



Publisher homepage: www.universepg.com, ISSN: 2707-4641 (Online) & 2707-4633 (Print)

<https://doi.org/10.34104/ijma.022.00330048>

International Journal of Management and Accounting

Journal homepage: www.universepg.com/journal/ijma

International Journal of
**Management
and Accounting**



Ranking of Factors Enhancing Consumer Purchase Decision of Pocket-Friendly Sized Beverages Packaging: An AHP Approach

Arogundade, Kayode Kingsley*

Department of Business Administration, Ekiti State University, Ekiti State, Nigeria.

*Correspondence: bolaalagbe@gmail.com (Arogundade, Kayode Kingsley, Department of Business Administration, Ekiti State University, Ekiti State, Nigeria).

ABSTRACT

The study investigates how consumers rank the factors that enhance the purchase decision of pocket-friendly sized beverages packaging using Analytic Hierarchy Process. The study adopted a descriptive survey design. Of the total population of 314,797, the selected University students in Southwest, Nigeria, 384 respondents were sampled using Multistage sampling technique using the Krejcie and Morgan, (1970) formula as a guide. Structured questionnaire was administered to the respondents, with a success response rate of 381 (99.22%). Data collected were analysed using descriptive statistics and Analytical Hierarchy Process (AHP). Based on the AHP, the result of the data analysis stipulates that size is the highest ranked purchase decision when selecting a beverage in this study, followed by dispensing mode and price. 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, price fairness was the most important price criterion. Reliability and family income were the most ranked factors driving the perceived quality and students' disposable income of the students respectively. The study concluded that 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 criterion, that affects students' purchase decisions. Reliability and family income were the main factors driving the perceived quality and disposable income of the students respectively. It is then recommended that it is believed that pocket-friendly sized packaging will enable manufacturers to grow their market share and meet fast changing market demands.

Keywords: Consumer patronage, Ranking of factors, AHP approach, Beverages, and Pocket-friendly.

INTRODUCTION:

Consumer behaviour is the actions and decision making processes of individuals who purchase goods and services for own use; it refers to the manner in which choices are made on their personal or household products by using their available resources such as money, time and effort" (Schiffman & Kanuk, 1978; Qazzafi, 2019). "Consumers make decisions on what to buy almost every day and many do not know what

drive them to take that decision to buy what they buy". Purchase decision is a conscious and stepwise procedure that all rational customers must pass through before purchases are made. Stankevich, (2017) agrees with Solomon *et al.* when he described the process of taking decision as "the amount of effort that goes into the conclusion each time it must be made". Kotler and Armstrong, (2014) described purchase decision as "a buyer's decision making phase in which an individual

decides to in reality buy the product being thought about”. (Similarly *et al.*, 2015) opined that, “the purchase decision making process is the stage where consumers actually buy the product”. “The process starts when a buyer has a desire for a specific products or services in order to fulfill his need”. Need in the sense that a consumer wants to follow his or her inner passion, to meet expectations, or live up to a standard. Beverage companies regularly, to a large extent influence consumers to buy their brand instead of their competitors’ products. In order to carry this out, they need to distinguish themselves and their brand. They should be able to convince the consumers that their product offers a superior worth. A brand refers to an identifiable product improved in such a way that the buyer identifies unique added values which matches their desires strongly; this results in a great achievement of being able to keep up these additional values against competitors (McDonald *et al.*, 2014).

Subsequently, for the beverage companies to attract more patronage of their products, pocket-friendly sized packaging must be considered as this may greatly influence consumers’ decision on whether or not to patronise beverages. Therefore, weighing the criteria of pocket-friendly sized packaging such as sizes, dispensing mode, prices, perceived quality and students’ disposable income through empirical research work will help in understanding the purchase decision of students, especially for beverages that have substitute and perform similar functions in the study area. In view of this, this study explores pocket-friendly sized packaging and purchase decision of beverages among students of selected universities in southwest, Nigeria. The procedure that will be used to explain this opinion is the Analytical Hierarchical process. In using this procedure, five major features of size, dispensing mode, price, perceived quality and students’ disposable

income were looked at. For the realization of the goals of factors of pocket-friendly, it is done by engaging in a pair wise comparison of the factors and alternatives, as they impact on consumer’s purchases, especially as it relates to the beverage industry. In addition, the five factors are based on how customers-based purchase decision works (Thu Ha & Ayda, 2014; Kotler, 2017). “The AHP has demonstrated to be a generally accepted multi-criteria decision method” (Hossain, 2020; Sardar *et al.*, 2020; Adekoya & Oyatoye, 2011).

“It enables decision-makers to structure, analyse, evaluate and prioritises any compound problem, such as beverage products that are of different brands. “It gives in a hierarchical structure, an idea about the relationships between goal, criteria and sub-criteria”. “The position this study anticipates to ascertain conforms to this hierarchical structure”. “The AHP is applied in this study to evaluate the criteria and the sub-criteria in the hierarchical structure, in order to decide which of the pocket-friendly criteria are the most important to consumers’ decision to purchase”.

METHODOLOGY:

The study adopted descriptive survey design. From the total population of 314,797 from the selected University students in Southwest, Nigeria, 384 respondents were sampled using Multistage sampling technique using the Krejcie and Morgan, (1970) formula as a guide. Structured questionnaire was administered to the respondents, with a success response rate of 381 (99.22%). Data collected were analysed using descriptive statistics and Analytical Hierarchy Process (AHP) technique

RESULTS:

Investigate how consumers rank the factors that enhance the purchase decision of pocket-friendly sized beverages packaging.

Table 1: Composite priorities of the criteria about Goal (Source: Field Survey, 2021).

Goal Purchase decision	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	1 st	2 nd	3 rd	4 th	5 th

Table 1 show 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 per-

ception of the undergraduate students who are consumers of pocket-friendly sized beverage pack-aging, 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.

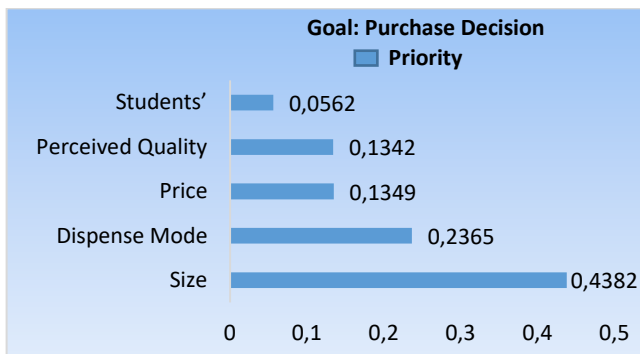


Fig. 1: Bar chart showing decision criteria with their corresponding priority.

