

THE INFLUENCE OF PRODUCT PACKAGING DESIGN ON CONSUMER BEHAVIOURS: A CASE STUDY OF STUDENTS OF AHMADU BELLO UNIVERSITY, ZARIA, NIGERIA

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Abstract

This paper investigates the influences of product packaging design on rational and irrational behaviours in consumption choices. Contemporary consumers display levels of rationality and irrationality in their consumption preferences. Rational factors influencing consumption patterns are considered to be thoughtful and evaluative while irrational factors are known to be impulsive and reactive. Therefore, the study assessed the relevance of product packaging in prompting the patronage of some selected household items amongst university students. These items are phones, laptops and consumables. The students were randomly selected on gender basis. The collected data from respondents was analyzed using the Statistical Package Social Sciences (SPSS). Findings revealed that the influence of rationality and irrationality are inherent in consumer behaviours, but personal interest of consumers at a particular point in time takes precedence.

Key Word: *Aesthetics, Rational Consumers, Irrational Consumers, Product Packaging*

Introduction

Consumption is an essential part of human life. Basically, consumption patterns are determined by consumer's desire to acquire goods that improve and enhance their daily lives. People routinely engage in buying for discerning needful, self-gratification, hedonic reasons and other factors which are basically driven by the state of mind. The choice of buying and place does much to enhance consumer's perceived personality. Consumers behaviours are influenced by lifestyle, values and needs which implicate the change of consumption patterns (Karwala, 2005). The dynamism

and impulsiveness in consumer's behaviours has prompted researches into unravelling issues primarily responsible for the decision making of consumers in contemporary times.

Consumer behaviours are stimulated by the consumer's state of mind and reasoning at a particular point in time. Often times, consumption patterns are anchored on subjective feeling which are unlikely to be measured. Factors influencing consumption choices are classified into rational and irrational behaviours. However, consumption decision predicated on emotion are often considered irrational. At its most basic

level, a particular behaviour is rational if it is goal-oriented, reflective (evaluative), and consistent (across time and different choice situations). One way of thinking holds that the mental process of decision-making is (or should be) rational: a formal process based on optimizing utility (Kant, 1991). Livet (2010) noted that rational thinking and decision-making does not leave much room for emotions. Irrational consumer behaviours are characterized by impulsiveness. Chan (2001), described four factors which influence impulse buying, such as external stimuli (buying frequency, store displays, promotions and advertising, atmosphere in the store and retailers), internal perceptions (lifestyle, personality, emotion, money and time pressure), buying behaviour (price, the time of purchasing, payment) and demographic variables (age, gender, income, occupation, marital status, education, household income and social status). These factors are responsible for consumer's choice of products irrespective of status. Although in most instances the immediate need of a consumer is prioritized when making purchasing decision.

In some circumstances, a buyer could resolve that acquiring a new accommodation ranks high in his checklist of needs. Therefore, it will be reasonable for him to channel his savings and probably some borrowings to actualize this pressing necessity. Utility decisions that make a consumer better off are the fundamentals for the theory of rational choice. High level of rationality are reflected in some choices made by consumer's, and usually these choices will give the consumer greater satisfaction. On the contrary some purchasing decisions are made based on the prevailing emotional expression of the

consumers. Consumers are involved in comfort buying at times to assuage their moods. Several studies of shown that most people engage in shopping improve their mood. Atalay and Meloy (2011) found that among 69 college participants, 43 (62%) reported having purchased an item to treat themselves in the past one week in order to repair their mood; in comparison, 19 (28%) were motivated (Yarrow, 2013). A new study conducted by TNS Global on behalf of Ebates.com has found that more than half of Americans admit to engaging in "retail therapy." (Yarrow, 2013). An emotional buyer can be considered to be irrational because his purchasing behaviour at that moment would not necessarily be guided by logical leanings.

Product Packaging

Consumers make subjective judgment of products based on its appearance and packaging features. Package design encompasses several considerations which includes protecting packaged contents and articulate the brand promise. Package design is a broad term spanning engineered functional attributes (e.g., ergonomics, durability, recyclability) and a package's visual attributes (Bloch, 1995). Gestalt psychologists (Koffka 1922; Wertheimer, 1925), defined "package design" as the various elements chosen and blended into a holistic design to achieve a particular sensory effect. When customers walk in to a store, products with distinctive and expressive packaged design get easily notice and eventually edge others out when the consumer makes his or her choice despite of quality. Contemporary shoppers make decisions with their eyes. Shoppers are even guilty of impulse buying which is largely influenced by the assertive aesthetics of the product packaging.

