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The Influence of Product Packaging on Students' Purchasing Intention

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ABSTRACT

In today's competitive market, a product's packaging plays a crucial part in attracting customers to purchase a certain product. There was an increase in the amount of competition between different packaged products. This is because product packaging has a significant impact on the consumer's purchase intention. This study seeks to investigate the influence of product packaging on the purchase intention among students in one of the Malaysian universities. A quantitative approach was used, with a total of 331 respondents drawn from the populations. This paper used descriptive analysis, frequency analysis, reliability analysis, correlation analysis, and multiple regression analysis. All analyses were developed using the Statistical Package for Social Science (SPSS) software. The finding shows that all the hypotheses were accepted. The results indicated that product packaging influences purchasing intention among university students depending on the four dimensions: packaging colour, packaging material, packaging design, packaging size, and shape.

Keywords: Packaging Colour, Packaging Material, Packaging Design, Packaging Size and Shape

1. INTRODUCTION

In current competitive market, product packaging is a critical component that can influence the purchase intention of customers in the market. This is because product packaging can help differentiate similar product and provide a competitive advantage for business to attract more potential customer to purchase their product (Klimchuk & Krasovec, 2007). Based on packaging research by Hussain et al. (2015), the colour of the package is vital since it identifies the product from others in the firm. The more colourful the packaging, the more interested people are in products. In a highly competitive environment, companies used a variety of packing colours to attract customers and remind them of their products. Besides, packaging material is also significant since it prevents losses; if enough material is used, people will be more attracted to the products. The proper brand-related image for a product's packaging can aid to grab customers' attention and affect their buy intent (Hussain et al., 2015). Whereas, graphic design involves the name, type, and structure design, which includes packaging or product size (Nilsson & Ostrom, 2014). Therefore, convenience marketers can use packaging to attract customers and

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get a competitive advantage over other competitors. Moreover, when buyers cannot determine the quality of a product simply on the appearance of the packaging, the size and shape of the packaging will have a significant influence on their purchase intent (Silayoi & Speece, 2007). Product packaging with larger size and shape will provide superior value than the product packaging in small size and shape in terms of customer purchase intention (Vila, 2006).

Nowadays, packaging is used by corporations as a sales and marketing technique. Customer purchase behaviour is also influenced by packaging elements such as package quality, colour, wrapping, and others. Packaging is a complete solution that acts as the last selling point and promotes impulsively buying. Packaging increases revenue and market share while reducing marketing and advertising costs. Asserts that a package piques a consumer's interest in a certain brand, develops its reputation, and enhances how the products are perceived by the customers (Rundh, 2005). Additionally, packaging supports buyer in choosing an item from a board range of options and provides value to items (Underwood et al., 2001; Silayoi, & Speece, 2007). Moreover, packaging entices people to buy (Wells et al., 2007). According to Kuvykaite et al. (2009) package captures the customer's attention to a certain product and impacts the consumer's buying intention. The package adds a single value to the item. Silayoi and Speece (2004) stated that packaging is a significant factor in differentiating similar product. Furthermore, Wells et al. (2007) stated that packaging play a vital role in influencing customer purchasing decisions. Packaging is also vital in the marketing environment where the best packaging creates a positive impression of the product in the mind of the consumer (AliceLouw, 2006).

In today's economy, there are many businesses that offer the same goods in the economy of today. Consumers are exposed to thousands of brands in just one trip to the store. Therefore, in today's aggressive market, packaging has developed into a significant tools and marketing strategy for capturing customers' buying intention (Ranjbarian et al., 2012). In a 30-minute shopping session, an American customer encounters 20,000 goods in a single grocery visit (Belch & Belch, 1999). Packaging can help differentiate a product or provide it a competitive advantage (Klimchuk & Krasovec, 2007). According to Nilsson and Ostrom (2014) graphic design which involve the name, printing labels, and structure layout, which includes packaging or product size. All aspects of packaging have a beneficial impact on the consumer's brand experience and purchase choice, resulting in brand loyalty (Sukri et al., 2014). Convenience marketers may utilise packaging to encourage consumers and get a competitive edge over their competition. The colour of the package is crucial since it distinguishes the product from others in the firm. The more colourful the packaging, the more interested people are in the items. In a competitive market, companies utilised a variety of packing colours to attract customers and remind them of their products. Packaging material is also significant since it prevents losses; if enough material is utilised, people will be attracted to products. Font style is printed on packaging based on customer perception, since firms who employ the best font style effectively grab market share.