The horizontal bar chart in **Fig. 1** represent the pictorial diagram of decision criteria where the horizontal bar length is the priority of each criterion. From the chart, size has the longest bar with priority 0.4382, followed by dispense mode with priority 0.2365, price with priority 0.1349, perceived quality with priority 0.1342, while the students' disposable income has the shortest bar with priority 0.0562. **Table 2** 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.

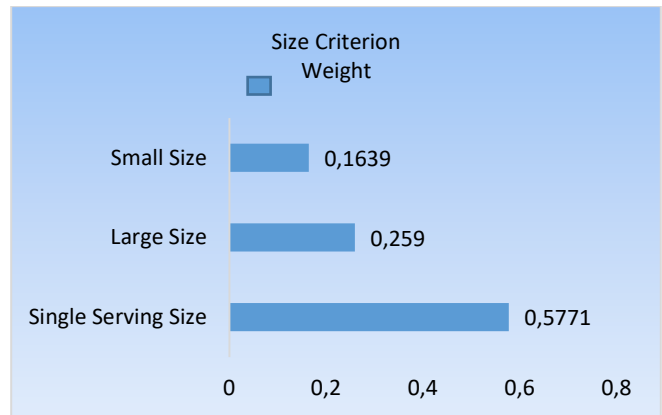


Fig. 2: Bar chart showing decision sub-criteria with their corresponding priority.

The horizontal bar chart in **Fig. 2** represent the pictorial diagram of decision sub-criteria where the horizontal bar length is the priority of each criterion. From the chart, single serving size has the longest bar with priority 0.5771, followed by large size with priority 0.2590, while the small size has the shortest bar with priority 0.1639.

Table 2: Composite priorities of the sub-criteria about criteria (Source: Field Survey, 2021).

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

Table 3: Composite priorities of the sub-criteria about criteria (Source: Field Survey, 2021).

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

Table 3 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.

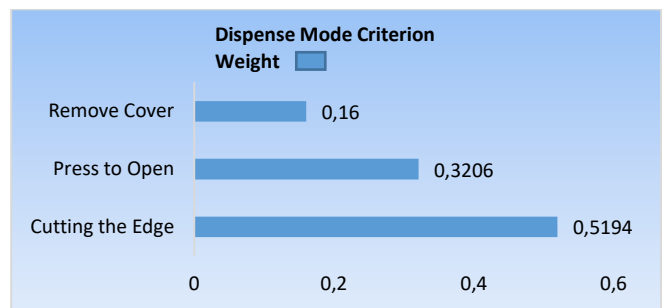


Fig. 3: Bar chart showing decision sub-criteria with their corresponding priority.

The horizontal bar chart in **Fig. 3** represent the pictorial diagram of decision sub-criteria where the horizontal bar length is the priority of each criterion. From the chart, cutting the edge has the longest bar with

priority 0.5194, followed by press to open with priority 0.3206, while the remove cover has the shortest bar with priority 0.1600.

Table 4: Composite priorities of the sub-criteria about criteria (Source: Field Survey, 2021).

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

Table 4 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.



Fig. 4: Bar chart showing decision sub-criteria with their corresponding priority.

The horizontal bar chart in **Fig. 4** represent the pictorial diagram of decision sub-criteria where the horizontal bar length is the priority of each criterion. From the chart, perceived price has the longest bar with priority 0.5349, followed by price fairness with

priority 0.3331, while the price comparison has the shortest bar with priority 0.1320.

Table 5 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.



Fig. 5: Bar chart showing decision sub-criteria with their corresponding priority.

The horizontal bar chart in **Fig. 5** represent the pictorial diagram of decision sub-criteria where the horizontal bar length is the priority of each criterion. From the chart, reliability has the longest bar with priority 0.5409, followed by safety with priority 0.3323, while the assurance has the shortest bar with priority 0.1268.

Table 5: Composite priorities of the sub-criteria about criteria (Source: Field Survey, 2021)

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

Table 6: Composite priorities of the sub-criteria about criteria (Source: Field Survey, 2021)

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

Table 6 reveals the consumers perception with regards to the decision criteria of students’ disposable income 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 family income with priority 0.6333, next is income expectation with priority 0.2430 and the least importance is saving with priority of 0.1237.

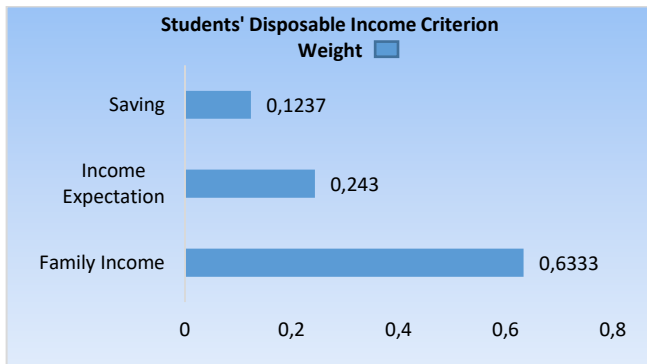


Fig. 6: Bar chart showing decision sub-criteria with their corresponding priority.

The horizontal bar chart in **Fig. 6** represent the pictorial diagram of decision sub-criteria where the horizontal bar length is the priority of each criterion. From the chart, family income has the longest bar with priority 0.6333, followed by income expectation with priority 0.2430, while the saving has the shortest bar with priority 0.1237.

Table 7 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.

Table 7: Composite priorities of the decision alternative about single serving size (Source: Field Survey, 2021).

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	3 rd	1 st	2 nd	4 th	5 th

Table 8: Composite priorities of the decision alternative about large size (Source: Field Survey, 2021).

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	1 st	3 rd	2 nd	5 th	4 th

Table 8 reveals the consumers perception with regards to the decision alternatives of large size using the composite priorities. This criterion has only five alter-

Undergraduate students who are consumers of pocket-friendly sized beverage pack-aging mostly preferred the brand Nestle with priority 0.3251, next is Wringing with priority 0.2570, follo-wed by Cadbury with priority 0.2258, Promasido with priority 0.1188, and the least importance is Friesland camping brand with priority of 0.0733.

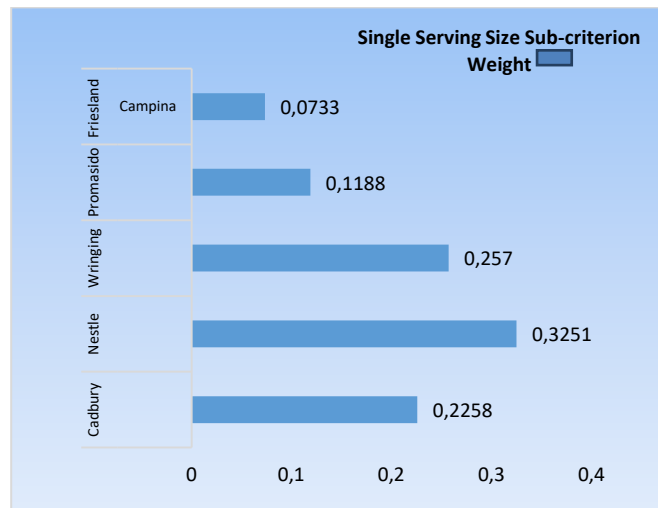


Fig. 7: Bar chart showing decision alternatives of single serving size.

