

Physical Attributes of Fashion Apparel that Influence the Purchase Intention of 20 to 24-Year-Old University Women in Lima

JORGE HUGO OMAR ARROYO SALAZAR ¹

CARLOS ANTONIO QUISPE ATÚNCAR ²

NANCY ELIZABETH BARREDA DE MIRANDA ³

SUBMITTED: 26/01/2022 ACCEPTED: 30/01/2023 PUBLISHED: 17/07/2023

ABSTRACT

The objective of this research is to determine whether the physical attributes of fashion apparel significantly affect the purchase intention of 20 to 24-year-old university women in Lima, Peru. Based on the answer to this question, product development activities oriented at satisfying this consumer are more assured, because a producer can direct resources to key activities in order to obtain competitive products. For this reason, an applied study following a correlational approach was conducted, in which the statistical method was used according to the multiple regression test. Data collection was carried out using the survey technique in the study unit. The analysis of the responses leads to measuring the influence that certain factors have on purchase intention, ranking physical attributes on a scale of importance, and concluding that physical attributes significantly influence purchase intention.

Keywords: physical attributes; purchase intention; product development; fashion apparel; theory of planned behavior.

INTRODUCTION

The global fashion industry's sales are immense. The apparel market is diverse and competitive. In 2019, Peru exported US\$274,976,022 (Asociación de Exportadores [ADEX], 2020) in fashion apparel. According to the Sociedad Nacional de Industrias (SNI, 2021), Peru's textile and apparel sector generates more than 398,000 formal jobs, meeting domestic and foreign market requirements. This sector represents 6.4% of the country's manufacturing GDP. There has been a decline in this sector in recent years due to the COVID-19 pandemic. To increase sales in domestic and international markets, it is necessary to determine consumers' aesthetic, physical, and emotional needs and interpret them correctly. The low competitiveness of the Peruvian fashion sector stems from several factors: weak development of productive forces, technological backwardness, and inadequate interpretation of customer needs, among others. Product development cycles are variable and difficult to control.

If product development takes a long time, the competition anticipates new products, and thus losses are incurred. This study contributes to the advancement of knowledge because it allows for an understanding of the perception of Lima consumers of a fashion product. The results provide guidance to the producer to focus on the most important qualities of the products to stimulate purchase intention. It is of interest to companies that manufacture garments. The objective of the research study is to determine the importance of the physical attributes of fashion apparel that influence the purchase intention of 20 to 24-year-old women in Lima. The theory of planned behavior (TPB) is used to determine the influences of the three physical attributes on purchase intention. No similar studies have been conducted using this method.

1 Master's degree in Industrial Engineering from Universidad Nacional Mayor de San Marcos [UNMSM]. Currently working as head of CERSEU of the School of Industrial Engineering of UNMSM (Lima, Peru).

Orcid: <https://orcid.org/0000-0003-2803-095X>

Corresponding author: jorge.arroyo@unmsm.edu.pe

2 Currently working as professor at the School of Industrial Engineering of UNMSM (Lima, Peru).

Orcid: <https://orcid.org/0000-0001-7527-2666>

E-mail: cquispea@unmsm.edu.pe

3 Currently working as professor at the School of Industrial Engineering of UNMSM (Lima, Peru).

Orcid: <https://orcid.org/0000-0001-7545-2851>

E-mail: nancy.barreda@unmsm.edu.pe

Knowing the importance of the attributes allows an understanding of consumer preferences. The results are valuable because they allow the allocation of resources to strengthen the most important qualities of the product, thus favoring producers, who are more likely to invest in a new product line.

Background

The first research on physical attributes sought to determine the quality attributes perceived by the customer. Abraham-Murali and Littrell (1995) compiled a list of attributes of fashion apparel (see Tables 1 and 2). Hines and O'Neal (1995) and Forsythe et al. (1996) conducted research that sought to understand the intrinsic characteristics of fashion products; they conducted studies to understand product quality characteristics. In contrast, De Klerk and Lubbe (2004, 2008) studied the importance of aesthetics in determining the quality of fashion garments of female consumers in the purchase decision. They found that the sensory, emotional and cognitive dimensions of aesthetic experience play a major role when female consumers determine the quality of products during the purchase decision. The product's design and materials should relate to the aesthetic dimension. Color and texture are especially of great importance in the aesthetic experience. O'Cass (2004) studied the effects of materialism, self-image, and product-image congruency on consumers' involvement in fashion. He examined purchase decision involvement, subjective fashion knowledge, and consumer confidence. The results indicated that involvement in fashion apparel is significantly affected by the degree of materialism, gender, and age of the consumer.