Consumer buying decisions are significantly influenced by product packaging, particularly at the moment of sale. Additionally, the packaging of products has evolved into a crucial step in the sales process (Rettie & Brewer, 2000). The availability of product packaging at supermarkets has enhanced consumer choice. Furthermore, there has been an increase in competitiveness among packaged goods. Customers perceive self-service packaging as a salesman on the shelf. Therefore, product packaging is increasingly regarded as a key channel for branding and communication (Rettie & Brewer, 2000). Mateen Khan (2018) there is a link between product packaging and customer purchasing intention. Rundh (2009) stated that product packaging must create favourable feedback. Moreover, Waheed et al. (2018) people are increasingly paying greater attention to product packaging and labelling. On the other side, package design and material have an influence on the purchase intentions of consumers (Deliya & Parmar, 2012). Also, there is a

connection between packaging style and font size was discovered (Waheed et al. (2018). Rundh (2009) discovered a link between the colour of the package and the written content.

The purpose of this study is to examine the influence of product packaging on the purchase intentions of students in Malaysia, focusing on four distinct packaging characteristics: packaging colour, packaging material, packaging design, and packaging size and shape. Product packaging has now become an important factor to attract customer to purchase the certain product.

Packaging has developed into a tool for company sales promotion. Product packaging quality, colour, wrapping, and other packaging factors as well impact the consumer purchasing behaviour. Packaging is a comprehensive bundle that works best as an impulse-buying marketing tactic. Packaging increases revenue and market share while reducing marketing and advertising costs. The package is appeals to a customer's interest in a specific brand, increase brand reputation, and improves the perceptions of the customer toward the products in the market (Sukri & Roslan, 2014; Rundh, 2005). Furthermore, product packaging raises the worth and value of goods (Underwood et al, 2001; Silayoi, & Speece, 2007). Packaging helps brands stand out from the competition and helps customers choose a product from among several options. Additionally, packaging entices people to buy (Wells et al., 2007). While a variety of elements impact purchasing intention, most customers have recently recognised that a product's packaging is critical in attracting their attention to the goods (Alhamdi, 2020; Kim et al., 2014). The impact of product packaging on buyer purchase intention has been the subject of plenty research, allowing many firms to invest more in research to identify innovative product package designs that would catch the buyer's attention. The packaging of a product, particularly in the manufacturing business, has a critical role in influencing consumer buying behaviour (Riaz et al., 2021). The manufacturing industry is largely concerned with goods and services (Sukri, 2022; Sukri & Yusoff, 2021; Sukri & Yusoff, 2019). As a result, the packaging utilised to package the goods is critical and leaves a lasting impression on the product customer. When the design characteristics of a product's packaging are appealing, the impression that the product wrapped within the container is of high quality is likely to be created (Ampuero & Vila, 2006).

Numerous studies have been conducted on the packaging's elements and how they give impact on the consumer preferences (Amin et al., 2015). A few numbers have concentrated on independent elements as how they affect buyer' purchase decisions (Underwood et al., 2001). Furthermore, there are several studies looked at the impact of the packaging and its elements on the total purchasing choice of customers (Underwood, 2003). However, there is no clear consensus in the research literature on the impact of package components on customer purchase intentions. As a result, this study looks at how packaging give impact on the customer purchase intentions. Conducting research that allows for the integration of theoretical and managerial issues might be beneficial. By emphasising the effects of package characteristics on buyer purchase intentions according to their generation and taking a closer look at two characters, the significance of package features in the processes of purchasing decision-making has been established (Silayoi & Speece, 2004). Visual aspects (packaging colour, packaging material, package design and packaging size and shape) and components of information (packaging font style and printed materials) are examples of such features (Estiri et al., 2010). Thus, there is a need to study on the impact of product packaging that can influence the students' purchase intention. Therefore, this study was conducted to discover how product packaging give impact toward students' purchase intentions. This study examines the relationship between product packaging and the purchase intentions of students. The current study is undertaken on the basis of these considerations to answer the following research questions:
1. Does packaging colour influence purchase intention of students?
2. Does packing material influence the purchase intention of students?
3. Does packaging design influence the purchase intention of students?
4. Does packaging size and shape influence the purchase intention of students?

