

Artículo de investigación

The moderating effect of time pressure on packaging elements and consumer buying behavior: a case of Nestle Pakistan

El efecto moderador de la presión del tiempo en los elementos de embalaje y el comportamiento de compra del consumidor: un caso de Nestlé Pakistán

O efeito moderador da pressão do tempo sobre os elementos de embalagem e o comportamento de compra do consumidor: um caso da Nestlé Paquistão

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Abstract

The purpose of this study to measure whether three product packaging Elements Wrapper Design, Packaging Material and Printed Information Influences Consumer Buying Behavior or does Time Pressure shows a moderating relationship. This study determines the importance of these elements when they purchase Nestle products during short time period. In this research highlighted that companies cannot afford to ignore the importance of time constraints and packaging elements of the products on consumer Buying Behavior. The study was conduct in District Vehari, Punjab Pakistan. Data was collecting to the students of Higher Educational Institution in District Vehari. Structured Questionnaire was used that consist on five point Likert Scale. Multiple Regression Analysis, ANOVA, coefficient was used to test the variables.

Keywords: Time Pressure, Packaging Elements, Consumer Behavior, Wrapper Design, Moderating relationship

Resumen

El propósito de este estudio es medir si el diseño de envoltorio de tres elementos, el material de empaque y la información impresa influyen en el comportamiento de compra del consumidor o si la presión del tiempo muestra una relación moderada. Este estudio determina la importancia de estos elementos cuando compran productos Nestle durante un período de tiempo corto. En esta investigación, se destacó que las empresas no pueden permitirse ignorar la importancia de las limitaciones de tiempo y los elementos de empaquetado de los productos en el comportamiento de compra del consumidor. El estudio fue realizado en el Distrito Vehari, Punjab Pakistán. Los datos fueron recolectados a los estudiantes de la Institución de Educación Superior en el Distrito Vehari. Se utilizó un cuestionario estructurado que consta de una escala Likert de cinco puntos. El análisis de regresión múltiple, ANOVA, coeficiente se utilizó para probar las variables.

Palabras claves: Presión del tiempo, Elementos de embalaje, Comportamiento del consumidor, Diseño de envoltura, Relación moderada.

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Resumo

O objetivo deste estudo é medir se três elementos de embalagem, design de invólucro, material de embalagem e informações impressas influenciam o comportamento de compra do consumidor ou se a pressão no tempo apresenta uma relação de moderação. Este estudo determina a importância desses elementos quando eles compram produtos da Nestlé durante um curto período de tempo. Nesta pesquisa destacou que as empresas não podem ignorar a importância das restrições de tempo e elementos de embalagem dos produtos no comportamento de compra do consumidor. O estudo foi realizado no Distrito Vehari, Punjab Paquistão. Data estava coletando para os estudantes da Instituição de Ensino Superior no Distrito Vehari. Utilizou-se Questionário Estruturado que consiste na Escala Likert de cinco pontos. Utilizou-se o coeficiente de Análise de Regressão Múltipla, ANOVA, para testar as variáveis.

Palavras-chave: Pressão do Tempo, Elementos de Embalagem, Comportamento do Consumidor, Design de Invólucros, Relação Moderadora

Introduction

According to (Rita & Aiste et al. 2009) packaging attracts consumers for a specific brand, increase its image and enhance consumer perception related the product. Packaging elements creates value of the product (Underwood & Klein et al. 2001) that differentiate the product to others and then consumer wide range of choices from similar products that influence the consumer buying behavior. (Wells & Farley et al. 2007) packaging is an important for marketing communication and treated as an important factor for consumer buying behavior. packaging is that it is an effective tool for communicate, sale and storage of product. Through this we can effectively motivate the consumers to purchase our product. Packaging is an instrument to convey information Butkeviciene et al, (2016): Gonzalez, thornsbury & twede. (2017) to attract, motivate and to give attention of the customers to buy the product venter et al. (2010); Rita, aiste & Laura, (2009): as a promotional tool that used for convenient goods that are particularly for self-services silayoi & speece, (2014): and used as a brand positioning in the customer's mind due to the tough competition (Rita, Aiste et al. 2009).