As for purchase intention, De Cannière et al. (2009) compared the Relationship Quality model (RQ) and the Theory of Planned Behavior, concluding that the TPB is a better predictor of consumer behavior. The explanation is that the attitudes measured by it are closer in time than the quality evaluations made by the customer, as defined in the theory of the quality relationship. Likewise, Vieira (2010) made a study on the causes that influence the purchase decision-making of fashion products and reached the following conclusions: materialism does not determine the purchase, both men and women have the same predisposition to buy, younger people have more predisposition to buy than older people, knowledge of fashion products also increases the predisposition to buy, and the perception of commitment to fashion also increases willingness to buy.

Torres and Padilla (2013) measured the intention to purchase consumable goods from the market

via the logistic regression model. The products studied were soft drinks, chewing gum, and beer. They concluded that this model is adequate to measure and, at the same time, to pose a predictive equation on purchase intention. For Kotler and Armstrong (2017), the sequence of the customer decision comprises the following stages: understanding the customer's need, locating the data, comparing options, making a purchase choice, and taking action after the purchase. It should be noted that the acquisition process starts before the actual purchase and continues for quite some time afterward; therefore, sales experts need to focus on the entire buying process, not just on the final stage of the purchase. During the testing phase, the customer rates the brands and forms purchase intentions. Generally, they would choose to purchase the brand of their choice; however, two factors may come between the purchase intention and the purchase decision. The attitude of others is the first factor. People's decisions are greatly influenced by what the people around them may think. For instance, if two cars are to be compared, such as a luxury car and an economy car, if someone who has influence over another person thinks that the price of the luxury car is too high, then the buyer will most likely take this opinion into account and decide not to buy the luxury car.

In addition, López and Terán (2018) proposed and evaluated an instrument to measure the variables involved in the TPB model, including attitude, subjective norm, perceived behavioral control, and purchase intention, related to organic products for agriculture. Instruments were compiled and a questionnaire was administered via e-mail, using the Google Drive format. The final results demonstrated the validity of the instrument within acceptable values. The authors state that this instrument can be used by companies to obtain empirical information that may serve to make decisions, as well as to back up and support some proposed ideas and theories about purchase intention, which have not been evaluated in the field of organic products for agriculture.

The theory of planned behavior developed by Ajzen (2020) has been widely applied to the prediction and change of behavior, including behavior related to the use of technology. He briefly describes the theory, answering a number of issues and questions that have been raised regarding the TPB.

Among the issues discussed are the difference between TPB and the theory of reasoned action, perceived behavioral control versus self-efficacy, the difference between perceived behavioral control and locus of

control, the possibility of including additional predictors in TPB, non-availability of standard TPB questionnaires, predicting behavior in a choice situation, the intention-behavior gap, and a comparison of the technology acceptance model to the TPB. (Ajzen, 2020, p. 134)

Theoretical Basis

Physical attributes. For Abraham-Murali and Littrell (1995), intrinsic attributes are physical or chemical characteristics of the product related to its function; if modified, they alter the intrinsic characteristics of the product. These attributes are related to the material and technical characteristics of the product and are important because their qualities represent the quality of the item. Attributes are a property or set of properties that determine the ability of the product to satisfy the customer’s demands. They are the product itself. They are the qualities of products perceived by consumers during purchase or use. Abraham-Murali and Littrell (1995) compiled a composite list of attributes of fashion apparel by sorting them into conceptual categories and dimen-

sional levels and examined them in ways most useful to retail marketers. The attributes determined are shown in Tables 1 and 2 below.

Brown and Rice (2001) state that apparel quality has two dimensions: a physical dimension, and a performance dimension. Given that physical features determine product performance consumers typically select products according to the physical features that they believe will cause a specific performance. It is unclear, however, whether consumers have adequate knowledge as to which physical features are likely to bring about specific behaviors. In many cases, the knowledge is practically non-existent.

In order to have a more synthesized understanding of the intrinsic attributes, we propose to group some of them into three basic dimensions: shape, mechanical properties of fabric, and color, based on the classification by Abraham-Murali and Littrell, as follows (Table 2):

This classification was used as the basis for this research study, allowing us to analyze variables and their relationships in detail.

Table 1. Model of Unidimensional and Multidimensional Clothing Attributes.

Clothing Unidimensional Attributes	
Physical Appearance	Physical Performance
Fiber content	Fabric shrinkage
Fiber weight	Fabric hang
Solid color	Fabric stretch
Pattern	Fabric wrinkle
Plaids match	Fabric soil
Wide hem	Fabric itchy
Seam stitch	Fabric pill
Casing	Ironing marks
Collar size	Color fade
1 or 2-piece	Washable
Neckline style	Dry clean
Waist finish	Cost/time care
Garment length	Stain removal
Sleeve length	Ironing
Extrinsic	Seams strong
Price	Collar fraying
Store type	Trims breakage
Care label	Buttonhole size
Quick service	Garment shape
Wide selection	-----
Sales person	-----

Table 1. Continued...