The horizontal bar chart in **Fig. 7** represent the pictorial diagram of decision alternatives of single serving size where the horizontal bar length is the priority of each criterion. From the chart, Nestle brand has the longest bar with priority 0.3251, followed by Wringing with priority 0.2570, Cadbury with priority 0.2258, Promasido with priority 0.1188, while the Friesland campina brand has the shortest bar with priority 0.0733.

natives in this study. Undergraduate students who are consumers of pocket-friendly sized beverage pack-aging 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.

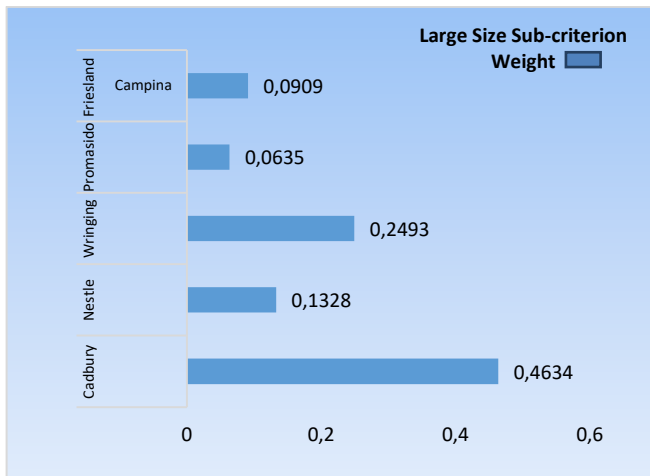


Fig. 8: Bar chart showing decision alternatives of large size.

The horizontal bar chart in **Fig. 8** represent the pictorial diagram of decision alternatives of large size where the horizontal bar length is the priority of each criterion. From the chart, Cadbury brand has the longest bar with priority 0.4634, followed by Wringing with priority 0.2493, Nestle with priority 0.1328, Friesland campina with priority 0.0909, while the Promasido brand has the shortest bar with priority 0.0635. The test for consistency of consumers’ purchase decision of pocket-friendly sized beverages. **Table 9** 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.

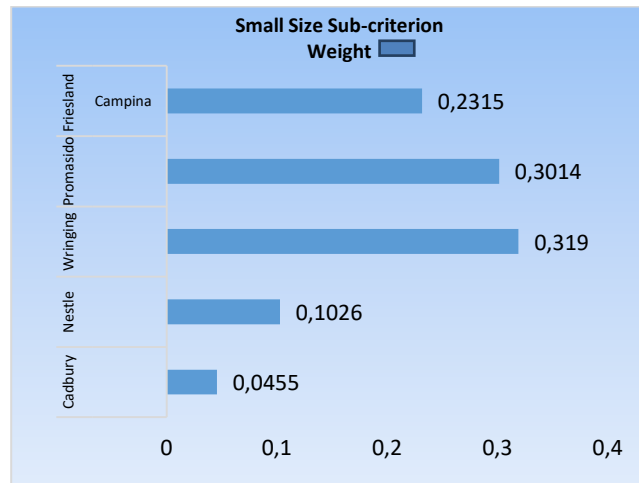


Fig. 9: Bar chart showing decision alternatives of small size.

The horizontal bar chart in **Fig. 9** represent the pictorial diagram of decision alternatives of small size where the horizontal bar length is the priority of each criterion. From the chart, Wringing brand has the longest bar with priority 0.3190, followed by Promasido with priority 0.3014, Friesland campina with priority 0.2315, Nestle with priority 0.1026, while the Cadbury brand has the shortest bar with priority 0.0455.

Table 9: Composite priorities of the decision alternative about small size (Source: Field Survey, 2021).

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	5 th	4 th	1 st	2 nd	3 rd

Table 10: Composite priorities of the decision alternative about cutting the edge (Source: Field Survey, 2021).

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	1 st	2 nd	5 th	4 th	3 rd

Table 10 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.

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.

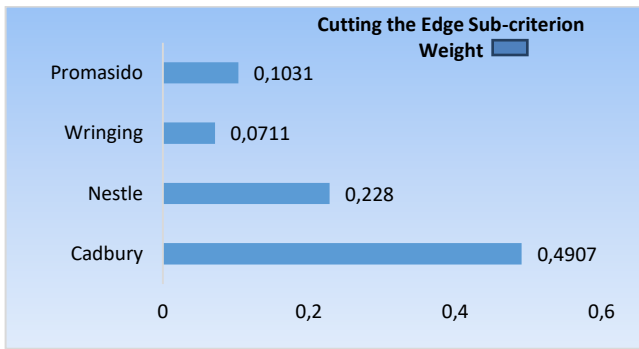


Fig. 10: Bar chart showing decision alternatives of cutting the edge.

The horizontal bar chart in **Fig. 10** represent the pictorial diagram of decision alternatives of cutting the edge where the horizontal bar length is the priority of each criterion. From the chart, Wringing brand has the longest bar with priority 0.4907, followed by Nestle with priority 0.2280, Friesland campina with priority 0.1071, Promasido with priority 0.1031, while the Wringing brand has the shortest bar with priority 0.0711.

Table 11 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.

The horizontal bar chart in **Fig. 11** represent the pictorial diagram of decision alternatives of press to open where the horizontal bar length is the priority of each criterion. From the chart, Wringing brand has the long-est bar with priority 0.4029, followed by Nestle with priority 0.2942, Cadbury with priority 0.1823, Proma-sido with priority 0.0631, while the Friesland campina brand has the shortest bar with priority 0.0575.

Table 11: Composite priorities of the decision alternative about press to open (Source: Field Survey, 2021).

