

FACTORS AFFECTING CONSUMER PURCHASE DECISION: MODEL TESTING AND VALIDATION w.r.t. HAND SANITIZERS' CONSUMER BEHAVIOUR

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ABSTRACT

The aim of this study is to test and validate the model of factors affecting consumer behaviour. As per the theory of consumer behaviour, there are five factors, which affect consumer purchase decision i.e. personal factors, psychological factors, social factors, cultural factors and economic factors. This study explores various variables in each factor that influence consumer decision-making process. These factors will be tested and validated as a model with the help of primary data collected from consumers of hand sanitizer products. The primary data was collected from 384 consumers of hand sanitizer products using purposive sampling techniques in an Indian city of Visakhapatnam. The respondents were served with a structured questionnaire, which was designed with the variables related to the factors that are affecting consumer decision. Confirmatory Factor Analysis was applied on the primary data to test the model of factors affecting purchase decision. The model found to be significant after performing reliability test, convergent validity, discriminant validity and achieving satisfactory model fit indices. This is an original and novel research work, which is useful for marketers of FMCG or consumer durable products in designing marketing mix strategies.

Keywords: Consumer Behaviour, Factors, Consumer Decision, Factors Affecting Consumer Decision, Hand Sanitizers, Consumer Decision Making Process.

INTRODUCTION

Consumer Purchase Behaviour refers to the final consumer's purchasing behaviour. Numerous factors, elements, variables, specificities, attributes, and traits impact the person in who she/he is, as well as the consumer in his decision-making process, shopping habits, purchasing behaviour, the brands he buys, and the merchants she/he visits. Every one of these criteria contributes to a buying decision. Individuals and consumers are guided by their culture, subculture, social class, membership groups, family, personality, psychological characteristics, and so on, and are impacted by cultural trends as well as their social and societal surroundings. Consumer behaviour refers to the selection, acquisition, and consumption of products and services to satisfy their desires. Consumer behaviour is comprised of several processes. Numerous elements, specificities, and traits impact the person in who she/he is, as well as the consumer in her/his decision-making process, shopping habits, purchasing behaviour, the brands she/he buys, and the merchants she/he visits.

By identifying and comprehending the factors that influence their customers, brands have the opportunity to create a more efficient strategy, a marketing message (Unique Value Proposition), and advertising campaigns that are more in line with the needs and ways of thinking of their target consumers, a valuable asset for better meeting the needs of its

customers and increasing sales. Every one of these criteria contributes to a buying decision. The consumer begins by attempting to identify which commodities he want to consume, and then he picks just those commodities that offer more benefit. After picking the items, the customer estimates how much money he has available to spend. Finally, the customer assesses the current commodity pricing and decides which commodities he should consume. Meanwhile, other elements such as social, cultural, economic, personal, and psychological influences influence consumer purchasing.

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The research gap that this study fulfils is that proposing a model for factors affecting consumer behaviour, test it and validate it with primary data collected from the consumers' of hand sanitizers.

THEORETICAL BACKGROUND

For an effective consumer focused market service provider should act as psychologist to procure customers. Things can be made more advantageous by keeping influencing variables in mind, and the objective of customer happiness can be accomplished. The study of customer purchasing behavior is the key to market success. The study of the processes involved when people or groups select, buy, use, or discard of goods, services, ideas, or experiences to fulfil wants and wishes is the scope of consumer behaviour (Solomon et.al., 2006). Table 1 shows the variables in each factor that affect the consumer behaviour.

Personal Factors: Personal factors are the first to influence customer purchasing behaviour. Personal factors that influence customer purchasing behaviour include age and life cycle stages, employment, personality, lifestyle, and beliefs. These are the results of a mix of direct and indirect personal variables. Some of these have direct effects on consumer purchasing behaviour, while others have secondary effects on consumer purchasing behaviour. Companies should concentrate on the personal element, which is typically relevant in both everyday and specific goods (Kotler & Keller, 2016). Consumer preferences alter as they progress through life. It can happen when a person marries, after the marriage, after having children, and when the children go to college. Companies frequently select a target market to promote their goods in, as well as develop marketing strategies based on various stages of a consumer's life cycle. Companies sometimes design goods based on various phases of the life cycle and/or consumer ages (Kotler et al., 2017). Occupation is a personal element that influences customer purchasing behaviour. Companies should consider the profession of the customer when pricing a product or developing a product. Doctors, architects, instructors, businessmen, drivers, and pupils are examples of occupations. A consumer's employment influences their purchasing behaviour for any products or services. For instance; a businessman may purchase more costly products or services as comparison to other professionals (Kotler & Keller, 2016). According to Kotler et al., (2017), personality consists of the unique psychological traits that distinguish an individual or organisation. Personality characteristics such as self-assurance, authority, sociability, autonomy, defensiveness, flexibility, and aggression are commonly used to

characterize people.