Clothing Multidimensional Attributes			
Physical Appearance	Physical Performance	Expressive	Extrinsic
Fabric structure	Fabric soft	Versatility	Global price
Trim coordinates	Fabric warmth	Compliments	Prestige
Tactile effect	Fabric look	Style & body type	Familiarity
Garment grain	Global fabric	Color & personal features	Store presentation
Garment finish	Easy care	Appropriate for age/person	Convenience
Global construction	Global workmanship	Makes me look...	Global services
Distinctive features	Garment fit	Global look	Value for money
Uncluttered style	Garment is easy to put on/take off	Unusual/new	Satisfaction
Top & bottom appropriate	Garment features	Fun/adventurous	Brand name
Accessories coordinate	Durability	Global individuality	Investment
Interaction of fabric & style	Garment comfort	Appropriate for occasion	Promotional campaign
Classic vs. fashionable style	-----	Global lifestyle	-----
Global style	-----	Coordinates	-----
-----	-----	Confidence	-----

Source: Abraham-Murali & Littrell (1995).

Table 2. Model of Unidimensional and Multidimensional Clothing Attributes.

Shape	Mechanical Properties of Fabric
Pattern	Fiber content
Wide hem	Fiber weight
Seam stitch	Fabric structure
Casing	Tactile effect
Collar size	Fabric grain
1 or 2-piece	Fabric shrinkage
Neckline style	Fabric hang
Waist finish	Fabric stretch
Garment length	Fabric wrinkle
Sleeve length	Fabric soil
Trim coordinates	Fabric itchy
Garment finish	Fabric pill
Global construction	Ironing marks
Distinctive features	Color fade
Uncluttered style	Washable
Top & bottom appropriate	Dry clean
Accessories coordinate	Stain removal
Interaction of fabric & style	Ironing
-----	Collar fraying
COLOR	Fabric soft
Solid color	Fabric warmth
Plaids match	Fabric look
-----	Global fabric
-----	Easy care
-----	Durability

Source: Prepared by the authors based on Abraham-Murali & Littrell, 1995.

Garment Shape. A garment's shape enables the fit of the product, achieving a particular silhouette, style, or look. The proper use of fabric grain, carefully chosen according to the requirements of the patterns, and support accessories that help a garment maintain its shape distinguish a high-quality garment from a low-quality one. Attention to shape and support is important in all garments, especially in tailored clothing (Brown & Rice, 2001, p. 114).

Mechanical Properties of Fabric. The mechanical properties of a fabric determine its performance. A single physical characteristic is not responsible for its performance; rather, the interaction of all physical dimensions of a fabric determines it. Understanding how they influence aesthetics, utility, durability, and cost is important to evaluate the components and quality of the fabric. These features include its fibers and yarns, the structure of the fabric, its weight, its strength, and how it is dyed, printed, and finished. Although the fabric is not the sole determinant of a garment's quality, it is a critical ingredient (Brown & Rice, 2001, p. 174).

Color. "Color is critical to consumers when considering which garment to purchase" (Brown & Rice, 2001, p. 182). Likewise, Kodžoman et al. (2022) state that people use colors to express their social identity, hierarchy, emotions, political attitude, personal identity, self-image, and aesthetic taste. Clothing choices are a statement, and fashion is related to the alter-ego: who the wearer wants to be at the time. Part of the meaning and communication of fashion can be explained in terms of color in the

psychology of clothing. Color is an important factor in the visual perception of products, as well as in brand recognition. It is critical for designers to understand consumer color preferences as part of an effective design plan.

Purchase Intention (PI). Consumer purchase intention is constructed by attitude, customer rating, and extrinsic factors (Ajzen, 2020). To Chu and Lu (2007), purchase intention is the degree to which consumers would like to purchase a product in the future; it is usually related to attitudes, behavior, and perceptions (Mirabi et al., 2015). Purchase intention comes from the prospective buyers' knowledge about the level of service, product features, and other subjective variables that come from their perception, which define the customer's interest in purchasing.

According to Ajzen (2020), intentions are indicators of the extent to which consumers are willing to engage in a particular behavior; they also indicate the efforts consumers make to perform a given behavior. Ajzen (1991) proposed the TPB shown in Figure 1 below.

