Investigating Consumers' Purchase Intentions Toward Jute-Blended Garments

by

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Abstract

Jute is a natural fiber that has been a popular choice for making packaging materials, composite materials, and geotextiles, but its use was limited to these areas only due to its inherent disadvantages like stiffness, low crease, and wrinkle recovery. The challenges associated with the limited wearability of jute fabric have been addressed through the blending of jute with other fibers and the use of different finishing techniques by researchers and industry practitioners. However, there is still a lack of research investigating consumer attitudes towards these products and their willingness to buy jute-blended garments, which is important for exploring the potential market of this product. To address the gap, this quantitative research investigated consumers' purchase intention toward jute-blended garments based on the functional, expressive, and aesthetic (FEA) consumer needs model and the theory of reasoned action (TRA). A convenience sample of undergraduate students at a southeastern public university was recruited for the web-based survey. Participants took the survey in person resulting in 148 useable responses. Multiple regression was run to examine the hypothesized relationship by using SPSS and all the hypotheses were supported. The result indicated that consumers perceived the functional, expressive, and aesthetic aspects of jute-blended garments positively. Consequently, it formed a positive attitude toward jute-blended garments that positively influences their purchase intentions. Furthermore, consumers thought they would have positive purchase intentions towards jute-blended garments if their reference group would admire them for using this. The findings of the study offer guidelines about the consumer-centered variables that influence the consumers' attitudes and purchase intentions toward jute-blended garments and can contribute to the growing body of research on jute-blended garments.

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CHAPTER 1: INTRODUCTION

Background

With the rise of the sustainability issue in the textile industry (Amindoust & Saghafinia, 2017), researchers and manufacturers are trying to come up with different solutions to economically sustain the business by reducing the negative impact on the planet and people (Caniato et al., 2012; Pandey et al., 2020) including the development of materials that have less or no impact on the environment. Moreover, the demand for organic and/or eco-friendly natural fibers has increased due to consumers' awareness of sustainability in textiles (Thompson & Tong, 2016). By considering features like biodegradability, eco-friendliness, and affordability, jute is considered one of the best sustainable natural fibers for various purposes (Adekomaya et al., 2016; Salih et al., 2019; Shahinur et al., 2021; Wang et al., 2019).

Vink et al. (2003) indicated several aspects of qualifying criteria that the ideal sustainable material should meet, such as the fabric should be available at a competitive or lower price, have a minimum environmental footprint, be safe to both humans and the environment, and not have any negative impact on food supply. Considering this, jute can be called the fiber of the future since all these features are present in the material (Roul, 2009; Saha et al., 2010).

Jute is second in natural fibers to cotton in terms of organized production and global consumption (Basu & Roy, 2008; Debnath, 2016; Konar et al., 2017) and is widely known as the *golden fiber* because of its golden and silky texture (Islam & Ali, 2018; Roul, 2009). Jute fiber has been popular for more than a century for making bags, sacks, packaging material, carpet-backing material, and geotextiles for its superior strength, high tenacity, and low cost (Debnath

et al., 2009; Ivanovska et al., 2020; Kozlowski & Mackiewicz-Talarczyk, 2020; Mahmud, 2018; Thakur et al., 2021). Jute has many excellent features such as good dyeability with various types of dyes, high moisture regains, and high heat resistance, which makes it an ideal fiber to produce apparel (Ghosh & Dutta, 1980; Pan et al., 2017; Roul, 2009). Even after having several inherent advantages, usage of jute has been limited to the previously mentioned non-apparel areas mostly because of its meshy structure, poor wrinkle recovery, susceptibility to rot (Ammayappan et al., 2013), stiffness, and poor elasticity due to the strong connection of lignin with cellulose and hemicellulose (Nath et al., 2021).

While it was not easy to make a garments collection from jute, many designers have been successful in doing so. Prabha Mohanty, a well-known designer from India, has pioneered the use of jute in high fashion garments (World Jute.Com, n.d.), and some other designers have featured jute garments at the Lakme India Fashion Week 2000 and International Fairs in Dusseldorf, Germany (Gupta, 2014). In addition, a famous designer, Donna Karan, launched a collection named 'Raw Romance' where she made jackets and dresses of jute (Ferwerda, 2010).

Problem Statement

There was a time when the image of jute was circumscribed to sacks, bags, and rugs and consumers were skeptical about wearing jute-made garments (Chandwani, 2015). Researchers have tried to find different methods to use jute in diversified ways (Gokarneshan et al., 2019) in particular, to make apparel from it. Blending with other fibers, namely cotton (Charankar et al., 2007; Salam & Salam, 2005), polyester, rayon, and flax (Bhardwaj & Juneja, 2012; Debnath, 1974; Ibrahim et al., 2009) can be helpful to overcome the inherent drawbacks of jute. Along with this, proper chemical, and biochemical finishing, for instance, resin, enzyme treatment, and

mechanical finishing (Ammayappan et al., 2013; Devi et al., 2014; Pan et al., 2017; Sreenath et al.,1996), can be used to enhance the jute properties.

Finer yarns are being spun for making garments from jute (Roul, 2009). Previous studies show the jute dyeability with natural dyes, as well as synthetic dyes, and eco-friendly printing on jute (Chattopadhyay & Pan, 2018; Gokarneshan et al., 2019; Konar et al., 2017; Patel et al., 2017). Although jute-blended garments have drawn the attention of researchers, manufacturers, and designers, most of the research hitherto was focused on making jute-blended fabric useable and wearable by using different techniques in the apparel industry. However, there is a lack of research addressing consumer perceptions, attitudes, and purchase intentions of jute-blended garments. Researchers to date have only studied consumer behavior toward jute bags mostly (Dasgupta, 2020; Hassan & Das, 2021) and found positive attitudes and purchase intentions towards it.

Jute-blended woven fabric has similar physical characteristics as 100% cotton fabric (Ullah et al., 2016) indicating better compatibility of the mixed component fibers (Salam et al., 2007). Jute cotton blended woven fabric shows sufficient breathability and comfortability in practice with superior tensile strength, better dimensional stability, excellent abrasion, and pilling resistance (Barsha et al., 2018). Sulphonated jute cotton blended fabric shows cotton-like softness, handling characteristics, and drapeability (Ali et al., 2001; Salam et al., 2007). However, to the best of my knowledge, no research has been conducted to investigate consumers' perceptions of and purchase intentions toward jute-blended garments.

This study aims to fill the above research gap. In the present study, the Functional, Expressive, and Aesthetic (FEA) consumer needs model by Lamb and Kallal (1992) has been

employed to examine and understand consumers' FEA perceptions of jute-blended garments and how these perceptions influence their attitudes toward jute-blended garments. In addition, the theory of reasoned action (TRA) by Fishbein and Ajzen (1975) has been used to explain how attitudes towards jute-blended garments along with their subjective norms assist in forming their purchase intention toward jute-blended garments.

The FEA model is helpful to evaluate the suitability of new apparel products to plan, develop, merchandise, and present a product line based on functional, expressive, and aesthetic perspectives (Lamb & Kallal, 1992). Lamb and Kallal (1992) identified functional (F) properties of the garments as its structural and decorative construction that deal with the fit and comfort of the garments, expressiveness (E) of the apparel as the visual statement which sends messages about the wearer and aesthetic (A) properties of a garment refer to the good visual design of the garment, which is created by manipulating art elements and applying design principles to enhance the body structure. In this study, the functional (F) aspect of jute-blended garments was evaluated based on the perceived fit and comfort, the expressive (E) aspect was assessed by consumers' perceived environmental friendliness and uniqueness, and the aesthetic (A) aspect was examined by the perceived aesthetic attributes of the jute-blended garments. Therefore, the attributes of the jute-blended garments that contribute to the consumers' attitudes that influence purchase intention from a perspective of functionality, expressiveness, and aesthetics (FEA) of a garment were investigated with this theory for future product development and to formulate a promotional strategy.