Researches have shown product package design are indispensable influential factor that promote patronages (Silayoi and Speece, 2004; Wells *et al.*, 2007). According to Rundh (2005) packages attracts consumer's attention to particular brand, enhances its image, and influences consumer's perceptions about product. The retail shelf has always been a platform for products to effectively compete for buyer's eyes and preferences. Visual designers strive to create eye catchy fascinating designs for product brand in an effort to carve a niche for the brand in buyer's mind and to make brands edgy amongst its rivals. Rabinowitz (2003) noted that skilfully teaming colourful graphics, a unique shape, or any

other eye-arresting method, the package designer is a key player in any company's marketing efforts.

Appearance is often an integral part of a brand's image, such as the hourglass shape of the Coca-Cola bottle and its logo in Spencerian type or the round-shouldered Bordeaux-style wine bottles that bear ornate labels and flourish typography (Orth and Malkewitz, 2008). Products appearance elicits feelings and determines brand perception. Consumer's favours aesthetics reflected in product design ahead of product functionality because it's widely assumed what is beautiful is value oriented and worth buying.

Maslow theory of Consumption

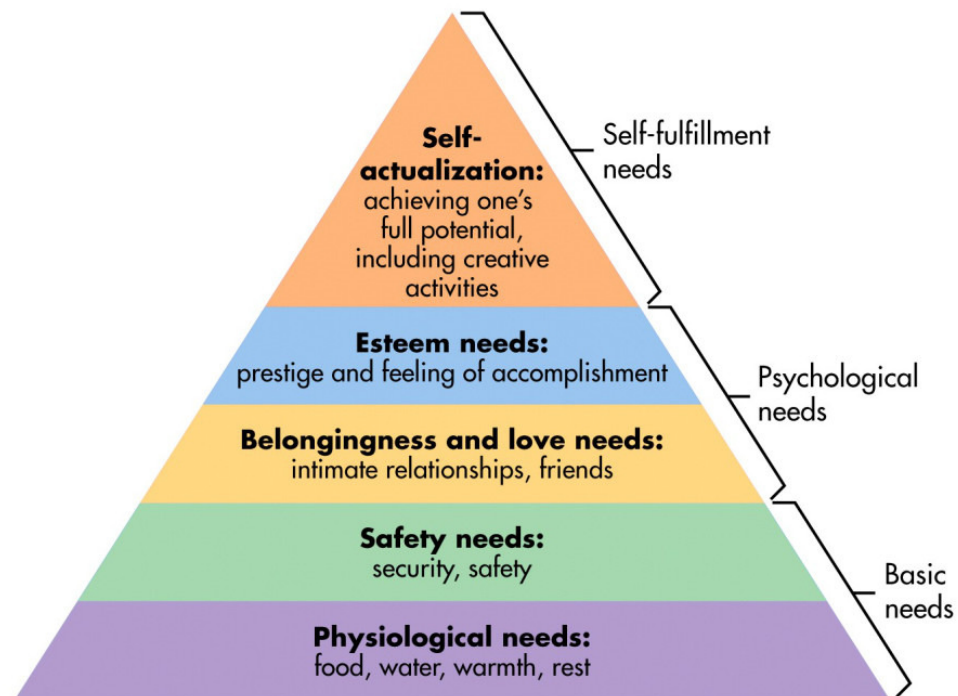


Fig. 1: Maslow Pyramid (Source: Mcleod, 2017)

Maslow hierarchy of needs is made up of a five-tier model of human needs, depicted as hierarchical levels within a

pyramid. Maslow's theory postulated that the most basic level of needs must be met before the individual will strongly desire

(or focus motivation upon) the secondary or higher level needs. Maslow also coined the term "metamotivation" to describe the motivation of people who go beyond the scope of the basic needs and strive for constant betterment (McLeod, 2014) and he explicitly discussed factors that motivate needs according to Maslow's hierarchy in the following.