According to this theory, the following variables influence purchase intention:

Purchase Attitude (PA). Typically, beliefs about objects are formed by associating them with certain attributes, other objects, characteristics, or events. In the case of attitudes toward the way of being, each belief is linked to behavior toward a certain future,

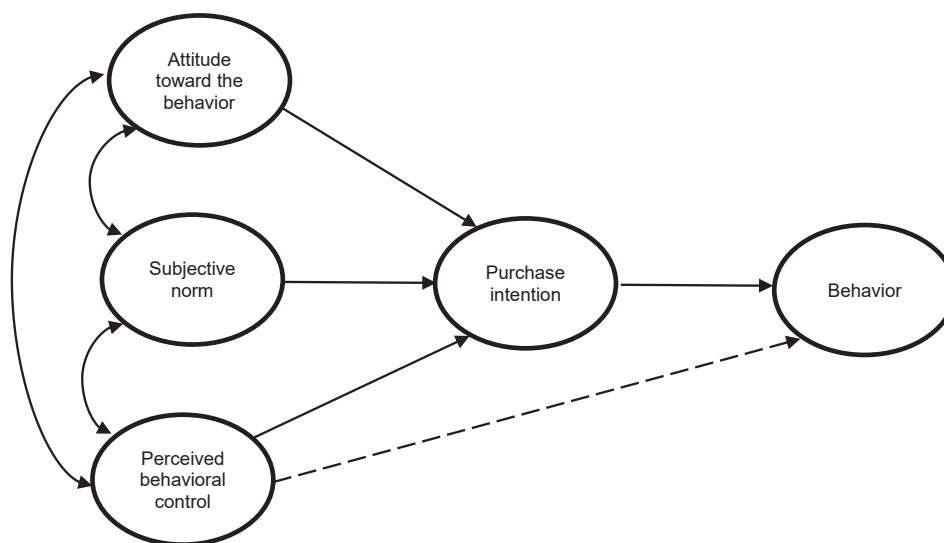


Figure 1. Theory of Planned Behavior.

Source: Ajzen (1991).

or to some other attribute such as the cost caused incurred by the behavior. Since such attributes are perceived negatively or positively, people automatically and simultaneously acquire an attitude toward behavior (Ajzen, 2020).

Subjective Norm (SN). It is determined by the pressure exerted on the prospective buyer by the people around him. Human beings often factor in what the people they care about will think; it is a kind of social pressure that influences the purchase intention, which can be decisive in some cases (Ajzen, 2020).

Perceived Behavioral Control (PBC). In Ajzen's view (2020), PBC refers to the emphasis on factors related to a particular behavior; it is the individual's perception of the difficulty or ease of performing a behavior of their interest. Behavioral control varies depending on the situation or actions being performed. It involves the judgments or conclusions of how well a person can execute a required action in a future event, therefore, it can be used to predict future behavior.

METHODOLOGY

General Hypothesis

Physical attributes of fashion apparel have a significant effect (SE) on the purchase intention (PI) of 20 to 24-year-old university women in Lima.

Specific Hypotheses

H₁ Shape of fashion apparel has a SE on the PI of 20 to 24-year-old university women in Lima.

H₂ The mechanical properties of fabric of fashion apparel have a SE on the PI of 20 to 24-year-old university women in Lima.

H₃ The color of fashion apparel has a SE on the PI of 20 to 24-year-old university women in Lima.

Identification of Variables

Independent variable (IV): Physical attributes (X)

Dependent variable (DV): Purchase intention (Y)

The variables were determined based on the classification by Abraham-Murali and Littrell (1995). Characteristics were grouped until the following were obtained: shape (X₁), mechanical properties of fabric (X₂), and color (X₃).

This is an applied study with a non-experimental design, following a quantitative, cross-sectional,

and correlational-causal approach. A representative sample of women in Peruvian society was deemed necessary to understand the consumer. We decided to conduct this study at Universidad Nacional Mayor de San Marcos, administering a questionnaire to female students. The questions were related to the three physical attributes identified in the theoretical framework, which were related to purchase intention. The influence of the attributes was measured based on the three dimensions defined in the TPB, thus determining their relationship with the dependent variable. The relationship degree was measured using the multiple regression statistical method.

The sample size was determined considering an infinite or unknown population of 20 to 24-year-old female university students in Lima. Based on this data, we can infer a sample of 196 respondents using the formula for infinite population sample determination ($Z = 1.96$ at 95%, margin of error = 0.07, $p = 0.5$, $q = 0.5$). A margin of error of 7% was chosen, as the complexity involved in measuring perceptions can lead to slightly larger errors. Respondents were 20 to 24-year-old female undergraduate students from Universidad Nacional Mayor de San Marcos (UNMSM), who were contacted via e-mail and WhatsApp, and voluntarily participated in the study.

A questionnaire was created and distributed via the web to analyze the variables. Before conducting the main study, the questionnaire was tested on 11 participants to ensure completeness, correct wording, clarity, and appropriate structure. After a few modifications, the final questionnaire had five core sections: Block 1 that collected important general information from the respondents; Blocks 2, 3, and 4 that measured attitude, subjective norm, and perceived behavioral control towards shape, mechanical properties of fabric, and color; and Block 5 that measured purchase intention for a product. Data were collected using two techniques: documentary analysis and surveys, which made it possible to understand the variables and draw the conclusions described.

