Personal and Psychological Factors Affecting Consumer Buying Behaviour in FMCG

Mrs. P. Muthu Ganeshwari

Ph.D Research Scholar (Full Time), PG and Research Department of Commerce, Ayya Nadar Janaki Ammal College, Sivakasi. Affiliated to Madurai Kamaraj University, Madurai.
Mail.Id: muthubcom92@gmail.com

Dr. G. Yogeswaran

Assistant Professor, PG and Research Department of Commerce,
Ayya Nadar Janaki Ammal College
Affiliated to Madurai Kamaraj University, Madurai.
Mail.Id: yogeswaranganesan@gmail.com

Abstract: ***Consumer buyer behaviour*** *varies over various time periods* ***and locations****, making its analysis a* ***complex process****. Previous studies have explored* ***all major factors*** *influencing consumer behaviour. However, this study focuses mostly on* ***two factors*** *within* ***Fast-Moving Consumer Goods (FMCG) sector****:* ***Psychological Factors*** *and* ***Personal Factors*** *(Schiffman & Wisenblit, 2019). Convenience sampling was used to select 70 respondents from Sivakasi for the study. The researcher employed* ***primary as well as secondary data****, with* ***SPSS software*** *applied for statistical analysis. The results, derived from* ***Independent T-Test and One-Way ANOVA****, revealed that* ***Personal Factors and Psychological Factors do not have a significant relationship****. However, analysis using* ***First-Order Confirmatory Factor Analysis (CFA)*** *confirmed that* ***Psychological Factors demonstrated a good model fit*** *(Hair et al., 2010; Field, 2018).*

Keywords: *Psychological Factors, Gender, Age, and Consumer Behaviour*

Introduction

Consumer buyer behaviour refers to the combination of attitudes, preferences, and purchasing intentions that influence consumer decision-making across various industries. This study observes consumer behaviour within FMCG sector, because these goods are regularly bought and essential in daily life. Although consumer behaviour is typically influenced by five key factors. Only two are the focus of this study: personal factors and psychological factors (Kotler & Keller, 2016).

The study was conducted in Sivakasi, with 70 respondents selected through a convenience sampling approach. To analyze the data, statistical techniques such as the Independent T-Test, One-Way ANOVA, and First-Order CFA are employed. The results exposed that Psychological Factors demonstrate a good model fit, while there was no discernible connection between Psychological and Personal Factors (Hair et al., 2010; Schiffman & Wisenblit, 2019).

Review of Literature

Neiba and N Tejmani Singh (2024)[15] in their article titled "Factors Influencing Consumer Preference Towards Organic Food Products in Manipur", in this paper the researchers investigate the factors influencing customer preferences for organic food items. A descriptive cross-sectional design using a quantitative technique was used, and primary data were collected through a survey of 320 organic food consumers. Statistical tools such as factor analysis, multiple regressions, and Andrew F Hayes' PROCESS v4.2 are used to analyse the data and assess the hypotheses, including the mediating effect. Organic food knowledge, health consciousness, and environmental consciousness all affect perceived value, which mediates between the influencing factors and consumer preference. The paper advances our understanding of the factors that influence consumers' perceived value and preference for organic foods. The findings have important implications for organic growers and marketers in rural Manipur, as well as India in general.

Samir Sarkar and Jennifer Rehman (2024)[19] in their article titled "Influence of Food Packing Cues on Consumer Buying Behaviour", identify food packing and its components, as well as their impact on customer purchasing behaviour. Exploratory research is undertaken on the extrinsic cues shown on food packaging. Structural equation modelling is utilised to assess the difference between environmental stimuli and purchasing behaviour. The study reveals that extrinsic cues such as brand name, price shown, wrapper design, date of manufacture, country of origin, package colour, and nutrition information have a substantial impact on customers' purchasing decisions. It also shows that male and female purchases respond similarly to all cues on the packaging, with the exception of 'country of origin'.