- **Physiological needs:** This is considered to be the biological requirement for human survival. The absence of these requirements might put a stalemate into the functionality of human body. Some of these needs are air, food and drink
- **Safety needs:** Safety needs take precedence and dominate human behaviour. Protection from fear, war, natural disaster, family violence, childhood abuse and others.
- **Love and belongingness needs -** after physiological and safety needs have been fulfilled, the third level of human needs is social and involves feelings of belongingness. Humans tend to reflect feelings of belongingness in their choice of needs. Examples include friendship, intimacy, trust, and acceptance, receiving and giving affection and love. Affiliating, being part of a group (family, friends, work).
- **Self-esteem-** enables humans the desire of being valued and appreciated. Consumers often engage in a profession, hobby or buying to boost their self-esteem
- **Self-actualization:** This level of need refers to the desire to accomplish potentials by humans. Individuals may perceive or focus on this need very specifically.

The Maslow's hierarchy of needs are explained in rational and irrational consumer behaviours.

Rational Consumer Behaviour

According to Investopedia dictionary, rational choice theory assumed that consumers always make prudent and logical decisions that provide them with the greatest benefit or satisfaction which are in their highest self-interest. Rational choice theory adopts a narrower definition of rationality. From observing people's behaviour, economists believe the best theory that defines individual's economic decisions is that they make choices that are in their best self-interest and this is the rational choice theory (Hawthorne, 2015). Classical rationalistic theory assumes that the consumer is able to efficiently assess the characteristics of a product by investing a minimum of resources in order to obtain a maximum result. (Trevisan, 2015).

Rational decisions are primarily driven by the following factors and conditions.

- **Necessity/Need recognition:** Consumer identifies a particular need. The need is prompted by an internal stimulus and rises to a level that it becomes a necessity then an individual makes efforts to cater for this need. A need can also be elicited by an external stimulus such as product packaging and advertisement. An advertisement commercial for clothing can arouse the recognition that an individual needs to change his wardrobe.
- **Information search:** At this stage the consumer searches for detailed information. The consumer may simply develop heightened thoughtfulness or engage in active information search.

- **Evaluation of alternatives:** Multiple information are evaluated based on alternative brand choices. Different process for every consumer, involves weighing product attributes and their ability to deliver benefits.
- **Purchase process/decision:** Choosing buying alternatives, includes product, package, store and method of purchase
- **Post purchase behaviour:** A buyer begins to entertain doubts shortly after a purchase if he has made the right decision. This can be mitigated by warranties and after sales interactions.

Irrational Consumer Behaviour

However irrational consumer's behaviours are simply random, reactive, whimsical, stimulated or influenced by (unevaluative) inclinations. Consumer's decisions are highly characterized by feelings or emotions such as joy, love, fear, hope, sexuality, fantasy and obsessions for certain possessions. Rather than carefully searching, deliberating and evaluating alternatives before buying, consumers are likely to make many of these purchases on impulse, or a whim, because they are emotionally driven (Schiffman and Kanuk, 2007).

Experts in behavioural economics and marketing believes that 95% of decision-making is unconscious (Wilcox, 2015). Sarki *et al.* (2012) found out that buying is more emotional rather than rational. Gary Klein, whose research pioneered the field of Naturalistic Decision Making, estimates that 90% of the critical decisions consumers make is based on intuition; and Kahneman noted that human intuitive system is more influential than experience, this is the secret underlining of many choices and judgments (Wilcox, 2015)

Functional Value of Package Design

According to Bloggrafik (2012), packaging plays an important role in the value perception of product because it connects the product to the consumer. Apart from its protective role, transport, storage and preservation, packaging has become a means for conveying information and communication. Deliya and Parmar (2012) further enumerates the functional relevance of packaging in the following:

- i. **Physical and barrier protection:** Protection of the objects enclosed in the package from shock, vibration, compression and temperature. Packaging serves as a barrier from oxygen, water vapour, dust and others.
- ii. **Containment or Agglomeration:** Small objects are typically grouped together in one package for transport and handling efficiency. Alternatively, bulk Commodities (such as salt) can be divided into packages that are a more suitable size for individual households.
- iii. **Information:** It informs consumers on how to use, transport, recycle and dispose of the package
- iv. **Reducing theft:** Packaging that cannot be re-closed or gets physically damaged is helpful in the prevention of theft. Packages also enables the incorporation of anti-theft features.
- v. **Convenience:** It makes distribution, handling, display, Sale, opening, reclosing, use, and re-use.
- vi. **Marketing:** Packaging and labels are means of marketing products to potential buyers

Methodology

This study adopted quantitative research design. It focused on examining

factors which are influential to consumers when making choices. Quantitative study was conducted in order to generate the numerical data necessary to establish these factors amongst a sample population. Therefore, the study sampled the opinion of respondents to understand the reasons influencing their patronage of some selected household items. These items are phones, laptops and consumables. The students were randomly selected on gender basis. The collected data from respondents was analysed using the Statistical Package Social Sciences (SPSS).