Packaging is an important tool to communicate others and brand name is growing for packing food products in a competitive market. It is an important factor in purchasing at a point of sale (Prendergast and pitt, 2016), that's why it is a compulsory part in a selling process (Rettie and Brewer, 2013). Packing food products are placed in supermarkets and small retail shops which provides lot of choices to consumers. In the retail shops and household, the competition is tough. In the context of self-service packaging increase its characteristics because salesman define importance regarding elements of packaging to sell its product. At the shelf in retail store the

packaging design of a product insure the interest of a consumer regarding particular product. Mostly consumers are focusing on the labeling information that is provide on the product. These consumers are more health conscious and focused on nutrition (Coulson, 2015: IGD, 203c). but some consumers are no spent time on food shopping and not consider the elements of packaging (Warde, 2017). Packaging is not only play role in the marketing perspective but also important in the consumer purchase decision.

The product packaging is a form built a difference regarding brand to the competitors in the market. Wrapper design create differentiation to the category of products. The wrapper is made through aluminum paper and plastic. The complete sketch of the wrapper develops an important role to convince the customers. (vila & Ampuero, 2017) recognized the basic features of product packaging like procedure, package size and material of product packaging. (Underwood, 2013) recognize the important and visual elements of packaging.

Material that is used to made package protect any product. When customers purchase any product firstly check quality of packing. The low quality of packing changes its purchasing attitude. That why the material is important thing to create packaging. The wooden boxes, papers or pure baskets used. In the previous studies regarding material of packaging. The concept of plastic paper boards and steel or iron things used to make material of product packing. The fiber paper and wooden cartons firstly used in the previous years of 19th century.

The behavior of consumer is based on product characteristics and high involvement. (Kupiec and Revell. 2011): in these circumstances

consumers required more information regarding products. If consumers give value to characteristics of product, then the information that write on package can change the decision of consumers.

Consumers not take so much time to take purchasing decisions. They are so much conscious about time. The purpose of this study is to measure the influence of packaging elements on buying behavior of time pressure consumers. The designers and manufacturers must consider this factor in today Market. This study fills up the gap in the research literature considering the consumer buying behavior of District Vehari Customers regarding Nestle Products under time pressure constraints.

- **Nestle Pakistan.** Nestle has 447 factories, its operating in 194 countries and around 339000 employees (Wikipedia). Nestle introduce its own business rules and transform it in to 40 languages and distributed in to our company management. Nestle operates in a multicultural business and its factories are placed in different countries and working in diverse cultures through the world. Nestle Pakistan is a secondary company of Nestle S.A. it is a company of Swiss origin headquartered in vevey, Switzerland. Company working on nutrition products that is certified in the Karachi or Lahore stock market.

Company has its own effective marketing channels and also wide sales all over a country its products are available in every place and every time.

In Pakistan the nestle work on different projects. The main focus of nestle on brands and products that create cooperate image in the mind of consumers Nestle company take step on 2013 and start a "chaunsa project" to meet a future demand in the segment of juice. The company preliminary aim to select good mango farms that provide quality then company give training to the farm owners that produce good quality mango farms and that is the final objective is being a part of nestle juice value chain.

Now apart from corporate orchard farms, mostly farmers are fail to better production because they are uncertain to implement these time consuming global procedures. In 2014 Pakistan produced 1.7 million tons of mangoes and is much lesser figure to its neighboring country India, which produced 15 million tons of mangoes. Nestle is loyal with a nation of Pakistan and will continue to work in future as well.

- **Problem Statement.** To find out the Moderating effect of Time Pressure on Packaging Elements and consumer Buying Behavior regarding Nestle products in District Vehari Punjab, Pakistan. To see that how much customers consider Time Pressure while taking purchase Decision. Because companies are so much conscious about this time Pressure constraint due to high competition in market.

