AN INVESTIGATION OF THE FACTORS THAT ARE CRITICAL FOR CONSUMERS OF POCKET-FRIENDLY SIZED BEVERAGES REPURCHASE BEHAVIOUR

By

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Abstract
Ascertaining the factors that enhanced consumers' repurchase decision of pocket-friendly sized beverages packaging has become a subject of interest among scholars and practitioners for understanding or predicting consumers shopping behaviour. This study explores the application of Analytic Hierarchy Process to investigate factors that are critical for pocket-friendly sized beverages packaging consumers repurchase and switching behaviour. A sample of 384 of pocket-friendly sized beverage packaging consumers among undergraduate students were drawn from selected Universities in Southwest, Nigeria using a multistage sampling process. The data obtained was analysed using descriptive statistics and the Super Decision Lens 3.2.0 software. The AHP model revealed that the most critical factor in the evaluation of the Nigerian pocket-friendly sized beverages is size, dispensing mode, price, perceived quality while the least factor is the students' disposable income. This shows that among the five criteria identified in determining consumers of pocket-friendly sized beverages packaging repurchase behaviour, size was rated highest, indicating that consumers are more conscious of the ideal volume within which pocket-sized beverages are being offered. The implication of this is that there is a need for pocket-friendly sized beverages manufacturers to re-evaluate policies in line with the identified factors in this study for sustainable competitive advantage.
Keywords: *Analytic Hierarchy Process, Pocket Sized Beverages, Consumers, Purchased Decision, Repurchase.*

1 Introduction

The observation in contemporary business environment, especially in Nigeria, is that products, such as beverages, are now packaged into various sizes (pocket-friendly) which allow consumers irrespective of their status, income, and educational background have access to such products (Gilaninia, Ganjinia & Moradi, 2013). A critical review of literature, according to Silayoi and Speece (2004) has shown that small packaging sizes are preferred by families with smaller consumers and that large sizes communicates a waste of product. This, as observed by Rahman, AbdelFattah and Mohamad (2014) is largely due to the purchasing power of consumers which are not the same and as such a consumer would be interested to purchase a product size commensurate to his or her purchasing power to achieve certain desired satisfaction. Opinions also have it that even though a large proportion of these consumers enjoy

consuming beverage products; but due to the economic situation, they may be forced to rearrange their list of consumption in order of preference due to the cost implication which they cannot afford (Abdalkrim & Al-Hrezat, 2013, Deliya & Parmar, 2012). This behavioural habit indicates that consumers may either decide to purchase such product once in a while or decide not to purchase it at all. Consequently, several consumers are negatively affected, as a result of the sharp decline in the standard of living. This assertion was pointed out by Muhammad (2019) that the primary cause of poverty involves disparity in the distribution and access to basic necessities such as food, healthcare, education and assets. This has unfolded many types of behaviours exhibited by consumers and their reactions to purchasing products significantly and beverages in particular. Understanding the needs and demands of customers are preconditions for value creation, so effective factors for customer satisfaction must be determined and then be improved (Tabaei & Fathian, 2012). Thus, for the beverage companies to attract more patronage of their products, pocket-friendly sized packaging has been considered as this was intended to greatly influence consumers' decision on whether or not to patronise beverages. However, identifying and understanding priority of the factors is another useful task for each company with resource restriction (Tabaei & Fathian, 2012).

Customers are more likely to be influenced in pre-consumption situation by extrinsic indications like brand image and price (Patterson & Spreng, 1997 cited in Adekoya & Dixon-Ogbechi, 2022) whereas in post-purchase situations, the customers now have the consumption experience and are already familiar with those indications, so the customers are less likely to make repurchase decision under the influence of these extrinsic indications. In fact, as remarked by Patterson and Speng (1997 cited in Adekoya & Dixon-Ogbechi, 2022), customers repurchase decisions are based on their satisfied or dissatisfied evaluation in post-purchase situations. Furthermore, consumer decision making does not only involve what products or service do but also what they mean to consumers since they are driven by emotional needs and are limited in the options they are willing to consider (Bettman, 1993; Schiffman & Kanuk, 2000). As noted by Zhang et al. (2002) that since consumer decision making process is considered a complex process, they remarked that the extent of decision making is influenced by how well established the consumers' criteria for selection are. These criteria for selection are evaluated in the evaluation stage, which is the process where a choice alternative is evaluated and selected in order to meet the consumers´ needs (Engel, Blackwell & Miniard, 1993). Within this stage the consumer needs to decide which choice alternatives to consider and what criteria to use to evaluate the product (Schiffman & Kanuk, 1991) and the consumer then has to use the criteria to judge the performance of the considered alternatives (Engel et al., 1993).

Moreover, the evaluation process exists because of consumer decision strategies which are the procedures that consumers use to make choices and provide guidelines that make the decision process less burdensome (Schiffman & Kanuk, 2007a). Consumer decision strategies can be based on compensatory decision rules, where a product or service (in this pocket-friendly size beverages) is evaluated in terms of attributes that are weighted and can balance out a negative evaluation on another attribute. A consumer decision strategy can also be based on non-compensatory rules, where a minimum acceptable level is selected for each attribute (conjunctive rule), or for all attributes that meet or exceed the minimum acceptable level of any attribute

(disjunctive rule) or by ranking the attributes in terms of relevance or importance (lexicographic rule) (Schiffman & Kanuk, 2007a as cited in Uzan, 2014).

Given the inconsistent nature of customer behaviour, the increasing product availability and low switching costs, consumer, without a compelling reason to choose one pocket-friendly size over another, would experiment or rotate purchases among multiple brand products (Bhattacherjee,2001b; Crego & Schiffrin,1995 cited in Adekoya & Dixon-Ogbechi, 2023). Thus, according to Reichheld and Schefter (2000) this trend necessitates a better understanding among pocket-friendly sized beverage producers to investigate the factors that encourage consumers to repurchase their products as repurchase action are critical, given the reasonably high cost of acquiring new customers and the economic value of reliable customers. A consumer would evaluate the purchase they have made according to their expectation. This would allow them to clear their uncertainty or anxiety about the informed pre-purchased decision, if satisfied they repeat purchase or discontinue purchase from the retail provider. Failure to repurchase would have serious consequences for the company's reputation and the customers' loyalty. For this reason, it is important for pocket-friendly sized beverage producers to understand not only their consumers' perceptions, but also which factors influence their repurchasing decisions. With a better understanding of the factors that play into the consumer's decision-making process after completing transactions they can better prepare themselves to serve their customers.

Moreover, given that the contemporary consumers are more informed than ever before, meeting their expectation is increasingly becoming more difficult. They want to get value for their money as they perceived it. For instance, given the relatively high incidence of poverty in Nigeria projected to reach 38.8% in 2024 (The Cable.ng, 2024), Nigeria consumers tend to be highly price sensitive. A repurchase shopping behaviour will lead to an increase in patronage of a brand pocket-friendly sized beverages, increase in revenue, increase in profit and confidence in the beverage firms. All these will eventually improve the company's image and reputation and ultimately increases its market share in the long run. As consumers who continue to patronize pocket-friendly sized beverages producer will provide confidence in the company and encourage others to purchase from her. The eventual outcome of these interactions would lead to the development and performance of the players (pocket-friendly sized beverages firms) in the Nigerian beverage industry. To this end, an attempt is made in this study to use the Analytic Hierarchy Process (AHP) to investigate the factors that are critical for consumers of pocket-friendly sized beverages repurchase behaviour in the Nigerian beverage industry. The aim of this study is to explore the application of the AHP model to investigate factors that are critical for consumers of pocket-friendly sized beverages repurchase behaviour. The specific objectives are to:

i. analyse factors that are critical for consumers of pocket-friendly sized beverages repurchase behaviour using Analytic Hierarchy Process;
ii. prioritise factors used by consumers of pocket-friendly sized beverages in evaluating beverage industry in Southwest, Nigeria for effective service delivery; and
iii. rank factors that are critical for consumers of pocket-friendly sized beverages repurchase behaviour for improving service delivery of pocket-friendly sized beverages producers in Southwest, Nigeria.

