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## MEDIATION EFFECT OF CUSTOMER SATISFACTION BETWEEN PROMOTION MIX ELEMENTS AND CUSTOMER BUYING BEHAVIOR IN EDUCATION SECTOR OF ETHIOPIA

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**Abstract:** Present investigation conducted to check the mediation effect of customer satisfaction between promotion mix elements and customer buying behavior in education sector of Ethiopia. The researchers employed mixed method research strategy and cross sectional sequential explanatory research design. In addition to this, archival data was collected from the public universities relation offices. Sampling method used was purposive and simple random sampling purposive and simple random sampling was used for data collection. Lastly, AMOS version 26 was used for data analysis. The Kaiser-Meyer-Olkin test was used to measure sampling Adequacy. Mahalanobis' distance (MD) as a statistical measure based on a chi-square distribution was employed to check the extent to which cases are adjusted with multivariate outliers. SEM model fitness results showed the complete mediation i.e the entire (or total) effect of Promotion Mix Elements on a Customer Buying Behavior is transmitted through Customer Satisfaction. Therefore, the Promotion Mix Elements have no direct effect on the Customer Buying Behavior; rather, its entire effect is indirect. Therefore, mediation role of Customer Satisfaction was really happening in a given model, but the total effect is significant simply because the sample size is very large, or assumptions for the test of the total effect were met.

**Keywords:** promotion mix, customer buying behavior, customer satisfaction, sampling adequacy, mediation effect

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### INTRODUCTION

Promotional elements usually are used by various organizations. Marketers use numerous tools to elicit responses from target markets. These tools are known as the marketing mix, which is defined as the set of tools that a firm uses to pursue its marketing objectives in the target market (Dinmukhamed et. al., 2017; Kotler, 2017). Every business uses a combination of one or more promotional mix elements to achieve high performance. These promotional mix elements are advertising, sales promotion, personal selling, public relation and direct marketing (Belch & Belch, 2018). Of all the marketing tools, advertisement is an effective way to influence the mind of viewers and gives viewers exposure towards a particular product or promotion activities (Kumar & Patra, 2017; Katke, 2018). Aaker (2016) defined promotional mix as —any marketing effort whose function is to inform actual or potential consumers about the merit a product possess for the purpose of inducing a consumer to either start buying or continue to purchase the firms product.

According to Drucker (2012) adopting a good and effective promotional strategy is very important for any business without a best promotional strategy; a business will not be able to get the ideal customers for its promotion activities and goods. This research paper was analyzed the effect of promotional strategies on Customers' buying behavior in case of education sector of Ethiopia. In addition, in selecting appropriate promotional mix, the financial institutions must consider the target audience, the stage of the products, life cycle, characteristics of the products, and decision stages of the products and the channel of distribution (Mahajan & Golahit, 2017; Kotler, 2000).

Fikri & Lisdayanti (2020) researched on effects of Marketing Strategy on profitability of Small-Scale Businesses in Maiduguri Metropolitan, Borno State Nigeria. Saguti (2018) researched the effect of marketing strategy (4Ps) on sales performance of Telecommunication Company. Findings revealed that marketing mix affects sales promotion in inverse manner. But Muthengi (2018) research on the effects of marketing strategies on sales performance of commercial banks and found out that marketing mix enhances sales performance in a positive manner. Munyole (2018) carried out research on marketing strategies adopted by veterinary pharmaceutical firms help to enhance performance and he found out that marketing strategies improve performance. Muthengi (2018) conducted research on the effects of marketing strategies on sales of Commercial Banks revealed the opposite results. Muchohi (2018) conducted a study on marketing strategies to enhance competitiveness. The results revealed that there is a strong positive relationship between marketing strategies and competitiveness. Although several studies conducted in the past highlighted the importance of marketing

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strategy and its impacts on an organization's performance. But, none of these studies was designed with respect to ascertaining the impact of the four marketing Ps on the customer buying behavior (Aldebi & Aljboory, 2018)

Yang, D. J., & Lee, C. W. (2016) conducted their study on marketing strategy and the effects on female consumer buying decisions in relation to cosmetic products and found a positive relation between marketing strategy strategies on organizational profitability. Sales promotion is one of the essential parts of a marketing strategy. Khan et. al., (2019) study tests the impact of various marketing strategies and its impact of organizational profitability and found a positive relation between marketing strategies on organizational profitability.