A cognitive and behavioral component of consumers (Altmann, 2008) that integrates feelings, and favorable or unfavorable responses (Asiegbu et al., 2012) after making an

assumptive comprehensive evaluation of jute-blended garments is their attitude toward jute-blended garments. Consumers' purchase intention toward jute-blended garments is their possibility to plan and decide to buy jute-blended garments after a general evaluation of the product (Dodds et al., 1991; Hsu, 1987).

The theory of reasoned action (TRA) (Ajzen & Fishbein, 1980; Fishbein & Ajzen, 1975) explains how individuals make rational decisions by the systematic use of information available to them (Belleau et al., 2007). Fishbein and Ajzen (1975) proposed that attitude is one of the antecedents of consumers' behavioral intention. The FEA model shows that consumers evaluate new garments in terms of their functionality, expressiveness, and aesthetics and form attitudes toward them. Therefore, they may form a positive or favorable attitude when their interests match their FEA perception of jute-blended garments. This is because consumers' behavior can be predicted from their involvement with the object due to the perceived relevance of the object that is based on their inherent needs and interests (Belleau et al., 2007; Zaichkowsky, 1985). Moreover, Ajzen (1991) mentioned that a positive attitude toward products causes higher purchase intention. Consequently, how consumers' FEA perception forms their attitudes toward jute-blended garments and further motivates consumers to purchase that garment was examined along with consumers' subjective norms by adopting the theory of reasoned action in this study. Furthermore, how subjective norms influence consumer purchase intention towards jute-blended garments was examined.

Statement of Purpose

The overarching purpose of the study was to examine and understand how consumers perceive the functional (perceived fit and perceived comfort of jute-blended garments),

expressive (environmental friendliness and uniqueness of jute-blended garments), and aesthetic (the aesthetic quality of jute-blended garments) factors of jute-blended garments and to investigate how these perceptions influence consumers' attitudes, which in turn influence their purchase intentions towards it. Furthermore, it aimed to examine the influence of consumers' subjective norms toward purchase intentions of jute-blended garments. This understanding can help researchers, product developers, and apparel manufacturers to understand comprehensively consumers' likelihood of buying jute-blended garments. The specific objectives of this study were as follows:

1. To investigate the influence of consumers' perceived functional attributes (perceived fit and perceived comfort) of jute-blended garments on consumers' attitudes toward jute-blended garments.
2. To assess the impact of the consumers' perceived expressive attributes (environmental-friendliness and perceived uniqueness) of the jute-blended garments on consumers' attitudes toward it.
3. To examine the influence of perceived aesthetic attributes of jute-blended garments on consumers' attitudes toward it.
4. To investigate the influence of consumers' attitudes toward jute-blended garments on their purchase intention towards jute-blended garments.
5. To investigate the influence of consumers' subjective norms toward jute-blended garments on their purchase intention towards jute-blended garments.

Definition of Key Terms

Attitude: A cognitive and behavioral component (Altmann, 2008) that is an integration of emotional feeling, comprehensive evaluation, and response (favorable or unfavorable) to a specific idea or object (Asiegbu et al., 2012).

Attitude Toward Jute-Blended Garments: Consumers' cognitive and behavioral component (Altmann, 2008) that is an integration of emotional feeling and response (favorable or unfavorable) (Asiegbu et al., 2012) to jute-blended garments after making an assumptive comprehensive evaluation about it.

Comfort: Pleasant psychological and physiological state that is based on the human sensory response to the harmony between a body and the garments, which is dependent on many factors such as fit, flexibility, surface roughness, and skin reactions (Bhatia & Malhotra, 2016; Das & Alagirusamy, 2011; Scott, 2009).

Environmental Friendliness: The extent to which a product or service has less or no harmful impact on the environment ("Environmentally Friendly," 2022; Definitions, n.d.; Wu et al., 2018).

Fit: The way garments hang on the body by creating a balance between the garments and the body (Cui et al., 2021; Hernández, 2018; Talbot, 2013).

Jute: A natural low-cost bast fiber that is biodegradable and renewable (Gokarneshan et al., 2019; Singh et al., 2019).

Jute-blended: The blending of jute with other fibers like cotton, polyester, and rayon for the betterment of its physical properties namely stiffness and elastic properties (Charankar et al., 2007; Ibrahim et al., 2009; Nath et al., 2021).

Jute-blended Garments: Items of garments that cover the body which is made of jute-blended fabric (Babu, 2010; Ranganathan & Amsamani, 2005).

Perceived Aesthetic Attributes of Jute-blended Garment: Consumers' anticipation regarding the overall color, pattern, details, styling, and fabrication of the jute-blended garment to evaluate its whole aesthetics (Chattaraman & Rudd, 2006; Hwang et al., 2016).

Perceived Comfort of Jute-blended Garment: Consumers' pleasant psychological and physiological state that is based on their anticipative response to the harmony between their body and the garments, when they will wear it (Bhatia & Malhotra, 2016; Das & Alagirusamy, 2011; Scott, 2009).

The Perceived Fit of Jute-blended Garment: Consumers' assumptions about the way jute-blended garments will hang on the body by creating a balance between jute-blended garments and their body (Cui et al., 2021; Hernández, 2018; Talbot, 1943).

Perceived Environmental Friendliness of Jute-blended Garment: Consumers' thoughts about how well jute-blended garments minimize the impact on the environment.

Perceived Uniqueness of Jute-blended Garment: Consumers' thoughts on how distinct jute-blended garments are from other garments (Banik et al., 2003; Sahu et al., 2017).

Purchase Intention: The possibility of a consumer planning and deciding to buy a product after a general evaluation of the product (Dodds et al., 1991; Hsu, 1987).

Purchase Intention Toward Jute-blended Garments: The possibility of a consumer planning and deciding to buy jute-blended garments after a general evaluation of them (Dodds et al., 1991; Hsu, 1987).

Subjective Norms: Consumers' prevalent behavioral standard that measures perceived social pressure (Venkatesh & Davis, 2000; Wu & Chen, 2014) for motivation to comply with this pressure and for making a behavioral decision towards jute-blended garments (Ajzen, 1991; de & Vandenbosch, 2017; Hiller Connell & Kozar, 2012).

CHAPTER 2: LITERATURE REVIEW

This chapter provides a pertinent literature review that led to the development of a conceptual research model and respective hypotheses. First, the overview of the Functional, Expressive, and Aesthetic (FEA) consumer needs model (Lamb & Kallal, 1992) and the theory of reasoned action (TRA) (Fishbein & Ajzen, 1975) is provided since these two theories have been used as the theoretical framework of this study. Then the literature on the research variables such as fit and comfort under functional attributes, aesthetic attributes, along with uniqueness and environmental friendliness of jute under expressive attributes are reviewed and hypotheses are proposed with the support from relevant literature. Furthermore, a discussion of the literature that shows the relationship between attitude, subjective norms, and purchase intention toward jute-blended garments is provided. Finally, the conceptual model for this research is presented.

Theoretical Framework

The present study employed consumer centered (Cui et al., 2021) Functional, Expressive, and Aesthetic (FEA) model by Lamb and Kallal (1992) and the Theory of Reasoned Action (TRA) by Fishbein and Ajzen (1975).

Functional, Expressive, and Aesthetic (FEA) Model

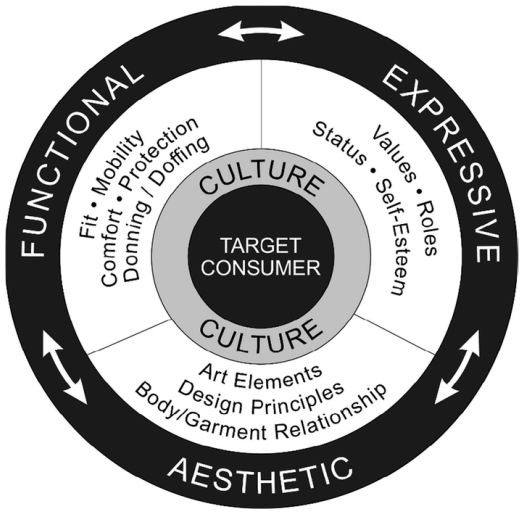
The FEA model links the inherent attributes of apparel products with human perception (Kaiser & Damhorst, 1991). This model (see Figure 1) helps designers to think conceptually and craft user-centered design (Orzada & Kallal, 2021).