The instrument was designed using three variables and 25 specific questions (Table 3). Cronbach's alpha was used to measure reliability, obtaining a value of 0.892 (Table 4), which supports the design of this questionnaire. It was developed based on other relevant research with high reliability and validity in its variables. The references of the attitude were taken from Zhang et al. (2017) and Singh and Verma (2017); the instrument to measure subjective norm was taken from Singh and Verma (2017) and Al-Swidi et al. (2014); the index of perceived behavioral control were taken from Yadav and Pathak (2016) and Al-Swidi et al. (2014); and, finally, the tools used

Table 3. Questionnaire per Dimension.

Shape
Attitude
SPA1. Wearing a fashion apparel in the shape of my preference makes me to feel more confident and attractive.
SPA2. I believe that fashion apparel with the shape of the consumer's preference satisfy the consumer.
SPA3. Fashion apparel with the shape of the consumer's preference are higher quality.
Subjective Norm
SSN4. If my close friends and family consumed fashion apparel with the shape of their preference, would I?
SSN5. The trend of buying fashion apparel with the shape of their preference among people around me is increasing.
SSN6. People around me generally believe that it is better to wear fashion apparel with the shape of their preference to feel comfortable.
FNS7. I would have the support of my close friends and family if I bought fashion apparel with the shape of my preference.
Perceived Behavioral Control
SPBC09. I consider myself financially capable of buying fashion apparel with the shape of my preference.
SPBC10. I think that fashion apparel with the shape of my preference can be found in stores in Lima.
SPBC11. Buying or not buying fashion apparel in the shape of my preference is entirely up to me.
Mechanical Properties of Fabric
Attitude
PPA8. Wearing fashion apparel with my preferred mechanical properties will give me greater comfort and safety.
PPA9. I think that fashion apparel with my preferred mechanical properties satisfy me.
PPA10. Fashion apparel with my preferred mechanical properties are higher quality.
Subjective Norm
PSN11. If my close friends and family consumed fashion apparel with my preferred mechanical properties, would I?
PSN12. The trend of buying fashion apparel with mechanical properties of their preference among people around me is increasing.
PSN13. People around me generally believe that it is better to wear fashion apparel with mechanical properties of their preference to live better.
PSN14. I would have the support of my close friends and family if I bought fashion apparel with my preferred mechanical properties.
Perceived Behavioral Control
PPBC20. I consider myself financially capable of buying fashion apparel with my preferred mechanical properties.
PPBC21. I think that fashion apparel with my preferred mechanical properties can be found in stores.
PPBC22. Buying or not buying fashion apparel with my preferred mechanical properties is entirely up to me.
Color
Attitude
CPA15. Wearing fashion apparel in the color of my choice makes me feel more confident and attractive.
CPA16. I believe that fashion apparel satisfy the wearer when they have a color of their preference.
CPA17. Fashion apparel that have a color of my preference have higher quality.
Subjective Norm
CSN18. If my close friends and family consumed fashion apparel in a color of their preference, would I?
CSN19. The trend of buying fashion apparel in the color of their preference among people around me is increasing.
CSN20. People around me generally believe that it is better to wear fashion apparel in the color of their preference to live better.
CSN21. I would have the support of my close friends and family if I bought fashion apparel in the color of my preference.
Perceived Behavioral Control
CPBC22. I consider myself financially capable of buying fashion apparel in my preferred color.
CPBC23. I think that fashion apparel in the color of my preference can be found in stores in Lima.
CPBC23. Buying or not buying fashion apparel in the color of my preference is entirely up to me.
Purchase Intention
PI25. How do the physical attributes of fashion apparel influence your purchase intention?

Source: Prepared by the authors.

Table 4. Reliability Results.

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	No. of Items
.889	.892	4

Source: Prepared by the authors.

to determine acquisition intention were taken from Zhang et al. (2017). The questions were adapted to the fashion industry; a Likert-type scale was used.

RESULTS

Multiple regression was used to analyze the data; therefore, hypothesis testing was performed to demonstrate that the proposed variables influence the purchase intention of fashion apparel.

General Hypothesis

H₀: Physical attributes of fashion apparel do not have a SE on the PI of 20 to 24-year-old university women in Lima.

$$\beta_1 = 0$$

H₁: Physical attributes of fashion apparel have a SE on the PI of 20 to 24-year-old university women in Lima.