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	3 rd	2 nd	1 st	4 th	5 th

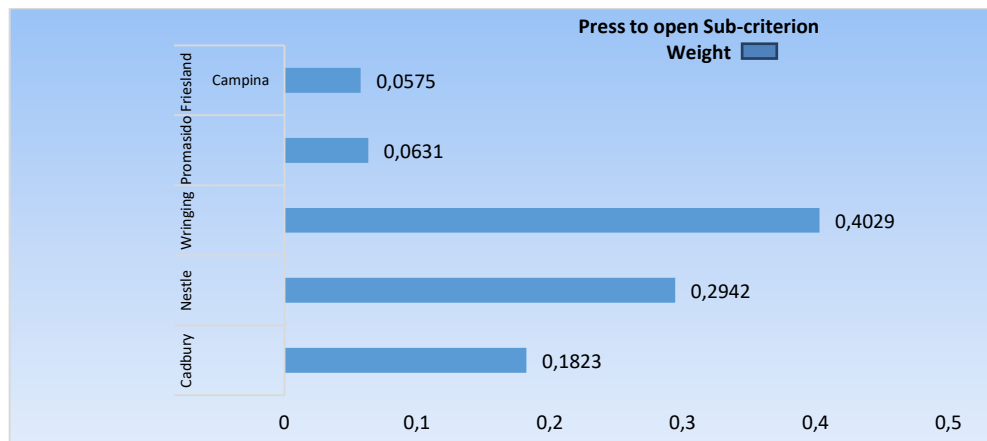


Fig. 11: Bar chart showing decision alternatives of press to open.

Table 12: Composite priorities of the decision alternative about remove cover (Source: Field Survey, 2021).

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	2 nd	5 th	3 rd	4 th	1 st

Table 12 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 camp-

ina 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.

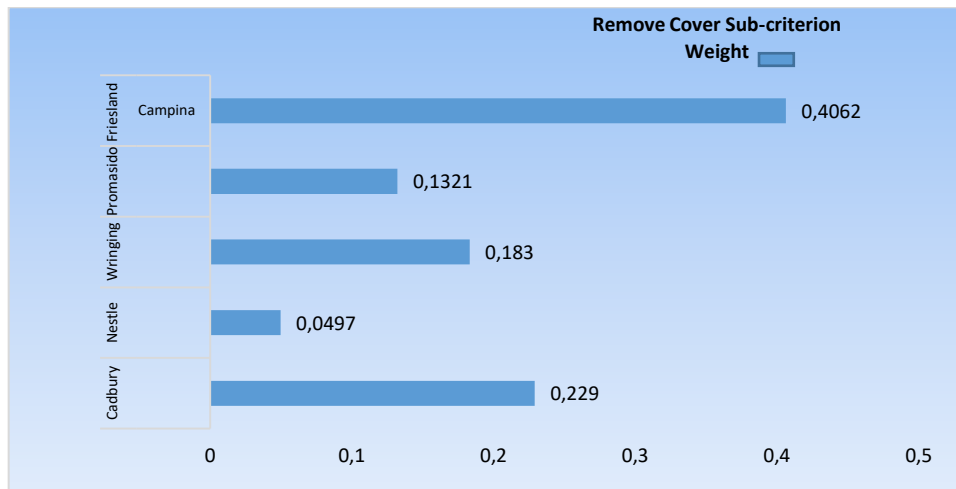


Fig. 12: Bar chart showing decision alternatives of remove cover.

The horizontal bar chart in **Fig. 12** represent the pictorial diagram of decision alternatives of remove cover where the horizontal bar length is the priority of each criterion. From the chart, Friesland campina brand has

the longest bar with priority 0.4062, followed by Cadbury with priority 0.2290, Wringing with priority 0.1830, Promasido with priority 0.1321, while the Nestle brand has the shortest bar with priority 0.0497.

Table 13: Composite priorities of the decision alternative about perceived price (Source: Field Survey, 2021).

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	1 st	2 nd	3 rd	4 th	5 th

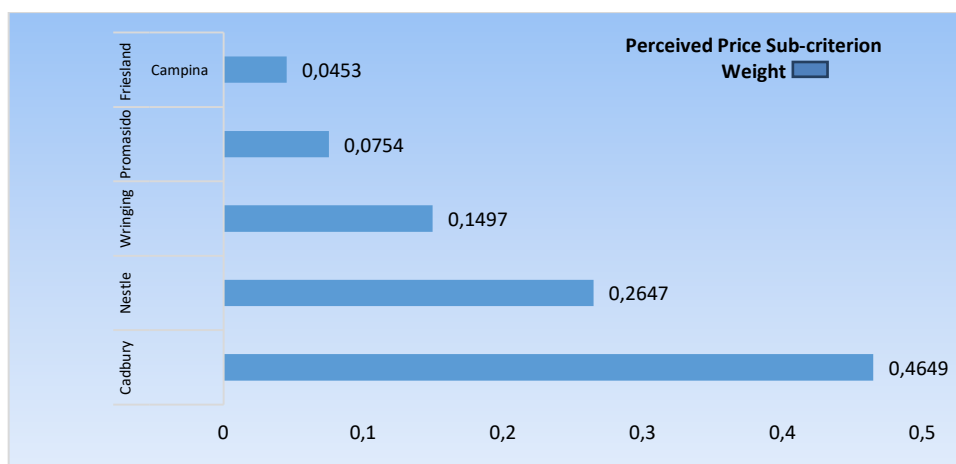


Fig. 13: Bar chart showing decision alternatives of perceived price.

Table 13 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. The horizontal bar chart in **Fig. 13** represent the pictorial diagram of decision alternatives of perceived price where the horizontal bar length is the priority of each criterion. From the chart, Cadbury brand has the lon-

gest bar with priority 0.4649, followed by Nestle with priority 0.2647, Wringing with priority 0.1497, Promasido with priority 0.0754, while the Friesland campina brand has the shortest bar with priority 0.0453.

Table 14: Composite priorities of the decision alternative about price fairness (Source: Field Survey, 2021).

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	3 rd	5 th	1 st	2 nd	4 th

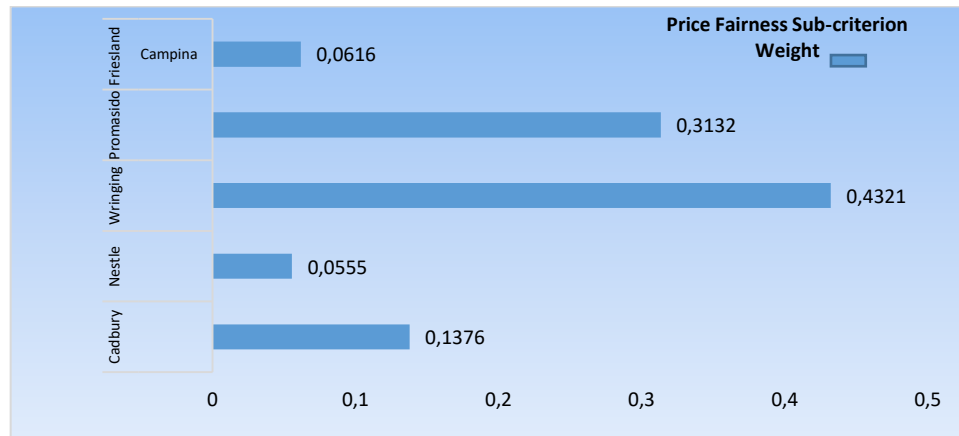


Fig. 14: Bar chart showing decision alternatives of price fairness.