Ibrahim et. al, (2018) studied that marketing strategy was used to communicate with consumers at alluring cost without convey it to customer too generate sales and profit. This research found a positive relation between marketing strategies on organizational profitability.

Paguntalan (2020) research used the descriptive study design to identify the effect of marketing strategy strategies on organizational profitability. This study manifested that in first stage because of marketing strategy strategies, organizational profitability was positively affected but after a certain time organizational profitability was negatively affected. It showed an inverted U shaped relation. Liu et. al., (2020) study depicted that marketing strategy strategies were negatively related to consumers' purchase behavior. Shaw & Bagozz (2018) study depicted that marketing strategy strategies were negatively correlated with rational choice attributions of organizational profitability. Marketing strategy can dramatically influence consumer perceptions and ultimately the success of a marketing strategy. Jang & Moutinho (2019) researched how price promotion influences actual consumer spending.

Price promotion negatively influences consumer spending. Therefore found that marketing strategy strategies were negatively correlated with balanced preference attributions of organizational profitability (Aldebi & Aljboory, 2018; Lang et. al., 2022).

Therefore on basis of above studies contradictory evidences are found in study the effect of marketing strategy strategies on organizational profitability. Therefore to fill this evidence gap researchers want to conduct this present research.

In addition, while most these studies focused on the impact of marketing strategies on the sales performance, competitiveness, and profitability of organizations in the telecommunication industry, banking industry, etc. none to the best of the researcher's knowledge had examine this impact with reference to the education industry in Ethiopia to be specific, thereby creating a research gap. Also no study will be conducted with mediation effect of customer satisfaction between promotion mix elements and customer buying behavior in education sector of Ethiopia. It based on the foregoing that this study seeks to examine the mediation effects of customer satisfaction between promotion mix elements and customer buying behavior in the education sector of Ethiopia.

This study therefore, seeks to evaluate the mediation effect of customer satisfaction in the relation between promotion mix elements and customer buying behavior in Ethiopia education sector.

## **MATERIALS AND METHODS**

A research methodology is a procedural framework to solve systematically identified research problems (Shaffril et al., 2021). The researcher was employed mixed method research strategy and cross sectional sequential explanatory research design. Purposive and simple random sampling methods were used to collect data from the targeted population.

In addition to this, archival data was collected from the educational universities public relation offices including annual reports, conference & seminar reports to get necessary information. Sampling method was used to purposive and simple random sampling get the sample from the targeted population. Quantitative data was collected from survey a questionnaire that was conducted with the educational universities public relation offices members and also through Observation. Lastly, AMOS version 26 was used for data analysis. Since, SPSS and AMOS are statistical package that are powerful & easy to use. Moreover, it is complete, integrated statistical package that was used for data analysis, data management, and graphics especially for handling large scale of data.

## **RESULTS AND DISCUSSION**

KMO is a test conducted to examine the strength of the partial correlation (how the factors explain each

other) between the variables. Table no. 1 shows two tests that indicate the suitability of your data for structure detection. The Kaiser-Meyer-Olkin Measure of Sampling Adequacy is a statistic that indicates the proportion of variance in your variables that might be caused by underlying factors (Hair et. al., 2012).