Psychological Factors: Consumer purchasing behaviour is also influenced by psychological factors. It is also referred to as an intrinsic component (Ali & Ramya, 2016). The environment has a significant impact on customer buying decisions (Kotler & Keller, 2016). People are frequently affected by the purchases of other consumers of products or services. The "other consumer" could be an acquaintance, family member, coworker, or someone else (Rani, 2014). Because of the climate, consumers may be excited about a new product that is launched into the market. The environment is linked to psyche. Some businesses place a premium on this aspect. Motivation, perception, learning, and recollection are the four psychological variables (Kotler & Keller, 2016). Learning is the method by which an individual responds to a given circumstance. A person's actions reflect what he or she has learned in the past. Learning describes a person's actions. Learning is described as an increase in problem-solving ability gained through practice (Washburne, 1936). Working memory is defined as a limited quantity of knowledge that can be kept in an available state and used for a variety of activities (Adams, et al., 2018).

Social Factors: One of the most influential factors influencing customer purchasing behaviour is the social element. A person's social factor encompasses his or her group, social network, internet social network, and family. Word-of-mouth is another social element that influences customer purchasing behaviour. "Two or more individuals who interact to achieve individual or mutual objectives," according to Kotler (2017). Primary groups with whom the individual engages on a reasonably regular and informal basis, such as family, friends, neighbours, and colleagues. People also adhere to secondary groups, such as religious, professional, and trade-union organisations, which are more official and necessitate less constant contact (Kotler & Keller, 2016).

Economic Factors: The fourth element influencing customer purchasing behaviour is the economic factors. A consumer's fiscal situation influences his or her buying decision and choice of a particular brand or product. Companies can conduct research on customer purchasing and saving habits. Personal revenue, family income, wage projections, savings, consumer credit, and other economic variables are examples of economic factors (Ali & Ramya, 2016).

Cultural Factors: The most basic predictor of a person's desire and behaviour is culture. Through his or her family and other important organisations, the developing kid learns a set of values, perceptual preferences, and behaviours. Society has a significant impact on purchasing and decision-making patterns. Marketers have to investigate the cultural forces and have to frame marketing strategies for each category of culture individually to drive up the sales of their products or services. However, culture is not permanent and evolves over time, and such changes are eventually incorporated within society (Schiffman & Kanuk, 2009).

Table 1 FACTORS AFFECTING CONSUMER BEHAVIOUR				
Personal Factors (PF)	Psychological Factors (GF)	Social Factors (SF)	Cultural Factors (CF)	Economic Factors (EF)
Age	Motivation	Family	Culture	Income
Income	Perception	Reference Groups	Sub Culture	Assets

Occupation	Learning	Roles	Social class	Liquidity
Lifestyle	Attitudes	Status		
	Beliefs			
Source: Kotler et al., (2017), Kotler & Keller (2016), Schiffman & Kanuk (2009)				

METHODOLOGY

This study attempts to test and validate the model using confirmatory factor analysis (CFA). The primary data from 300 customers who were using hand sanitizer products. The respondents were chosen based on purposive sampling method from the respondents who regularly uses hand sanitizer product in their daily routine. The primary data was collected in the Indian city of Visakhapatnam during December 2022 to March 2023. The respondents were served with a structured questionnaire, which was designed with the variables related to the factors that are affecting consumer decision. Confirmatory Factor Analysis was applied on the primary data to test the model of factors affecting purchase decision. The model found to be significant after performing reliability test, convergent validity, discriminant validity and achieving satisfactory model fit indices.

