in the existing BOP literature. This study is propelled by the research questions of inculcating the BOP or subsistence marketplace into the mainstream market and thereby efficiently serving them. However, the review of adopted methodology in BOP literature suggests that conceptual articles slightly exceeded the number of empirical articles (Goyal et al., 2014). Thus, the current research makes an effort to fill this research gap and adopts an empirical approach for the research study. Previous literature suggested that BOP consumers spent on items that may be viewed as a luxury or at least non-essential (Subrahmanyam & Gomez - Arias, 2008). In the current research study, it is evident that the average consumer spending on non - core or compensatory food groups is only slightly more than the spending on core-food items. It indicates the extensive presence of compensatory consumption made by BOP consumers. The findings from the current study fortifies the case of "BOP sceptics" since a substantial part of BOP household income is spent on the compensatory food groups (Jaiswal & Gupta, 2015 ; Karnani, 2009, 2017).

The extant literature of BOP highlighted marketing issues to be addressed by firms before undertaking BOP initiatives and entering the BOP marketplace (Mulky, 2011). Thus, the present research study is centered on the critical area of how marketers can adapt their marketing mix in an egalitarian manner to efficiently tap the BOP segment (Chikweche & Fletcher, 2012; Jaiswal & Gupta, 2015). In the context of the food items in the BOP market, the literature suggested application of conventional 4Ps marketing mix elements with requisite modification (Akbar & Jones, 2005; Chikweche & Fletcher, 2012; Nevin & Karakus, 2010). Thus, the present study redefines the product-mix and renames it as 'Quality Product,' place - mix as 'Convenience,' Price-mix as 'Value of the Offer,' and Promotional-mix as 'Social Sources' to reach BOP consumers in context of non - core food items. In the existing literature, there is a lack of vertical focus on identifying the core themes, thus marking a heterogeneous state of the BOP literature (Goyal et al., 2014; Kolk et al., 2014). It embarked on the urgent need for an integrated conceptual framework. Therefore, the current study provides an empirically derived marketing mix for BOP consumers in the context of non-core food items. Further, the current study provides a suggestive research model which may guide the managers while entering the BOP market. This study also provides an objective way of measuring the BOP consumers' satisfaction from non-core food constructs and further examines the relation between consumer-centric marketing-mix and satisfaction level. Earlier research studies suggested that satisfaction is an outcome of the marketing-mix for non-core food categories (Ahmed & Rahman, 2015; Nuseir & Madanat, 2015; Thieu et al., 2017). The same is corroborated in the current study as the path coefficients of the SEM provide evidence of the significant direct influence of redefined marketing mix variables on purchase satisfaction from the compensatory construct of food items. In case of subsistence markets, previous studies found that social networks were relevant in the BOP circumstances as far as promotion and distribution were concerned, these also influenced the acceptance of the products offered, and the prices consumers were willing to pay (Viswanathan et al., 2010). Therefore, the previous studies suggested social networks to be an intervening variable

(Chikweche & Fletcher, 2012). It is corroborated in the current study where most of the interviewees acknowledged the importance of familial and kinship networks as having an essential role in purchase decisions.

The current research study extends the discussion on subsistence marketplaces beyond the advocacy for increased engagement (Chikweche & Fletcher, 2010). BOP literature suggested entering-firms adopted Western marketing strategies without understanding the ground realities of subsistence consumers. Thus, for managers, this research study will provide an understanding of food consumption behaviour and suggest a set of guidelines for responsibly doing business in this marketplace. This research study will help the managers to design a marketing-mix in a consumer-sensitive manner and provide an understanding about drivers of satisfaction for non-core food items. The findings from the study will enable the policy makers to consider a social network for formulation and successful implementation of policies.

Further, the recommendations will lead to inculcating a long-forgotten market in mainstream economy and improving the standard of their living by providing suggestive and efficient changes in the marketing system at the subsistence marketplace.

Limitations of the Study and Directions for Future Research

The current study is limited to BOP in Delhi, India. Thus, future researches are expected to cover BOP markets in other parts of the world. In the current study, respondents of income below INR 4,000 were less. Future research might investigate consumer behaviour of the different income sub-segments of BOP and suggest a particular methodology of serving these income segments. The current study divides the food categories into core and non-core food items. It is found that BOP consumers spent more on non-core food items with rising income bracket. The probable explanation to this consumption is compensatory consumption. Future studies are expected to define a construct of addictive, conspicuous, and aspirational consumption for food items at the BOP market. It also opens an opportunity of designing a marketing - mix based on the nature of consumption. The current study was performed in urban BOP population of Delhi. It provided an opportunity to investigate the differences in consumption behaviour of urban and rural BOP population and influence of the marketing mix.

In India, culture is an integral aspect of consumer buying decisions, given there is different religious and cultural diversity. Therefore, it becomes imperative to integrate its influence on the application of consumer behaviour theory across various markets. Future researchers can examine if the poverty penalty phenomenon is applicable for all types of products. Overall, the various propositions related to consumption model of BOP consumers need closer empirical examination. The macro-environmental constraints such as inflation, the role of the government, and other environmental factors are prevalent in India. These limitations could potentially influence purchase decision by BOP consumers. Future studies are expected to be undertaken in the direction of macroeconomic factors.

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About the Authors

Dr. Yukti Sharma is currently working as a Post-Doctoral Research Fellow at IIM Calcutta. She finished her Doctorate from Jamia Hamdard, New Delhi in the subject of marketing at subsistence marketplace. She was previously working as an Assistant Professor at University of Delhi and possesses 6 years of teaching experience. With a consistent academic record, she did her M. Com from Department of Commerce, University of Delhi. She has a decent number of publications in journals of international repute. She has presented research papers in various national and international conferences.

Dr. Reshma Nasreen is currently working as an Associate Professor at Department of Management, Jamia Hamdard, New Delhi and has two decades of research and teaching experience. She has successfully guided three Ph.D. candidates and is currently guiding three Ph.D. candidates. She has been a reviewer for EEMCS (*Emerald Emerging Market Case Studies*) since 2012. She has a various publications in journals of international repute.

Amit Kumar is currently working as an Assistant Professor in the Department of Commerce, Dyal Singh Evening College, Delhi University. He did his graduation and post - graduation from Delhi University and is pursuing Ph.D. in Marketing. He has authored of 20 articles/research papers and has presented papers in international conferences. He has completed four projects, including an innovation project, which won two prizes. His research interests include social media, medical tourism, and health-care communities.