2. LITERATURE REVIEW

2.1 Purchase Intention

Purchase intention is defined as a choice or decision made to buy a particular item in the future that is not required to be implemented because it depends on a person's willingness to do so (Yeo et al., 2018). A person's purchase intention will arise when a person has planned to acquire a certain product or at a certain timeframe (Liat & Wuan, 2014). The decision to purchase a product will be determined by actions, understanding of a certain product, and attitude (Jamali & Khan, 2018). Hosein (2012) has found that examining buyer procedures and recognition and investigating customers' buying intentions has become an interesting field of study (Bidyut et al., 2016). Customers' purchase intentions were a major crucial aspect for a corporation to find a way to achieve a competitive advantage in the industry. Moreover, Billeter et al. (2012) discovered that customers' purchasing intent develops into a crucial factor to anticipating purchasing habits, which can be discovered by the values and benefits of a given product or service. Hussain et al. (2015) study on purchase intention opined that it is the capability to buy that is often defined as the likelihood of a consumer purchasing an item or service. whereas a buyer's purchase intention is a situation in which a buyer will acquire a given item under a particular condition (Prianjana Roy, 2021). The behaviour, observations, and attitudes of purchasers are frequently linked to purchase intent. Pre-purchase behaviour includes buying intention as well. The pre-purchase chores are carried out at the beginning of the essential leadership process, when someone is compelled to buy (Estiri et al., 2010). These obligations are crucial for both advertising and consumers (Wikström et al., 2019). The phase includes two important components: recognition of the problem and recognition that the arrangement may appear to be addressing certain needs by way of a purchase (Estiri et al., 2010). After gathering information and learning about options, buyers describe a number of determining features that they may use to contrast and evaluate a product. Due to this, buying intent is classified as pre-purchase behaviour. Thus, purchase intention includes the expectation that the client will purchase the product after evaluating it. Many elements influence a customer's purchase intention when picking a product, and the ultimate choice is based on the purchase intention of consumers who are influenced by significant external variables (Keller, 2009). Customer's perceptions, product design or packaging, consumer knowledge, and celebrity endorsement are just a few of the factors that influence purchase intent. Furthermore, Ruto (2015) said that a customer's grasp of the product is the most important factor in their choice to buy it. One believes that the product's packaging should be modest and straightforward, while the other believes that eye-catching packaging should be provided. According to Younus et al. (2015), these aspects are also important and can influence consumer purchase intent.

2.2 Packaging Colour

Every colour has a distinct significance that may affect how people feel and think. The most important aspect of packaging is the colour, since different shades will influence how different consumers perceive or feel about the package (Keller, 2009). Additionally, Keller (2009) pointed out that a key element in helping customers recognise between competitors' products with similar features is the colour of the packaging. When customers relate to new package designs for a fresh product that have the same colour to the initial product package, some study claimed that this would affect consumers' purchase intentions (Olawepo & Ibojo, 2015). The right colour selection for the package might draw the consumer's attention, according to earlier research by Javed et al. (2015). However, a bad colour selection will make consumers less interested in the products. All of the colours used by the packaging are significant in appealing to and emphasising certain moods (Hussain et al., 2015). The research also reveals a product's package colour influences a customer's decision to buy, that a product's packaging colour may be remembered, and that a product's packaging colour can provide a firm a competitive edge.