2 Literature Review

Repurchase decision of a particular product depends on consumer behaviour. However, it is assumed that the repurchasing of a product is a choice that a consumer without doubt must make. Consequently, they have to go all the way through the processes delineated in the theory of consumer behaviour. Therefore, the theory underpinning this study is the Theory of Consumer Behaviour and Marshallian Economic Model. The theory of consumer behavour attempts to comprehend the process of arriving at a decision by consumers and it considers size, dispensing mode, Price of product, perceived quality and students' disposable income which may affect the choice of beverage a person patronises. The theory therefore predetermined that every sane person trial different beverage product and evaluates the alternatives to make a choice based on the mentioned factors. On the other hand, the Marshallian Economic Model stresses that customers are rational beings with their repurchase behaviour and that what the consumer would buy in each price and income, or wealth situation will perfectly solve his or her utility maximization problem.

The Nicosia model proposed by Francesco Nicosia in 1976 centred on the relationship between the firm and its potential consumers. Nicosia asserts that the firms and the consumers are linked with each other, the firm tries to influence the consumer and the consumer inturn influences the firm by his decision (Ram & Manoj, 2014). The significant of Nicosia's model in this current study showed that the communication via advertisement and the nature of the packaging is a way of informing the customers about what they need to know about the beverage and the various sizes available. In the same vein, the responses of the consumers (students) towards this will serve as an eye opener to the manufacturers, if indeed all the variants examined in the study are capable of enhancing their purchase decision. "In addition, it will assist marketers in recognizing the different sides to consumer decision making before the final repurchase of a product. This present study will go a step further to understand the whole process of consumer decision making for repurchase of beverage product".

Kotler's Behaviour Choice Model was propounded in 1965 by Kotler. The broad objective of the model is what happens in the buyer's mind between the acts of receiving impressions about products and making his repurchasing decisions. The model demonstrates consumer decision making process in four pathways; namely: inputs, channels, processor, and output. The inputs or buying influence as demonstrated in the model consist of communication from the firm or marketer about obtainable brands, their prices, qualities, size and dispensing mode. The channels or means through which the information gets to the buyer; possibly through impersonal communication such as advertising, salesmen or promotion; or rather interpersonal communication (word of mouth) such as acquaintances, the buyer's family and his personal observations. The consumer processes all available information received before taking rational decisions. After processing the inputs in the model, the buyer's reactions are evident in the form of decisions regarding product preference, brand selection; quantities to buy and rate of repurchase of the product" (Oladele, Olowookere, Okolugbo & Adegbola, 2015). The relevance of the model to the present study is that the marketers, in order to appeal to the consumer, will make as much information as possible available in terms of the price, size and the dispensing mode. The input, channel, processes and output in Kotler behavioural

choice model makes it captivating, because, when properly applied, will lead to realistic decision making. Following the inputs, which are mostly the features of a product and influences that motivate the buying behaviour, the marketer is expected to design his product mix to ensure reasonable conformity with these inputs".

The Theory of Reasoned Action (TRA) developed by Martin Fishbein and Icek Ajzen in 1975 defines the links between beliefs, attitudes, norms, intentions, and behaviours of individuals (Yzer, 2017). According to the model, a person's behaviour is determined by its behavioural intention to perform it. This intention is itself determined by the person's attitudes and his subjective norms towards the behaviour. Intention represents a person's self-commitment to performing the behaviour". "The theory suggests that a person's purchase behaviour is determined by their intention to perform that behaviour. Some modern definitions of the attitude construct, for instance, proposed that attitude is a state of readiness to act. The relevance of the reasoned action theory in understanding purchase intention lies in its direct applicability to the question under what situation will consumers be able to purchase the product that will lead to behaviour change. Seen through a reasoned action lens, beverages are of different varieties and sizes, consumers level of finances are not the same and they also differs greatly, all these forms the basis of beliefs that guides their intention to perform a particular behaviour. The theory relates to the study in that it helps to provide a relatively simple basis for identifying where and how to target consumers' behavioural change attempts" (Agbaeze *et. al*., 2017). "This study included other factors external to the theory of reasoned action in order to for see consumers behavioural intentions to purchase beverage products in Southwest, Nigeria. The variables included size; dispensing mode, price, perceived quality and students' disposable income.

The Theory of Planned Behaviour proposed by Icek Ajzen in 1985 and developed from the Theory of Reasoned Action (Ajzen, 1991). The theory presumes that the most excellent prediction of behaviour is known by asking people if they are going to behave in a certain way in the future. It was noted that the intention will not express itself in behaviour if it is physically impossible to execute the behaviour or if unanticipated obstacles stand in the way. Subjective norms and perceived behavioural control predict the intention, successionally predicts the behaviour. Background variables, as demographical factors, are supposed to influence the behaviour through the three determinants and the intention. Attitude, subjective norms and the perceived behavioural control, explain the behavioural intention before the behaviour takes place. The intention is a good predictor of the actual behaviour. The actual behaviour leads to feedback about the expectations of the behaviour. Furthermore, Ajzen states that for a good and predictive value of the theory, it is necessary that the several model variables are defined on the same level of specificity: For example, when investigating the explaining critical factors of buying a product prediction will not be found in the attitude toward the environment, but in the attitude toward another. The theory is relevant due to the fact that this study appraises the application of the TPB to understanding intention and actual repurchasing decision in relation to some brands of beverages. It also examines the additional predictive power afforded by the consideration of size; dispensing mode, price, perceived quality and students' disposable income. Another input of this current study is the use of Analytical Hierarchical Process method. Additionally, applying the notion of TPB to repurchase

decision of beverages, this study predicts that consumers' intention to repurchase increases as their positive attitude toward beverages increases.

The Marshallian Economics was forwarded by the eminent economist Alfred Marshall in 1890. The key message of Marshallian Economic Model is that individual buyers will spend their income on goods that will offer the greatest satisfaction, depending on their taste and the relative prices of goods. He proposed that the marginal utility of money is constant. This means consumers prefer buying specific products or services exclusively based on the level of personal satisfaction" (Biswas cited in Bhattacharya & Jena, 2019). Marshall carefully laid out the concept of a demand schedule, used it to draw a demand curve, and then derived the law of demand: Thus the one universal rule to which the demand curve conforms is that it is inclined negatively throughout the whole of its length" (Bhattacharya & Jena, 2019). The fundamental characteristic of the Marshallian Economic Model is that it stresses that consumers are rational being. Consumer choice is an important parameter that determines the effectiveness of pocket-friendly package sized beverages. In such a scenario, Marshallian economics proves helpful in understanding what factors determine their purchase decision at a given time. The relevance of this theory to this study is that the Marshallian model offers a way for marketers to understand the behaviour of consumers when they are making purchases that require rational consideration".

3 Methods

This study adopted the quantitative approach and a descriptive and exploratory survey design. The population were undergraduate students in public universities in Southwest, Nigeria. Multi-stage sampling procedure was employed to select a sample of 384 consumers among undergraduate students drawn from twelve federal and state universities in South-West, Nigeria. The respondents were selected by employing purposive-random sampling technique. The AHP model of this study was developed using the Nicosia, Kotler's Behaviour Choice, and Marshallian Economic models. The general structure of the Analytical Hierarchy process model for this study consisted of four hierarchical levels: Level 1 (objective/goal), Level 2 (the criteria), Level 3 (the sub criteria) and Level 4 (the alternatives). The AHP was applied in this study because it is easy to use, reduced over-specification of judgment, has a built-in consistency test, use an appropriate measurement scale, and it agreed well with the behaviour of consumers, since consumers base their judgment on knowledge and experience and then make decisions accordingly (Al-Harbi, 2001; Lai, Trueblood & Wong, 1999).

3.1: The Analytical Hierarchy Process Model:

The general structure of the Analytical Hierarchy process model for this study entails three hierarchical levels.

Level 1 - Objective Identification (Goal): - At this stage the objective to be achieved has to be identified and stated properly. The objective (goal) of this research is to determine the purchase decision of pocket-friendly sized beverages packaging by consumers.

Level 2 - Criteria: These are the factors that affect the objective. The Factors that affect the objective in this study are the constructs (variables) affecting the purchase decision of pocket-friendly sized beverages packaging by consumers namely:- size, dispense mode, price, perceived quality and students' disposable income.

Level 3 – Sub-criteria: These are the factors that affect the criteria of achieving the objective this study. These factors are the measurements of each of the success constructs that formed the criteria. The component of each criteria are:- size – single serving size, large size and small size. For dispense mode – cutting the edge, press to open and remove cover. For price – perceived price, price fairness and price comparison. For perceived quality – reliability, safety and assurance. Finally, for students' disposable income – family income, income expectation and savings.
Level 4 - The Alternatives To Be Decided Upon: These are the brands of the pocket-friendly sized beverages packaging. They are Cadbury, Nestle, Wringing, Promasido and Frieslandcampina. Thus, the hierarchical model is presented figure 1.