Table 14 reveals the consumer’s 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. The horizontal bar chart in **Fig. 14** represents the pictorial diagram of decision alternatives of price fairness where the horizontal bar length is the priority of each criterion. From the chart, Wringing brand has the longest bar with priority 0.4321, followed by Promasido with priority 0.3132, Cadbury with priority 0.1376, Friesland campina with priority 0.0616, while the Nestle brand has the shortest bar with priority 0.0555.

Table 15: Composite priorities of the decision alternative about price comparison (Source: Field Survey, 2021).

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	3 rd	2 nd	4 th	1 st	5 th

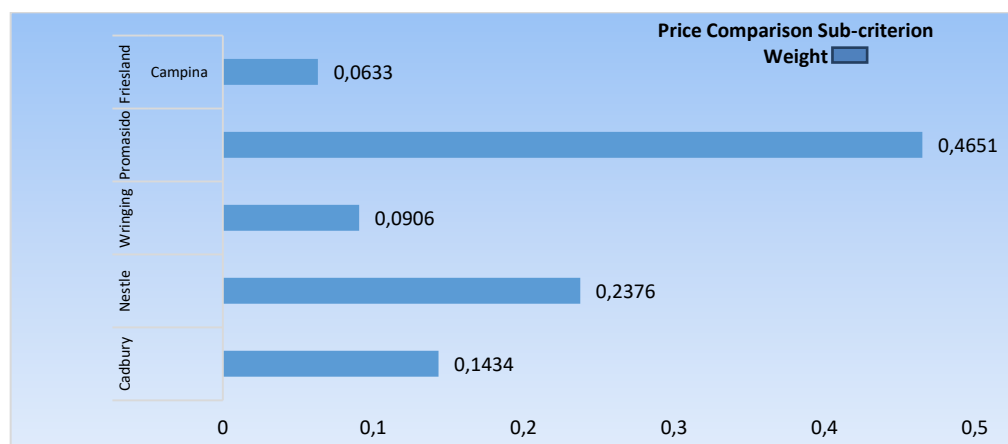


Fig. 15: Bar chart showing decision alternatives of price comparison.

Table 15 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 Fries-

land campina brand with priority of 0.0633. The horizontal bar chart in **Fig. 15** represent the pictorial diagram of decision alternatives of price fairness where the horizontal bar length is the priority of each criterion. From the chart, Promasido brand has the longest bar with priority 0.4651, followed by Nestle with priority 0.2376, Cadbury with priority 0.1434, Wringing with priority 0.0906, while the Friesland campina brand has the shortest bar with priority 0.0633.

Table 16: Composite priorities of the decision alternative about reliability (Source: Field Survey, 2021).

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	2 nd	1 st	3 rd	4 th	5 th

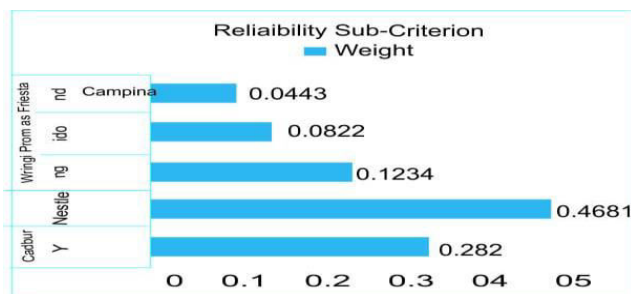


Fig. 16: Bar chart showing decision alternatives of reliability.

Table 16 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. The horizontal bar chart in **Fig. 16** represent the pictorial diagram of decision alternatives of reality where the horizontal bar length is the priority of each criterion. From the chart, Nestle brand has the longest bar with priority 0.4681,

followed by Cadbury with priority 0.2820, Wringing with priority 0.1234, Promasido with priority 0.0822, while the Friesland campina brand has the shortest bar with priority 0.0443.

Table 17 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 0.0565, and the least importance is Wringing brand with priority of 0.0. The horizontal bar chart in **Fig. 17** represent the pictorial diagram of decision alternatives of saving where the horizontal bar length is the priority of each criterion. From the chart, Wringing brand has the longest bar with priority 0.5974, followed by Cadbury with priority 0.1153, Nestle with priority 0.1095, Promasido with priority 0.1077, while the Friesland campina brand has the shortest bar with priority 0.0417.

Table 17: Composite priorities of the decision alternative about safety (Source: Field Survey, 2021).

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	3 rd	4 th	5 th	2 nd	1 st

Table 18: Composite priorities of the decision alternative about assurance (Source: Field Survey, 2021).

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	1 st	3 rd	2 nd	5 th	4 th

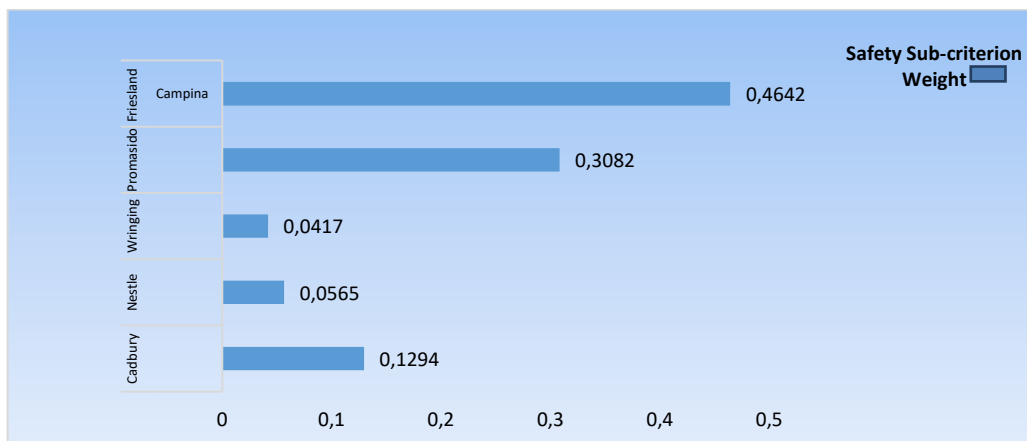


Fig. 17: Bar chart showing decision alternatives of safety.

Table 18 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 Pro-

masido brand with priority of 0.0666. The horizontal bar chart in Fig. 18 represent the pictorial diagram of decision alternatives of saving where the horizontal bar length is the priority of each criterion. From the chart, Cadbury brand has the longest bar with priority 0.5048, followed by Wringing with priority 0.1848, Nestle with priority 0.1754, Friesland campina with priority 0.0684, while the Promasido brand has the shortest bar with priority 0.0666.