One or more $\beta_i \neq 0$

Specific Hypothesis 1

H₀: Shape of fashion apparel does not have a SE on the PI of 20 to 24-year-old university women in Lima.

$$\beta_1 = 0$$

H₁: Shape of fashion apparel has a SE on the PI of 20 to 24-year-old university women in Lima.

$$\beta_1 \neq 0$$

Specific Hypothesis 2

H₀: Fabric of fashion apparel does not have a SE on the PI of 20 to 24-year-old university women in Lima.

$$\beta_2 = 0$$

H₁: Fabric of fashion apparel has a SE on the PI of 20 to 24-year-old university women in Lima.

$$\beta_2 = 0$$

Specific Hypothesis 3

H₀: Color of fashion apparel does not have a SE on the PI of 20 to 24-year-old university women in Lima.

$$\beta_3 = 0$$

H₁: Color of fashion apparel has a SE on the PI of 20 to 24-year-old university women in Lima.

$$\beta_3 = 0$$

There were 196 valid surveys, that is, the number statistically determined for the generation of the model with the information obtained from the surveys. Data were organized according to five categories. The SPSS software was used to run the normality test (Table 5), and a summary of the model was obtained (Table 6), showing that 52.4% of the variable is explained by this model, followed by the ANOVA test (Table 7) and finally the multiple regression test (Table 8). The results were as follows:

Normality Test

H₀: The variable follows a normal distribution.

H₁: he variable does not follow a normal distribution.

Due to the volume of data, the Kolmogorov-Smirnov test is used.

The *p*-value obtained for each variable (> 0.05) means that H₀ cannot be rejected; therefore, the data normality assumption is valid. Verification of data normality is necessary to select the statistic to be used.

Hypothesis Testing

General Hypothesis

p-value = 0%, the null hypothesis (H₀) is rejected (see Table 7).

If *p*-value < 5%, then H₀ is rejected.

As the *p*-value < 5%, the H₀ is rejected; therefore, physical attributes of fashion apparel have a SE on the PI of 20 to 24-year-old university women in Lima.

Specific Hypothesis 1

Table 5. Tests of Normality.

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Shape	.234	196	.000	.878	196	.000
M. P. of fabric	.253	196	.000	.880	196	.000
Color	.251	196	.000	.885	196	.000
Purchase Int	.210	196	.000	.860	196	.000

a. Lilliefors Significance Correction.

Source: Prepared by the authors.

Table 6. Model Summary.

Model	R	R ²	Adjusted R ²	Std. Error of the Estimate
1	.724 ^a	.524	.517	.720

a. Predictors: (Constant), color, shape, mechanical properties of fabric.

Source: Prepared by the authors.

Table 7. Analysis of Variance (ANOVA).

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	109.556	3	36.519	70.464	.000 ^a
Residuals	99.505	192	.518		
Total	209.061	195			

a. Dependent variable: Purchase intention.

Source: Prepared by the authors.

p -value = 60.1% (see Table 8)

If p -value < 5%, then H_0 is rejected.

In this case, H_0 is accepted (p -value > 5%); therefore, the shape of fashion apparel does not have a SE on the PI of 20 to 24-year-old university women in Lima.

Specific Hypothesis 2

p -value = 0.1 % (see Table 8)

If p -value < 5%, then H_0 is rejected.

In this case, H_0 is rejected (p -value < 5%); therefore, the mechanical properties of fabric of fashion apparel have a SE on the PI of 20 to 24-year-old university women in Lima.

Specific Hypothesis 3

p -value = 0% (see Table 8)

If p -value < 5%, then H_0 is rejected.

In this case, H_0 is rejected (p -value < 5%); therefore, the color of fashion apparel has a SE on the PI of 20 to 24-year-old university women in Lima.

Regression Analysis No. 2

In the second analysis, the variable shape is removed to develop a model that can predict the purchase intention based on the two remaining variables: color and physical characteristics of the fabric (see Table 9).

All coefficients are statistically significant in this case. Color remains the most influential. This equation can explain the consumer's purchase intention. Other extrinsic factors are known to influence this dependent variable; however, this study intends to focus only on the importance of the physical variables of which the fashion apparel is composed. A p -value of over 5% means there is no relationship of dependence between the variables.

DISCUSSION

Analysis of variance and multiple regression were used as analytical tools to test the hypotheses. Upon performing the ANOVA test for the general hypothesis, the results yielded a p -value = 0% (see Table 7); therefore, the null hypothesis was rejected and the alternative was accepted. Overall, physical attributes influence purchase intention.

Table 8. Regression Analysis.

Coefficients ^a						
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	
	B	Std. Error	Beta			
1	(Constant)	.737	.231		3.188	.002
	Shape	.048	.092	.040	.524	.601
	M. P. of Fabric	.302	.091	.261	3.336	.001
	Color	.529	.088	.480	6.010	.000

a. Dependent variable: Purchase intent.

Source: Prepared by the authors.

Table 9. Regression Analysis No. 2.

Coefficients ^a						
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	
	B	Std. Error	Beta			
1	(Constant)	.765	.224		3.414	.001
	M. P. of Fabric	.320	.084	.276	3.823	.000
	Color	.548	.080	.497	6.881	.000

a. Dependent variable: Purchase intent.

