

ANALYSIS PACKAGE DESIGN AESTHETICS TOWARDS ON FEMALE CONSUMER BUYING DECISION OF VASELINE LOTION

by:

Firsie Idelrose Kalangi¹

Peggy Adeline Mekel²

^{1,2}Faculty of Economics and Business,
International Business Administration (IBA) Program
University of Sam Ratulangi Manado
email: ¹firsiekalangi@yahoo.com
²peggyadeline@yahoo.com

ABSTRACT

Now a day, so many products that already produced by company as unique as possible and creative. Packaging is the one part of product that can attract the consumer or influence the consumer buying decision. Through packaging, costumer will know about the information of product and company through the label on packaging and packaging can show the visual beauty of the product. Product that has a good package design can add value to product itself. The aim of this study is to examine the effects of package design aesthetics on female consumer buying decision of Vaseline lotions with particular emphasis on these variables: package color, instructions, typography and material. This research used quantitative method. The analytical method used was multiple linier regression analysis. The data used in this research is primary data obtain through the questionnaire. The population observed is student female of Sam Ratulangi University who using Vaseline Lotion with sample as many as 100 respondents. Result and conclusions are from all variables of package design aesthetics (Color, Instructions, Typography, and Material), not all aesthetic package design elements has a significant influence on consumer buying decision. Instruction has no significant influence and color is the most influencing variable. Therefore, the management of Vaseline Company should care about package instruction on product.

Keywords: *product, design elements, consumer buying decision*

INTRODUCTION

Competition is one thing that normal and natural in marketing world. To win the competition, company should make something different or unique that can attract the consumers. The company can start it from the packaging design of the product. Package of product can make increasing the value of company itself by their own skill or creativity that can attract the consumer attention.

Packaging is a part of the marketing mix. The sixth 'P' of the marketing mix stands for Packaging, Meyers and Gerstman (2005). Because of packaging is a tool of communication between consumer and company. By packaging, costumer will know about the information of product and company through the label on packaging and packaging can show the visual beauty of the product. Vaseline lotion is a product for this research and female as target. Because of Vaseline lotion is one example of cosmetic products that always make innovation on the package of product. Vaseline is a brand of petroleum jelly based products owned by Anglo-Dutch Company Unilever. Products include plain petroleum jelly and a selection of skin creams, soaps, lotions, cleansers, deodorants and personal lubricants. Founded in 1870 by Robert Chesebrough with a wonder jelly, they have been keeping skin protected for over 140 years.

Research Objectives

The objectives of this research are to analyze the influence of:

1. Package color, instruction, typography, and material of Vaseline lotion products on female consumer purchase decision simultaneously.
2. Package color of Vaseline lotion products on female consumer purchase decision partially.

3. Package instruction of Vaseline lotion products on female consumer purchase decision partially.
4. Package typography of Vaseline lotion products on female consumer purchase decision partially.
5. Package material of Vaseline lotion products on female consumer purchase decision partially.

THEORITICAL FRAMEWORK

Consumer Buying Decision

A buying decision actually is composed of a series of stages that results in the selection of one product over competing options. In order to satisfy or to fulfill people needs and want in daily life, they are faced with purchase decision. In this research package design may stimulate consumer attention, giving them a chance to comprehend the product and can influence the consumer repeatedly or always to purchase the product.

An appealing and successful packaging design with relevant design, picture and decorations is more successful in attracting the consumer, Asadollahi and Give (2011). Package design's ability to kick off an emotional dialogue with the consumer is what affects decision-making, Stewart (2004). It is the influence of emotions that make packaging very influential. Product package design elements (color, instruction, and typography) are can influence, shaping, guiding consumers' decision making process and also can determine their choices.

Marketing Mix

A planned mix of the controllable elements of a product's marketing plan commonly termed as 4Ps: product, price, place, and promotion. But number of 'Ps' sometimes differs as various authors add on to the list. Kotler (2008) has added a fifth 'P' that stands for Positioning, the fifth 'P' is Prospect (Russell and Lane, 2002). But author such as Meyers and Gerstman (2005) argue that a sixth 'P' exists, which stands for packaging. But some might not agree that packaging should have a specific place in the marketing mix, it is still perhaps one of the key elements in a marketing strategy for a product and will promote, be recognized and sought out by the customer (Ambrose and Harris, 2011).