#### Measure of Sampling Adequacy (Bartlett's Test of Sphericity)

**Table 1.** Kaiser-Meyer-Olkin And Bartlett's Test

Variable	KMO	Chi-Square	df	Sig.	Initial Eigen values	TVE (%)	Result
Advertising	.747	312.910	6	.000	2.548	54.489	Accepted
Personal selling	.798	564.581	6	.000	2.103	64.972	Accepted
Sales promotion	.787	523.839	6	.000	2.327	62.940	Accepted
Public Relation	.741	518.199	6	.000	2.306	57.658	Accepted
Direct Marketing	.776	685.741	6	.000	2.742	68.547	Accepted
Customer Satisfaction	.765	636.211	6	.000	2.608	65.194	Accepted
Customersbuying behavior	.500	373.984	1	.000	1.712	75.600	Accepted

Extraction Method: Principal Component Analysis

Source: SPSS output (2022)

The KMO and Bartlett test evaluate all available data together. A KMO value over 0.5 and a significance level for the Bartlett's test below 0.05 suggest there is substantial correlation in the data. Variable collinearity indicates how strongly a single variable is correlated with other variables.

**Table 2.** Residuals Statistics<sup>a</sup>

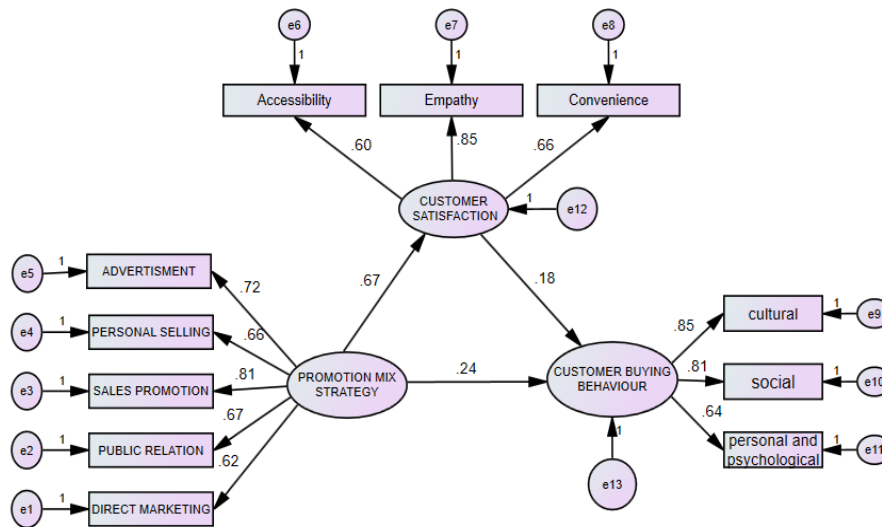
	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	1.93	4.68	3.54	.492	569
Std. Predicted Value	-3.266	2.321	.000	1.000	569
Standard Error of Predicted Value	.048	.299	.107	.048	569
Adjusted Predicted Value	1.99	4.66	3.54	.493	569
Residual	-3.254	1.979	.000	.785	569
Std. Residual	-4.103	2.495	.000	.990	569
Stud. Residual	-4.212	2.599	.002	1.005	569
Deleted Residual	-3.428	2.147	.002	.810	569
Stud. Deleted Residual	-4.302	2.618	.001	1.009	569
Mahalanobis Distance	.503	57.869	7.981	8.559	569
Cook's Distance	.000	.105	.004	.010	569
Centered Leverage Value	.001	.140	.019	.021	569

a. Dependent Variable: Customer Buying Behavior

Source: SPSS output (2022)

Mahalanobis' distance (MD) is a statistical measure of the extent to which cases are multivariate outliers, based on a chi-square distribution, assessed using  $p < .001$ . The critical chi-square values for 2 to 10 degrees of freedom at a critical alpha of 0.001 as shown in above table indicated a good fit. The Cook's distance shown in above table, considered high as it is greater than 0.5 and extreme. It is greater than 1. As the point has been flagged by the Cook's distance, this point is considered highly influential and has a combination of unusual explanatory variables and response values (the combination of  $X_i$ 's and  $y_i$  are unusual).