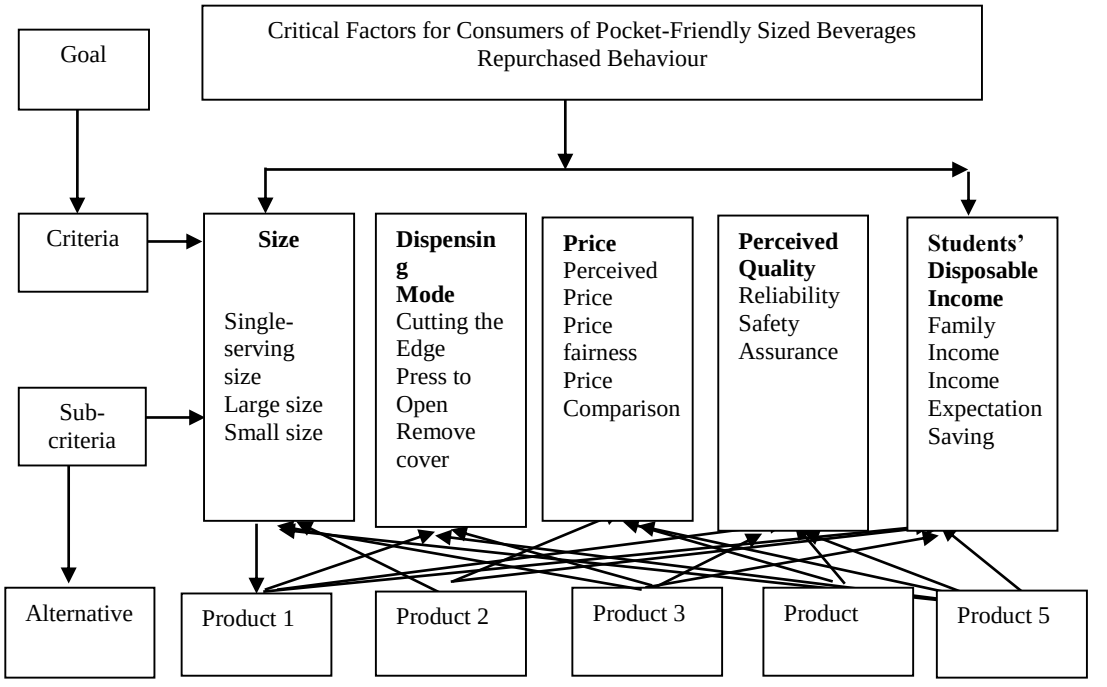

Figure 1: AHP Model of critical factors for Consumers of Pocket-Friendly Sized Beverages Repurchased Behaviour.
Source: Author conceptualization (2024)

4. Results

A total of 384 questionnaires were administered to undergraduate pocket-friendly sized beverages consumers in the Southwest tertiary institutions that were selected for the study, 381 were returned and were properly filled and found valid for the analysis representing 99.22% response rate. Male respondents were 162(43.7%) while 209(50.3%) were female. Significant numbers of the respondents were between the ages of 21-25 years 62.2% (237); while the remaining 23.6% (90), 12.1% (46), and 2.1% (8) were between 17-20 years, 26-30 years and 31 years and above. On the marital status, majority of the respondents were single, due to the fact that many of the respondents are undergraduate students. Three hundred and sixty-two (362) respondents (95.0%) were single, while 19 (5.3%) were married. The mix of single and married is very good for the study from the perspective of people who would have different needs and reason to purchase beverages of these different brands.

4.1 Analysis of factors that are critical for consumers online retailing repurchase and switching behaviour using Analytic Hierarchy Process

For AHP analysis, the comparison matrix for each respondent is reduced to 1 for each level of the hierarchy. Hence, the 8001 matrices were reduced to twenty (21) comparison matrices (shown below) using 1/381 ratio based on the assumption that beverage consumers (undergraduate students) are equally knowledgeable about the factors that enhances the decision to purchase pocket friendly size packages of beverages. The CR values for the six matrices were less than 10%, the judgement was considered to be consistent.

Table 1 Factors that are critical for consumers of pocket-friendly sized beverages repurchase behaviour.

Decision Criteria	Size	Dispense Mode	Price	Perceived Quality	Students' Disposable Income	Weight
Size	1.0000	2.7533	3.0000	3.0000	7.8545	0.4382
Dispense Mode	0.3632	1.0000	2.6037	3.0000	2.0000	0.2365
Price	0.3333	0.3841	1.0000	1.0026	3.8005	0.1349
Perceived Quality	0.3333	0.3333	0.9974	1.0000	3.9528	0.1342
DisposableIncome	0.1273	0.5000	0.2631	0.2530	1.0000	0.0562
					Total	1.0000
λ_{max} = 5.3354		CI=0.0839			CR= 0.0747	

Source: Field Survey, 2024.

Therefore, looking at the eigenvector values/priority weight of determinants of Southwest, Nigeria pocket-friendly sized beverages evaluation decision criteria, it was evident that size criteria have contributed 43.82% to the goal, whereas dispense mode criterion contributed 23.65% to the goal. A positive evaluation on this factor contributes almost twice more than a positive evaluation on the dispense mode criterion (26.55%).

Table 2 Reduced matrix for size sub-criteria

Size sub-Criteria	Single Serving Size	Large Size	Small Size	Weight
Single Serving Size	1.0000	2.7533	2.8050	0.5771
Large Size	0.3632	1.0000	1.9528	0.2590
Small Size	0.3508	0.5121	1.0000	0.1639
			Total	1.0000
λ_{max} = 3.0376	CI = 0.0094		CR= 0.0188	

Source: Field Survey, 2024

In considering the sub-criteria of size criterion, the eigenvector priority weight showed that single serving size has a weight of 57.71% relative to size criteria. A positive evaluation on this factor contributes approximately 3 (three) times more than a positive evaluation on large size (25.90%).

Table 3 Reduced matrix for dispense mode sub-criteria

Dispense mode sub-Criteria	Cutting the Edge	Press to Open	Remove Cover	Weight
Cutting the Edge	1.0000	2.1024	2.5013	0.5194
Press to Open	0.4756	1.0000	2.6011	0.3206
Remove Cover	0.3998	0.3845	1.0000	0.1600
			Total	1.0000
λ_{max} = 3.0684	CI = 0.0590		CR= 0.0342	

Source: Field survey, 2024

Considering the sub-criteria of dispense mode criterion, the eigenvector priority weight showed that cutting the edge has a weight of 51.94% relative to dispense

mode criteria. A positive evaluation on this factor contributes approximately 2 (two) times more than a positive evaluation on press to open (32.06%).

Table 4 Reduced matrix for price sub-criteria

Price sub-Criteria	Perceived Price	Price Fairness	Price Comparison	Weight
Perceived Price	1.0000	2.0997	3.0997	0.5349
Price Fairness	0.4763	1.0000	3.2992	0.3331
Price Comparison	0.3226	0.3031	1.0000	0.1320
			Total	1.0000
λ_{max} = 3.0724	CI = 0.0624		CR= 0.0362	

Source: Field Survey, 2024

Considering the sub-criteria of price criterion, the eigenvector priority weight showed that perceived price has a weight of 53.49% relative to price criteria. A positive evaluation on this factor contributes approximately 2 (two) times more than a positive evaluation on price fairness (33.31%).

Table 5 Reduced matrix for perceived quality sub-criteria

Perceived quality sub-Criteria	Reality	Safety	Assurance	Weight
Reality	1.0000	2.1024	3.3018	0.5409
Safety	0.4756	1.0000	3.3832	0.3323
Assurance	0.3029	0.2956	1.0000	0.1268
			Total	1.0000
λ_{max} = 3.0656	CI = 0.0566		CR= 0.0328	

Source: Field Survey, 2024.

Considering the sub-criteria of perceived quality criterion, the eigenvector priority weight showed that reality has a weight of 54.09% relative to perceived quality criteria. A positive evaluation on this factor contributes approximately 2 (two) times more than a positive evaluation on safety (33.23%).