2.3 Packaging Materials

To protect a product from damage, wrapping a layer of product materials on the outside is necessary. (Ali et al., 2019). Similarly, the package material is described as an instrument for advertising the product's value to the consumer. The packaging material used can impact the product's perceived quality, and packaging material can protect the product from being harm (Farooq, Habib & Aslam, 2015). According to research by Mutsikiwa and Marumbwa (2013), public preferred natural materials for packaging in previously since they were easy to obtain and didn't require much processing. Buyers are more willing to select a product with outstanding packaging as compare with poor packaging (Zekiri & Hasani, 2015). They also came to the conclusion that the materials used in packaging have a big effect on how people buy things and how likely they are to buy something. Also, Zekiri and Hasani (2015) say that the materials used for packaging have a big effect on how people buy things, which changes their plans to buy. However, this will change with time. Packaging materials have also evolved into materials that are treated to build up their endurance and quality (Mutsikiwa & Marumbwa, 2013). Material that makes up the packaging is an essential component that serves to protect the item from suffering any kind of harm that might lead to financial losses.

2.4 Purchase Size and Shape

According to Silayoi and Speece (2004), the size and shape of the package are determined by the item's dimension and appearance outline. According to packaging studies, consumers who select a practical package design have their purchase habits influenced by the size and shape of the packaging (Ali et al.,2019). Consumers will be drawn in by the exterior impression of large packaging, but if the item within the container is very little or in small quantities, the buyer will not be interested in purchasing the product again (Ali et al., 2019). In comparison, customers perceive that larger product packaging offers better value than small-size product packaging. (Ali et al., 2019). Consumers can form an impression of a certain product only by observing the overall size and shape of the packaging (Sook et al., 2020).

3. RESEARCH METHODOLOGY

3.1 Conceptual Framework

This study's conceptual framework is derived from the prior research presented in this publication. The framework highlighted the effect of product packaging on students' intention to purchase. The conceptual framework of the study is shown in Figure 1.
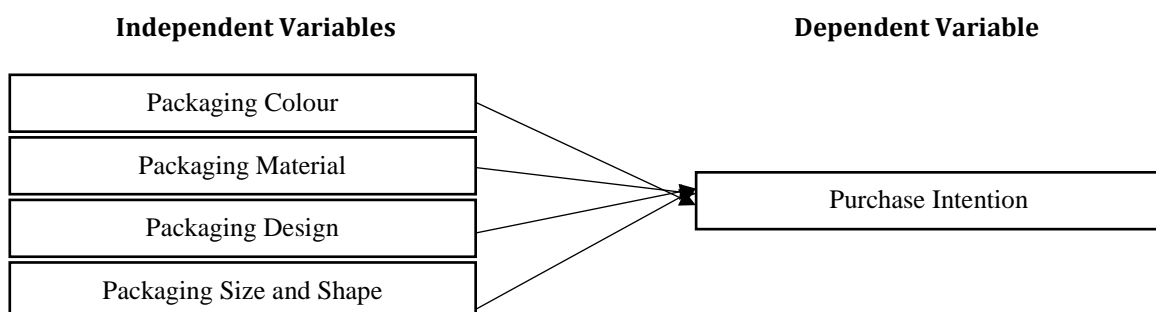

Figure 1. Conceptual Framework

Based on Figure 1, below are the developed hypotheses of this study:

H_1: There is a significant influence of packaging colour on students' purchase intention.
H_2: There is a significant influence of packaging material on students' purchase intention.
H_3: There is a significant influence of packaging design on students' purchase intention.
H_4: There is a significant influence of packaging size and shape on students' purchase intention.

3.2 Research Design

In this study, quantitative research is the research methodology being used. Quantitative research can be defined as research which uses numerical data as inputs (Crowther & Lancaster, 2008). The advantage is that through numerical inputs, there is mathematical and statistical evidence. This can help in increasing the reliability and credibility of the research findings. By outlining how a study proceeds from research questions to outcomes, research design acts as a roadmap for steering the research process. Furthermore, it is a complete planning process that is used to gather and evaluate data in order to have a greater understanding of the topic. The research design also specifies the type of study, research questions, hypotheses, dependent and independent variables, experimental design, data collecting techniques, and statistical analysis strategy. The study design, as seen above, effectively addressed and performed the research problem. Quantitative approaches were employed for the quantitative study since they are faster and take less time than qualitative ones. Quantitative research techniques are the phenomena of gathering numerical data and analysing it using mathematical approaches, particularly statistics. Furthermore, a quantitative technique entails gathering data that is susceptible to information and qualifying it for statistical reasons in order to support or deny the given hypotheses.