Promotion

Kotler (2008:257) defines promotion as follows: sales promotion consists of diverse collection of Incentive issue, mostly short term, designed to encourage the purchase of a specific product / service faster and bigger by the consumer or the merchant. Promotion represents all of the communications that a marketer may use in the marketplace. Promotion includes every aspect of advertising, brochures, packaging, salespeople and sales methodology.

Consumer Behavior

Consumer behavior is defined as the behavior that consumers display in searching for, purchasing, using, evaluating, and disposing of products and services that they expect will satisfy their needs (Schiffman and Kanuk, 2007). Consumer behavior talk about the study of individuals, groups, or organizations and the processes they use to select, secure, use, and dispose of products, services, experiences, or ideas to satisfy needs and the impacts that these processes have on the consumer and society.

Previous Research

Mustikiwa and Marumbwa(2013) in their study about The impact of Aesthetics Package Design Elements on Consumer Purchase Decisions: A Case of Locally Produced Dairy Products in Southern Zimbabwe. The result, product package color has a highest influence on consumer buying decision. Zahra, (2014) in his journal about The dilemma of flavor, shape and color in the choice of packaging by children. Also, color package has a significant influence. Cahyorini and Rusfian(2011) in their journal about The Effect of Packaging Design on Impulsive Buying. The result, packaging design dimensions (graphic design, structure design and product information), product information has a significant influence.

Research Hypothesis

1. H_1 : All of package design Aesthetics elements (color, instruction, typography, material) Influence female consumer buying decision simultaneously.
2. H_2 : Color influences female consumer buying decision partially.
3. H_3 : Instruction influences female consumer buying decision partially.
4. H_4 : Typography influences female consumer buying decision partially.
5. H_5 : Material influences female consumer buying decision partially.

Conceptual Framework

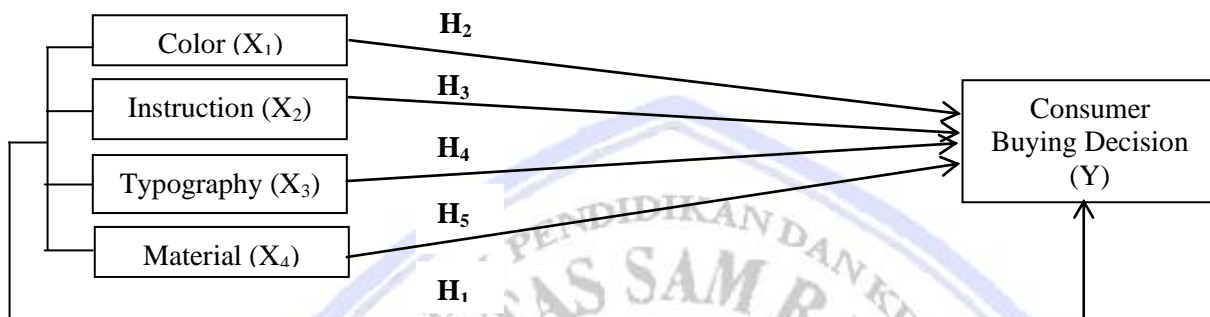


Figure 1. Conceptual Framework

Source: Data Process, 2014

RESEARCH METHOD

Type of Research

This research is causal type. Causal since the purpose is to determine if one or more variables cause another variable to occur or change. This research is a quantitative method since using questionnaire as a tool to gather data and analysis.

Place and Time of Research

The study will be conducted in Manado specifically Campus of Sam Ratulangi University. This research regarding the female consumer as respondents and was conducted in Manado from June to July 2014.