Table 6 Reduced matrix for students' disposable income sub-criteria

Students' disposable sub-Criteria	Family Income	Income Expenditure	Saving	Weight
Family Income	1.0000	3.2520	4.1024	0.6333
Income Expectation	0.3025	1.0000	2.4514	0.2430
Saving	0.2438	0.4079	1.0000	0.1237
			Total	1.0000
λ_{max} = 3.0460	CI = 0.0396		CR=0.0230	

Source: Field Survey, 2024.

Considering the sub-criteria of disposable income criterion, the eigenvector priority weight showed that family income has a weight of 63.33% relative to students' disposable income criteria. A positive evaluation on this factor contributes approximately 3 (three) times more than a positive evaluation on income expectation (24.30%).

Table 7 Reduced matrix for single serving size alternatives

Single serving size	Cadbury	Nestle	Wringing	Promasido	Friesland Campina	Weight
Cadbury	1.0000	0.3333	1.2391	2.9958	2.8120	0.2258
Nestle	3.0000	1.0000	0.7299	1.3307	5.4718	0.3251
Wringing	0.8010	1.3700	1.0000	2.3401	3.0000	0.2570
Promasido	0.3333	0.7515	0.4273	1.0000	1.2391	0.1188
Friesland Campina	0.3556	0.1828	0.3333	0.8070	1.0000	0.0733
					Total	1.0000
λ_{max} = 5.3786			CI = 0.0845		CR=0.0947	

Source: Field Survey, 2024

Considering the decision alternatives of single serving size sub-criterion, the eigenvector priority weight showed that Nestle brand of pocket-friendly sized beverage packaging has a weight of 32.51% relative to single serving size sub-criteria. A positive evaluation on this factor contributes approximately 3 (three) times more than a positive evaluation on Promaxido (11.88%).

Table 8 Reduced matrix for large size alternatives

Large size	Cadbury	Nestle	Wringing	Promasido	Friesland Campina	Weight
Cadbury	1.0000	5.0000	3.0000	3.0000	5.0000	0.4634
Nestle	0.2000	1.0000	0.3674	3.0000	2.3565	0.1328
Wringing	0.3333	2.7220	1.0000	5.0000	3.0000	0.2493
Promasido	0.3333	0.3333	0.2000	1.0000	0.3716	0.0636
Friesland Campina	0.2000	0.4244	0.3333	0.2691	1.0000	0.0909
					Total	1.0000
λ_{max} = 5.2847			CI = 0.0635		CR=0.0712	

Source: Field Survey, 2024

Considering the decision alternatives of large size sub-criterion, the eigenvector priority weight showed that Cadbury brand of pocket-friendly sized beverage packaging has a weight of 46.34% relative to large size sub-criteria. A positive evaluation on this factor contributes approximately 2 (two) times more than a positive evaluation on Wringing (24.93%).

Table 9 Reduced matrix for small size alternatives

Small size	Cadbury	Nestle	Wringing	Promasido	Friesland Campina	Weight
Cadbury	1.0000	0.2000	0.1453	0.1943	0.3333	0.0455
Nestle	5.0000	1.0000	0.3333	0.2500	0.2000	0.1026
Wringing	7.0176	3.0000	1.0000	0.7835	2.3869	0.3190
Promasido	5.1464	4.0000	1.2762	1.0000	1.2355	0.3014
Friesland Campina	3.0000	5.0000	0.4190	0.8094	1.0000	0.2315
					Total	1.0000
λ_{max} = 5.4180			CI= 0.0933		CR= 0.1082	

Source: Field Survey, 2024

Considering the decision alternatives of small size sub-criterion, the eigenvector priority weight showed that Wringing brand of pocket-friendly sized beverage packaging has a weight of 31.90% relative to small size sub-criteria. A positive evaluation on this factor contributes approximately 2 (two) times more than a positive evaluation on Nestle (10.26%).

Table 10 Reduced matrix for cutting the edge alternatives

Cutting edge	Cadbury	Nestle	Wringing	Promasido	Friesland Campina	Weight
Cadbury	1.0000	5.0000	5.0000	3.0000	3.0000	0.4907
Nestle	0.2000	1.0000	5.0000	2.0632	3.0000	0.2280
Wringing	0.2000	0.2000	1.0000	0.9045	0.6633	0.0711
Promasido	0.3333	0.4847	1.1056	1.0000	0.8758	0.1031
Friesland Campina	0.3333	0.3333	1.5076	1.1418	1.0000	0.1071
					Total	1.0000
λ_{max} = 5.3327			CI = 0.0743		CR = 0.0832	

Source: Field Survey, 2024

Considering the decision alternatives of cutting the edge sub-criterion, the eigenvector priority weight showed that Cadbury brand of pocket-friendly sized

beverage packaging has a weight of 49.07% relative to cutting the edge sub-criteria. A positive evaluation on this factor contributes approximately 3 (three) times more than a positive evaluation on Friesland campina (10.71%).

Table 11 Reduced matrix for press to open alternatives

Press to open	Cadbury	Nestle	Wringing	Promasido	Friesland Campina	Weight
Cadbury	1.0000	0.3333	0.3318	3.0000	6.2122	0.1823
Nestle	3.0000	1.0000	0.6515	4.3331	3.0000	0.2942
Wringing	3.1035	1.5348	1.0000	5.0000	7.0149	0.4029
Promasido	0.3333	0.2308	0.2000	1.0000	1.0474	0.0631
Friesland Campina	0.1620	0.3333	0.1426	0.9548	1.0000	0.0575
					Total	1.0000
λ_{max} = 5.2836			CI = 0.0633		CR = 0.0709	

Source: Field Survey, 2024

Considering the decision alternatives of press to open sub-criterion, the eigenvector priority weight showed that Wringing brand of pocket-friendly sized beverage packaging has a weight of 40.29% relative to press to open sub-criteria. A positive evaluation on this factor contributes approximately 3 (three) times more than a positive evaluation on Cadbury (18.23%).

Table 12 Reduced matrix for remove cover alternatives

Remove cover	Cadbury	Nestle	Wringing	Promasido	Friesland Campina	Weight
Cadbury	1.0000	3.1986	2.0000	1.3580	0.7188	0.2290
Nestle	0.3126	1.0000	0.3752	0.2000	0.1222	0.0497
Wringing	0.5000	2.6650	1.0000	3.0000	0.3774	0.1830
Promasido	0.7364	5.0000	0.3333	1.0000	0.2367	0.1321
Friesland Campina	1.3911	8.1670	2.6499	4.2241	1.0000	0.4062
					Total	1.0000
λ_{max} = 5.3509			CI = 0.0783		CR = 0.0877	

Source: Field Survey, 2024

Considering the decision alternatives of remove cover sub-criterion, the eigenvector priority weight showed that Friesland campina brand of pocket-friendly sized beverage packaging has a weight of 40.62% relative to remove cover sub-criteria. A positive evaluation on this factor contributes approximately 3 (three) times more than a positive evaluation on Promaxido (13.21%).

Table 13 Reduced matrix for perceived price alternatives

Perceived price	Cadbury	Nestle	Wringing	Promasido	Friesland Campina	Weight
Cadbury	1.0000	3.0000	4.0000	5.0000	6.0000	0.4649
Nestle	0.3333	1.0000	3.0000	5.0000	4.0000	0.2647
Wringing	0.2500	0.3333	1.0000	3.0000	5.0000	0.1497
Promasido	0.2000	0.2000	0.3333	1.0000	3.0000	0.0754
Friesland Campina	0.1667	0.2500	0.2000	0.3333	1.0000	0.0453
					Total	1.0000
λ_{max} = 5.3916			CI = 0.0874		CR = 0.0979	

Source: Field Survey, 2024

Considering the decision alternatives of perceived price sub-criterion, the eigenvector priority weight showed that Cadbury brand of pocket-friendly sized beverage packaging has a weight of 46.89% relative to perceived price sub-criteria. A positive

evaluation on this factor contributes approximately 3 (three) times more than a positive evaluation on Wringing (14.97%).