Moreover, the quantitative approach begins with a research topic, followed by the formulation of hypotheses and research questions, literature reviews, and quantitative data analysis. The use of statistical data can save time and effort in this study and analysis, while the qualitative researcher will have more time and effort to describe the results. Furthermore, because the data obtained is in the form of numbers, percentages, and quantifiable quantities, it can be evaluated and carried out using IBM Statistical Package for Social Science, or SPSS, which saves a lot of time and work. Most importantly, quantitative research may ensure that respondents remain anonymous. Lastly, the quantitative technique is chosen because of its benefits to the research, since it allows the researcher to analyse the study's findings in a precise and impartial manner. It is a very systematic procedure, and the researcher will gather data from the questionnaires that have been issued. The questionnaire will be circulated through the internet to students from several Malaysian institutions in order to collect data for this study. Close-ended questions will be used to ask students since they give quantifiable replies and allow researchers to collect numerical data and statistical results.

3.3 Population, Sample Size and Data Collection Method

The population of this study was all students from one faculty of a public university in Malaysia. The faculty has 6 diploma programmes, 37 bachelor's degree programmes, 20 master's degree programmes and 12 doctoral programmes from various faculty. There are 2,460 students in the faculty and 331 sets of questionnaires were distributed and a total of 322 surveys were completed, representing a response rate of 97%. The study used administered online questionnaire as the mode of data collection.

4.   DISCUSSION OF THE FINDINGS

4.1 Reliability Analysis

Sekaran and Bougie (2013) define reliability as the internal consistency of a measurement element, which proves its homogeneity. The reliability analysis method investigates the qualities and questions of a measuring scale, as well as the relationships between its individual pieces and their internal consistency (Sekaran & Bougie, 2013). During the examination of factor dependability, Cronbach's alpha was utilised to assess the internal consistency and reliability of the scales. A value of 0.6 or below indicates insufficient internal consistency dependability, those beyond 0.7 indicate acceptable reliability, and those exceeding 0.8 are regarded as adequate for the study's aims (Sekaran, 2003). Thus, Sekaran and Bougie (2013) found that the closer the value or reliability coefficient is to 1.0, the more reliable the measurement items are.

4.2 Frequency Analysis

As mentioned in previous chapter, frequency analysis is analysis which describes the frequency of results and the name of the data. In this research, this analysis is used to examine the demographic-related information of respondents, including their gender, age, race, and qualification of education level.

Table 1. Gender of Respondents

	Gender	Frequency	Percentage (%)	Valid Percentage (%)	Cumulative Percentage (%)
Valid	Male	147	45.7	45.7	45.7
	Female	175	54.3	54.3	100.0
	Total	322	100.0	100.0	

The demographics section included percentage and frequency breakdowns of the evidence collected from questionnaires given to respondents. This study included 322 respondents, and Table 1 lists the gender breakdown of those participants. Table 1 shows that 147 respondents (or 45.7%) are male and the remaining respondents are female (or 54.3%).

Table 2. Age Distribution of Respondents

	Age	Frequency	Percentage (%)	Valid Percentage (%)	Cumulative Percentage (%)
Valid	18-22 years old	133	41.3	41.3	41.3
	23-27 years old	162	50.3	50.3	91.6
	28-32 years old	17	5.3	5.3	96.9
	33-37 years old	7	2.2	2.2	99.1
	38-40 years old	3	0.9	0.9	100.0
	Total	322	100.0	100.0	

Table 2 displays the age distribution of respondents. From the table, it is shown that the majority of respondents are from the age group of 23–27 years old, which consists of 162 respondents (50.3%) out of 322 respondents. It is followed by respondents from the age group of 18–22 years old, which consists of 133 respondents (41.3%). Besides, there are 17 respondents (5.3%) and 7 respondents (2.2%) in the age groups of 28–32 years old and 33–37 years old, respectively. Lastly, there are only 3 respondents (0.9%), who range in age from 38 to 40 years old.