Population and Sample

The population refers to the entire group of people, events, or things of interest that the researcher wishes to investigate (Sekaran and Bougie, 2009). The population in this research is female who are uses the lotion in University Sam Ratulangi Manado. A sample is a subset of a population that comprises some members selected from it (Sekaran and Bougie, 2009). The sample of this research was taken from 100 female respondents who are use the Vaseline lotion. Hair et al (2010) mention that the ratio should never fall below five observations for each independent variable, but to avoid making the result specific to the sample, at least 15-20 respondents per variable is desirable ratio. Since there were three variables in this research, the sample of 100 respondents gave a ratio approximately 25 respondent per independent variable, which proved that a more than sufficient sample size was achieved to allow generalizability.

Data Collection Method

Primary data is a data and information originated or obtained first-hand on the variables of interest for the purpose of the research. The data collected through questionnaire that will be distributed to 100 female consumers those are user Vaseline lotion. So many information and data that will be find through this questionnaire about the effect of packaging design aesthetics on their (respondents) buying decision.

Operational Definitions and Measurement of Research Variables

The general explanations about variables in this current research that will be analyzed are stated as follows:

1. Color (X_1) can help the customers know about the type of product.
2. Instruction (X_2) will give information about the product to customers.
3. Typography (X_3) will show the information of product by the arranging of the text art and techniques as well and creatively.
4. Material (X_4) will show the requirement of the package.

Data Analysis Method

Validity and Reliability Test

Validity test is the degree to which a test procedure accurately measures what it was designed to measure. Consistency indicates how well the items measuring a concept hang together as a set, Cronbach's alpha is a reliability coefficient that indicates how well the items in a set are positively correlated to one another (Sekaran and Bougie 2009). Since reliable scales are not necessarily valid, researchers also need to be concerned about validity. It assesses whether a scale measures what is supposed to be measured. Thus validity is a measure of accuracy in measurement (Hair et, al 2010).

Multiple Regressions Analysis

Multiple regression analysis is the appropriate technique to use when there are several independent variables that need to be examined for their influence on a dependent variable (Malhotra 2007:37). The formula for multiple regression analysis method is as follows:

$$Y = a + b_1X_1 + b_2X_2 + b_3X_3 + b_4X_4 + e$$

Whereas: Y = Consumer buying decision, X_1 = Color, X_2 Instruction, X_3 = Typography, X_4 = Material and B_1-4 = Partial coefficients for each variable X_1, X_2, X_3, X_4 .

RESULT AND DISCUSSION

Validity

Table 1. Validity Result

Variables and Indicators	Pearson Correlation
X_1 Color	
$X_{1.1}$	.494
$X_{1.2}$	.865
$X_{1.3}$	.847
X_2 Instruction	
$X_{2.1}$	.836
$X_{2.2}$	.676
$X_{2.3}$	.806
X_3 Typography	
$X_{3.1}$	.718
$X_{3.2}$	.665
$X_{3.3}$	.543
X_4 Material	
$X_{4.1}$	.592
$X_{4.2}$	.718
$X_{4.3}$	.657
Y Consumer Buying Decision	
Y_1	.851
Y_2	.410
Y_3	.863
Y_4	.916

Source: Data Processed 2014

From the table above, it can be seen that the Pearson Correlation values are more than 0.3, means that all the indicators are valid.

Reliability

Table 2. Reliability Result

Variable	Cronbach's Alpha	N of Items
X ₁ Color	.749	3
X ₂ Instruction	.798	3
X ₃ Typography	.723	3
X ₄ Material	.732	3
Y Consumer Buying Decision	.693	4

Source: Data Processed 2014

The value of Cronbach's Alpha are more than 0.6, indicated that all research instrument indicator of variable are reliable.

Multiple Regression Analysis

Table 3. Results of Multiple Linear Regression Analysis

Variable	B	T	Sig.	Information
(Constant)	0.123	Value		
Color (X ₁)	0.362	4.303	0.000	Significant
Instruction (X ₂)	0.82	1.347	0.181	No Significant
Typography (X ₃)	0.253	3.358	0.001	Significant
Material (X ₄)	0.341	4.001	0.000	Significant

Source: Data Processed SPSS, 2014

The equation is as follows:

$$Y = 0.123 + 0.362 X_1 + 0.082 X_2 + 0.253 X_3 + 0.341 X_4$$

The explanation of the equation is as follows:

Constant value of 0.123 means that if the variables in this research of Color (X₁), Instruction (X₂), Typography (X₃) and Material(X₄) simultaneously increased by one scale or one unit will increase the Consumer Buying Decision (Y) at 0.123 point. Coefficient value of 0.362 means that if the variables in this research of Color (X₁) increased by one scale or one unit, it will improve and increase Consumer Buying Decision (Y) at 0.362. Coefficient value of 0.082 means that if the variables in this research of Instruction (X₂) increased by one scale or one unit, it will decrease Consumer Buying Decision (Y) at 0.082. Coefficient value of 0.253 means that if the variables in this research of Typography (X₃) increased by one scale or one unit, it will improve and increase Consumer Buying Decision (Y) at 0.253. Coefficient value of 0.341 means that if the variables in this research of Material (X₄) increased by one scale or one unit, it will improve and increase Consumer Buying Decision (Y) at 0.341.

Testing the Goodness of Fit: Coefficient of Correlation (R) and Coefficient of Determination (R²)

Table 4. R and R square

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.785	.616	.600	.31741	2.331

Source: Data Processed 2014

The value of R is 0.785 indicating a substantial positive association between independent and dependent variable. The value of R² is 0.616 means that Color (X₁), Instruction (X₂), Typography (X₃) and Material (X₄) as independent variables have moderate positive association and influence Consumer Buying Decision (Y) as much as 61.6% while the remaining 38.4% is affected by other variables not examined in this study.

Classical Test Assumptions

Normality Test

Normal P-P Plot of Regression Standardized Residual

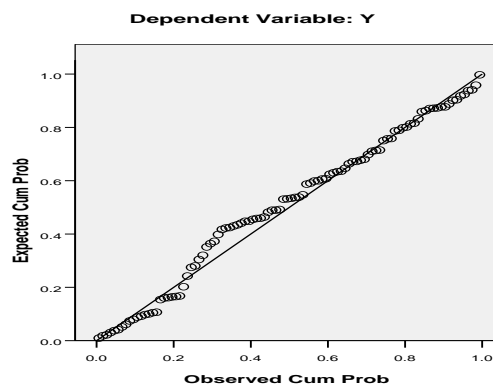


Figure 2. Normality Test
 Source: *Data Process, 2014*

From the figure above it can be seen that the points spread and spread around the diagonal line in the direction diagonal lines. This proves that the model Regression of The Influence of Color (X₁), Instruction (X₂), Typography (X₃) and Material(X₄) on Consumer Buying Decision (Y) in test normality assumption was met.

Multicollinearity Test

Table 5. Multicollinearity Test

Collinearity Statistics			
Model	Tolerance	VIF	
1	(Constant)		
	X ₁	.657	1.522
	X ₂	.924	1.082
	X ₃	.686	1.458
	X ₄	.607	1.647

Source: *Data Process, 2014*

Table above shows the calculation of Multicollinearity. Moreover, it can be known through the VIF and tolerance, whereby if the value of VIF and tolerance to be around the number < 10 then the regression model above are free from multicollinearity. Based on the results in the table above can be seen by SPSS output does not occur because the symptoms of multicollinearity VIF value of Color (X₁), Instruction (X₂), Typography (X₃) and Material(X₄) are below numbers < 10, this means that there is no connection between the independent variables. Thus, multicollinearity assumptions are met (free of multicollinearity).

Heteroscedasticity Test

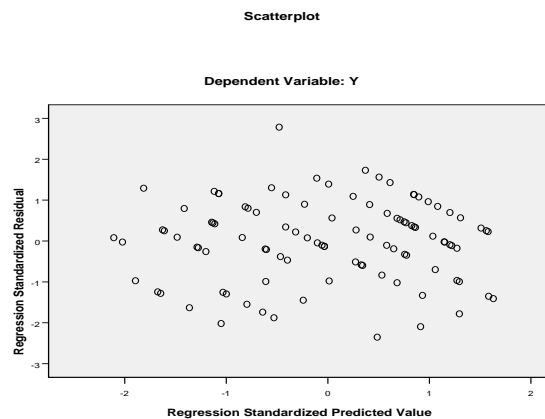


Figure 3. Heteroscedasticity Test

Source: Data Process, 2014

From the figure above it can be seen that there is no established pattern, in other words the graph describing the plot spread above and below the number 0 (zero) on the Y-axis. This proves that the independent variable of Color (X_1), Instruction (X_2), Typography (X_3) and Material (X_4) on Consumer Buying Decision (Y) are free of Heteroscedasticity.