Table 14 Reduced matrix for price fairness alternatives

Price fairness	Cadbury	Nestle	Wringing	Promasido	Friesland Campina	Weight
Cadbury	1.0000	3.0000	0.3333	0.3333	3.0000	0.1376
Nestle	0.3333	1.0000	0.2500	0.1661	0.5803	0.0555
Wringing	3.0000	4.0000	1.0000	3.0000	5.0000	0.4321
Promasido	3.0000	6.0190	0.3333	1.0000	7.6937	0.3132
Friesland Campina	0.3333	1.7234	0.2000	0.1300	1.0000	0.0616
					Total	1.0000
λ_{max} = 5.3572			CI = 0.0797		CR = 0.0893	

Source: Field Survey, 2024

Considering the decision alternatives of price fairness sub-criterion, the eigenvector priority weight showed that Wringing brand of pocket-friendly sized beverage packaging has a weight of 43.21% relative to price fairness sub-criteria. A positive evaluation on this factor contributes approximately 3 (three) times more than a positive evaluation on Cadbury (13.76%).

Table 15 Reduced matrix for price comparison alternatives

Price comparison	Cadbury	Nestle	Wringing	Promasido	Friesland Campina	Weight
Cadbury	1.0000	0.6038	1.1469	0.3333	3.0000	0.1434
Nestle	1.6562	1.0000	3.0000	0.3333	5.0000	0.2376
Wringing	0.8719	0.3333	1.0000	0.1966	1.2420	0.0906
Promasido	3.0000	3.0000	5.0866	1.0000	5.0000	0.4651
Friesland Campina	0.3333	0.2000	0.8058	0.2000	1.0000	0.0633
					Total	1.0000
λ_{max} = 5.1291					CR = 0.0323	

Source: Field Survey, 2024

Considering the decision alternatives of price comparison sub-criterion, the eigenvector priority weight showed that Promasido brand of pocket-friendly sized beverage packaging has a weight of 46.51% relative to price comparison sub-criteria. A positive evaluation on this factor contributes approximately 3 (three) times more than a positive evaluation on Cadbury (14.34%).

Table 16 Reduced matrix for reality alternatives

Reality	Cadbury	Nestle	Wringing	Promasido	Friesland Campina	Weight
Cadbury	1.0000	0.3333	5.0000	3.0000	5.0000	0.2820
Nestle	3.0000	1.0000	4.0000	5.0000	7.0000	0.4681
Wringing	0.2000	0.2500	1.0000	3.0000	2.7871	0.1234
Promasido	0.3333	0.2000	0.3333	1.0000	3.0000	0.0822
Friesland Campina	0.2000	0.1429	0.3588	0.33333	1.0000	0.0443
					Total	1.0000
λ_{max} = 5.4019			CI = 0.0897		CR = 0.1005	

Source: Field Survey, 2024

Considering the decision alternatives of reality sub-criterion, the eigenvector priority weight showed that Nestle brand of pocket-friendly sized beverage packaging has a weight of 46.81% relative to reality sub-criteria. A positive evaluation on this factor contributes approximately 3 (three) times more than a positive evaluation on Wringing (12.34%).

Table 17 Reduced matrix for safety alternatives

Safety	Cadbury	Nestle	Wringing	Promasido	Friesland Campina	Weight
Cadbury	1.0000	2.4353	5.0000	0.2000	0.3333	0.1294
Nestle	0.4106	1.0000	0.9127	0.2500	0.1667	0.0565
Wringing	0.2000	1.0955	1.0000	0.1333	0.1136	0.0417
Promasido	5.0000	4.0000	7.5043	1.0000	0.3333	0.3082
Friesland Campina	3.0000	6.0000	8.8056	3.0000	1.0000	0.4642
					Total	1.0000
λ_{max} = 5.2928			CI = 0.0654		CR = 0.0732	

Source: Field Survey, 2024

Considering the decision alternatives of single safety sub-criterion, the eigenvector priority weight showed that Friesland campina brand of pocket-friendly sized beverage packaging has a weight of 46.42% relative to safety sub-criteria. A positive evaluation on this factor contributes approximately 3 (three) times more than a positive evaluation on Cadbury (12.94%).

Table 18 Reduced matrix for assurance alternatives

Assurance	Cadbury	Nestle	Wringing	Promasido	Friesland Campina	Weight
Cadbury	1.0000	5.0000	3.3610	8.0378	3.0000	0.5048
Nestle	0.2000	1.0000	0.9314	2.4447	5.0000	0.1754
Wringing	0.2975	1.0736	1.0000	2.0871	5.0000	0.1848
Promasido	0.1244	0.4091	0.4791	1.0000	1.0570	0.0666
Friesland Campina	0.3333	0.2000	0.2000	0.9460	1.0000	0.0684
					Total	1.0000
λ_{max} = 5.4347			CI = 0.0970		CR = 0.1087	

Source: Field Survey, 2024

Considering the decision alternatives of assurance sub-criterion, the eigenvector priority weight showed that Cadbury brand of pocket-friendly sized beverage packaging has a weight of 50.48% relative to assurance sub-criteria. A positive evaluation on this factor contributes approximately 3 (three) times more than a positive evaluation on Wringing (18.48%).

Table 19 Reduced matrix for family income alternatives

Family income	Cadbury	Nestle	Wringing	Promasido	Friesland Campina	Weight
Cadbury	1.0000	3.0000	3.0000	3.0000	5.0000	0.4185
Nestle	0.3333	1.0000	3.0000	3.0000	5.0000	0.2675
Wringing	0.3333	0.3333	1.0000	3.0000	5.0000	0.1720
Promasido	0.3333	0.3333	0.3333	1.0000	3.0000	0.0967
Friesland Campina	0.2000	0.2000	0.2000	0.3333	1.0000	0.0464
					Total	1.0000
λ_{max} = 5.3990					CR = 0.0998	

Source: Field Survey, 2024

Considering the decision alternatives of family income sub-criterion, the eigenvector priority weight showed that Cadbury brand of pocket-friendly sized beverage packaging has a weight of 41.85% relative to family income sub-criteria. A positive evaluation on this factor contributes approximately 3 (three) times more than a positive evaluation on Wringing (17.20%).

Table 20 Reduced matrix for income expectation alternatives

Income expectation	Cadbury	Nestle	Wringing	Promasido	Friesland Campina	Weight
Cadbury	1.0000	3.0000	5.0000	0.2000	4.3821	0.2388
Nestle	0.3333	1.0000	3.0000	0.2809	3.0000	0.1313
Wringing	0.2000	0.3333	1.0000	0.2000	1.1372	0.0593
Promasido	5.0000	3.5599	5.0000	1.0000	5.0000	0.5129
Friesland Campina	0.2282	0.3333	0.8793	0.2000	1.0000	0.0578
					Total	1.0000
λ_{max} = 5.3811			CI = 0.0851		CR = 0.0953	

Source: Field Survey, 2024

Considering the decision alternatives of income expectation sub-criterion, the eigenvector priority weight showed Promasido brand of pocket-friendly sized beverage packaging has a weight of 51.29% relative to income expectation sub-criteria. A positive evaluation on this factor contributes approximately 3 (three) times more than a positive evaluation on Nestle (13.13%).

Table 21 Reduced matrix for saving alternatives

Saving	Cadbury	Nestle	Wringing	Promasido	Friesland Campina	Weight
Cadbury	1.0000	1.0411	0.1905	1.2968	2.0000	0.1153
Nestle	0.9605	1.0000	0.1786	2.0000	0.7004	0.1095
Wringing	5.2497	5.6000	1.0000	7.0000	9.3759	0.5974
Promasido	0.7711	0.5000	0.1429	1.0000	3.4959	0.1077
Friesland Campina	0.5000	1.4278	0.1067	0.2861	1.0000	0.0701
					Total	1.0000
λ_{max} = 5.3961			CI = 0.0884		CR = 0.0990	

Source: Field Survey, 2024

Considering the decision alternatives of saving sub-criterion, the eigenvector priority weight showed that Wringing brand of pocket-friendly sized beverage packaging has a weight of 59.74% relative to single serving size sub-criteria. A positive evaluation on this factor contributes approximately 5 (five) times more than a positive evaluation on Cadbury (11.53%).

4.2 Prioritize factors by consumers of pocket-friendly sized beverages in evaluating beverage industry in Southwest, Nigeria for effective service delivery.