Source: Prepared by the authors.

Regarding the first specific hypothesis, the result of the multiple regression (Table 8) validates the null hypothesis stating that shape does not influence purchase intention with a p -value = 60.1%. Therefore, the alternative hypothesis stating that shape influences purchase intention is rejected. We can reflect on the circumstances in which young women of these ages make their purchases. They are very young women who are learning to shop, are entering the labor market, and have a different appreciation of what they buy, as opposed to more experienced shoppers. These are their first purchases, so they value new features in the products. This appreciation may change and consolidate for another age range, placing a different value on the shape of the product. This leads to a field of new research that can be proposed for other age groups. However, this result is at odds with results obtained in other studies, such as those of De Klerk and Lubbe (2004, 2008), who concluded that aesthetics was significant in determining product quality. Furthermore, Davis (1985) found a high correlation between physical attributes and the perception of product quality.

The multiple regression analysis (Table 8) validates the second specific hypothesis stating that fabric has a significant effect on purchase intention; the null hypothesis is rejected because the p -value =

0.1%, which is less than 5%. The results also show a coefficient of 0.302, which is the slope of the straight line of this variable in the model to be plotted; therefore, the specific hypothesis stating that the physical characteristics of the fabric influence the purchase intention of the product is accepted. The third specific hypothesis is also accepted because the null hypothesis is rejected as the p -value = 0%. This variable has a steeper slope of 0.529; therefore, the hypothesis stating that color influences purchase intention is accepted. The relationship between slopes leads to the conclusion that color has the greatest influence on this type of customer.

According to the results, garment shape does not have a decisive influence on the customer's purchase intention; for this reason, a new model in which this variable is removed was proposed. This new model uses multiple regression (Table 9), but only with the variables mechanical properties of the fabric and color. The two specific hypotheses are validated in this analysis, where it is observed that color has a greater influence on purchase intention. This new model is not a general equation, but it provides some insight into how these variables work with each other. Many other variables could influence the dependent variable, such as extrinsic variables: price, packaging, image, etc. However, this paper

has intended to address the analysis of the physical (intrinsic) variables of fashion apparel.

CONCLUSIONS

The following conclusions can be drawn from the analysis:

- Physical attributes have a significant effect on customers' purchase intention (p -value = 0%).
- The garment shape factor does not have a significant effect on purchase intention (p -value = 60.1%), due to the specific characteristics of the consumer segment chosen for this study.
- Mechanical properties have a significant effect on the customer's purchase intention (p -value = 0.1%), thus validating the usefulness of the planned behavior model proposed by Ajzen and Fishbein.
- The color of the garment significantly influences the customer's purchase intention (p -value = 0%), as the variable that most influences it. The Ajzen and Fishbein model was used to measure purchase intention.
- The relative weights of the variables were determined, revealing that color had a higher weight for the established sample frame, followed by the physical characteristics of the fabric.
- The proposed model predicts purchase intention when the customers' attitudes, subjective norms, and perceived behavioral control concerning fabric shape, color, and mechanical properties are well identified.