Discussion

Package color is crucial in this case, because of color has highest significant point based from research that supports the packaging of Vaseline lotion. Based on previous research by Mutsikiwa and Marumbwa (2013) about “The impact of Aesthetics Package Design Elements on Consumer Purchase Decisions: A Case of Locally Produced Dairy Products in Southern Zimbabwe”, it is related with this research show that color also has a highest influence on consumer buying decision. The company of Vaseline lotion should carefully concern about package color because consumer sometimes implement the colors of package the product to their intention for buying the product itself. Consumer receive non textural information about the product from the packaging that helps the decision making process. When consumers are faced with choosing a product, the packaging becomes a source of information. Colors have immediate impacts in the consumer psyche. Particular colors convey very particular messages. From SPSS analysis; package instruction has not significantly influences on consumer buying decision. Maybe this is because of consumer today generally has known about the way of use the lotion, so that the information of the package is not crucial for consumer or maybe because information of Vaseline lotion is not give satisfaction to consumers. Prior to purchase, consumers search for and evaluate information relating to product usage, expiration dates, ingredients, volume, weight, and disposal (Kupiec and Revell, 2001).

Typography relate to increasing of consumer buying decision. From SPSS analysis, the analysis shows that typography is a factor that gives the positive influence to the increasing of Consumer Buying Decision. This is because of package typography of Vaseline is creative; therefore package typography of Vaseline can attract the consumer. The information of Package can look beautiful by typography. Underwood (2003) suggests that the product package typography affect the brand identity and personality due to multiple structural and visual elements. In this research typography has a significant influence on consumer buying decision.

The analysis shows that package material is the factor that gives the positive influence to the increasing of Consumer Buying Decision. This is because of material package of Vaseline is friendly and have a good material, make the consumer feel save to use it. Based on previous research by Mutsikiwa, and Marumbwa (2013) about “The impact of Aesthetics Package Design Elements on Consumer Purchase Decisions: A Case of Locally Produced Dairy Products in Southern Zimbabwe” show that Material gives influence on consumer buying decision, it is related with this research that material also influences consumer buying decision. In this

study, the result proves that Material has significant influence on consumer buying decision because material has the second high significant point based from the research that support the packaging of Vaseline lotion. It is found that material factor as structural design is also important. It proves from the result and theory that material is a most important factor for female to buy a Vaseline product.

The component of package design aesthetic such as color, instruction, typography and material become the essential keys for packaging innovation to attract the consumer. From the result of analysis, the theory above is proven because all the variables of packaging are positively relationship with consumer buying decision as packaging variables influences buying decision process, the company of Vaseline should be concerned to maintain and growing the use and beauty of package.

Target market for this research is female because female customer expecting more to the packaging of Vaseline. Women have a significant influence on today's product packaging. From this research has found that package design aesthetics of Vaseline lotion has significant influence on their buying decision with 61.6% point and the rest 38.4% is caused the other reasons or variables, maybe the price of the product or promotion.

CONCLUSION AND RECCOMENDATION

Conclusion

The result on this research can be concluded that:

1. Color, Typography and Material has a significant influence on Consumer Buying Decision. But Instruction has no significant influence on consumer buying decision.
2. Color has a highest significant influence on Consumer Buying Decision.
3. Instruction has not significant influence on Consumer Buying Decision.
4. Typography has a significant influence on Consumer Buying Decision.
5. Material has a significant influence on Consumer Buying Decision.