Lamb and Kallal (1992) identified functional properties of clothing as the structural and decorative construction of the clothing that should fit the wearer and be comfortable enough and aesthetic properties of the garments as the good visual design which is created by the application

of the art elements and design principles. They mentioned the expressiveness of the apparel as the visual statement which sends a message about the wearer (1992).

Figure 1

FEA Consumer Needs Model



Note. FEA consumer needs model (Lamb & Kallal)

This model is helpful to evaluate the suitability of apparel products to plan, develop, merchandise, and present a product line based on three perspectives which are functional, expressive, and aesthetic (Lamb & Kallal, 1992). There is a duality of approach as well to assess relative importance in the continuum mentioned by Lamb and Kallal (1992) and according to them "the functional(F) – expressive (E) continuum acknowledges that apparel can be useful while it conveys a message about the wearer" (p. 43).

Utilitarian aspects are the usefulness of the product that a customer may look for such as protection, comfort, fit, and ease of movement that is considered functional facts of clothing (Lamb & Kallal, 1992; Orzada & Kallal, 2021). In this study, the functional aspect was evaluated based on fit, comfort, exposure, and experience with jute-blended garments. Expressiveness can

be related to the symbolic aspects of clothing that communicate and convey messages about particular social standards, social position, expectations, etc. about the wearer (Eicher & Evenson, 2014; Lamb & Kallal, 1992). Individuals express them in terms of identity, roles, status, and so on through their garments which has become a major global concern in many sociocultural contexts (Thompson & Anyakoha, 2012). Under the concept of expressiveness, the study dealt with consumers' perceived environmental friendliness and uniqueness of jute-blended garments. The aesthetic attributes of jute-blended garments were examined under the aesthetic perception.

Theory of Reasoned Action (TRA)

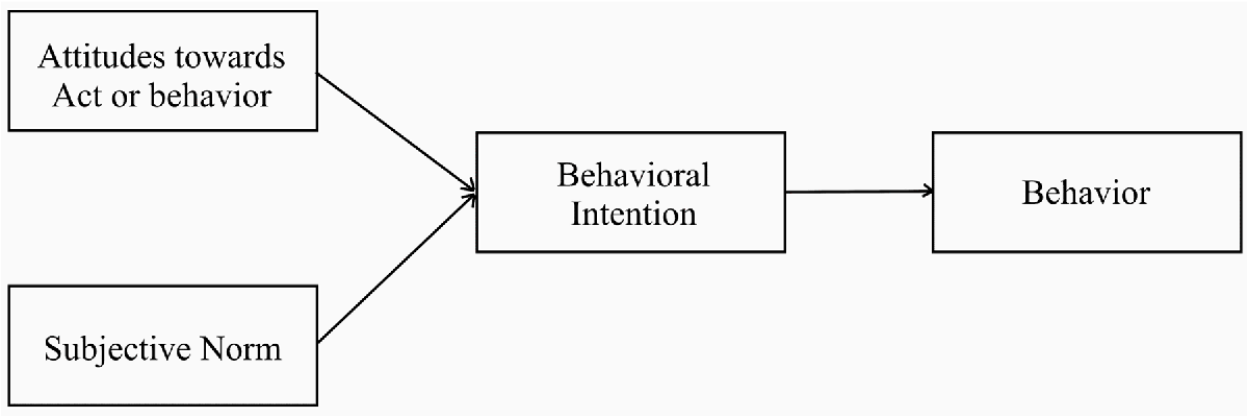
TRA provides a framework to understand the relationship between a person's attitudes and certain behavior by emphasizing attitudes, subjective norms, and behavioral intentions (Ajzen & Fishbein, 1980; Fishbein & Ajzen, 1975). This theory explains the psychological cognitive processes (Lee & Chow, 2020) behind a certain behavior (Hasan, 2021) that are influenced by their attitude and the way their subjective norms affect their thought patterns (Ajzen & Fishbein, 1980). Furthermore, this theory helps to predict consumers' purchase behavior by predicting purchase intention via measuring attitudes and subjective norms (Lutz, 1991) toward act/behavior (see Figure 2).

Attitude is the first determinant of having intentions before performing a certain behavior (Abd et al., 2015). Attitude is the cognitive and behavioral component (Altmann, 2008) that is an integration of psychological emotion routed through consumers' evaluations of a specific object (Paul et al., 2016). The second factor is the subjective norm which is a combination of an individual's perception and expectations of other people and their motivation to comply with

those expectations and wishes (Fishbein & Ajzen, 1975; Sparks & Shepherd, 1992). When a person is concerned about others' thoughts and perceptions regarding them, they are more likely to modify their attitude and behavior to become more in line with others around them (Copeland & Zhao, 2020; Sparks & Shepherd, 1992).

Figure 2

Theory of Reasoned Action (TRA) (Fishbein & Ajzen, 1975)



This theory has been used largely to predict the specific group of consumer behavior (Belleau et al., 2007) and consumer behavior towards a specific type of product. Many studies have used the TRA to predict consumers' green behavior (Liu et al., 2017) such as their willingness to buy environmentally friendly products (Kalafatis et al., 1999), organic cotton apparel (Kang et al., 2013), consumers' recycling behavior (Boldero, 1995) as well as their stay at a green hotel (Han et al., 2010). TRA is used in this study to investigate how consumers' attitudes towards jute-blended garments along with their subjective norms influence their willingness to buy jute-blended garments since TRA is widely used to study customers' decision-making processes in various contexts (Han & Kim, 2010). Functional Perception

Functional Perception

Fit

Fit and comfort have been identified as important clothing attributes of consumers' desirability for all kinds of apparel products (Fan et al., 2004; Wong & Li, 2006; Zhang et al., 2002). According to Frost (1988), though fit and comfort are two separate functions, consumers use these terms interchangeably when they judge fit based on how the garment looks on the body and comfort based on how comfortable the consumer feels in the garment (Ashdown & DeLong, 1995).

Two dimensions of clothing fit have been identified in a few studies; one of them is aesthetic fit which is the appearance of the clothing in relation to the wearer of the clothing and the other one is functional fit which is the performance and comfort of the clothing on wearer's body (Eckman et al., 1990; Outling, 2007). Fit can be evaluated by apparel appearance and consumers' perceptions of fit, which depends on how well a piece of apparel is suited to the body (Cui et al., 2021). Consumers' fit preference is affected by many factors, such as body image, body cathexis, and personal comfort preference (Ghalachayan, 2018). Brown (1992) stated that personal preferences for fit are modified by current fashion trends, cultural influences, and consumers' age, gender, and lifestyle.

Fit is considered one of the crucial criteria throughout the consumer decision-making process that has an impact on consumers' satisfaction (Chen et al., 2010; Eckman et al., 1990; Hsu & Burns, 2002) and their purchase decisions (Kim et al., 2021). Consumers' degree of concern about fit may relate to psychological issues such as body satisfaction as well as fit satisfaction (Shin & Damhorst, 2018). Comprehending consumers' satisfaction with fit is

complex since clothing fit for consumers has both psychological and social meaning (Shin & Damhorst, 2018).

Perception of the fit of a garment shapes attitudes and purchase behavior of the garment. (Alexander et al., 2005; Hwang et al., 2016). Jin and Hye (2011) measured attitude toward jeans based on some attributes including good fit and comfort of the apparel product. Effectively finished jute fabrics and jute fabrics made from finer yarns have good drapeability (Ibrahim et al., 2009), and Peng et al. (2010) showed that jute-cotton blended fabrics are suitable for making clothes that have more definite shapes, with folds that result in creating garments with a good fit. Consequently, consumer perceptions about the fit of the jute-blended garments may have a positive impact on their attitude as well.

Comfort

Researchers identified that comfort from the FEA model is an important factor affecting the products' overall evaluation (Hwang et al., 2016). Comfort can be perceived from tactile sensations like warmth, prickliness, stiffness, and roughness by touching the garment (Fan & Tsang, 2008; Kamalha et al., 2013). According to Ghalachayan (2018), the perceived comfort of garments can be examined from various dimensions such as physical, psychological, and social comfort.