Literature Review

According to (Rita, Aiste et al. 2009) package creates image in the mind of consumers that enhance its attentions toward particular brand. underwood, klien & Burke, 2016: Silayoi & Speece, (2017), differentiate that packaging helps customers select a product in large collection of same products. In the literature theoretically analyze the elements of packaging and its empirical impact on consumer buying behavior. In scientific literature Rita used research methods that based on systematic and comparative analysis. There are most important three items to be considered in this research that producers used during made reasonable package: wrapper Design, Packaging Material, Printed Information.

It is important to firstly analyze each element of package and its choice on the consumer point of view and then made a link between packaging and consumer purchasing attitude. (Bed Nath Sharma Dec. 2017) conduct a research about brand name, packing of product and label that fix on the pack, and label that fix on packing of new household goods in production plants. In this study the method was used descriptive analysis and data gathered of new casual using consumer merchandises (soap, biscuit, noodles, cigarettes).

- **Consumer Buying Behavior.** According to (Paul Peter Jerry C. Olsen) Consumer behavior consist of thoughts, emotions and experiences they act during the cycle of usage. And also including all the items in the climate that encourage such beliefs, moods and activities. The important aspects of this definition that consumer behavior is active, include interfaces and exchanges. Consumer behavior is dynamic because consumer groups and society feelings are largely changing.

- **Wrapper Design.** The literature defines elements of packaging in different ways. Smith and taylor (2004) define six variables that have been factors introduced by designers and producer when made an efficient package: font style, wrapper, size, color, graphics and flavor.

Similarly, Kotler and Armstrong (2005) differentiate six elements: size, color, font style, wrapper, information, innovation. Current scholars have sought to these elements in to blocks.

Ampuero and vila (2007) and Underwood (2003) define two blocks of package elements: graphic elements (color, typography, design and images) and structural elements (form, size container and materials). But in this research we analyze only three variables wrapper Design, Packaging Material, Printed Information.

It is another element of packaging that create innovation in a brand from the competition. design of wrapper fluctuates from brand to brand and according product to product individually. Wrapper is made to a flat sheet of paper, cellophane and plastic. The complete design also an important element to attracting the consumer. (vila & Ampuero, 2007) explain the structural elements of product packaging like form, size of the containers and material of packaging. Companies try to made an effective design of packaging to capture more customers. Creative packaging built an iconic brand image in a mind of consumers.

(Golnesa, 2013) mostly consumer's belief on that design of product is directly linked with ease of use, product storage and its carry from one place to another. pinya, (2004) Research concluded that children of 10-18 years are so sensitive to the design of wrapper.

- **Packaging Material.** It is another visual element that also communicates to others. The importance of this variable is linked with the perceived quality of a particular product. It means that if the results of packaging material are changed than the consumers regarding perceived quality is also changed. And sometimes company made those type of packaging material that give freshness to product in a high or low temperature (smith and Taylor, 2004).

In 2013 the study will be conduct on three different types of packaging material in which glass, plastic and cardboard. The results were concluded on this study is that consumers give different points of view regarding packaging material but consumers give more importance to the plastic material of packaging. The main advantage of this packaging is that the chances of leakage are low and retain freshness of a product in a long time Lynsey: Laura: Armstrong: Heather, (2013).

- **Printed Information.** Packaging information also play a role as a silent salesman in market. Company used different color, styles and shades are used to present information and for more attractive product in market. Labeling or information on packaging are important factor that helpful for advertising built brand identity, increase a brand image in a mind of the consumers and also establish shelf space allocation in the market Mitul et al., (2012).

The consumers changed your decisions on the basis of printed information because if information is not relevant and accurate that create bad image in the mind of consumers. The information regarding price, ingredients of products, produced and expiry date are the important elements on which focused the potential buyers. The current study explains that organization increase awareness about the product in the market when they introduce new creative packaging elements in their marketing campaigns.