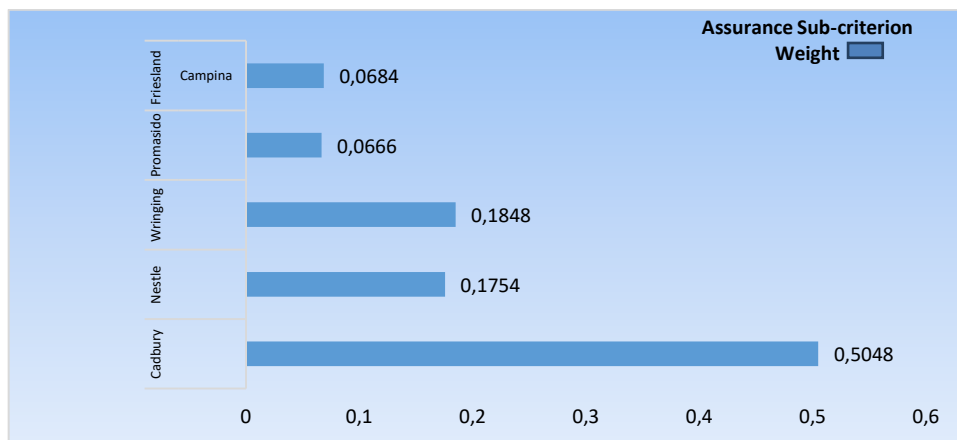


Fig.18: Bar chart showing decision alternatives of assurance.

Table 19: Composite priorities of the decision alternative about family income (Source: Field Survey, 2021).

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	1 st	2 nd	3 rd	4 th	5 th

Table 19 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, Wringing with priority 0.1720, Promasido with priority 0.0967, and the least importance is Friesland campina brand with priority of 0.0464. The horizontal bar chart in Fig. 19 represent the pictorial diagram of decision alternatives of family income where the horizontal bar length is the priority of each criterion. From the chart, Cadbury brand has the longest

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. The horizontal bar chart in Fig. 19 represent the pictorial diagram of decision alternatives of family income where the horizontal bar length is the priority of each criterion. From the chart, Cadbury brand has the longest

bar with priority 0.4185, followed by Nestle with priority 0.2675, Wringing with priority 0.1720, Promasido

with priority 0.0967, while the Friesland campina brand has the shortest bar with priority 0.0464.

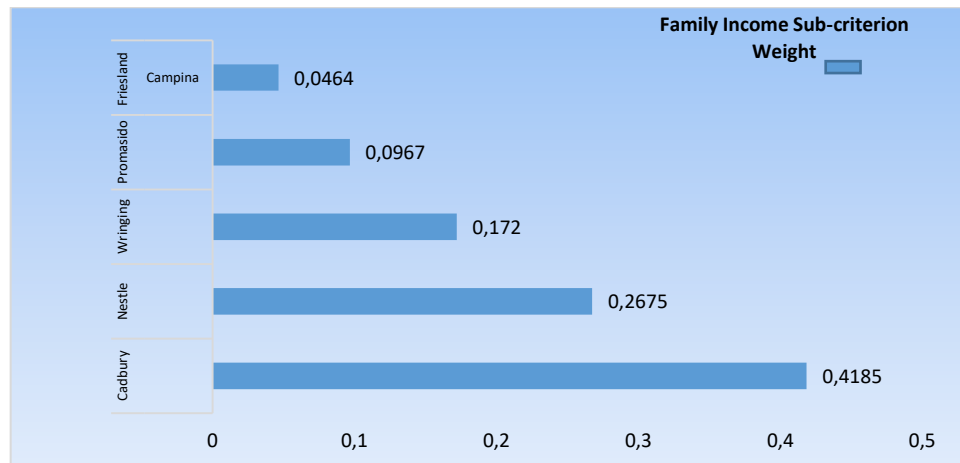


Fig. 19: Bar chart showing decision alternatives of family income.

Table 20: Composite priorities of the decision alternative about income expectation (Source: Field Survey, 2021).

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	2 nd	3 rd	4 th	1 st	5 th

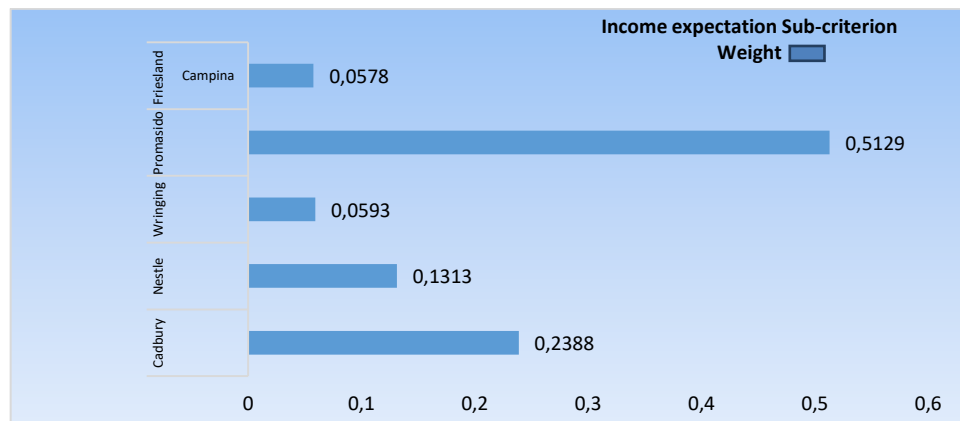


Fig. 20: Bar chart showing decision alternatives of income expectation.

Table 20 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. The horizontal bar chart in Fig. 20 represent the pictorial diagram of decision alternatives of income expectation where the horizontal bar length is the priority of each criterion. From the chart, Promasido brand has the longest bar with priority 0.5129, followed by Cadbury with priority 0.2388, Nestle with priority 0.1313, Wringing with priority 0.0593, while the Friesland campina brand has the shortest bar with priority 0.0578.

Table 21: Composite priorities of the decision alternative about saving (Source: Field Survey, 2021).