Table 22 Composite priorities of the criteria about Goal

Goal: Critical Factors for Consumers of Pocket-Friendly Sized Beverages Repurchased Behaviour	Size	Dispense Mode	Price	Perceived Quality	Students' Dispensable Income
Pooled Average Composite Priority	0.4382	0.2365	0.1349	0.1342	0.0562
Relative Preference Ranking	1st	2nd	3rd	4th	5th

Source: Field Survey, 2024

Table 22 shows the priorities of the criteria with respect to the main goal which is to understand factors that enhances purchase decision of pocket-friendly sized beverages packaging of consumers. Based on the perception of the undergraduate students who are consumers of pocket-friendly sized beverage packaging, size of the product is ranked highest with priority 0.4382, next is dispense mode with priority 0.2365 followed by price with priority 0.1349, perceived quality with priority 0.1342, while the least ranked factor is the students' disposable income with priority 0.0672.

Table 23 Composite priorities of the sub-criteria about criteria

Size	Single Serving Size	Large Size	Small Size
Pooled Average Composite Priority	0.5771	0.2590	0.1639
Relative Preference Ranking	1st	2nd	3rd

Source: Field Survey, 2024

Table 23 reveals the consumers perception with regards to the decision criteria of size using the composite priorities. This criterion has only three sub-criteria in this study. Undergraduate students who are consumers of pocket-friendly sized beverage packaging mostly ranked single serving size with priority 0.5771, next is large size with priority 0.2590, and the least importance is small size with priority of 0.1639.

Table 24 Composite priorities of the sub-criteria about criteria

Dispense mode	Cutting the Edge	Press to Open	Remove Cover
Pooled Average Composite Priority	0.5194	0.3206	0.1600
Relative Preference Ranking	1st	2nd	3rd

Source: Field Survey, 2024

Table 24 reveals the consumers perception with regards to the decision criteria of dispense mode using the composite priorities. This criterion has only three sub-criteria in this study. Undergraduate students who are consumers of pocket-friendly sized beverage packaging mostly ranked cutting the edge with priority 0.5194, next is press to open with priority 0.3206, and the least importance is remove cover with priority of 0.1600.

Table 25 Composite priorities of the sub-criteria about criteria

Price	Perceived Price	Price Fairness	Price Comparison
Pooled Average Composite Priority	0.5349	0.3331	0.1320
Relative Preference Ranking	1st	2nd	3rd

Source: Field Survey, 2024

Table 25 reveals the consumers perception with regards to the decision criteria of price using the composite priorities. This criterion has only three sub-criteria in this study. Undergraduate students who are consumers of pocket-friendly sized beverage packaging ranked perceived price as the most preferred with priority 0.5349, next is price fairness with priority 0.3331, and the least importance is price comparison with priority of 0.1320.

Table 26 Composite priorities of the sub-criteria about criteria

Perceived quality	Reality	Safety	Assurance
Pooled Average Composite Priority	0.5409	0.3323	0.1268
Relative Preference Ranking	1st	2nd	3rd

Source: Field Survey, 2024

Table 26 reveals the consumers perception with regards to the decision criteria of perceived quality using the composite priorities. This criterion has only three sub-criteria in this study. Undergraduate students who are consumers of pocket-friendly sized beverage packaging mostly ranked reality with priority 0.5409, next is safety with priority 0.3323, and the least importance is assurance with priority of 0.1268.

Table 27 Composite priorities of the sub-criteria about criteria

Students' disposable income	Family Income	Income Expectation	Saving
Pooled Average Composite Priority	0.6333	0.2430	0.1237
Relative Preference Ranking	1st	2nd	3rd

Source: Field Survey, 2024

Table 28 Composite priorities of the decision alternative about single serving size

Decision Alternatives of single serving size	Cadbury	Nestle	Wringing	Promasido	Friesland Campina
Pooled Average Composite Priority	0.2258	0.3251	0.2570	0.1188	0.0733
Relative Preference Ranking	3rd	1st	2nd	4th	5th

Source: Field Survey, 2024

Table 4.28 reveals the consumers perception with regards to the decision alternatives of single serving size using the composite priorities. This criterion has only five alternatives in this study. Undergraduate students who are consumers of pocket-friendly sized beverage packaging mostly preferred the brand Nestle with priority 0.3251, next is Wringing with priority 0.2570, followed by Cadbury with priority 0.2258, Promasido with priority 0.1188, and the least importance is Friesland campina brand with priority of 0.0733.

Table 29 Composite priorities of the decision alternative about large size

Decision Alternatives of large size	Cadbury	Nestle	Wringing	Promasido	Friesland Campina
Pooled Average Composite Priority	0.4634	0.1328	0.2493	0.0635	0.0909
Relative Preference Ranking	1st	3rd	2nd	5th	4th

Source: Field Survey, 2024

Table 29 reveals the consumers perception with regards to the decision alternatives of large size using the composite priorities. This criterion has only five alternatives in this study. Undergraduate students who are consumers of pocket-friendly sized beverage packaging mostly preferred the brand Cadbury with priority 0.4634, next is Wringing with priority 0.2493, followed by Nestle with priority 0.1328, Friesland campina with priority 0.0909, and the least importance is Promasido brand with priority of 0.0635.

Table 30 Composite priorities of the decision alternative about small size

Decision Alternatives of small size	Cadbury	Nestle	Wringing	Promasido	Friesland Campina
Pooled Average Composite Priority	0.0455	0.1026	0.3190	0.3014	0.2315
Relative Preference Ranking	5th	4th	1st	2nd	3rd

Source: Field Survey, 2024

Table 30 reveals the consumers perception with regards to the decision alternatives of small size using the composite priorities. This criterion has only five alternatives in this study. Undergraduate students who are consumers of pocket-friendly sized beverage packaging mostly preferred the brand Wringing with priority 0.3190, next is Promasido with priority 0.3014, followed by Friesland campina with priority 0.2315,

Nestle with priority 0.1026, and the least importance is Cadbury brand with priority of 0.0455.

Table 31 Composite priorities of the decision alternative about cutting the edge

Decision Alternatives of cutting the edge	Cadbury	Nestle	Wringing	Promasido	Friesland Campina
Pooled Average Composite Priority	0.4907	0.2280	0.0711	0.1031	0.1071
Relative Preference Ranking	1st	2nd	5th	4th	3rd

Source: Field Survey, 2024

Table 31 reveals the consumers perception with regards to the decision alternatives of cutting the edge using the composite priorities. This criterion has only five alternatives in this study. Undergraduate students who are consumers of pocket-friendly sized beverage packaging mostly preferred the brand Wringing with priority 0.4907, next is Nestle with priority 0.2280, followed by Friesland campina with priority 0.1071, Promasido with priority 0.1031, and the least importance is Wringing brand with priority of 0.0711.

Table 32 Composite priorities of the decision alternative about press to open

Decision Alternatives of press to open	Cadbury	Nestle	Wringing	Promasido	Friesland Campina
Pooled Average Composite Priority	0.1823	0.2942	0.4029	0.0631	0.0575
Relative Preference Ranking	3rd	2nd	1st	4th	5th

Source: Field Survey, 2024

Table 4.57 reveals the consumers perception with regards to the decision alternatives of press to open using the composite priorities. This criterion has only five alternatives in this study. Undergraduate students who are consumers of pocket-friendly sized beverage packaging mostly preferred the brand Wringing with priority 0.4029, next is Nestle with priority 0.2942, followed by Cadbury with priority 0.1823, Promasido with priority 0.0631, and the least importance is Friesland campina brand with priority of 0.0575.

Table 33 Composite priorities of the decision alternative about remove cover

Decision Alternatives of remove cover	Cadbury	Nestle	Wringing	Promasido	Friesland Campina
Pooled Average Composite Priority	0.2290	0.0497	0.1830	0.1321	0.4062
Relative Preference Ranking	2nd	5th	3rd	4th	1st

Source: Field Survey, 2024

Table 4.58 reveals the consumers perception with regards to the decision alternatives of remove cover using the composite priorities. This criterion has only five alternatives in this study. Undergraduate students who are consumers of pocket-friendly sized beverage packaging mostly preferred the brand Friesland campina with priority 0.4062, next is Cadbury with priority 0.2290, followed by Wringing with priority 0.1830, Promasido with priority 0.1321, and the least importance is Nestle brand with priority of 0.0497.

Table 34 Composite priorities of the decision alternative about perceived price

Decision Alternatives of perceived price	Cadbury	Nestle	Wringing	Promasido	Friesland Campina
Pooled Average Composite Priority	0.4649	0.2647	0.1497	0.0754	0.0453
Relative Preference Ranking	1st	2nd	3rd	4th	5th

Source: Field Survey, 2024

Table 34 reveals the consumers perception with regards to the decision alternatives of perceived price using the composite priorities. This criterion has only five alternatives in this study. Undergraduate students who are consumers of pocket-friendly sized beverage packaging mostly preferred the brand Cadbury with priority 0.4649, next is Nestle with priority 0.2647, followed by Wringing with priority 0.1497, Promasido with priority 0.0754, and the least importance is Friesland campina brand with priority of 0.0453.