Sample Population

Population for this study comprised of male and female students in Ahmadu Bello University campus. The total of respondents was fifty, both genders are represented equally. Therefore, male respondents are seventy-five; likewise, female respondents are seventy-five. This is simply because both sexes patronize the selected products equally. Random sampling was adopted in the selection of respondents for the study.

Descriptive Statistics

This analysis produced the data in a format necessary to provide the descriptive statistics presented below. The data collected was analyzed using mean. The nominal scores and records was attained using Yes and No responses. Yes (Maximum) = 2 and No (Minimum) = 1. These were calculated as $2+1 = 3/2 = 1.5$ (Mean Average). The score of each item was summed and the arithmetic mean calculated for each item. If the mean is equal to or above (greater than) the average mean (1.5) then the item is accepted. But if the mean is lower than (1.5) then the item is rejected. The standard deviation values were also generated.

Results and Discussions

Demographics of Respondents

Both male and female respondents were 75 (50%) each. Therefore, the total numbers of respondents are one hundred and fifty (150). From the male and female respondents within the age range (20 – 30) yrs were 105 (70%) and 45 (30%) were within the range of (20 – 30). 117 (78%) are fulltime students while 33(22%) are working alongside their studentship.

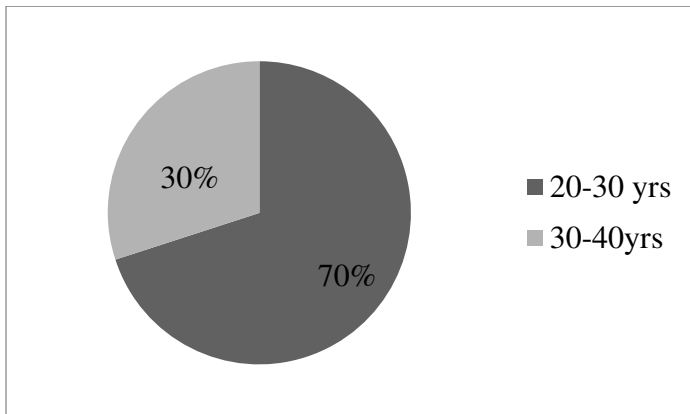


Fig. 2: Demography of Respondents Age

Table 1: Descriptive Statistics

Items	N	Minimum	Maximum	Mean	Std. Deviation
1. I purchase the phone/Laptop because my colleagues use that same brand	150	1	2	1.12	.443
2. I purchased my phone/laptop due to the unique features displayed on the packaging.	150	1	2	1.70	.303
3. I purchased the phone/Laptop to keep up with trends	150	1	2	1.67	.454
4. I purchased the phone/Laptop due to its affordability	150	1	2	1.66	.404
5. I was influenced by the packaging advertorials	150	1	2	1.61	.499
6. I will change the item for a more sophisticated one if opportune	150	1	2	1.54	.501
7. Needs inform my choice of consumables	150	1	2	1.88	.479
8. Showcase of lifestyle on the product labels informs my choice of consumables	150	1	2	1.44	.501
9. Income inform my choice of consumables	150	1	2	1.78	.485
10. Trends inform my choice of consumables	150	1	2	1.61	.495
11. Religion influences my choice of consumables	150	1	2	1.44	.501
12. Appealing labels design inform my choice of consumables	150	1	2	1.58	.499
13. Communication of health benefits on the packaging informs my choice of consumables	150	1	2	1.54	.485
Valid N (listwise)					