Tanusri Pillai & Jothi. K (2020)[27] in their article titled "An Empirical Study on Consumers' Behavior of Buying Green Products of FMCGS (Fast Moving Consumer Goods) in Kerala", explain Brand Influence using various factors. The researchers use ANOVA, Structural Equation Modelling tools for their analysis. The researchers frame different hypotheses for analysis. In terms of advertising, consumer buying habits, brand influence, celebrity endorsement, cultural orientation, there is no correlation among income groups. They are approved, and there is no correlation between factors and age group. Lastly, the researchers declare that the model fits.

Shaik Shanshuddin et.al. (Sep 2020)[23] in their paper titled, "A Study on Consumer Buying Behaviour Towards FMCG's Mosquito Refill Products with Reference to Selected Districts of State of Andhra Pradesh" state that the objectives of the study are fulfilled. The researchers use tools like Chi-Square, Frequencies, Factors, and ANOVA with the help of Quota Sampling Techniques. The researchers examine how consumers behave after purchasing FMCG Mosquito Refill items and the media sources that inform consumers about these goods. Lastly, they draw the conclusion that marketing decisions that are in line with consumer demands are made possible by consumer behavior.

Acharya, S & et al., (Nov 2018)[1] in their study entitled "Consumer Buying Behaviour Towards Toothpaste" they state that pulling in and holding clients, branding impacts buyer purchasing conduct. To get the above result, the researcher has framed two objectives, namely to impact the purchasers to purchase different toothpaste, and Consumers of Promotions and factors influencing purchase decision as well as switching. This objective is analyzed by using Tools called EFA, ANOVA, and Independent Samples T-Test. These tools only help find the results for this paper.

Pallavi, G.S. & Shashidhar, S (April 2015)[17] in their study titled "A study on Consumer Behavior towards Selected FMCG" explain three categories of Products influencing the buying behaviour, factors influencing the consumer while

purchasing, and comparative analysis for HUL & P&G. For analysis of the above said objectives, the researcher has applied frequency by comparing the product with variables namely Price, Quality, packaging, Availability, and influence by others. It is concluded that both companies compete with each other and focus mainly on the advertisement, and products available to consumers.

Objectives

The goals of study are listed below:

- To identify the variables of the psychological factors
- To analyse the relationship among gender and the psychological factors
- To analyse the relationship among age and the psychological factors
- To analyse the model fit in the psychological factors
- To recommend suitable suggestions for the findings.

Methodology

The researcher has analyzed psychological and personal aspects impacting consumer behaviour in FMCG sector among consumers in Sivakasi. A convenience sampling approach is employed to select 70 respondents for study. The research variables are taken from websites and academic journals, which are then utilized to develop a questionnaire for primary data collection through Google Forms. Additionally, secondary data are obtained from websites, articles, journals. The collected data are analyzed by utilizing SPSS & AMOS software packages to ensure statistical validity and model fit (Field, 2018; Hair et al., 2010).

Identification of Variables

The researcher has identified key psychological factors influencing consumer behaviour in FMCG sector using information from reputable sources. The identified psychological features comprise:

- Motivation
- Perception
- Learning
- Attitudes & Beliefs

Consumer decision-making and purchasing behavior are greatly influenced by these aspects (Kotler & Keller, 2016; Schiffman & Wisenblit, 2019).

Hypothesis

The researcher has framed two alternative hypotheses for analysing listed below:

- There is a relationship among Gender and the Psychological Factors
- There is a relationship among Age with the Psychological Factors

Analysis and Interpretation

Independent T-Test

Independent Sample T-test having a statistical approach employed to compare means of 2 independent groups from same population. Since it's a parametric test, it presumes that the data are distributed normally. Given that psychological factors data followed a normal distribution, the researcher has applied the Independent T-test to inspect the relationship between gender and psychological factors (Field, 2018; Pallant, 2016).