Table 3. Race of Respondents

	Race	Frequency	Percentage (%)	Valid Percentage (%)	Cumulative Percentage (%)
Valid	Malay	198	61.5	61.5	61.5
	Chinese	96	29.8	29.8	91.3
	Indian	28	8.7	8.7	100.0
	Total	322	100.0	100.0	

The total race of respondents is shown in Table 3, which consists of Malay, Chinese, and Indian. As shown in Table 3, the majority of respondents are Malay, which has a total of 198 respondents and equals 61.5% of the total percentage. It is followed by respondents from China, who have 96 respondents and a percentage of 29.8%. Lastly, there are only 28 respondents from the Indian race and they have a percentage of 8.7% of the total races.

Table 4. Qualification and Education Level of Respondents

	Qualification	Frequency	Percentage (%)	Valid Percentage (%)	Cumulative Percentage (%)
Valid	Degree	301	93.5	93.5	93.5
	Master	13	4.0	4.0	97.5
	PhD	8	2.5	2.5	100.0
	Total	322	100.0	100.0	

The qualifications and educational backgrounds of the respondents to this study are displayed in Table 4. 301 respondents, or 93.5% of the 322 respondents who took part in this study, are currently pursuing a bachelor's degree, as shown in Table 4. Additionally, it was discovered that 13 respondents, or 4.0% of the total, have a master's degree. Finally, it was discovered that only 8 of the 322 respondents were PhD students.

4.3 Descriptive Analysis

The variables of the investigation are statistically analysed in a descriptive analysis. Means and standard deviation (SD) values for the independent and dependent variables were calculated. The results for those questionnaire set-based descriptions will be reported separately in the following sub-section. Each variable has been rated on a scale of 1 to 5 points. Table 5 shows the different mean levels based on the average or sum of the scores for each variable.

Table 5. Classification of Mean Level

Mean Level for Variables	Indications
1.00 to 1.66	Low
1.67 to 3.33	Medium
3.34 to 5.00	High

Table 6. Descriptive Analysis

Factor Variables	Mean	Standard Deviation	Number of Respondents (N)
Purchase Intention	4.0885	0.97990	322
Packaging Colour	3.9612	1.03352	322
Packaging Material	3.9449	1.02873	322
Packaging Design	3.9309	1.01818	322
Packaging Size and Shape	3.8874	0.99900	322

Table 6 display the mean, standard deviation, and number of respondents of all dependent and independent variable in this research. The Five-point Likert Scale was used for this study, as was

described in Table 6. The scale ranges from scale 1 (Strongly Disagree) to scale 2 (Disagree), scale 3 (Neutral), scale 4 (Agree), and scale 5 (Strongly Agree), with scale 1 being the most negative. The range of all variables' means was between 3.8874 to 4.0885. The mean of purchase intention, packaging colour, packaging material, packaging design and packaging size and shape are 4.0885, 3.9612, 3.9449, 3.9309 and 3.8874 respectively. The mean for all variables is relatively high because all the dependent variable and independent variable score a range in mean from the lowest 3.8874 to the highest 4.0885. This result showed that the purchase intention of students was having high impact with all the independent variable which is packaging colour, packaging material, packaging design and packaging size and shape. Standard deviation shows how much the data deviate from the mean. The data are grouped around the mean when the standard deviation is low; when it is high, the data are distributed. The range of all dependent variable and independent variable's standard deviation (SD) were range between 0.97990 to 1.03352. Among all the variables in this study, packaging colour have the highest value of standard deviation, which is 1.03352, followed by packaging material (1.02873), packaging design (1.01818), packaging size and shape (0.99900) and purchase intention (0.97990).