Table 35 Composite priorities of the decision alternative about price fairness

Decision Alternatives of price fairness	Cadbury	Nestle	Wringing	Promasido	Friesland Campina
Pooled Average Composite Priority	0.1376	0.0555	0.4321	0.3132	0.0616
Relative Preference Ranking	3rd	5th	1st	2nd	4th

Source: Field Survey, 2024

Table 35 reveals the consumers perception with regards to the decision alternatives of price fairness using the composite priorities. This criterion has only five alternatives in this study. Undergraduate students who are consumers of pocket-friendly sized beverage packaging mostly preferred the brand Wringing with priority 0.4321, next is Promasido with priority 0.3132, followed by Cadbury with priority 0.1376, Friesland campina with priority 0.0616, and the least importance is Nestle brand with priority of 0.0555.

Table 36 Composite priorities of the decision alternative about price comparison

Decision Alternatives of price comparison	Cadbury	Nestle	Wringing	Promasido	Friesland Campina
Pooled Average Composite Priority	0.1434	0.2376	0.0906	0.4651	0.0633
Relative Preference Ranking	3rd	2nd	4th	1st	5th

Source: Field Survey, 2024

Table 36 reveals the consumers perception with regards to the decision alternatives of price comparison using the composite priorities. This criterion has only five alternatives in this study. Undergraduate students who are consumers of pocket-friendly sized beverage packaging mostly preferred the brand Promasido with priority 0.4651, next is Nestle with priority 0.2376, followed by Cadbury with priority 0.1434, Wringing with priority 0.0906, and the least importance is Friesland campina brand with priority of 0.0633.

Table 37 Composite priorities of the decision alternative about reliability

Decision Alternatives of reality	Cadbury	Nestle	Wringing	Promasido	Friesland Campina
Pooled Average Composite Priority	0.2820	0.4681	0.1234	0.0822	0.0443
Relative Preference Ranking	2nd	1st	3rd	4th	5th

Source: Field Survey, 2024

Table 37 reveals the consumers perception with regards to the decision alternatives of reality using the composite priorities. This criterion has only five alternatives in this study. Undergraduate students who are consumers of pocket-friendly sized beverage packaging mostly preferred the brand Nestle with priority 0.4681, next is Cadbury with priority 0.2820, followed by Wringing with priority 0.1234, Promasido with priority 0.0822, and the least importance is Friesland campina brand with priority of 0.0443.

Table 38 Composite priorities of the decision alternative about safety

Decision Alternatives of safety	Cadbury	Nestle	Wringing	Promasido	Friesland Campina
Pooled Average Composite Priority	0.1294	0.0565	0.0417	0.3082	0.4642
Relative Preference Ranking	3rd	4th	5th	2nd	1st

Source: Field Survey, 2024

Table 38 reveals the consumers perception with regards to the decision alternatives of safety using the composite priorities. This criterion has only five alternatives in this study. Undergraduate students who are consumers of pocket-friendly sized beverage packaging mostly preferred the brand Friesland campina with priority 0.4642, next is Promasido with priority 0.3082, followed by Cadbury with priority 0.1294, Nestle with priority 0.0.0565, and the least importance is Wringing brand with priority of 0.0417.

Table 39 Composite priorities of the decision alternative about assurance

Decision Alternatives of assurance	Cadbury	Nestle	Wringing	Promasido	Friesland Campina
Pooled Average Composite Priority	0.5048	0.1754	0.1848	0.0666	0.0684
Relative Preference Ranking	1st	3rd	2nd	5th	4th

Source: Field Survey, 2024

Table 39 reveals the consumers perception with regards to the decision alternatives of assurance using the composite priorities. This criterion has only five alternatives in this study. Undergraduate students who are consumers of pocket-friendly sized beverage packaging mostly preferred the brand Cadbury with priority 0.5048, next is Wringing with priority 0.1848, followed by Nestle with priority 0.1754, Friesland campina with priority 0.0684, and the least importance is Promasido brand with priority of 0.0666.

Table 40 Composite priorities of the decision alternative about family income

Decision Alternatives of family income	Cadbury	Nestle	Wringing	Promasido	Friesland Campina
Pooled Average Composite Priority	0.4185	0.2675	0.1720	0.0967	0.0464
Relative Preference Ranking	1st	2nd	3rd	4th	5th

Source: Field Survey, 2024

Table 40 reveals the consumers perception with regards to the decision alternatives of family income using the composite priorities. This criterion has only five alternatives in this study. Undergraduate students who are consumers of pocket-friendly sized beverage packaging mostly preferred the brand Cadbury with priority 0.4185, next is Nestle with priority 0.2675, followed by Wringing with priority 0.1720, Promasido

with priority 0.0967, and the least importance is Friesland campina brand with priority of 0.0464.

Table 41 Composite priorities of the decision alternative about income expectation

Decision Alternatives of income expectation	Cadbury	Nestle	Wringing	Promasido	Friesland Campina
Pooled Average Composite Priority	0.2388	0.1313	0.0593	0.5129	0.0578
Relative Preference Ranking	2nd	3rd	4th	1st	5th

Source: Field Survey, 2024

Table 41 reveals the consumers perception with regards to the decision alternatives of income expectation using the composite priorities. This criterion has only five alternatives in this study. Undergraduate students who are consumers of pocket-friendly sized beverage packaging mostly preferred the brand Promasido with priority 0.5129, next is Cadbury with priority 0.2388, followed by Nestle with priority 0.1313, Wringing with priority 0.0593, and the least importance is Friesland campina brand with priority of 0.0578.

Table 42 Composite priorities of the decision alternative about saving

Decision Alternatives of saving	Cadbury	Nestle	Wringing	Promasido	Friesland Campina
Pooled Average Composite Priority	0.1153	0.1095	0.5974	0.1077	0.0701
Relative Preference Ranking	2nd	3rd	1st	4th	5th

Source: Field Survey, 2024

Table 42 reveals the consumers perception with regards to the decision alternatives of saving using the composite priorities. This criterion has only five alternatives in this study. Undergraduate students who are consumers of pocket-friendly sized beverage packaging mostly preferred the brand Wringing with priority 0.5974, next is Cadbury with priority 0.1153, followed by Nestle with priority 0.1095, Promasido with priority 0.1077, and the least importance is Friesland campina brand with priority of 0.0701.

4.3 Rank factors that are critical for consumers of pocket-friendly sized beverages repurchase behaviour for improving service delivery of pocket-friendly sized beverages producers in Southwest, Nigeria.

After the weight of elements at all level was computed, the weight of the whole level was calculated. From the hierarchical structure of the AHP and its characteristics each level in the hierarchy were independent of one another which implied that probability multiplicative law holds. Hence, probability (alternative) = $\sum_{i=1}^{n} pr(Decision\ criterion\ correspond\ to\ the\ alternative)$ * pr(alternative/corresponding decision criterion).