**Structural Equation Model (SEM)**



Source: AMOS output (2022)

As a multivariate statistical analysis technique above figure in the form of Structural equation modeling shown the structural relationships analyze. SEM combined the factor analysis and multiple regression analysis, and it is showed the structural relationship between measured variables and latent constructs were under acceptance.

**Interpretation of Model Fit**

This model fit sheet summarizes the result of SEM model fitness with their accepted values.

**Table 4.** Model Fit Indices

Acronym	Explication	Accepted fit	Result	Reference
<b>Likelihood Ratio</b>	P-value	≥ 0.05	0.08	Joreskog & Surbom (1996);
<b>Relative X2</b>	(X2/df)	≤ 2 = acceptable fit	1.986	Tabachnick & Fidell (2007);
<b>CMIN/DF</b>	Chi-square divided by Degree of Freedom	≤ 3 = acceptable fit ≤ 5 = reasonable fit	1.988	Kline (1998); Marsh & Hocevar (1985);
<b>GFI</b>	Goodness of Fit Index	1 = perfect fit ≥ 0.95 = excellent fit ≥ 0.9 = acceptable fit	0.92	Kline (2005); Hu & Bentler (1998);
<b>AGFI</b>	Adjusted Goodness of Fit Index	≥ 0.90 = acceptable fit	0.91	Tabachnick & Fidell (2007);
<b>CFI</b>	Comparative Fit Index	1 = perfect fit ≥ 0.95 = excellent fit ≥ 0.90 = acceptable fit	0.93	West et al. (2012); Fan et al. (1999);
<b>RMSEA</b>	Root Mean Square Error of Approximation	≤ 0.05 = reasonable fit	0.056	MacCallum et al (1996);
<b>RMR</b>	Root Mean Squared Residual	≤ 0.05 = acceptable fit ≤ 0.07 = acceptable fit	0.006	Diamantopoulos & Siguaw (2000); Steiger (2007);
<b>SRMR</b>	Standardized Root Mean Squared Residual	≤ 0.05 = acceptable fit	0.04	Diamantopoulos & Siguaw (2000);

CN	Critical N	$\geq 200$ = acceptable fit	264	Joreskog & Sorbom (1996);
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*Source: AMOS output (2022)*

As we seen in above table, the model fit sheet summarizes the result of SEM model fitness with their accepted values. When researchers compare the SEM model fit indices with the standardized vales, it was observed that Chi-Square (CMIN), Goodness of Fit Index (GFI), Baseline Comparisons in Model Fit, Parsimony-Adjusted Measures, Root Mean Square Error of Approximation (RMSEA), Standardized Root Mean Squared Residual, Comparative Fit Index and Critical N all are under acceptance range and depicted the model fitness.

Researcher mediator model based on Customer Satisfaction mediation, decomposes the total effect,  $c$ , into the indirect effect,  $ab$  (product of the indirect paths  $a$  and  $b$ ) and the direct effect,  $c'$  (with the effect of the mediator removed). The total effect can be described as  $c = c' + ab$ , and hence the indirect effect as  $ab = c - c'$ . With complete mediation, the entire (or total) effect of Promotion Mix Elements on a Customer Buying Behavior is transmitted through Customer Satisfaction as a mediator variable. Therefore, the Promotion Mix Elements has no direct effect on the Customer Buying Behavior; rather, its entire effect is indirect. Therefore, mediation role of Customer Satisfaction was really happening in a given model, but the total effect is significant simply because the sample size is very large, or assumptions for the test of the total effect were met. Present result was also supported by the previous researchers (Paguntalan, 2020; Liu et. al., 2020; Jang & Moutinho, 2019; Khan et. al., 2019).