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	2 nd	3 rd	1 st	4 th	5 th

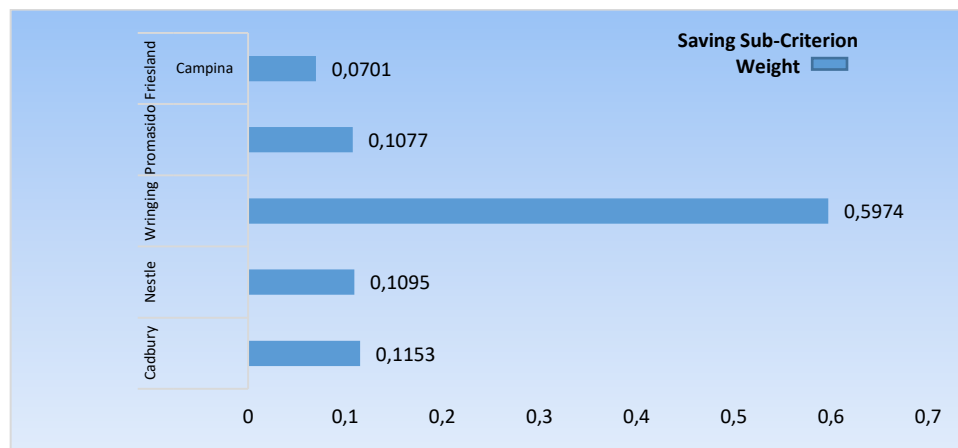


Fig. 21: Bar chart showing decision alternatives of saving.

The horizontal bar chart in **Fig. 21** represent the pictorial diagram of decision alternatives of saving where the horizontal bar length is the priority of each criterion. From the chart, Wringing brand has the longest bar with priority 0.5974, followed by Cadbury with priority 0.1153, Nestle with priority 0.1095, Promasido with priority 0.1077, while the Friesland campina brand has the shortest bar with priority 0.0701. **Table 21** 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.

DISCUSSION:

The objective investigates how consumers rank the factors that enhance the purchase decision of pocket-friendly sized beverages packaging. The consumers' perception with regards to the decision criteria of size using the composite priorities revealed that Undergraduate students who are consumers of pocket-friendly sized beverage packaging mostly ranked single serving size as the highest with priority 0.5771, next is large size with priority 0.2590, and the least importance is small size with priority of 0.1639. The students may have preferred the single-serve size (pocket-friendly) beverages because of their reluctances in carrying something heavy and also the size on their income. The lower price of single-serve size beverages

can explain why it is most preferred. When products are considerably cheaper than full-size ones, they tend to make up a significant proportion of demand. This is corroborated by Ford, Moodie and Hastings cited in Khuong and Tan, (2018) that found out that a product being of various sizes influences consumer purchase decision more significantly than an item which is of only one size. Another angle to the respondent's preference is the fact that storing an opened sachet of beverages is challenging because of ants and other insects invasion, therefore, they will prefer to go for some-thing that can be used at once and discard the empty package in the dustbin (Hernddorf, 2020). This result explained and affirmed the fact that students preferred the small size packaged more than the big size package. In the sub-criteria for dispensing mode, the study revealed that the respondents 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. Respondents' perception with regards to the decision criteria of price using the composite priorities revealed that perceived price is the most ranked with priority 0.5349, next is price fairness with priority 0.3331, and the least important is price comparison with priority of 0.1320. Cutting the edge of sachet allow the students to cover the left over in the package of the product. This often gives them the opportunity of later usage and also reduces the incidence of insect invasion. More so, cutting the edge of sachet is the most common mode of dispensing in the country. Piana, (2007) noted that if a product is technically or socially difficult to use as well as requires a high level of

expertise, many consumer would renounce to buy it, even if they need it and would like to buy it. The study in line with earlier submission of Zekiri and Hasani, (2015) and Ashaduzzaman and Mahbub, (2016) that packaging played most important role in purchase decision. The cutting the edge of sachet is the first mode of dis-pensing is pocket-friendly packages, and is common among the beverage producers, unlike the press to open, that is prevalent among the paste producers like toothpaste, tomato paste and other liquid substances. Expectedly, remove the cover is not common among the students. In addition, the result of the sub-criteria of price showed that perceived price has the highest weight in influencing the price purchase decision of the students. Phan and Nguyen, (2016) citing Khan found out that consumers will estimate the product or service value as well as make decision for any of their purchase through price. This will determine whether or not to buy the product. Consumers' perception of price is seen as consumers overall assessment of whe-ther the offered price of a product or service of a seller is really reasonable, acceptable and justified. One key reason why pocket-friendly sizes could work is that they are both more affordable (per package) and chea-per (per unit). This is affirmed by Ogundana, (2012) when it was stated that growing demand for quality products, aided by decreasing disposable income, is influencing the demand for pocket-friendly beverage consumption in the society. Price comparison was the least price criteria that the student takes into consider-ation when taking purchase decision. Consumers per-ception with regards to the decision criteria of percei-ved quality using the composite priorities revealed that reliability is the mostly ranked with priority 0.5409, next is safety with priority 0.3323, and the least importance is assurance with priority of 0.1268. Finally, the study revealed that the respondents mostly ranked family income with priority 0.6333, next is income expectation with priority 0.2430 and the least importance is saving with priority of 0.1237. The result of the sub-criteria revealed that reliability reports an influence proportion of 0.5409 on the sub-criterion of perceived quality on purchase decision of the respondents. According to (Halim *et al.*, 2014), a product that is inconsistent in quality was inevitably bound to lose its customers to its competitor. This shows that the

students are more after purchasing a reliable product than the unreliable one. Safety is another important factor considered to be a major criterion that often affects the purchase decision of the students. No one wants to consume goods that pose danger to good health. It is necessary to be careful of what to eat.

Assurance is the least factor to the students in determining their purchase decision with respect to the perceived quality. Safety of a beverage is very important, because it is a consumable that marred the healthy lifestyle of human; therefore quality is very paramount to the purchase decision of the students. More so, no matter the condition of the individual, reliable product will be his priority, because it conveys the concept of dependability and satisfaction. The study contradict the earlier submission of Setiowati and Liem, (2018) who opined that perceived quality insignificantly influence purchase intention of consumers. Finally, the sub-criteria of students' disposable income revealed that family income is the major source of students' disposable income of the respondents, which arguably affect their purchase decision. This is in line with Ajide, (2015) who found out that the major source of income for students (male and female youths) was pocket money got from relatives and family. Also, income expectation is next in rank while the least is savings. The result revealed that the respondents hardly save as a result of the 46eager stipend they are getting or receiving from their parents which cannot even take care of their basic needs. This was confirmed by (Abolanle *et al.*, 2018) who found that there was a significant relationship between indicators of economic recession and effect of economic recession on lifestyles of undergraduates. Similarly, (Muniady *et al.*, 2014) study noted that the economic situation had a negative relationship with consumer behavior of Malaysian University Students. This is contrary to Sinclair cited in (Ahmad *et al.*, 2012) that believed that the consumer's decision making processes is not rational in the sense that it is objective and consistent; neither does it follow any pre-determined rational, statistical economic patterns.