Consumers prefer to buy comfortable clothing (Sanad, 2016). Sidberry (2011) found a positive relationship between comfort and purchase intention. Hwang et al. (2016) stated that the perceived comfort of a product may decrease the risks of having unfamiliarity with the usage of products since customers do not feel skeptical about clothing being comfortable. Expected comfort from the garment plays one of the most intriguing roles in making a purchase decision

for that garment (Davis, 1987; Eckman et al., 1990; McLean et al., 1986). Day by day, the demand for comfortable garments is increasing among consumers (Kaplan & Okur, 2008).

Studies revealed that jute can be considered comfortable by blending with other fibers and by giving proper mechanical, chemical, and functional finishing (Ammayappan et al., 2013; Bhardwaj & Juneja, 2012; Charankar et al., 2007; Debnath, 1974; Devi et al., 2014; Ibrahim et al., 2009; Pan et al., 2017; Salam & Salam, 2005; Sreenath et al.,1996). Consumers combine information about the expected fit and comfort of garments before forming attitudes toward them (Eckman et al., 1990). The same can be expected in terms of jute-blended garments. Though there is a lack of literature that solely focuses on the fit and comfort of jute-blended garments, based on the existing literature review on fit, comfort, and attitudes, hypotheses 1a and 1b have been developed:

> **H1:** Consumers' perceived functional attributes of jute-blended garments, in terms of (a) perceived fit and (b) perceived comfort, positively influence their attitudes toward jute-blended garments.

Expressive Perception

Environmental Friendliness of the Products

Individuals who possess a positive attitude towards the environment are more likely to engage in environmentally responsible behaviors (Kim & Damhorst, 1999) and behave responsibly in consuming apparel (Yan et al., 2012). Lang and Wei (2019) have mentioned that environmental concerns, values, or attitudes are indirect predictors of specific environmental consumption behaviors, namely purchasing environmentally friendly products, reusing, or recycling old items, and so on.

Jute has been identified as a significant source of sustainable fashion products (Ghalachyan, 2018; Saha et al., 2010). Environmentally friendly materials such as jute are getting attention from environment-conscious people (Akter et al., 2020). Islam and Xiaoying (2016) mentioned that there is a trend of buying eco-friendly products made of jute. Considering the environmentally sustainable qualities of jute-blended garments (e.g., environmental friendliness, bio-degradable, recyclable), and based on the existing literature, hypothesis 2a has been developed:

H2a: Consumers' perceived expressive attributes of jute-blended garments, in terms of environmental friendliness of jute-blended garments, positively influence attitudes toward jute-blended garments.

Uniqueness

According to the uniqueness theory by Fromkin (1970), people strive to have distinct identities and uniqueness. Tian et al. (2001) stated consumers perceive the uniqueness of a product when they see differences from other products. This desire can be satisfied by having unique products (Snyder, 1992). Consumers with higher needs for uniqueness, behave in a more innovative way as well as look for newer and unique consumer products more than individuals with a lower need for uniqueness (Workman & Kidd, 2000). Moreover, people with a higher need for uniqueness appreciate unique products (Franke & Schreier, 2008) and adopt new products and brands even more than the other group (Amaldoss & Jain, 2005; Zimmer et al., 1999). When they possess unique products, they consider the value of the product to be high (Kim et al., 2021). When the value of the product increases, consumers perceive a higher purchase intention toward such a product (Wu et al., 2012).

Consumers concerned about the environment are more likely to choose unique clothing to express their individuality (Farsang et al., 2015) and seek items that convey messages about themselves (Lamb & Kallal, 1992). Jute is an environmentally-friendly fiber with unique properties and is versatile by nature (Ali et al., 2001; Gangwar et al., 2011). The quality of jute has been upgraded by using different blending and softening techniques which result in expanding the market by making a new class of jute-based fabrics (Charankar et al., 2007). Since jute-blended garment has the possibility of being unique, hypothesis 2b has been proposed as follows:

H2b: Consumers' perceived expressive attributes of jute-blended garments, in terms of the perceived uniqueness of jute-blended garments, positively influences attitude toward jute-blended garments.

Aesthetic Perception

Aesthetic Attributes

Aesthetic attributes are one of the key determining factors in consumer choice and consumption behavior (Bloch, 1995; Eckman, 1997; Holbrook 1986). Several studies supported the importance of aesthetic attributes in consumer psychology (Patrick & Peracchio, 2010) and their importance in consumption decisions (Eckman et al., 1990; Jordan et al., 1996; Kalins, 2003), especially for products such as clothing that have strong aesthetic components (Eckman, 1997). The attractiveness of the wearer that pleases the senses is included in the functions of clothing, so it is important in the choice of clothing (Eckman, 1997).

Previous research showed that for highly aesthetic products, consumers develop a more positive attitude and a higher purchase intention (Bloch et al., 2003; Chang et al., 2014; Hoyer &

Stokburger-Sauer, 2012) because consumers expect that aesthetic products are also functionally superior (Han et al., 2016). Attitude and purchase intentions towards different types of products from smartwatches to upcycled products are significantly influenced by perceived aesthetic attributes (Gilal et al., 2018; Hsiao & Chen, 2018; Hwang et al., 2016; Yu & Lee, 2019). Jung et al. (2020) found aesthetics has a positive influence on both attitude and purchase intention toward sustainable fashion.

Blending other fibers with jute enhances the aesthetic properties of jute fabric (Nandi et al., 2015). Jute-blended composites proved to have an aesthetic appeal (Sivakumar et al., 2018). It has been anticipated that garments made of jute blend may have a good amount of aesthetic appeal due to its' attractiveness (Roy Maulik, 2019). Therefore, the present study proposed the following hypothesis:

H3: Consumers' perceived aesthetic attributes of jute-blended garments positively influence their attitudes toward jute-blended garments.

Attitude

Attitudes and intentions are distinctive in contemporary attitude theory (Fransson & Gärling, 1999). According to the theory of reasoned action by Ajzen and Fishbein (1980), the intention of an individual is influenced by one's attitude. Empirical research supports that there is a relationship between attitude and intention (Ajjan & Hartshorne, 2008; Alavi et al., 2016; Lam et al., 2007).

The attitude was the strongest predictor of intention to purchase green products (Paul et al., 2016). Researchers have found positive effects of attitude on purchase intention in the context of apparel products (Abrar et al., 2021; Gam, 2011; Hwang et al., 2016; Kang & Kim,

2012; Nam et al., 2017; Park et al., 2015; Seo & Kim, 2019; Shin et al., 2020). Jin and Hye (2011) found that attitude was the most important antecedent of purchase intention toward US apparel brands. In fact, consumers who possess a positive attitude toward preserving the environment prefer purchasing green products (Ginsberg & Bloom, 2004; Minton & Rose, 1997) as well as environmentally friendly packaging (Van Birgelen et al., 2009). A favorable attitude toward sustainable products has a positive impact on creating strong purchase intentions toward them (Kang & Kim, 2013). An et al. (2021) found a positive relationship between attitude and purchase intention toward innovative and newly developed sustainable products.

Functional, expressive, and aesthetic attributes of the garment can form an attitude toward it (Hwang et al., 2016). Extending the findings from the previous literature on the impact of attitudes toward other eco-friendly and sustainable products on consumer purchase intentions, the following hypothesis is proposed:

H4: Consumers' attitude toward jute-blended garments positively influences their purchase intention towards jute-blended garments.

Subjective Norm

Subjective norm is another important component of the theory of reasoned action (TRA) (Fishbein & Ajzen, 1977) which explains how an individual gets the motivation to act upon the approval from their social reference group as well as from social pressure (Leclercq-Machado et al., 2022; Schneider & Jastram, 2018). Subjective norm shows how a person behaves in a certain way under the influence of others (Minton & Rose, 1997; Saricam & Okur, 2019). Consumers are influenced by the approval of others and echo it through their actions (Leclercq-Machado et al., 2022).