4.4 Reliability Analysis

Research reliability measures how consistent and dependable a research method's findings are. If a measurement can be used on the same thing repeatedly with flawless results, it is thought to be reliable.

Table 7. Results of Reliability Test

Variables	Number of Items	Cronbach's Alpha	Remarks
Purchase Intention	4	0.934	Dependent Variable
Packaging Colour	4	0.952	Independent Variable
Packaging Material	4	0.953	Independent Variable
Packaging Design	4	0.953	Independent Variable
Packaging Size and Shape	4	0.950	Independent Variable

Table 7 shows the reliability analysis of the dependent variable and independent variables in this study. Purchase intention is the dependent variable for this research, while the rest, such as packaging colour, packaging material, packaging design, packaging size and shape, are independent variables. In the results of the reliability test for this research, it shows that all of the variables have an alpha value larger than 0.80, which suggests high reliability for this research. The alpha for purchase intention, packaging colour, packaging material, packaging design, packaging size and shape are 0.934, 0.952, 0.953, and 0.950 respectively. In short, all of the tests are good, reliable, and independent, and they all meet the level of reliability needed for further study.

4.5 Correlation Analysis

Correlation is a measurement method for determining the relationship between two or more variables. The measurement scales should typically be interval scales, despite the fact that various correlation coefficients may be employed with other types of data. Correlation coefficients could vary from -1.00 to +1.00. A number of +1.00 shows perfect correlation in the desired direction, whereas a value of -1.00 denotes perfect correlation in the opposing direction. In the case of a value of 0, there is no connection. See Table 8. The degree of importance of a correlation is one of the most crucial indicators of its dependability. The significance of a given correlation coefficient will depend on the size of the sample used to calculate it. The bivariate correlation technique was used to conduct a two-tailed test of significance at two levels of difference: (a) extremely significant (p = 0.01) and (b) significant (p = 0.05).

Table 8. The scale of Pearson's Correlation Coefficient (Source: Zamani et al., 2020)

Size of Correlation	Interpretation
0 < r ≤ 0.19	Very low correlation
0.2 ≤ r ≤ 0.39	Low correlation
0.4 ≤ r ≤ 0.59	Moderate correlation
0.6 ≤ r ≤ 0.79	High correlation
0.8 ≤ r ≤ 1.0	Very high correlation

Table 9. Inter-correlation between Variables

Variables		Purchase Intention	Packaging Colour	Packaging Material	Packaging Design	Packaging Size and Shape
Purchase Intention	Pearson Correlation Sig (2-tailed) N	-				
Packaging Colour	Pearson Correlation	.895**	-			
	Sig (2-tailed)	.000				
	N	322				
Packaging Material	Pearson Correlation	.890**	.895**	-		
	Sig (2-tailed)	.000	.000			
	N	322	322	322		
Packaging Design	Pearson Correlation	.872**	.880**	.891**	-	
	Sig (2-tailed)	.000	.000	.000		
	N	322	322	322	322	
Packaging Size and Shape	Pearson Correlation	.882**	.891*	.906**	.873*	-
	Sig (2-tailed)	.000	.000	.000	.000	
	N	322	322	322	322	322

** Correlation is significant at the 0.01 level (2-tailed).

The rule of thumb states that the Pearson Correlation value illustrates how the dependent variable and independent variables are related. For instance, when the value is in the range of 0.00-0.30, it implies that there is little correlation between the dependent variable and independent variables. While 0.50-0.70 is referred to as moderate correlation, 0.30-0.50 is classified as weak correlation. The correlation is deemed to be strong when the value is between 0.70 and 0.90, great when it is between 0.90 and 1.00. As shown in the Table 9, packaging colour, packaging material, packaging design and packaging size and shape have a positive relationship with purchase. Purchase intention is showing extremely great relationship with all the independent variables which consist of packaging colour (0.895), packaging material (0.890), packaging design (0.872) and packaging size and shape (0.882). Thus, it is suggested that any changes from each of independent variables will positively affect the dependent variable.