## CONCLUSION

The purpose of this study was to investigate the effect of promotion mix elements on consumers buying behavior. To achieve the purpose of the study three basic research questions were proposed to investigate the effect of promotion mix elements on consumers buying behavior and to answer the stated basic questions. From the findings of the study it can be concluded that the entire research objective for this study was attained; the general objective of this study was to examine the effect of Promotion mix elements on customer buying behavior: Selected promotion mix elements have significant effect on customers buying behavior. With complete mediation, the entire (or total) effect of Promotion Mix Elements on a Customer Buying Behavior is transmitted through Customer Satisfaction as a mediator variable. Therefore, the Promotion Mix Elements has no direct effect on the Customer Buying Behavior; rather, its entire effect is indirect. Therefore, mediation role of Customer Satisfaction was really happening in a given model, but the total effect is significant simply because the sample size is very large, or assumptions for the test of the total effect were met. Moreover, based on the findings from the regression analysis, the researcher concluded that, a positive association found with the buying behavior of customers and mediation effect of customer satisfaction between promotion mix elements and customer buying behavior in education sector of Ethiopia was found. Based on the quantitative research analysis finding, all the five elements of promotion mix have their own impacts for the customer buying behavior.

## REFERENCES

- Ahmed, S., Mohiuddin, M., Rahman, M., Tarique, K. M., & Azim, M. (2021). The impact of Islamic Shariah compliance on customer satisfaction in Islamic banking services: mediating role of service quality. *Journal of Islamic Marketing*.
- Aldebi H., & Aljboory N., (2018). The Impact of the Tourism Promotion-Mix Elements on the Foreign Tourists' Mental Images of the Jordanian Tourist Destinations (A Field Study). *International Business Research, Canadian Center of Science and Education*, 11(1).
- Belch, G. E., & Belch, M. A. (2018). *Advertising and promotion: An integrated marketing communications perspective*. 8<sup>th</sup> ed. Irwin/McGraw-Hill.
- Bintu. (2017). *Advertising and promotion: An integrated marketing communication perspective*. 6<sup>th</sup> Ed. Irwin.
- Drucker (2016). In-store promotional mix and the effects on female consumer buying decisions in relation to cosmetic products. *International Journal of Management, Economics and Social Sciences*, 5(2).
- Fikri, M., & Lisdayanti, A. (2020). Analysing promotion mix and perceived usefulness of e-wallets: A case of Linkaja applications in Indonesia. *International Journal of Finance & Banking Studies, Center for the Strategic Studies in Business and Finance*, 9(1).
- Hajare, S. T., Gobena, R. K., Chauhan, N. M., & Eriso, F. (2021). Prevalence of intestinal parasite infections and their associated factors among food handlers working in selected catering establishments from Bule Hora, Ethiopia. *BioMed Research International*.
- Ibrahim. (2018). The influence of brand image and promotional mix on Consumer buying decision, Southwestern University Nigeria, OkunOwa, P.M.B. 2088, Ijebu Ode, Nigeria. *British Journal of Marketing Studies*, 3(4).
- Ibrahim, A. N., Zakaria, N. A. M., Kamaruddin, M., Mud, N. N. N., & Rahman, R. A. (2018). The effectiveness of promotion strategy influence organizational profitability of Menara Optometry. *International Journal of Academic Research in Business and Social Sciences*, 8(8).
- Jang & Moutinho (2018). The psychological impact of advertising on the customer behavior. *Communications of the IBIMA*, 3(1).
- Jang, S., & Moutinho, L. (2019). Do price promotions drive consumer spending on luxury hotel promotion activities? The moderating roles of room price and user-generated content. *International Journal of Hospitality Management*, 78.
- Kant, S. (2020). Critical appraisal of prevailing marketing mix: Applies particularly to the digital marketing metaphor. *Journal of Marketing and Consumer Research*, 71.
- Kelesbayev, D., Kalykulov, K., & Yertayev, Y., Turlybekova, A., & Kamalov., A. (2017). expressions creating confusion among elements of promotion mix: Sales promotion. *International Review of Management and Marketing, Econjournals*, 7(2).
- Khan, M., Tanveer, A., & Zubair, D. S. S. (2019). Impact of sales promotion on organizational profitability: a case of modern trade, Pakistan. *Governance and Management Review*, 4(1).
- Khan, R. U., Salamzadeh, Y., Iqbal, Q., & Yang, S. (2022). The impact of customer relationship management and company reputation on customer loyalty: The mediating role of customer satisfaction. *Journal of Relationship Marketing*, 21(1).
- Kothari, C. M. (2017). *Research methodology: Methods and techniques*. New Age International (P) Limited.
- Kotler, P. (2000). *Principles of marketing*. Prentice-Hall, Inc.
- Kotler, P. (2018). *Marketing management*. 12<sup>th</sup> edition. Prentice-Hall Inc.
- Koyade, O. (2014). *Marketing communications*. Ventus publishing Aps.
- Kumar S., & Patra S., (2017). Does promotion mix really help to enhance brand equity: A literature review. *Indian Journal of Commerce and Management Studies, Educational Research Multimedia & Publications*, 8(2).
- Lang, L. D., Lim, W. M., & Guzmán, F. (2022). How does promotion mix affect brand equity? Insights from a mixed-methods study of low involvement products. *Journal of Business Research*, 141(C).
- Liu, R. (1932). A technique for the measurement of attitudes. *Archives of Psychology*, 140.
- Liu, Q., Zhang, X., Huang, S., Zhang, L., & Zhao, Y. (2020). Exploring consumers' buying behavior in a Mediation Effect of Customer Satisfaction Between Promotion Mix Elements and Customer Buying Behavior in Education Sector of Ethiopia