MODEL EXECUTION, TESTING AND VALIDATION

The values of the model fit indices found to be within the acceptability limits proposed by Hair et al (2010). The values of absolute fit measures indices of measurement model were found as “ $p=0.000$ ” and “Chi-Square”=349.192 at $df=80$, “Chi-Square”/ $df=4.75468$, “Root Mean Square of Approximation (RMSEA)” =.115 and “Goodness of Fit Index (GFI)”=.812, “Adjusted Goodness of Fit Index (AGFI)”=.889, “Incremental Fit Index (IFI)” =.823, “Normed Fit Index (NFI)” =.756, “Comparative Fit Index (CFI)” =.745 and “Tucker-Lewis Index (TLI)” =.735. The incremental fit measure values were also discovered in the limit of acceptability. Finally, the model of factors affecting consumer purchase decision found to be compatible with the data obtained on consumer buying decisions of hand sanitizers. Construct validity can be checked by discriminant and convergent validity. All constructs are having AVEs more than 0.5 as all AVEs are greater and showing discriminant validity. The factor loadings for each construct, confirming that the observed indicators have sufficient convergent and discriminant validity as mentioned in Table 2.

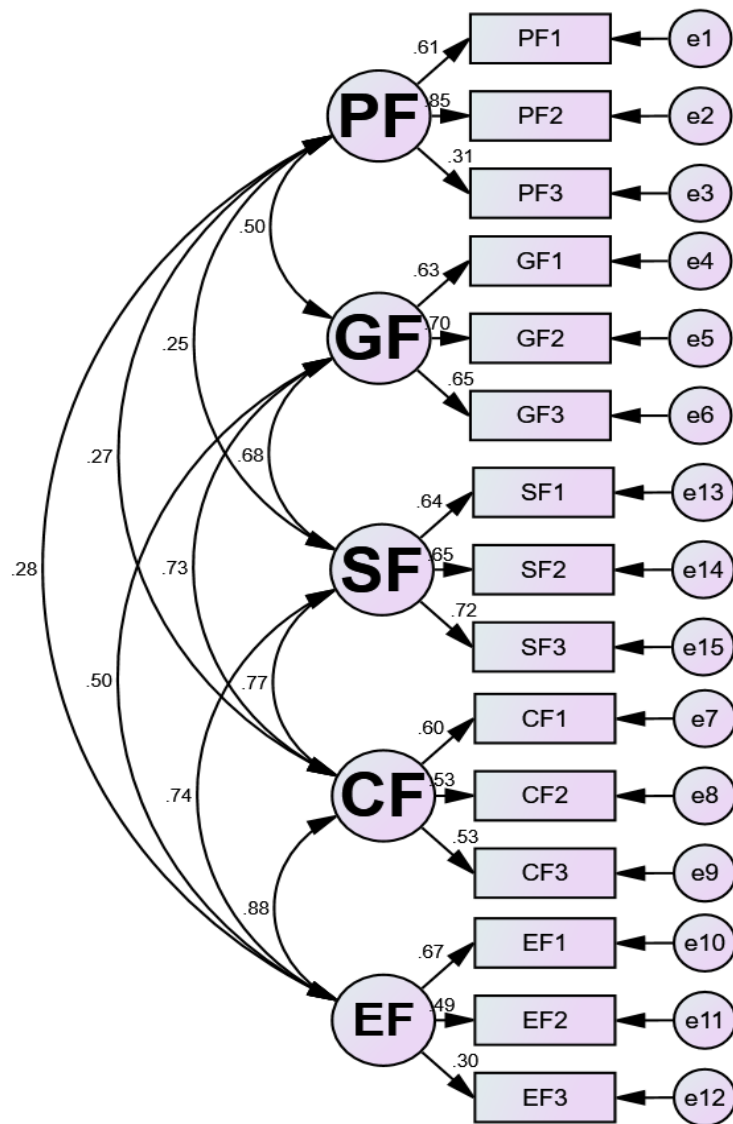


FIGURE 1
FACTORS AFFECTING CONSUMER BEHAVIOUR MODEL

Table 2 CONVERGENT VALIDITY AND DISCRIMINANT VALIDITY										
	α	CR	AVE	MSV	MaxR(H)	EF	PF	GF	CF	SF
EF	0.824	0.891	0.660	0.578	0.549	0.509				
PF	0.713	0.836	0.599	0.548	0.767	0.279	0.631			
GF	0.813	0.898	0.636	0.534	0.701	0.498	0.498	0.660		
CF	0.807	0.773	0.610	0.578	0.576	0.882	0.274	0.731	0.557	