CONCLUSION AND RECOMMENDATIONS:

From the findings of this study, it was concluded that single-serve size was the most preferred pocket-friendly package among the students. In term 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. It is then recommended that it is believed that pocket-friendly sized packaging will enable manufacturers to grow their market share and meet fast changing market demands. The manufacturer of beverage products should continue to adopt the method of cutting the edge mode of dispensing their product because these unique styles will offer convenience in forms of usage – especially for those students with reasonable disposable income.

ACKNOWLEDGEMENT:

I acknowledged the assistance given by my colleagues who help in reviewing this work and giving constructive criticisms to make this research work a success. I also declare that there is no any conflict of interest in the course of this research and also on the final output of the research.

CONFLICTS OF INTEREST:

The author has no conflict of interest.

REFERENCES:

- 1) Abolanle, O. L., Oluwabusola, C. W., & Olatunbosun, J. S. (2018). The effects of Economic Recession on the Lifestyle of Undergraduates in Nigeria. *The European J. of Social and Behavioural Sciences*, **22**(2), 2667-2683. <https://www.europeanpublisher.com/en/article/10.15405/ejsbs.235>
- 2) Adekoya, A. G. & Oyatoye, E. O. (2011). Determining the Strategic consolidation of the capital-base of Nigerian Commercial Banks. *KCA Journal of Business Management*, **3**(2).
- 3) Ahmad, N., Billo, M. and Lakhan, A. (2012). Effect of product packaging in consumer buying decision. *J. of Business Strategies*, **6**(2), 1-10. <https://www.researchgate.net/publication/344250015>
- 4) Ajide, F. M. (2015). The spending pattern among the youth in Lagos, Nigeria. *Journal of Business and Management*, **17**(4), 66-73.
- 5) Alizadeh, A., Moshabaki, A., Hoseini, S.H.K. & Naiej, A.K. (2014). The Comparison of Product and corporate branding strategy: a conceptual framework. *Journal of Business and Management (IOSR-JBM)*, **16** (1). 14-24. <https://doi.org/10.9790/487X-16141424>
- 6) Ashaduzzaman, M. D., & Mahbub, F. (2016). Understanding the role of packaging elements on buying detergent powder in Dhaka City: A study on Bangladesh. *Asia J. of Business*, **6**(1), 18-33.
- 7) Djatmiko, T. & Pradana, R. (2015). Brand image and product price: it's impact for Samsung Smartphone purchasing decision. *Procedia Social and Behavioural Sciences*, 221-227. <https://doi.org/10.18502/kss.v4i6.6609>
- 8) Halim, P., Swasto, B, & Firdaus, M. R. (2014). The influence of product quality, brand image, and quality of service to customer trust & implication on customer loyalty (Survey on customer brand Sharp Electronics product at the South Kalimantan Province). *European Journal of Business and Management*, **6**(29),
- 9) Herrndorf, M. (2020). Small is beautiful; small is Cheap, But Do the Poor Care? <https://nextbillion.net/small-is-beautiful-small-is-cheap-but-do-the-poor-care/>
- 10) Hossain MM. (2020). Influential factors of tourists' satisfaction in Bangladesh: evidence from selected tourism destinations at Cumilla region, *Can. J. Bus. Inf. Stud.*, **2**(4), 75-86. <https://doi.org/10.34104/cjbis.020.075086>
- 11) Khuong, M. N. & Tran, N. T. H. (2018). The Impacts of product packaging elements on brand image and purchase intention-An Empirical Study of Phuc Long's Packaged Tea Products. *International Journal of Trade, Economics and Finance*, **9**(1).
- 12) Kotler, P. & Armstrong, G. (2014). Principles of Marketing. *Pearson Education*. Fifth Edition.
- 13) Kotler, P. (2017). Principles of Marketing. *Pearson Education*. Seventh European Edition. <https://www.pearson.com/uk/educators/higher-education>
- 14) Krejcie, R. V. & Morgan, D. D. (1970). Determining sample size for research activities. *Educational and psychological measurement*, **30**, 607-610.

- 15) Muniady, R., Al- Mamun, A., & Zainol, N. R. B. (2014). Factors influencing consumer behaviour: A Study among University Students in Malaysia, *Asian Social Science*, 10(9), 1911-2025. <https://ccsenet.org/journal/index.php/ass/article/view/36569>
- 16) Ogundana, F. (2012). Austerity and the challenges of health for all in Nigeria. *International Journal of Development and Sustainability*, 1(2) 437-447.
- 17) Phan, T. A. & Nguyen, T. H. T. (2016). An Analysis of factors impact on customer satisfaction in Vietnam Restaurants: Case of Fast Food Restaurants. *International Journal of Business and Management Review*, 4(6), 1-17.
- 18) Piana, V. (2007). Repurchase. *Economic Web Institute*. <http://www.economicwebinstitute.org/glossary/repurchase.htm>
- 19) Qazzafi, S. (2019). Consumer Buying Decision Process toward Products. *International Journal of Scientific Research and Engineering Development*, 2(5). <https://www.researchgate.net/publication/336047692>
- 20) Sardar S, Hossain MI, and Islam MS. (2020). Factors affecting visitor's satisfaction: an empirical study on the Paharpur Buddha Vihara, Naogaon, Rajshahi, *Int. J. Manag. Account.* 2(4), 61-73. <https://doi.org/10.34104/ijma.020.061073>
- 21) Schiffman, L. E., Kanuk, L. L (1978). *Consumer behaviour*. Eaglewood Cliff, N. J: Prentice Hall.
- 22) Setiowati, R. & Liem, Y. (2018). Impact of packaging design on perceived quality, perceived value, brand preference, and repurchase intention of candy products in Jakarta. *Pertanika Journal of Sociology Science and Humanity*, 26, 297– 306.
- 23) Stankevich, A. (2017). Explaining the Consumer decision-making process: critical literature review. *Journal of International Business Research and Marketing*, 2(6), 7-14. <https://ideas.repec.org/a/mgs/jibrme/v2y2017i6p7-14.html>
- 24) Thu Ha, N. & Ayda, G. (2014). Factors influence consumer purchase decisions of private label food products. A Bachelor Thesis in Business Administration Institution: School of Business, *Society and Engineering*.
- 25) Zekiri, J. & Hasani, V. V. (2015). The role and impact of the packaging effect on consumer buying behaviour. *Economic forum*, 4(1), 232-239. <https://ideas.repec.org/a/scm/ecofrm/v4y2015is1p29.html>

Citation: Kingsley AK. (2022). Ranking of factors enhancing consumer purchase decision of pocket-friendly sized beverages packaging: an AHP approach, *Int. J. Manag. Account.* 4(2), 33-48.

<https://doi.org/10.34104/ijma.022.00330048>