Subjective norm concerns the behaviors that others would prefer and approve for the consumers to perform a particular behavior in a certain way (Van Tonder et al., 2023) and motivation to comply with those people's views. Thus, subjective norms refer to both the perceived social pressure from others for an individual to behave in a certain manner, as well as his/her motivation to comply with those people's views (Ajzen, 1991; Ham et al., 2015; Jin et al., 2012; Yang and Jolly, 2009).

To understand the purchase decision-making process, it is necessary to understand the relationship between attitudes, subjective norms, and purchase intention since there is an important role of subjective norms on other behavioral drivers like the attitude that eventually impacts purchase intention (Al-Swidi et al., 2014; Chang, 1998; Shimp & Kavas, 1984; Vallerand et al., 1992). A study found that the reference group (e.g., Social group) influences consumers' green consumption (Wu & Chen, 2014). Maloney et al. (2014) found, that in terms of consumers' purchase intention to buy organic apparel, attitude was the most significant factor followed by the subjective norm. A similar result has been found in the context of the purchase intention toward sustainable fashion products (Saricam & Okur, 2019). Past literature suggests a positive influence of subjective norms on consumers' eco-friendly attitudes and purchase intentions (Cowan & Kinley, 2014; Liobikiene et al., 2016; Nam et al., 2017). Extending these findings in the context of jute-blended garments, the following hypothesis is proposed:

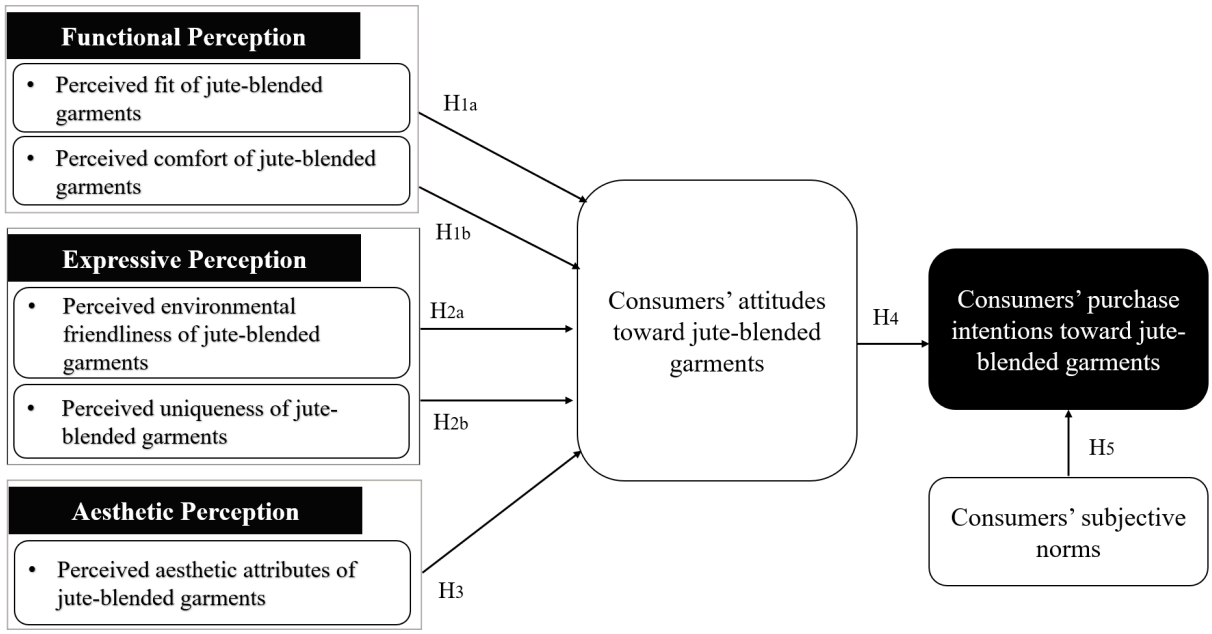
H5: Consumers' subjective norms positively influence their purchase intention toward jute-blended garments.

Conceptual Research Model

The conceptual research model (see Figure 3) for the present study has been developed based on previous relevant literature reviews on the research variables utilizing the FEA model and TRA theory as the framework.

Figure 3

Conceptual Research Model



CHAPTER 3: METHODS

Jute-blended Garments Prototype

Two previously developed medium size blazers with conventional classic designs have been used for this study. One of them was designed as menswear and the other one is as womenswear since blazers are worn by individuals of various genders and ages. The garments are shown in Figure 4. The garments were made of eco-friendly finished jute-cotton (i.e., jutton) blended woven fabric. One of the fabrics (i.e., white) contained 67% jute and 33% cotton and the other one (i.e., grey) contained 80% jute and 20% cotton. The price per yard of the fabric was around $2-3 in the year 2016 which is considered affordable.

Figure 4

Developed Prototype Blazers a) Female fit and b) Male fit

Research Design

Based on the reviewed literature, a quantitative research approach by incorporating the online survey method was deemed suitable to be employed for investigating the hypothesized relationships. An online survey was conducted instead of a paper-and-pencil conventional survey

because of its advantages such as being less expensive and convenient for the researchers and respondents (Dillman et al., 2014). Consumers' attitudes, subjective norms, and purchase intentions toward jute-blended garments along with consumers' perceived fit, perceived comfort, perceived environmental friendliness, perceived uniqueness, and perceived aesthetic quality of jute-blended garments were measured through this survey. Details of the survey instrument along with the research procedure used for collecting the data are provided below.

Instruments

To collect the data, a survey questionnaire (see Appendix B) was developed by using and modifying previously validated measurement scales to measure consumers' functional, aesthetic, and expressive perceptions of jute-blended garments and consumers' attitudes, subjective norms, and purchase intentions toward it. The demographic information of the respondents was collected at the end of the survey. The wording of the measurement items for each variable is given in Table 1.

Perceived Fit of Jute-blended Garment

To measure the perceived fit of a jute-blended garment, three items were used by modifying and combining two previously developed scales (Chattaraman et al., 2013; LaBat & DeLong, 1990) for the context of this study. One of them was developed to measure the apparel fit preference that contains four items (Chattaraman et al., 2013) with Cronbach's α = .90. Two relevant items were used from this scale for this study. Another scale was developed to measure satisfaction with the fit of the apparel by using a 9-point scale that has ten items for different body point sites (LaBat & DeLong, 1990) with Cronbach's α = .78. Instead of using all body points (e.g., bust, waist, arm, etc.) separately, combining all (e.g., body) were used for this study

to measure the overall fit of the body. For the convenience of this study, the researcher used a 5-point Likert scale to report respondents' agreement level (1 = Strongly Disagree, 5 = Strongly Agree).

Perceived Comfort of Jute-blended Garment

For assessing the perceived comfort of jute-blended garments, a measurement scale was adapted from Fan and Tsang (2008) which was used to measure comfort sensation rated on a 5-point scale. Furthermore, Michaelson et al. (2018) used this scale to assess the comfort of rock-climbing pants and reported Cronbach's α of .79. Cui et al. (2021) used this scale for measuring the comfort of the 3D printed garment on a 7-point Likert scale and reported Cronbach's α from their study was .91 which indicates a high reliability of this scale. For this study, four items from nine items are adopted from the study of Cui et al. (2021) and used a 5-point Likert scale (1 = Strongly Disagree, 5 = Strongly Agree) to get a response from participants.

Perceived Environmental Friendliness of Jute-blended Garment

The perceived environmental friendliness of jute-blended garments was assessed by three items adapted from an existing scale (Kianpour et al., 2014). Some words have been changed to reflect the context of this study. Cronbach's α of this scale was reported to be .86 (citation) which shows good reliability of this scale. These items asked for responses on a 5-point scale (1 = Strongly Disagree, 5 = Strongly Agree).