Table 1: Gender Vs Psychological Factors

Psychological Factors	Gender	Frequency	Mean	SD	Std. Error Mean	F value	Sig
Motivation	Male	28	3.7857	1.22798	.23207	2.706	.105
	Female	42	3.9524	1.03482	.15968		
Perception	Male	28	3.6786	1.27812	.24154	.247	.621
	Female	42	3.7143	1.17465	.18125		
Learning	Male	28	3.7500	1.23603	.23359	.002	.965
	Female	42	3.6667	1.16172	.17926		
Attitudes & Beliefs	Male	28	3.7500	1.23603	.23359	.117	.733
	Female	42	3.7857	1.11608	.17222		

Source: Computed Data

Table 1 presents the psychological factors—Motivation, Perception, Learning, and Attitudes & Beliefs—or their relationship with gender. The Independent Sample T-test was used to examine these relationships, and the outcomes show that significance value (p-value) is >0.05. Based on this finding, the researcher concludes no significant relationship among gender as well as psychological features. Consequently, the alternative hypothesis is rejected, null hypothesis is accepted (Field, 2018; Pallant, 2016).

One-Way Analysis of Variance (ANOVA)

ANOVA is utilized for comparing means of two or more samples. Since data are normally distributed, the researcher applied this parametric test to examine the connection between psychological variables and age (Field, 2018).

Table 2: Age Vs Psychological Factors

ANOVA

Factors		Sum of Squares	Df	Mean Square	F	Sig.
Motivation	Between Groups	10.226	3	3.409	3.005	.037
	Within Groups	74.860	66	1.134		
	Total	85.086	69			
Perception	Between Groups	2.910	3	.970	.655	.583
	Within Groups	97.790	66	1.482		
	Total	100.700	69			
Learning	Between Groups	1.843	3	.614	.427	.734
	Within Groups	94.857	66	1.437		
	Total	96.700	69			
Attitudes and Beliefs	Between Groups	.914	3	.305	.220	.882
	Within Groups	91.429	66	1.385		
	Total	92.343	69			

Source: Computed Data

Table 2 displays outcomes of ANOVA analysis, which examines relationship between age and psychological factors. The analysis indicates a negative relationship, leading to rejection of alternative hypothesis based on the 0.05 significance threshold (Field, 2018; Hair et al., 2010). Consequently, the null hypothesis, which indicates that age and psychological characteristics do not significantly correlate, is accepted.

First Order Confirmatory Factor Analysis

First-Order CFA is employed to evaluate goodness of fit for a single-factor model. To assess the psychological elements driving consumer purchasing behaviour in the FMCG industry, the investigator used First-Order CFA. (Hair et al., 2010; Kline, 2015).

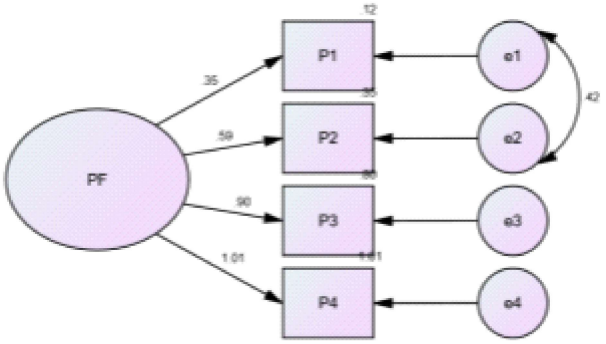


Figure 1: First Order CFA for Psychological Factors

The model fit indices for first-order CFA for psychological components are displayed in the table below, which also explains the aforementioned figure.

Table 3: First Order CFA Result of Psychological Factors

Name of the Fit	Name of Index	Achieved Value	Accepted Level	Observations
Absolute Fit	P Value	0.176	P- Value >0.05	Required level is achieved – Accepted
	RMSEA	0.110	<0.08 (Hair et al., 2006)	Required level is Not achieved – Rejected
	GFI	0.987	>0.90 (Hair et al., 2006)	Required level is achieved – Accepted
Incremental Fit (or) Relative Fit	AGFI	0.871	>0.90 (Hair et al., 2006)	Required level is Not achieved – Rejected
	CFI	0.995	>0.90 (Hu and Bentler, 1999)	Required level is achieved – Accepted
	TLI	0.969	>0.90 (Hair et al., 1998)	Required level is achieved – Accepted
	NFI	0.989	>0.90 (Hu and Bentler, 1999)	Required level is achieved – Accepted
Parsimonious Fit	CMIN/DF	1.834	< 5.0 (Hair et al., 1998)	Required level is achieved – Accepted