- **Time Pressure.** Due to shortage of time and life is so much busier customers not spend much time to purchasing goods. Singh (2006) conduct a survey and to communicate every individual then finally reach a conclusion that customers not spend much time on purchase Decision. But most of the people negotiate on the pricing factor when they finally want to purchase product Cohen & Babey, 2012; Herrington & Capella, (1995).

Time pressure is a constraint that give exposure to customers that used it efficiently because it is a capital of life Konus, verhoef, & Neslin, (2008). In this study this variable shows a situational variable which determine the customers buying decision in a shop Lin & Chen, (2013). Herrington and Capella (1995) have explained that time pressure influence customers buying behavior and customers different shopping behavior at different level of time pressure conditions.

Time pressured buyers don't conduct broad research regarding products because time variable is an important comprehensive investigation of packaging Elements (Konus et a., 2008; Silayoi & Speece, 2004). Customers not much read or focus on packaging elements and ordinary read some lines regarding packaging elements in a twenty minutes of shopping (Cohen & Babey, 2012).

The importance of wrapper design, packaging Material and printed information is increased when shoppers have a much time to spend on

purchasing goods. Silayoi & Speece (2004) suggests that time is a significant factor that marketers must to give value when they designing and manufacturing products packaging.

Research Hypothesis

H1: Packaging Elements and Consumer Buying Behavior are positively and significantly relation with each other.

H2: Time Pressure (TP) and Consumer Buying Behavior (CBB) are positively and significantly relation with each other.

H3: Packaging Elements (WD, PM, PI) and Consumer Buying Behavior are positively and significantly relating under the moderating effect of time pressure (TP).

- Conceptual Frame Work.

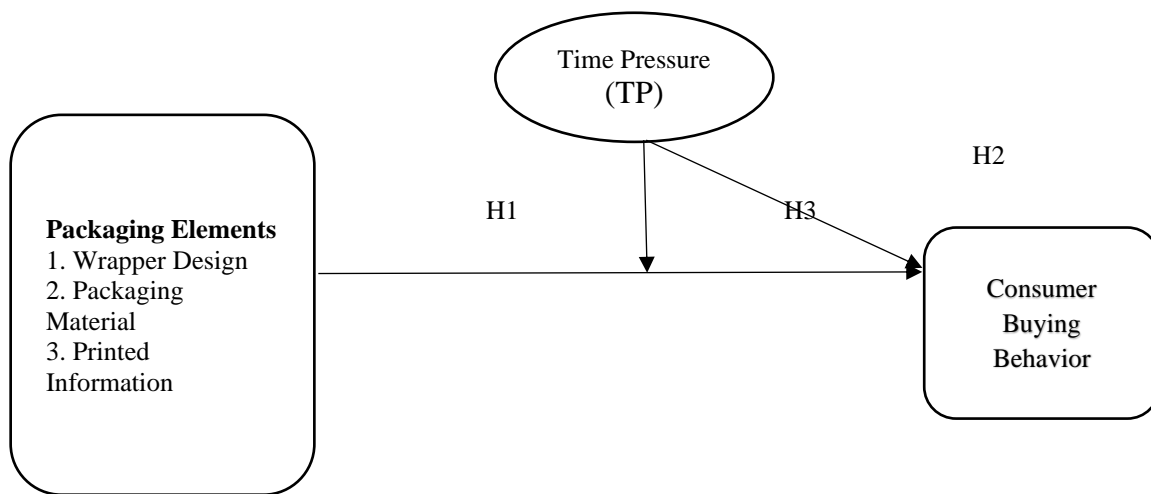


Figure 1. The Research Framework

Research Methodology

From the structured questionnaire data will be collected through graduate and under graduate students aged 18 to 25, 26 to 30 from universities in district vehari, Punjab, Pakistan. The questionnaire consists of Three sections: section A: Packaging Elements, section B: Consumer Buying Behavior, section C: consumer buying behavior and its moderating Relation with Time Pressure. The questionnaire for section A, B, C were adopted and modified from the literature, specifically from Silayoi & Speece (2004), Aiste & Laura (2009) Alam (2010). But only modification of time pressure variable in the Questionnaire. The Questionnaire consists of fourteen items and six variables were being studied in this research. Five point Likert scale will be construct to measure the variable items in the research questionnaire.