Table 1

Survey Instruments: Measurement Scale and Sources

Variable Category	Variable Name	Measurements	Source of Scale
Functional perceptions	**Perceived fit of the jute-blended garment**	I perceive the jute-blended garment will - 1. fit my body perfectly. 2. look best on me. 3. comfortably fit my body. 4. fit (tight/loose) my hips.	LaBat and DeLong (1990); Chattaraman et al. (2013)
	Perceived comfort of the jute-blended garment	I perceive the jute-blended garment will be - 1. prickly 2. stiff 3. rough next to my skin 4. uncomfortable to wear.	Fan and Tsang (2008)
Expressive Perception	**Perceived environmental friendliness of jute-blended garment**	I perceive the production of the jute-blended garment - 1. is less harmful to the environment. 2. uses less energy than a comparable traditional blended garment. 3. is harmless for humans.	Kianpour et al. (2014)
	Perceived uniqueness of the jute-blended garment	I perceive the jute-blended garment is – 1. highly unique. 2. one of a kind. 3. really special.	Franke and Schreier (2008)
Aesthetic Perception		1. The appearance of the jute-blended garment is aesthetically	Hwang et al. (2016)

Variable Category	Variable Name	Measurements	Source of Scale
		appealing to me. 2. The design of the jute-blended garment is aesthetically appealing to me. 3. The overall style of the jute-blended garment is appealing to me.	
Consumers' attitude toward the jute-blended garment		I think the jute-blended garment is – Bad (1) – Good (5) Unpleasant (1) – Pleasant (5) Unsatisfying (1) – Satisfying (5) Unfavorable (1) – Favorable (5)	Park and Ha (2014)
Consumers' subjective norm		1. Most people who are important to me would think that I should use jute-blended garments. 2. People whose opinions I value may prefer that I use jute-blended garments. 3. My friends (my peer group) may think that it is a good idea to use jute-blended garments.	Paul et al. (2016); Timyan and Sadachar (2020)
Consumers' purchase intention toward the jute-blended garment		1. I would consider buying a jute-blended garment. 2. I will purchase a jute-blended garment. 3. There is a strong likelihood that I will buy a jute-blended garment.	Dodds et al. (1991)

Perceived Uniqueness of Jute-blended Garment

For measuring the perceived uniqueness of jute-blended garments, three items were adopted from the scale developed and validated by Franke and Schreier (2008) with Cronbach's α of .85, which ensures good reliability of this scale. Items were modified by changing certain words for this study context. Again, the items were measured on a 5-point Likert-type scale (1 = Strongly Disagree, 5 = Strongly Agree).

Perceived Aesthetic Attributes of Jute-blended Garment

A total of three items on perceived aesthetic attributes of jute-blended garments were adapted from Hwang et al. (2016) by changing some words for the context of this. The reliability of this scale was confirmed by the previously reported value of Cronbach's α **.**94 (citation). This variable was measured on a 5-point Likert scale (1 = Strongly Disagree to 5 = Strongly Agree) in this study.

Consumers' Attitudes Toward Jute-blended Garment

Attitude is one of the constructs of the theory of reasoned action (TRA), so it was measured according to the recommendations of Ajzen and Fishbein (1980) and Ajzen (1985). Therefore, consumers' attitude toward jute-blended garments was assessed by using semantic differentials 5-point scale (e.g., 1 = Very bad, 3 = neither, 5 = Very good) adapted from a study by Fielding et al. (2008). Fielding et al. (2008) collected responses on a 7-point scale by using six semantic differentials. Four semantic differentials that were used in this study are bad/good, unpleasant/pleasant, unsatisfying/satisfying, and unfavorable/favorable. The value of Cronbach's α for this scale reported earlier is .90 which indicated the high reliability of this scale.

Consumers' Subjective Norms

The subjective norm was measured by adapting 3 items from two existing scales (Paul et al., 2016; Timyan & Sadachar, 2020). Two items for this study have been chosen from the study by Paul et al. (2016) where researchers measured the subjective norm for green product consumption by using a 4 items scale on a 5-point Likert-type scale with Cronbach's α .896. Another item was taken from the study conducted by Timyan and Sadachar (2020) where researchers measured subjective norms for reusable shopping bags by using a 3 items scale on a 5-point Likert-type scale and Cronbach's α for this scale was reported as .678. A combination of these two scales was used to measure the subjective norms of consumers regarding jute-blended garments by using a 5-point Likert scale to capture respondents' agreement level (1 = Strongly Disagree, 5 = Strongly Agree).

Consumers' Purchase Intentions Toward Jute-blended Garment

Consumers' purchase intention toward jute-blended garments was measured by using an existing scale (Dodds et al., 1991) that has five items. Dodds et al. (1991) used seven points scale to get responses and reported the value of Cronbach's α as .97 for this scale which reveals the high reliability of this scale. From that scale, three items were modified for this study context with some wording changes and respondents used a 5-point Likert scale to report their agreement level (1 = Strongly Disagree, 5 = Strongly Agree).

Sample

The sample for this study was students from the College of Human Sciences at a southeastern public university who were 19 years of age or older and were residing in the United States, including all genders who wear different types of garments regularly. Nineteen years was

the legal age of consent for research in this state at the time of this study. This age group of college students has higher involvement in clothing consumption in comparison with their older counterparts (O'Cass, 2004; Kwon et al., 2020).

Different studies consider different study characteristics such as research objectives, type of statistical test, etc. for determining sample size. However, the sample size should be enough for identifying the relationship effects (Fink et al., 2009), for meeting a desired level of measurement precision and calculating the descriptive and exploratory pursuit of meaningful estimates from the data (Cappelleri et al., 2014; Thissen & Wainer, 1982). For this study, the sample size was determined based on the sample-to-variable ratio. Studies found that a 15:1 sample-to-variable ratio is appropriate to determine sample size (Hair et al., 2018; Memon et al., 2020). Many other studies have used this approach to determine their study's sample size (Nazir et al., 2021; Rashid, 2019; Sandi, 2021). Therefore, the minimum required sample size for the present study was 120 since this study has 8 variables (15*8=120).

Survey Design

The questionnaire of this survey was constructed through Qualtrics where the contents were divided into four parts. At the beginning of the survey, an Institutional Review Board (IRB) approved information letter was included that briefly described the purpose, risks, and benefits of the study as well as compensation for taking part in this study and a guarantee of confidentiality of their personal information (See Appendix A).

In the second part of the survey (See Appendix B), a brief description of the jute, jute-blended fabric, and jute-blended garments was provided for participants. Following this description, the respondents were shown a 31-second video of the manufacturing process of jute

as well as jute-blended fabrics and pictures of jute-blended garments from different sources. Then, they were given instructions to physically touch and feel the jute-cotton blended fabric swatches and carefully view the garments made of jute-cotton blended fabric hung on the dress form. (See Figure 5)

In the third part of the survey (See Appendix B), participants were given guidance to respond to the questions. All (27) items in this part of the survey were close-ended to first measure consumers' FEA perception of jute-blended garments and then their attitude, subjective norms, and purchase intention towards jute-blended garments. The fourth part of the survey was designed to solicit the demographic information of the participants like their age, gender, class standing, etc.

Figure 5

Jute-blended Fabric Swatches and Garments are Shown to the Participants

Another separate survey (See Appendix B) was designed and linked with this previous survey to collect the student participant's name and course name as well as the course code to provide extra credit points to the students. Creating this second survey ensured that participants' responses are separate from their personal information to maintain confidentiality. The whole survey was designed in a way that would take 5-10 minutes to complete. Both the survey link and QR code were generated through Qualtrics to be shared with the participants.

Data Collection Procedure

Approval from the Institutional Review Board (IRB) was received to administer the survey (See Appendix A). Researchers reached out to various undergraduate course instructors from the College of Human Sciences at a large Southeastern public university with the

possibility of offering an extra credit points opportunity to their students for their participation in the research survey. Instructors who responded positively were further provided with study participation details (e.g., date, time, and venue) to be shared with their students. Students were informed by their instructors that participation in the survey was entirely voluntary, and they would be given extra credit points for participating in the research survey. This is how the sample recruitment took place.

A pilot test was carried out to evaluate the clarity of the survey questionnaire. Five to ten graduate students from the graduate program at the same university were given the Qualtrics link with a request to participate in the survey and were asked to report any challenges they faced during the completion of the survey or any suggestions they had for improvement. In addition, suggestions from the graduate student's thesis committee members (i.e., three graduate faculty members) were sought and considered to refine the wording of the items. The survey questionnaire was fine-tuned based on suggestions from the faculty members and feedback from the graduate students.