Recommendation

Since the color package has highest significant influence on consumer buying decision among the other factors in aesthetic packaging design elements, the product that will be produced should has an interesting color because color could persuade the consumer to buy the product of Vaseline lotion and the package design aesthetics of the product is really important to be concerned. Company has to make something new or different and more attractive in designing the package of product to attract the consumer attention. Especially in aesthetics package design of product which is include instruction, typography and material. Company should be more effort to influence the consumer buying decision by the package design of product. Since the package instruction is the lowest significant, the company should be more concern about the information about product on the package. Company should be more effort to influence the consumer buying decision by the package design of product.

REFERENCES

- Ambrose, G. and Harris, P. (2011) *Packaging the Brand: Exploring the Relationship between Packaging Design and Brand Identity*. Lausanne: AVA Publishing.
- Asadollahi, A and Give.M., 2011. The Role of Graphic Design in Packaging and Sales of Product in Iran. *Contemporary Marketing Review*. Vol.1(5). ISBN: 2278-487X.
- Cahyorini, A and Rusfian. Z, E., 2011. The Effect of Packaging Design on Impulsive Buying. *Journal of Administrative Science & Organizational*, Volume 18. ISSN: 0854-3844. <http://journal.ui.ac.id/index.php/jbb/article/viewFile/970/893>. Accessed on August 13, 2014. Pp.15-20

Hair, J.F., Anderson R. E., Tatham R. L and Black W. C., 2010. *Multivariate data analysis*. 5th ed. Prentice-Hall International Inc., New Jersey.

Kotler, P., Armstrong, G., Wong, V. and Saunders, J., 2008. *Principles of Marketing*, 5th European Edition: Pearsons Education Limited.

Kupiec, B., and Revell, B., (2001). Measuring consumer quality judgements. *British Food Journal*, 103, 1, Pp7-22.

Malhotra N. K., 2007. *Marketing Research*, 5th ed. Pearson. ISBN:0-13-227917-7.

Mustikiwa, M., and Marumbwa, J., 2013. The impact of Aesthetics Package Design Elements on Consumer Purchase Decision: A Case of Locally Produced Dairy Product in Southern Zimbabwe. *IOSR Journal of Business and Management*. Vol. 8, Issue 5. ISSN: 2278-487X. <http://www.iosrjournals.org/iosr-jbm/papers/Vol8-issue5/I0856471.pdf>. Accessed on August 10, 2014. Pp.68-70.

Meyers, H. and Gerstman, R., 2005. The visionary package: using packaging to build effective brands. *Houndmills, Basingstoke, Hampshire: PalgravMacmillan*. [http://www.palgraveconnect.com/pc/busmanback/browse/inside/inline/9780230286917.pdf?chapterDoi=%7Bchapter.getDoiWithoutPrefix\(\)%7D](http://www.palgraveconnect.com/pc/busmanback/browse/inside/inline/9780230286917.pdf?chapterDoi=%7Bchapter.getDoiWithoutPrefix()%7D). Accessed on September 11, 2014. Pp 3-4.

Russell, T. and Lane, R. (2002) *Kleppner's Advertising Procedure*, 15th ed., New Jersey: Prentice-Hall, Inc.

Schiffman, L. G. & Kanuk, L. L. 2007, *Consumer Behavior*. 9th edn, New Jersey, Prentice Hall.

Sekaran, U. and Bougie, R., 2009, *Research Methods for Business*, 5th ed. Wiley, Americas, New York. ISBN (tbk): 978-0470-74479-6.

Stewart, B. (2004) *Packaging Design Strategy*. 2nd edn., Leatherhead, Pira International: UK.

Underwood, R. L. (2003), The Communicative Power of Product Packaging: Creating Brand Identity via Lived and Mediated. *Journal of Product & Brand Management*, Pp.403-422.

Zahra A., 2014. The dilemma of flavor, shape and color in the choice of packaging by children. *International Journal of Academic Research in Business and Social Science: Iran*. Vol. 4. ISSN:2222-6990. http://hrmars.com/hrmars_papers/The_dilemma_of_flavor_shape_and_color_in_the_choice_of_packaging_by_children.pdf. Pp.391-393.

FAKULTAS EKONOMI
DAN BISNIS