The data will be measured through multiple regression analysis. Cronbach alpha will be used

to examine that how well a set of elements in this research give one dimension. According to Rubin

and babbie (2010), the quantitative research consists in numeric numbers it explains a specific phenomenon or generalize it across groups of people. Check the reliability of items through regression. Check the model goodness through ANOVA.

Coefficient used to measure the variables useful relation with each other. Target population on this study is graduate and undergraduate students of universities in district vehari like COMSATS vehari campus, University of Education Lahore, vehari campus, PMAS-Arid Agriculture University Rawalpindi, Burawala Campus, University of Agriculture Faisalabad Burawala Campus. Gather the information regarding packaging of Nestle juices in District Vehari.

Total enrolled students of universities in district vehari is our target population of this study that are 700. A sample size of 250 students has been considered for this study that was the customers of Nestle juices. Customers drink different flovrns of Nestle juices like Mango, Gava, Orange, Grapes at universities café.

Data Analysis

Reliability of questionnaire and items were measured through Cronbach Alpha. Each

research item was reliable and satisfactory. Table 1 shows reliability coefficient were 0.73, 0.75, 0.72, 0.81, 0.65 for research items relating to variation in consumer Buying Behavior due to wrapper design, packaging Material, printed information discrepancy due to time pressure and then inclination variation due to WD, PM, PI in the existence of time pressure individually. So concluded that reliability and validity of items was adequate.

Table 1. Reliability Statistics

Cronbach's Alpha	Number of Items
0.73	3
0.75	3
0.72	3
0.814	
0.651	

a) Research items show variation in CBB due to WD
 b) Research items show Difference in CBB due to PM
 c) Research Items show Variation in CBB due to PI
 d) Research Items show variation in CBB due to TP
 e) research item gauging variation in CBB due to multiplicative factor of PE & TP

R square explains the variance between dependent variable (consumer buying behavior) which can be explained by independent variables (packaging elements). From table 2 it can be seen that packaging elements explains a 0.17 variation

consumer buying behavior regarding nestle fruita vital juice. After making adjustment based on number of predictors, this study fined that packaging elements has explained 0.16 variations on consumer Buying Behavior.

Table 2. Model Summary

Mode	R	R ²	Adjusted R Square	Standart error of estimate
0.42 ^a	0.17	0.16	0.19	1

a. Predictors: (Constant), WD, PM, PI

It can be seen from Table 3, that sig = 0.000<0.05 which means that model is valid.

Table 3. The Results of ANOVAa

Model	Sum of Squares	df	Mean Square	F	Sig.
Progression	15.31	1	15.31	47.59	0.00 ^b
1 Residual	72.26	249	0.75		
Total	8757	250			

a) Dependent Variable: CBB
 b) Predictors:(Constant), WD, PM, PI

Table 4 shows that P-value is $0.000 < 0.05$ (5%) so it is concluding that wrapper design has significant impact on consumer buying behavior. P-value is $0.002 < 0.05$ (5%) so it is concluding that packing material has significant but positive relation with consumer buying behavior. P- value

is $0.001 < 0.05$ (5%) so it is concluding that printed information has significant but positive relation with consumer buying behavior. Value of beta is 0.45, 0.33, 0.21 which has a positive but moderate relation with consumer buying behavior.

 Table 4. Coefficients^a

model	Non-standarized coefficients		Standardized coefficient	T	Sig.
B	Std. Error	Beta			
(constant)		0.29		4.01	0.00
1	1.29				
WD		0.08			0.00
PM	0.56	0.45		6.45	
PI	0.42	0.04			0.02
	0.35	0.33		4.43	
		0.02			0.01
		0.21		2.33	
CBB					

Table 5 shows that R square value was 0.09 which explained that 9 percent of variation in consumer buying behavior due to Time pressure. The value of R was 0.36 which means it was less

then p value 0.05. The independent variable (time pressure) showed positive but weak relationship with dependent variable.