During the assigned dates and times, the researcher (i.e., MS Thesis student) occupied one of the classrooms where she displayed two jute-blended garments on two dress forms, carried jute-blended fabric swatches for participants to touch and feel, and kept printed copies of the QR codes for participants to begin their participation in the study. Undergraduate students scanned the QR code to take the survey. As per their given consent (part one of the survey), they read the description of the jute, jute-blended fabric, and jute-blended garments as well as watched a video regarding the manufacturing process of jute fiber. Next, they saw images of the jute-blended garments collected from different sources (part two of the survey). Then, they

touched and felt the jute-blended fabric swatches as well as looked at the jute-blended garments which were showcased on the dress forms. After this process, they provided their responses in the third part (i.e., items on research variables) and fourth part (i.e., demographic items) of the survey. At the end of this survey, students were directed and linked to another survey where they provided their names and course names to receive extra credit points. Participants were also thanked for their time at the end of this survey.

In total, 148 undergraduate students participated in the survey within a three-week period. A list of participants' names was sent to the respective course instructors so that they could provide extra credit points to the students who participated in this study.

Data Analysis

Collected data was exported in both .sav and .xlsx files. An Excel data file was used to clean the data before analysis. SPSS software was used to analyze the data.

The demographics of the sample were calculated by using descriptive statistics. The data were summarized using frequencies, in terms of participants' gender, age, class standing, ethnicity, and annual household (i.e., family) income.

Exploratory factor analysis (EFA) was conducted by using the Principal Component Analysis (PCA) with Varimax rotation separately on the items of each variable to check the dimensionality of the items (construct validity). This step included the independent variables - consumers' (a) Functional, (b) Expressive (c) Aesthetic perceptions of jute-blended garments, and other research variables such as consumers' attitudes, subjective norms, and purchase intention toward jute-blended garments.

Factors were created from groups of the items loading on them that have loading above or equal to .60 and were free of low loading and cross-loading issues. To ensure internal consistency and reliability for each factor, all finalized factors of the scales in the survey were assessed with Cronbach's α value and 0.70 was considered as the minimum value for showing internal consistency. Pearson correlation coefficient was calculated to check the relationship among the studied variables by examining the correlation coefficients between them.

H1 to H3 contain the same dependent variable. Thus, stepwise multiple linear regression was conducted to test the hypothesized relationship. H4 and H5 contain the same dependent variable. Thus, multiple regression was employed to test these two hypotheses.

CHAPTER 4: RESULTS

This chapter reports and discusses the results and findings of this study. This chapter includes a description of the demographic characteristics of the sample, the result of exploratory factor analysis (EFA) on each measurement scale, the reliability of the scales, the correlation between the variables, and hypothesis test results.

Sample Demographic Characteristics

A total of 148 undergraduate students participated in this study which met the desired sample size of the study. The demographic characteristics of the sample are illustrated in Table 2. The findings indicate that there were 139 female participants (93.9%), 7 male participants (4.7%), and 2 participants who preferred not to reveal their gender. The age range of the study participants was between 19 to 34 years with an average of 20.3 years which reveals that most of the participants are Gen Z. Most of the participants were in their junior classification (35.1%) followed by sophomore level (29.7%). Participants of this study were predominantly non-Hispanic white (83.1%) followed by non-Hispanic black (8.1%). The family household income for 36.5% of the participants was $150,001 or more, and 20.3% preferred not to mention their household income level.

Table 2

Demographic Characteristics of Participants (N =148)

Variable	**Categories**	***f***	**%**
Gender	Male	7	4.7
	Female	139	93.9
	Prefer not to say	2	1.4
Age	19	46	31.1
	20	51	34.5
	21	30	20.3
	22	10	6.8
	23	5	3.4
	24	2	1.4
	25	3	2.0
	34	1	.7
Classification	Freshmen	27	18.2
	Sophomore	44	29.7
	Junior	52	35.1
	Senior	25	16.9
Ethnicity	American Indian/ Alaskan Native	1	.7
	Asian/pacific islander	5	3.4
	Hispanic	4	2.7
	Non-Hispanic black	12	8.1
	Non-Hispanic white	123	83.1
	Other	3	2.0
Household income	Less than $30,000	9	6.1
	$30,000 to 60,000	8	5.4
	$60,001 to $90,000	14	9.5
	$90,001 to $120,000	21	14.2
	$120,001 to $150,000	12	8.1
	$150,001 or more	54	36.5
	Prefer not to say	30	20.3

Exploratory Factor Analysis and Reliability of the Scales

Exploratory factor analysis (EFA) was conducted using the Principal Component Analysis (PCA) with Varimax rotation separately on the items of each variable to check the dimensionality of the items (construct validity). This included the independent variables - consumers' (a) Functional, (b) Expressive (c) Aesthetic perceptions of jute-blended garments, and other research variables such as consumers' attitudes, subjective norms, and purchase intention toward jute-blended garments. To ensure internal consistency and reliability for each factor, all finalized factors of the scales in the survey were assessed using Cronbach's α value and 0.70 was considered as the minimum value for showing internal consistency (Taber, 2018). All the factor loadings and reliability of the measurement items are illustrated in Table 3.

The perceived fit of the jute-blended garment was measured with four items that were loaded onto one factor with a factor loading above .70 except for one item ("*I perceive the jute-blended garment will fit (tight/loose) my hips"*). All four items together explained 51.54% of the total variance with a Cronbach's *alpha* of .68 which showed nearly acceptable internal consistency.

The four items measuring the perceived comfort of the jute-blended garment loaded onto one factor with factor loadings ranging from .757 to .872. These four items explained 66.455% of the total variance with a Cronbach's *alpha* of .829 which indicated the scale items are significantly consistent internally.

The perceived uniqueness of the jute-blended garment construct consisted of three items that all were loaded onto one factor explaining 72.172% of the total variance with factor loadings

above .80. Cronbach's *alpha* of this scale was .80 which reveals the internal consistency of the scale items.

Table 3

Factor Loading and Reliability of Measurement Items

Item	Factor Loading	% of Variance	Cronbach's α
Perceived fit of the jute-blended garment		51.547	.682
1. I perceive the jute-blended garment will fit my body perfectly.	.805		
2. I perceive the jute-blended garment will comfortably fit my body.	.755		
3. I perceive the jute-blended garment will look best on me.	.714		
4. I perceive the jute-blended garment will fit (tight/loose) my hips.	.577		
Perceived comfort of the jute-blended garment		66.455	.829
1. I perceive the jute-blended garment will be rough next to my skin.	.872		
2. I perceive the jute-blended garment will be uncomfortable to wear.	.843		
3. I perceive the jute-blended garment will be prickly.	.783		
4. I perceive the jute-blended garment will be stiff.	.757		
Perceived uniqueness of the jute-blended garment		72.172	.800
1. I perceive the jute-blended garment is one of a kind.	.858		
2. I perceive the jute-blended garment is really special.	.853		
3. I perceive the jute-blended garment is highly unique.	.837		

Item	Factor Loading	% of Variance	Cronbach's α
Perceived environmental friendliness of jute-blended garment		69.861	.764
1. I perceive the production of the jute-blended garment uses less energy than a comparable traditional blended garment.	.882		
2. I perceive the jute-blended garment as less harmful to the environment.	.854		
3. I perceive the production of the jute-blended garment is harmless for humans.	.767		
Perceived aesthetic perception toward the jute-blended garment		81.835	.887
1. The appearance of the jute-blended garment is aesthetically appealing to me.	.917		
2. The design of the jute-blended garment is aesthetically appealing to me.	.909		
3. The overall style of the jute-blended garment is appealing to me.	.887		
Consumers' attitude toward the jute-blended garment		74.887	.884
I think the jute-blended garment is -			
1. Unsatisfying: Satisfying	.898		
2. Unpleasant: Pleasant	.875		
3. Unfavorable: Favorable	.844		
4. Bad: Good	.843		
Consumer's subjective norm		74.091	.824
1. People whose opinions I value may prefer that I use jute-blended garments.	.900		
2. Most people who are important to me would think that I should use jute-blended garments.	.886		
3. My friends (my peer group) may think that it is a good idea to use jute-blended garments.	.793		

Item	Factor Loading	% of Variance	Cronbach's α
Consumers' purchase intention toward the jute-blended garment		79.610	.868
1. I will purchase a jute-blended garment.	.924		
2. There is a strong likelihood that I will buy a jute-blended garment.	.901		
3. I would consider buying a jute-blended garment.	.851		

For the perceived environmental friendliness of the jute-blended garment, the measure consisted of three items with factor loadings ranging from .767 to. 882. The three items of this scale explained 69.861% of the total variance and loaded onto one factor. Cronbach's *alpha* for this scale was .764 which showed an acceptable internal consistency for the scale.