Source: AMOS Output

Table 3 presents the AMOS output for the psychological factors using CFA. The p-value is 0.176, which exceeds the 0.05 threshold, indicating an acceptable model fit (Hair et al., 2010; Kline, 2015). "Root Mean Square Error of Approximation (RMSEA)" of 0.110, above the 0.08 limit, suggests inadequate model fit (Hu & Bentler, 1999). However, the Goodness of Fit Index (GFI) is 0.987, surpassing 0.90 threshold and indicating a good absolute model fit. These three indices—p-value, RMSEA, and GFI—belong to the Absolute Fit category, which evaluates how successfully the proposed model replicates the data that was seen (Byrne, 2016).

Adjusted Goodness of Fit Index (AGFI) is 0.871, while Comparative Fit Index (CFI) is 0.995, the Tucker-Lewis Index (TLI) is 0.969, Normed Fit Index (NFI) is 0.989. Model fit is normally considered good if threshold is >0.90 for these indices, except for AGFI, which falls slightly below this cutoff (Hair et al., 2010; Hu & Bentler, 1999). All other indices suggest a good model fit. These indices—CFI, TLI, and NFI—are categorized as Incremental or Relative Fit Indices, as they contrast the suggested model with a baseline model (Bentler, 1990; Kline, 2015).

Parsimonious fit is assessed using a single index, the Chi-Square/Degrees of Freedom ratio (CMIN/DF), which in this case is 1.834. Since this value is below accepted threshold of 5.0 (Hair et al., 2010; Kline, 2015), it indicates an acceptable model fit. As per outcomes of CFA, the researcher concludes that psychological factors in the CFA model provide a good fit for sample data.

Findings

The findings of study are

- Independent t-test analysis indicates no significant relationship among gender and psychological factors.
- One-way ANOVA results show no significant relationship among age and psychological factors.
- Psychological factors demonstrate a good model fit, as analyzed by utilizing First-Order CFA (Hair et al., 2010; Kline, 2015).

Suggestions

The researcher finds that psychological factors do not exhibit a significant relationship with gender and age, which may be attributed to the non-normal distribution of the motivation variable. However, in a broader sense, psychological factors are generally expected to be associated with gender and age (Schiffman & Wisenblit, 2019). If purchase motivation increases through strategic influences such as advertising and promotional efforts, a stronger relationship between gender, age, and psychological factors may emerge (Kotler & Keller, 2016). Therefore, future research should explore how targeted marketing strategies impact these relationships.

Scope for Further Research

The researcher provides the following suggestions for further investigation:

- This research focuses solely on Sivakasi area, and findings may not be generalizable to other regions. Therefore, further research should be conducted in different geographic locations to enhance the applicability of the results.
- The study analyzes only psychological factors influencing consumer behaviour. The researcher suggests expanding future research to include additional factors, such as social, cultural, and economic influences (Kotler & Keller, 2016; Schiffman & Wisenblit, 2019).
- This study employs First-Order CFA. For more robust validation, the researcher recommends using Pooled CFA and Structural Equation Modeling (SEM) in future studies (Hair et al., 2010; Kline, 2015).

Conclusion

When making a buying decision, buying behavior is very important (Kotler & Keller, 2016). Consumer behavior directly influences how decisions are made when selecting products (Schiffman & Wisenblit, 2019). This study concludes that various factors influencing buying behavior—psychological, social, cultural, and economic—help consumers make informed decisions and purchase products effectively (Solomon, 2020). The findings confirm that these factors demonstrate model fitness, validating their significance in shaping consumer behavior (Hair et al., 2019). Therefore, the researcher concludes that the study provides a well-fitting model and offers a foundation for further analysis in this domain.

References

Acharya.S. Ubeja.S. Jain.P. Loya.A. (2018). Consumer Buying Behaviour Towards Toothpaste. *International Journal of Computer sciences and Engineering,* 6(9), 74 –82.

Arvinder Pal Kaur, Kamalpreet Kaur, Ashish Saihjpal, and Shashi Kapoor. 2024. Factors Influencing the Impulse Buying Behavior of Millennials in India: A Structural Equation Modeling Study. *The IUP Journal of Marketing Management*.