Most of the respondents do not agree that the preference of their colleagues influences their choice of phone and laptop brand (Mean=1.12) which is rejected. This response indicates that peer pressure have less influence on consumer's choice. Peer influence is considered to be irrational because most times it's not reflective of conscious evaluation. Consumers purchase their phones and laptops products based on the value added features advertised on the product packages (Mean=1.7). This shows that consumers reflect elements of rationality when making some choices. Good product quality is evaluative and gives satisfaction. This outcome also emphasizes the presumptions of classical rationalistic theory which noted that the consumer is able to efficiently assess the characteristics of a product by investing a

minimum of resources for maximum satisfaction. Most consumers make their purchasing decision based on product affordability (Mean=1.66). Apparently the perception of product affordability is relative, it depends on the consumer's income. However, affordability has enormous influence on consumption patterns. Consumers are trend conscious in their choice of product consumption (Mean=1.67). Indices of trends are reflective of both irrationality and rationality. Respondents alluded to the fact that advertorials of product plays a vital influence in consumer's choice (Mean=1.61). A reasonable number of respondents make their patronage based on sophistication resonating from the appearance of their choice of consumption (Mean=1.54). This outcome designates that some other factors are

considered ahead of sophistication by a reasonable number of consumers when making consumption choices. However, the functionality, beauty, craftsmanship and sophistry showcased on the package design of luxury items enliven the senses sometimes. Consumers prioritize their needs ahead of other factors when making purchasing decision (Mean=1.88). Need is the fundamental stimuli for consumption decision. According Maslow's hierarchy, needs are influenced by physiological demands, safety, love and belongingness, esteem and self-actualization. The lifestyle of target consumers merchandized on product packages influence the choices of consumption (Mean=1.5). Chen (2001) noted that lifestyle is an internal perceptions of consumers which often times result in impulsive choices. The research also confirmed that that more females make choices which accentuates their lifestyle, 53 (64%) of the respondents that selected yes are female while 30 (36%) were male. Consumers are trigger in making choices conditional on the worth of their income (Mean=1.78). This buttresses the Keynesian theory postulated by Maynard Keynes. This theory states that current real income is the most important determinant of consumption in the short run. Simply put, an individual spend according to his income. This is the basis for most consumption theory (Hill, 2018). Packaging and labeling is an essential factor which influences consumption choices (Mean=1.58). Packaging and labeling connect the products to consumers using aesthetic as an emotional bridge. Although some of the respondents do not really factor this into consideration when making choices.

Religion infrequently informs the choice of consumption (Mean=1.44). But this result shows that some consumers factors that into consideration when making choices. Consumption choices influenced by religion can either be rational or irrational. Communication of health benefits on product packages design is a salient factor often considered in consumption choices (Mean=1.54). This outcome implied that consumers demonstrate reasonable level of rationality when making consumption choices. An individual who doesn't want to add unnecessary weight may decide to take less or avoid foods whose packages advertises cholesterol foods. Also, diabetes patients are conditioned to consume foods that has little or no carbohydrate content to remain healthy. The food constituents are explicitly articulated on the package wraps.

The findings from this study are highlighted below;

- i. Product package design is influential in nudging the consumer towards rational or rational consumption choices
- ii. The salient factors that influences consumption choices include needs, affordability, income, lifestyle, product packaging, health, advertorials and diverse social inclinations.
- iii. Consumers behaviours reflects tendencies of rationality and irrationalities.
- iv. Rational factors influencing consumer behaviours includes affordability, needs, income, health and product packaging
- v. Irrational consumer behaviours are often times driven by trends, lifestyle, emotion, religion, peer influence, advertisements and others.

Conclusion

Consumer behaviours are unpredictable and profound, diverse interest evokes preferences and mind sets (and ultimately their purchasing behaviour). The consumer whom was thought to be rational is now considered to be driven by something other than rationality. In relative, consumption choices fluctuate between the penchants of rationality and irrationality. This research has shown that product package design plays a vital role in influencing the rationality and irrationality of consumer's choices. The visual design content on product packages are proximate in sensory pathways to consumer behaviours. Findings contradicts some assertions which states consumers are significantly irrational in their choice and do not know what they really want. Although, the sense of rationality in consumer choices are limited and relatively low as compared to irrationality. An evaluation of behaviours should afford marketers and graphic designers to create product design packages that edge consumers towards more utility buying options, not to hoodwink consumer for the sake of a short-term surge in patronage.

In conclusion, the study affirms the assertion of Elimimian in Bechara, 2004; Damasio *et al.* (1991) that most abnormal and irrational buying behaviours are considered to be meaningful, because they occur for a reason, and in that sense, they are rational. Rationality or irrationality, it's the consumer's prerogative to determine their consumption choices.

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