REFERENCES

- [1] Abraham-Murali, L., & Littrell, M. A. (1995). Consumers' Conceptualization of Apparel Attributes. *Clothing and Textiles Research Journal*, 13(2), 65-74. <https://doi.org/10.1177/0887302X9501300201>
- [2] Ajzen, I. (1991). The theory of planned behavior. *Organizational and Human Decision Processes* 50(2), 179-211. [https://doi.org/10.1016/0749-5978\(91\)90020-t](https://doi.org/10.1016/0749-5978(91)90020-t)
- [3] Ajzen, I. (2020). The theory of planned behavior: Frequently asked questions. *Human Behavior and Emerging Technologies*, 2(14), 314-324. <https://doi.org/10.1002/hbe2.195>
- [4] Al-Swidi, A., Mohammed Rafiul Huque, S., Haroon Hafeez, M., & Noor Mohd Shariff, M. (2014). The role of subjective norms in theory of planned behavior in the context of organic food consumption. *British Food Journal*, 116(10), 1561-1580. <https://doi.org/10.1108/BFJ-05-2013-0105>
- [5] Asociación de Exportadores. (2020). *Estudio de Internacionalización del Sector Textil y Confecciones Peruano*. <https://www.cien.adexperu.org.pe/estudio-de-internacionalizacion-del-sector-textil-y-confecciones-en-el-marco-de-la-cooperacion-tecnica-caf-adex/>
- [6] Brown, P., & Rice, J. (2001). *Ready-to-Wear Apparel Analysis* (3rd ed.). Upper Saddle River, NJ, USA: Prentice-Hall, Inc.
- [7] Chu, C., & Lu, H. (2007). Factors influencing online music purchase intention in Taiwan an empirical study based on the value-intention framework. *Internet Research*, 17(2), 139-155. <https://doi.org/10.1108/10662240710737004>
- [8] Davis, L. L. (1985). Effects of Physical Quality and Brand Labeling on Perceptions of Clothing Quality. *Perceptual and Motor Skills*, 61(2), 671-677. <https://doi.org/10.2466/pms.1985.61.2.671>
- [9] De Cannière, M. H., De Pelsmacker, P., & Geuens, M. (2009). Relationship Quality and the Theory of Planned Behavior models of behavioral intentions and purchase behavior. *Journal of Business Research*, 62(1), 82-92. <https://doi.org/10.1016/j.jbusres.2008.01.001>
- [10] De Klerk, H. M., & Lubbe, S. J. (2004). The role of aesthetics in consumers' evaluation of apparel quality: A conceptual framework. *Journal of Family Ecology and Consumer Sciences*, 32, 1-7.
- [11] De Klerk, H. M., & Lubbe, S. J. (2008). Female consumers' evaluation of apparel quality: exploring the importance of aesthetics. *Journal of Fashion Marketing and Management*, 12(1), 36-50. <https://doi.org/10.1108/13612020810857934>
- [12] Forsythe, S., Presley, A. B., & Caton, K. W. (1996). Dimensions of Apparel Quality Influencing Consumers' Perceptions. *Perceptual and Motor Skills*, 83(1), 299-305. <https://doi.org/10.2466/pms.1996.83.1.299>
- [13] Hines, J. D., & O'Neal, G. S. (1995). Underlying Determinants of Clothing Quality: The Consumers' Perspective. *Clothing and Textiles Research Journal*, 13(4), 227-233. <https://doi.org/10.1177/0887302X9501300403>

- [14] Kodžoman, D., Hladnik, A., Pavko Čuden, A., & Čok, V. (2022). Exploring color attractiveness and its relevance to fashion. *Color Research and Application*, 47(1), 182-193. <https://doi.org/10.1002/col.22705>
- [15] Kotler, P., & Armstrong, G. (2017). *Fundamentos de Marketing* (13^{ed}). Mexico D. F., Mexico: Pearson Educación de México.
- [16] López Piñón, D. C., & Terán Cázares, M. M. (2018). Validación de un instrumento para medir la intención de compra de productos agrícolas orgánicos. *Latindex*.
- [17] Mirabi, V., Akbariyeh, H., & Tahmasebifard, H. (2015). A Study of Factors Affecting on Customers Purchase Intention. Case Study: The Agencies of Bono Brand Tile in Tehran. *Journal of Multidisciplinary Engineering Science and Technology (JMEST)*, 2(1), 267-273. <https://www.jmest.org/wp-content/uploads/JMESTN42350395.pdf>
- [18] O'Cass, A. (2004). Fashion clothing consumption: antecedents and consequences of fashion clothing involvement. *European Journal of Marketing*, 38(7), 869-882. <https://doi.org/10.1108/03090560410539294>
- [19] Singh, A., & Verma, P. (2017). Factors influencing Indian consumers' actual buying behaviour towards organic food products. *Journal of Cleaner Production*, 167, 473-483. <https://doi.org/10.1016/j.jclepro.2017.08.106>
- [20] Sociedad Nacional de Industrias. (2021). *Industria textil y confecciones*. Instituto de Estudios Económicos y Sociales. <https://sni.org.pe/wp-content/uploads/2021/03/Presentacion-Textil-y-confecciones-IEES.pdf>
- [21] Torres Valverde, E. P., & Padilla Rivadeneira, G. S. (2013). *Medición de la intención de compra con base en un modelo de regresión logística de productos de consumo masivo*. (Degree thesis). Universidad de Quito, Quito. <https://dspace.ups.edu.ec/bitstream/123456789/5772/1/UPS-QT03953.pdf>
- [22] Vieira, V. A. (2010). Determinants of the purchase or non-purchase of fashion apparel: an exploratory study. *Revista de Administração – RAUSP*, 45(2), 130-141. <https://www.redalyc.org/pdf/2234/223414862003.pdf>
- [23] Yadav, R., & Pathak, G. S. (2016). Intention to purchase organic food among young consumers: Evidences from a developing nation. *Appetite*, 96, 122-128. <https://doi.org/10.1016/j.appet.2015.09.017>
- [24] Zhang, Y., Jing, L., Bai, Q., Shao, W., Feng, Y., Yin, S., & Zhang, M. (2017). Application of an integrated framework to examine Chinese consumers' purchase intention toward genetically modified food. *Food Quality and Preference*, 65, 118-128. <https://doi.org/10.1016/j.foodqual.2017.11.001>