Bentler, P. M. (1990). Comparative fit indexes in structural models. Psychological Bulletin, 107(2), 238–246. https://doi.org/10.1037/0033-2909.107.2.238

Byrne, B. M. (2016). Structural equation modeling with AMOS: Basic concepts, applications, and programming (3rd ed.). Routledge.

Elizar, Suripin and Mochamad Agung Wibowo (2017). Model of Construction Waste Management using AMOS-SEM for Indonesian Infrastructure Projects. *MATEC Web of Conferences 138*, 01-08.

Field, A. (2018). Discovering statistics using IBM SPSS statistics (5th ed.). Sage Publications.

Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2010). Multivariate data analysis (7th ed.). Pearson.

Hu, L. T., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. Structural Equation Modeling: A Multidisciplinary Journal, 6(1), 1–55. https://doi.org/10.1080/10705519909540118

Kirk, R. E. (2013). Experimental design: Procedures for the behavioral sciences (4th ed.). Sage Publications.

Kline, R. B. (2015). Principles and practice of structural equation modeling (4th ed.). Guilford Press.

Kotler, P., & Keller, K. L. (2016). Marketing management (15th ed.). Pearson.

Malhotra, N. K., & Dash, S. (2021). Marketing research: An applied orientation (8th ed.). Pearson.

Mohamad Asyraf, Sabri Ahmad, & Ibrahim Mamat. 2014. Pooled Confirmatory Factor Analysis (PCFA) Using Structural Equation Modeling on Volunteerism Program: A Step By Step Approach. *International Journal of Asian Social Science,* 4(5), 642-653.

Mustafa Emre Civelek. (2018). Essentials of Structural Equation Modeling. Zea E-Books. 64, 18-20.

Neiba and N Tejmani Singh. (2024). Factors Influencing Consumer Preference Towards Organic Food Products in Manipur, *The IUP Journal of Marketing Management,* 23 (4), 124-147.

Pallant, J. (2016). *SPSS survival manual* (6th ed.). McGraw-Hill Education.

Pallavi. G.S. & Shashidhar.S. (2015). A Study on Consumer Behavior towards Selected FMCG. *International journal of engineering and Management Research,* 5(2), 303 - 320.

Peter, J. P., & Olson, J. C. (2018). Consumer behavior and marketing strategy (12th ed.). McGraw-Hill.

Samir Sarkar and Jennifer Rehman. (2024). Influence of Food Packaging Cues on Consumer Buying Behavior, *The IUP Journal of Marketing Management*, 23(1).

Sampling Techniques (3rd edition). John Wiley &Sons, New York.

Sarmah. H.K., Bora Hazarika. B. & Choudhury. G. (2013). An Investigation on Effect of Bias on Determination of Sample Size on the Basis of Data Related to the Students of Schools of Guwahati. International Journal of Applied Mathematics & Statistical Sciences (IJAMSS), 2(1), 33 – 48.

Schiffman, L. G., & Wisenblit, J. (2019). Consumer behavior (12th ed.). Pearson.

Shaik Shamshuddin. Venkateswarulu. T. Haniefuddin Shaik. (2020). A Study on Consumer Buying Behaviour Towards FMCG's Mosquito to Refill products with reference to selected Districts of state of Andhra Pradesh. *EPRA International Journal of Economics and Management Studies (EBMS),* 7(2), 18 – 28.

Solomon, M. R. (2020). Consumer behavior: Buying, having, and being (13th ed.). Pearson.

Suja R. Nair. Consumer Behaviour (Text and Cases), Himalaya Publishing House, Mumbai, RePrint:2014. Pg. No: 3.

Tabachnick, B. G., & Fidell, L. S. (2013). Using multivariate statistics (6th ed.). Pearson.

Tanusri Pillai & Jothi. K. (2020). An Emprical Study on Consumers' Behavior of Buying Green Products of FMCGs (Fast Moving Consumer Goods) in Kerla. *Journal of Critical Reviews,* 7(4), 735 -738.