- large online promotion activity: The role of psychological distance and involvement. *Journal of theoretical and applied electronic commerce research*, 15(1).
- Mahajan, P. & Golahit, S. (2017). Appealing diversified enrollments: A holistic marketing and promotion mix for technical education. *Post-Print*.
- Mohammed, S. (2021). The effect of promotion practices on consumer's purchase decision: The case of some selected real estates in Addis Ababa, Ethiopia. *Journal of Business and Administrative Studies*, 12(1).
- Munyole, B. (2017). Lack of attribute search ability: Some thoughts. *Psychology and Marketing*, 21(6).
- Muthengi, W. M. (2018). The role of personalization in promotion activities encounters. *Journal of Retailing*, 72(1).
- Paguntalan, L. C. (2020). The effectiveness of marketing strategy of pharmaceutical companies in the Philippines: the sales force perspective. *Asian Journal of Research in Business and Management*, 2(1).
- Saguti, A.K., & Ali, M. Y. (2006). Mediated effects of export promotion programs on firm export performance. *Asia Pacific Journal of Marketing and Logistics*, 18(2).
- Shaw, S. D., & Bagozzi, G. (2018). Impact of television advertising on buying behavior of women consumers [With special reference to FMCG Products] Chandrapur City. *International Journal of Business and Management Invention*, 2(3).
- Shaw, S. D., & Bagozzi, R. P. (2018). The neuropsychology of consumer behavior and marketing. *Consumer Psychology Review*, 1(1).
- Wakjira, G. G., & Kant, S. (2022). Assessment of challenges and prospects of local milk supply on market performance: A case of Ethiopia, Horn of Africa. *Jurnal Peternakan Sabana*, 1(2).
- Wata, C. D., & Kant, S. (2021). Education sector structural digital transformations in comprehensive Universities of Ethiopia in post COVID-19 periods. *International Journal of Multidisciplinary Research and Growth Evaluation*.
- Wata, C. D., & Kant, S. (2022). Review of Ethiopia education sector development programme VI in perspectives of filling the labour market skill gap. *Journal of Culture, Society and Development*, 67.
- Yang, D. J., & Lee, C. W. (2016). In-store marketing strategy and the effects on female consumer buying decisions in relation to cosmetic products. *International Journal of Management, Economics and Social Sciences*, 5(2).



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