SF	0.854	0.712	0.553	0.526	0.716	0.737	0.248	0.677	0.772	0.673
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			Estimate	S.E.	C.R.	P	Label
PF	<-->	GF	.711	.160	4.436	***	par_11
PF	<-->	CF	.304	.108	2.823	***	par_12
PF	<-->	EF	.255	.090	2.834	***	par_13
PF	<-->	SF	.289	.102	2.833	***	par_14
GF	<-->	CF	1.104	.189	5.851	***	par_15
GF	<-->	EF	.620	.133	4.646	***	par_16
GF	<-->	SF	1.075	.181	5.928	***	par_17
CF	<-->	EF	.853	.133	6.428	***	par_18
CF	<-->	SF	.953	.156	6.109	***	par_19
EF	<-->	SF	.748	.122	6.140	***	par_20

From the Table 3, there are ten covariances formed between all the five factors i.e. Personal Factors (PF), Psychological Factors (GF), Social Factors (SF), Cultural Factors (CF) and Economic Factors (EF) as shown in the figure 1. The covariances formed are: PF<-->GF, PF<-->CF, PF<-->EF, PF<-->SF, GF<-->CF, GF<-->EF, GF<-->SF, CF<-->EF, CF<-->SF and EF<-->SF. The covariances are found to be significant at 0.000 level.

CONCLUSION

Consumer behaviour study explores how individual consumers, groups, or organisations pick, acquire, use, and dispose of ideas, commodities, and services to meet their needs and desires. It relates to consumer behaviour in the marketplace and the underlying motivations behind such behaviour. It is influenced by many different factors. These are some of the fundamental elements that drive customer behaviour, and marketers must keep them in mind while making strategic marketing decisions. Finally, we can conclude that the model of factors affecting consumer behaviour is found to be significant, the items with in each construct are significantly correlating (alpha values found to be significant) and all the constructs are significantly varying with each other as discriminant validity and convergent validity found to be significant. The model along with scale items presented in Annexure-1. Theoretical Implications: This research study is able to test and validate the model of factors affecting consumer purchase decision with the help of primary data. The study confirmed the variables in each factor and all factor as a model tested and validated as an integrated model. The theory of consumer behaviour can be implemented in different verticals like retailing, marketing of services and products etc.

Practical Implications: The marketing managers, product managers or brand managers should identify the factors that are affecting the consumer purchase decision before they design marketing mix strategies. The consumers data on personal and economics factors can be helpful in designing pricing strategy and place strategy, data related to social and cultural factors useful in designing promotion strategies and product strategies Annexure Table 1.

Annexure Table 1		
VARIABLES IN THE MODEL OF FACTORS AFFECTING CONSUMER BEHAVIOUR		
Item No.	Personal Factors (PF)	Item Code
1	Sanitizers have become an essential part of my everyday routine, and I will continue to buy them on a regular basis.	PF1
2	To be secure, my doctor believes I should use hand sanitizers.	PF2
3	As per my occupation. I should use hand sanitizers.	PF3
Item No.	Psychological Factors (GF)	Item Code
1	I approach my friends and peers for information about sanitizer companies.	GF1
2	I mostly trust professional advice (doctor or others) when it comes to disinfectant products.	GF2
3	I bought the disinfectant because of the firms' marketing/advertising endeavours.	GF3
Item No.	Social Factors (SF)	Item Code
1	I want to use the sanitizer because my colleagues and co-workers are.	SF1
2	Because of the Covid-19 predicament, I purchased the sanitizer product.	SF2
3	I'm using because I'm required to use hand sanitizer at work/home/outside.	SF3
Item No.	Cultural Factors (CF)	Item Code
1	Using hand sanitizer is an accepted culture everywhere.	CF1
2	It has been emerged as a work culture to use hand sanitiser at work place.	CF2
3	It has been emerged as a family culture to use hand sanitiser at home.	CF3
Item No.	Economic Factors (EF)	Item Code
1	Because of the Discount/Offer, I purchased the hand sanitizers.	EF1
2	The cost of the hand sanitizer is an important consideration when purchasing it.	EF2
3	I can afford to a branded hand sanitizer.	EF3

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Received: 20-Mar-2023, Manuscript No. AMSJ-23-13188; **Editor assigned:** 21-Mar-2023, PreQC No. AMSJ-23-13188(PQ); **Reviewed:** 08-Apr-2023, QC No. AMSJ-23-13188; **Revised:** 20-Apr-2022, Manuscript No. AMSJ-23-13188(R); **Published:** 16-May-2023