Table 5. Model Summary

Mode	R	R ²	Adjusted R ²	Std. Error of the estimate
1	0.36 ^a	0.09	0.08	0.71

a) Predictors: (Constant), TP

A Table 6 showing that 0.002 which was less than p value 0.005. it means that model was good fit.

 Table 6. ANOVA^a

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	4.56	1	4.56	10.35	0.002 ^a
Residual	81.01	249	0.58		
1 Total	85.57	250			

a) Dependent Variable: CBB

b) Predictors: (Constant), TP

Table 7 shows that P-value is $0.002 < 0.05$ (5%) so it is concluding that time pressure has significant but positive impact on consumer

buying behavior. Value of beta is 0.21 which has a positive but moderate relation with consumer buying behavior.

Table 7. Coefficients^a

Model	Non-standarized Coefficients			T	Sig.
	B	Std. Error	Beta		
(constant)	2.21	0.24		9.05	0
1 TP	0.24	0.07	0.21	3.36	0.002

a) Dependent Variable: CBB

The moderating effect of time pressure on packaging elements and consumer buying behavior is measuring through analysis shown in Table 8,9 and 10. R was 0.51 which shows a

positive but moderate relation between (packaging Elements and time pressure) and consumer buying behavior.

Table 8. Model summary

Model	R	R ²	Adjusted R ²	Std. Error of estimate
	0.25	0.23	0.614	0.519 ^a

Table 9 showing that 0.001 which means it is less than 0.005. then the model goodness is fit. All the

variables show significant relation with each other.

Table 9. ANOVA^a

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	27.902	3	9.30	20.99	.001 ^b
Residual	64.677	146	0.44		
Total	92.579	149			

a) Dependent Variables: CBP

b) Predictors: (Constant), Multiplication, (WD, PM, PI) TP

Table 10 explained that the mutual collaboration of independent variables (WD, PM, PI, TP) and dependent variable (consumer buying behavior) had shown a moderate but positive link with

CBB. So concluded that time pressure represented as a moderating variable in this study. Then finally third hypothesis was accepted.

Table 10

Model	Non- standardized coefficients		standardized coefficients	T	sig.
B	std. Error	Beta			
(Constant)	2.21	0.80		2.15	0.00
TP	0.47	0.33	0.46	1.65	
0.34					
WD	0.61	0.42	0.51	1.25	
0.61					
PM	-0.31	0.28	-0.44	-0.14	
0.78					
PI	0.21	0.25	0.16	0.18	
0.33					

Multiplication

1	n	0.219	0.04	0.97	3.28
0.03					

a) Dependent Variable: CBB

Conclusion

Without Packaging elements companies cannot communicate with customers. It plays an important role for customers to take decisions regarding purchasing of goods. If time pressure factor includes then customer's preferences different and also its behavior were different. Time pressure made a cause for quick purchase decision that was mostly not a good decision. In this study included four independent variables Wrapper Design, packaging Material, printed Information and time pressure.

The results concluded that packaging Elements had significant moderate positive correlation with CBB. And time pressure had significant moderate positive correlation with CBB. Results of this study validate that time pressure was an important factor that effect on packaging elements and consumer buying behavior. That's why buying decisions of customers more based on packaging elements than on time factor. Then time pressure moderately influenced the relation between packaging elements and consumer buying behavior. The study observed that mostly customer's decisions changed due to products packaging designs.

Limitations and future Research

This study was conduct on a small district Punjab, Pakistan. And choose a particular sector. In future we can generalize this study. Take a large sample size and take comparison of two different companies products. In different environment we can conduct this similar research and get different results. Culture is an important factor that we can add in this study and get interesting results in future.

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