4.6 Regression Analysis

Table 10. Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.925a	0.855	0.853	0.37536

a Predictors: (Constant), Packaging Colour, Packaging Material, Packaging Design and Packaging Size and Shape

R Square measures how well the model accounts for variation. The better the model matches the data, the higher the R-square value. Table 10 revealed that 85.5% of the independent variables had a significant impact on purchase intention among FSGM students. Other factors account for the remaining 14.5% of the influence on their opinion of the sportswear brand. Multiple regression is used as a test of hypotheses and is used to determine whether independent factors can predict the dependent variable. Table 11 shows the results of the regressions for the independent variables, such as package colour, package material, package design, and package size and shape.

Table 11. Coefficients Analysis

Coefficients[a]

Model		Beta	t-Ratio	Sig. t
1	(Constant)		5.165	0.000
	Packaging Colour	0.339	6.098	0.000
	Packaging Material	0.239	3.934	0.000
	Packaging Design	0.183	3.469	0.001
	Packaging Size and Shape	0.204	3.571	0.000

[a] Dependent Variable: Purchase Intention

The results of standardised beta coefficients show how strongly each independent variable effects the dependent variable. The packaging colour is determined to have the highest beta value, which is 0.339, while the other independent variables' beta coefficients (β) include packaging material (β= 0.239), packaging design (β= 0.183), and packaging size and shape (β= 0.204), as indicated in the Table 11. Given that packaging design has the lowest beta coefficients out of the four independent variables, it appears that packaging colour has the greatest influence on the dependent variable. The coefficients for each variable are shown in Table 11, and it can be seen that the independent variables packaging colour (β=0.339, t=6.098, p=0.000), packaging material (β=0.239, t=3.934, p=0.000), packaging design (β=0.183, t=3.469, p=0.001), and packaging size and shape (β=0.204, t=3.571, p=0.000) are significantly related to the dependent variable purchase intention as the p-value of each variable is less than 0.05 ($p \leq 0.05$).

It is suggested that significance level is indicated as p-value ranged from 0 to 1, and smaller p-value demonstrates stronger evidence to accept the hypotheses developed for the study (Simply Psychology, 2019). When the p-value is less than 0.05, the hypothesis is accepted or vice versa; however, when the p-value is larger than 0.05, the hypothesis is not accepted since it is not significant. See Table 12 and Table 13.

Table 12. Table of P-Value (Source: Abhigyan, 2020)

$P \geq 0.1$	Absence of evidence against the null hypothesis: data consistent with the null hypothesis
$0.05 \leq P < 0.1$	Low evidence against the null hypothesis in favour of the alternative
$0.01 \leq P < 0.05$	Moderate evidence against the null hypothesis in favour of the alternative
$0.001 \leq P < 0.01$	Strong evidence against the null hypothesis in favour of the alternative
$P < 0.001$	Very strong evidence against the null hypothesis in favour of the alternative

Table 13. Summary for Hypothesis Testing Results

	Hypothesis	P-Value	Remark
H_1	There is a significant influence of packaging colour on students' purchase intention.	0.000 (p < 0.05)	Accepted
H_2	There is a significant influence of packaging material on students' purchase intention.	0.000 (p < 0.05)	Accepted
H_3	There is a significant influence of packaging design on students' purchase intention.	0.001 (p < 0.05)	Accepted
H_4	There is a significant influence of packaging size and shape on students' purchase intention.	0.000 (p < 0.05)	Accepted

5. CONCLUSION

This study indicated that packaging colour, packaging material, packaging design, packaging size and shape, and student purchase intent were positively correlated. The research improved our understanding of student purchase intentions. As demonstrated by the outcome, all product packaging factors have a substantial positive link with the dependent variable. Therefore, the study has supplied significant and applicable information for future researchers to produce more studies on the effect of product packaging on students' intentions to purchase. This study is essential for marketers to have a deeper understanding of how product packaging has affected the purchase intentions of students. Most marketers focus on the consumer's decision on purchase intention (Sukri et al., 2015). Moreover, product packaging has evolved into a significant sales promotion strategy for the majority of organisations. Therefore, marketers should pay special attention to how product packaging has affected the purchasing intentions of Malaysian students.

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