Synthesizing the criteria and sub-criteria of pocket-friendly sized beverage packaging in order to understand the purchase decision or otherwise of the brands, the composite priorities that is priorities for the purchase decision or otherwise is as follows:

Cadbury = [0.4382 {(0.5771 x 0.2258) + (0.2590 x 0.4634) + (0.1639 x 0.0455)}] + [0.2365 {(0.5194 x 0.4907) + (0.3206 x 0.1823) + (0.1600 x 0.2290)}] + [0.1349 {(0.5349 x 0.4649) + (0.3331 x 0.1376) + (0.1320 x 0.1434)}]

	+ [0.1342 {(0.5409 x 0.2820) + (0.3323 x 0.1294) + (0.1268 x 0.5048)}] + [0.0562 {(0.6333 x 0.4185) + (0.2430 x 0.2388) + (0.1237 x 0.1153)}] = 0.2919
Nestle	= [0.4382 {(0.5771 x 0.3251) + (0.2590 x 0.1328) + (0.1639 x 0.1026)}] + [0.2365 {(0.5194 x 0.2280) + (0.3206 x 0.2942) + (0.1600 x 0.0497)}] + [0.1349 {(0.5349 x 0.2647) + (0.3331 x 0.0555) + (0.1320 x 0.2376)}] + [0.1342 {(0.5409 x 0.4681) + (0.3323 x 0.0565) + (0.1268 x 0.1754)}] + [0.0562 {(0.6333 x 0.2675) + (0.2430 x 0.1313) + (0.1237 x 0.1095)}] = 0.2343
Wringing	= [0.4382 {(0.5771 x 0.2570) + (0.2590 x 0.2493) + (0.1639 x 0.3190)}] + [0.2365 {(0.5194 x 0.0711) + (0.3206 x 0.4029) + (0.1600 x 0.1830)}] + [0.1349 {(0.5349 x 0.1497) + (0.3331 x 0.4321) + (0.1320 x 0.0906)}] + [0.1342 {(0.5409 x 0.1234) + (0.3323 x 0.0417) + (0.1268 x 0.1848)}] + [0.0562 {(0.6333 x 0.1720) + (0.2430 x 0.0593) + (0.1237 x 0.5974)}] = 0.2193
Promasido	= [0.4382 {(0.5771 x 0.1188) + (0.2590 x 0.0636) + (0.1639 x 0.3014)}] + [0.2365 {(0.5194 x 0.1031) + (0.3206 x 0.0631) + (0.1600 x 0.1321)}] + [0.1349 {(0.5349 x 0.0754) + (0.3331 x 0.3132) + (0.1320 x 0.4651)}] + [0.1342 {(0.5409 x 0.0822) + (0.3323 x 0.3082) + (0.1268 x 0.0666)}] + [0.0562 {(0.6333 x 0.0967) + (0.2430 x 0.5129) + (0.1237 x 0.1077)}] = 0.1412
Friesland Campina	= [0.4382 {(0.5771 x 0.0733) + (0.2590 x 0.0909) + (0.1639 x 0.2315)}] + [0.2365 {(0.5194 x 0.1021) + (0.3206 x 0.0575) + (0.1600 x 0.4067)}] + [0.1349 {(0.5349 x 0.0453) + (0.3331 x 0.0616) + (0.1320 x 0.0633)}] + [0.1342 {(0.5409 x 0.0443) + (0.3323 x 0.4642) + (0.1268 x 0.0684)}] + [0.0562 {(0.6333 x 0.0464) + (0.2430 x 0.0578) + (0.1237 x 0.0701)}] = 0.1133

On the basis of this calculation, Cadbury brand has the highest composite priority and hence represent the most preferred brand choice for consumers of pocket-friendly sized beverage packaging.

Table 43 Results from the Synthesis

Pocket-friendly size beverages packaging brands	Ideals	Normal	Raw
Cadbury	1.0000	0.2919	0.2919
Nestle	0.8027	0.2343	0.2343
Wringing	0.7513	0.2193	0.2193
Promasido	0.4837	0.1412	0.1412
Friesland Campina	0.3881	0.1133	0.1133

Source: Field Survey, 2024

From table 43, the results show that Cadbury is the most preferred brand of pocket-friendly size beverages packaging. The Ideal column shows the result divided by the largest value so that the preference has a priority of 1. The others are in the same proportion as in Normal column and are interpreted this way: Nestle brand is 80.27% as preferred as Cadbury brand, Wringing brand is 75.13% as preferred as Cadbury brand, Promasido brand is 48.37% as preferred as Cadbury brand, and Friesland campina brand is 38.81% as preferred as Cadbury brand.

5. Discussion

The study, based on the AHP analysis, showed the priorities of the criteria with respect to the main goal which is to investigate the critical factors that enhances repurchase decision of pocket-friendly sized beverages packaging of consumers. This is in line with study of Shohrowardhy and Hassan (2015) that revealed that size is a major influence on repurchase decision among customers. On contrary, the study by Hassan, Leng and Peng (2012) and Khuong and Tran (2018) revealed that size do not

have any influences on repurchase decision. This factor is followed by dispensing mode as the most important factor in the repurchase decision of beverages using the AHP. This is supported by the study of Atróbski, Ziemba, Jankowski and Zioło, (2016) which found that the most important features of packaging for consumers are the comfort of use and durability. This revealed that beverage products are expected to be packed in such a way that it will not be difficult to use and dispense off after use. The third most important factor is price using the AHP. This is in agreement with some previous studies that confirmed that customers' perception of price fairness has been seen as an important effect on the reactions of consumers with respect to strategic decisions that relates to pricing (Ahmad 2015; Hanaysha, 2016; Nwokah & Nne, 2018; Ibitomi 2018). The result corroborate the finding of Albari and Indah (2020), who found that brand image and price (fair price and fixed price) simultaneously have a partial and positive effect on purchasing decision. This assertion also corroborates the submission of Karki *et. al.* (2018) that price is the most important factor that influences the purchase decision of the consumer. More so, the finding of Faith and Agwu, (2014) was not strongly supported by the finding of this study, because it is not the most important factor influencing the student repurchase decision of beverage. On the other hand, perceived quality and students' disposable income are at the bottom line of important factors in their purchase decision. This is contrary to the findings of Vowotor (2002) that quality is imperative to success and growth in the beverage industry because in the present day, it is quality that sensitive consumer demands. The study of Ramya and Ali (2016) negates this study as they claimed that income is an important source of purchasing power; therefore, buying pattern of people differs with different levels of income. Ajide (2015) also found out that the major source of income for students (male and female youths) was pocket money got from relatives and family. And that a significant positive relationship existed between pocket money and spending pattern. This implies that if finances are not adequate, the situation may not affect purchase decision adversely. Therefore, the amount of money available to the student does not determine the purchase decision of beverages.

Finally, results from the Synthesis showed that Cadbury is the most preferred brand of pocket-friendly size beverages packaging. The Ideal column shows the result divided by the largest value so that the preference has a priority of 1. The others are in the same proportion as in Normal column and are interpreted this way: Nestle brand is 80.27% as preferred as Cadbury brand, Wringing brand is 75.13% as preferred as Cadbury brand, Promasido brand is 48.37% as preferred as Cadbury brand, and Friesland campina brand is 38.81% as preferred as Cadbury brand. this is in line with Agbaeze, Nnabuko, Ifediora and Ekoja (2017) that examined the most patronized beverage food drinks between Cadbury Bournvita and Nestle Milo by customers in Enugu State and found that Bournvita had more consumers' patronage than Milo, even though the difference is statistically insignificant.

6. Conclusions

This study was conducted to investigate factors that are critical for consumers of pocket-friendly sized beverages repurchase behaviour in Southwest, Nigeria. The result of the AHP model showed that among the five criteria which are critical for consumers of pocket-friendly sized beverages repurchase behaviour in Southwest, Nigeria that size is the highest ranked repurchase decision when selecting a beverage

in this study. This was followed by dispensing mode. Price of the beverages was ranked third, while perceived quality was ranked fourth and students' disposable income was the least ranked criteria by the students in making purchase decision of beverages. In size sub-criterion, single-serve size was the most preferred pocket-friendly package among the students. In terms of mode of dispensing, it was discovered that students mostly preferred cutting the edge of sachet of the package. Also, in price criterion, price fairness was the most important price criteria, that affect students' purchase decision. Reliability and family income were the main factors driving the perceived quality and disposable income of the students respectively. The study has been able to apply the AHP approach in analysing, prioritizing, and ranking the critical factors for consumers of pocket-friendly sized beverages repurchase behaviour in Southwest, Nigeria and therefore the AHP approach has proved to be an effective tool of determining policy and strategic selection for the beverage industry.

The study concluded that depending on the brand of the product, the sub-criteria factors preferred are different but the actual most preferred is done by synthesis. The synthesis revealed the priority weight of the most preferred which according to the analysis, Bournvita is the most preferred brand followed by Nestle, Wringing, Promasido and finally, Friesland Campina. It was recommended that Beverage industries should not relent in improving the quality of their product as this has been found to be very useful in influencing the consumers' purchase decisions. This study has been able to conclude that size is the highest ranked repurchase decision when selecting a beverage in this study. The study therefore recommended that it has becomes imperative that firms should be conscious of how their product is being packaged into different sizes, as it has a tendency to refrain or attract more customers in the light of the economic instability in an austerity-stricken society. Beverage firms should be able to balance both packaging and quality to meet the level of cost they need as well as build customers confidence.

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