The perceived aesthetic perception toward the jute-blended garment measure comprised three items that all were loaded onto one factor explaining 81.835% of the total variance with factor loadings ranging from .887 to .917. Cronbach's *alpha* of this scale was .887 which indicated high internal consistency.

Four semantic differential items have been used to measure the consumers' attitudes toward the jute-blended garment that loaded onto one factor with factor loadings above .80. All four items together explained 74.887% of the total variance with Cronbach's *alpha* .884.

For the consumers' subjective norm, the measure consisted of three items with factor loadings ranging from .793 to .900. The three items of this scale explained 74.091% of the total variance and loaded onto one factor. Cronbach's *alpha* for this scale was .824 which showed high internal consistency of this scale.

The consumers' purchase intention toward the jute-blended garment was measured with three items that were loaded onto one factor with factor loadings above .70. All of the three items explained 79.610% of the total variance with a Cronbach's *alpha* of .86 which showed high internal consistency.

Correlation Among the Constructs

According to (Leedy & Ormrod, 2019), the correlation coefficient expresses the degree of similarity between the two measures as well as describes the degree of intercorrelation between two variables. A correlation coefficient for two variables is a number between -1 and +1. A number close to either -1 or +1 (e.g., +.89 or - .76) indicates a strong correlation, whereas a number close to 0 (e.g., +.15 or -.22) indicates a weak correlation. The correlation between variables was weak to moderate (see Table 4). The finding reveals that the strongest correlation is between consumers' subjective norms and consumers' purchase intention toward jute-blended garments with a correlation coefficient of .611 followed by the correlation between consumers' attitude toward jute-blended garments and consumers' subjective norm (correlation coefficient of .601). The correlation matrix among all variables is summarized in Table 4.

Table 4

Pearson Correlation Coefficients Among Variables

Variable	*1*	*2*	*3*	*4*	*5*	6	7	8
1. *Perceived fit of the jute-blended garment*	—							
2. *Perceived comfort of the jute-blended garment*	.401**	—						
3. *Perceived uniqueness of the jute-blended garment*	.354**	.070	—					
4. *Perceived environmental friendliness of jute-blended garment*	.279**	.166*	.421**	—				
5. *Perceived aesthetic perception toward the jute-blended garment*	.416**	.342**	.280**	.289**	—			
6. *Consumers' attitude toward the jute-blended garment*	.478**	.458**	.379**	.393**	.535**	—		
7. *Consumers' subject norm*	.543**	.378**	.311**	.240**	.506**	.601**	—	
8. *Purchase intention*	.482**	.419**	.223**	.306**	.541**	.553**	.611**	—

*$p < .05$, **$p < .001$

Hypothesis Testing

The first, second, and third hypotheses (1a, 1b, 2a, 2b, 3) contain the same dependent variable. Thus, stepwise multiple linear regression was conducted to check the hypothesized

relationship together. Multiple regression was conducted to examine the relationship between consumers' FEA perceptions of jute-blended garments and their attitudes toward jute-blended garments.

The regression model was statistically significant ($p < .001$) and indicated that consumers' attitudes toward jute-blended garments can be predicted by their FEA perceptions of jute-blended garments ($R^2 = 0.470$, adjusted $R^2 = 0.452$). The result is summarized in Table 5.

Hypothesis 1a proposed that consumers perceived functional attributes of jute-blended garments, in terms of perceived fit, would positively influence their attitudes toward jute-blended garments. The findings indicate that this hypothesis was supported (ß = .151, $p = 0.043$). Hypothesis 1b proposed that consumers perceived functional attributes of jute-blended garments, in terms of perceived comfort, would positively influence their attitudes toward jute-blended garments. The findings provided significant support in favor of this hypothesis (ß = .260, $p < .001$). Therefore, H1a and H1b were supported.

Hypothesis 2a and 2b predicted that consumers perceived expressive attributes of jute-blended garments, in terms of a) the perceived environment-friendliness of jute-blended garments and b) the perceived uniqueness of jute-blended garments, would positively influence their attitude toward jute-blended garments. The result showed the positive influence of the perceived environment-friendliness of jute-blended garments on their attitude toward jute-blended garments (ß = .156, $p = 0.025$) and the positive influence of the perceived uniqueness of jute-blended garments on their attitude toward jute-blended garments (ß = .159, $p = 0.027$). Therefore, Hypotheses 2a and 2b were supported.

Table 5

Multiple Regression Analysis Report for H1 to H3

Independent Variable	**Std. ß**	***t***	***R^2***	***Adj. R^2***	***p***
Model 1			.470	.452	
Perceived fit of the jute-blended garment	.151	2.047			0.043
Perceived comfort of the jute-blended garment	.260	3.777			< .001
Perceived uniqueness of the jute-blended garment	.159	2.236			0.027
Perceived environmental friendliness of jute-blended garment	.156	2.264			0.025
Perceived aesthetic perception toward the jute-blended garment	.293	4.163			< .001

Note. Dependent Variable: Consumers' attitude toward the jute-blended garment

Hypothesis 3 proposed that consumers' perceived aesthetic attributes of jute-blended garments would positively influence their attitudes toward jute-blended garments. The result showed that consumers' perceived aesthetic attributes of jute-blended garments significantly influenced their attitude toward jute-blended garments (ß = .293, $p < .001$).

Multiple regression analysis was employed to test hypotheses 4 and 5 to examine the influence of consumers' attitudes toward jute-blended garments as well as their subjective norms on their purchase intentions toward jute-blended garments. The regression model proved that both consumers' attitudes toward jute-blended garments as well as their subjective norms have a significant positive influence on their purchase intentions toward jute-blended garments (R^2 = 0.427, adjusted R^2 = 0.420). The regression results are illustrated in Table 6.

Hypothesis 4 predicted that consumers' attitude toward jute-blended garments positively influences their purchase intention towards jute-blended garments. The findings indicated a significant positive influence of consumers' attitudes towards jute-blended garments (ß = .291, $p < .001$) on their purchase intention, which supports this hypothesis.

Table 6

Multiple Regression Analysis Report for H4 and H5

Independent Variable	**Std. ß**	***t***	***R^2***	***Adj. R^2***	***p***
Model 2			.427	.420	
Consumers' attitude toward the jute-blended garment	.291	3.693			< .001
Consumer's subjective norm	.436	5.549			< .001

Note. Dependent Variable: Consumers' purchase intention toward the jute-blended garment

Hypothesis 5 proposed that consumers' subjective norms positively influence their purchase intention toward jute-blended garments. The hypothesis was significantly supported by the values obtained from the result (ß = .436, $p < .001$).

The findings of the study are summarized in Table 7 and illustrated in Figure 6.

Table 7

Hypothesized Relationship and Summary of the Results

HP #	**Hypothesis Statement**	**Result**
H1a	Consumers perceived functional attributes of jute-blended garments, in terms of perceived fit, positively influence their attitudes toward jute-blended garments. (ß = .151, $p = 0.043$)	Supported
H1b	Consumers' perceived functional attributes of jute-blended garments, in terms of perceived comfort, positively influence their attitudes toward jute-blended garments. (ß = .260, $p < .001$)	Supported

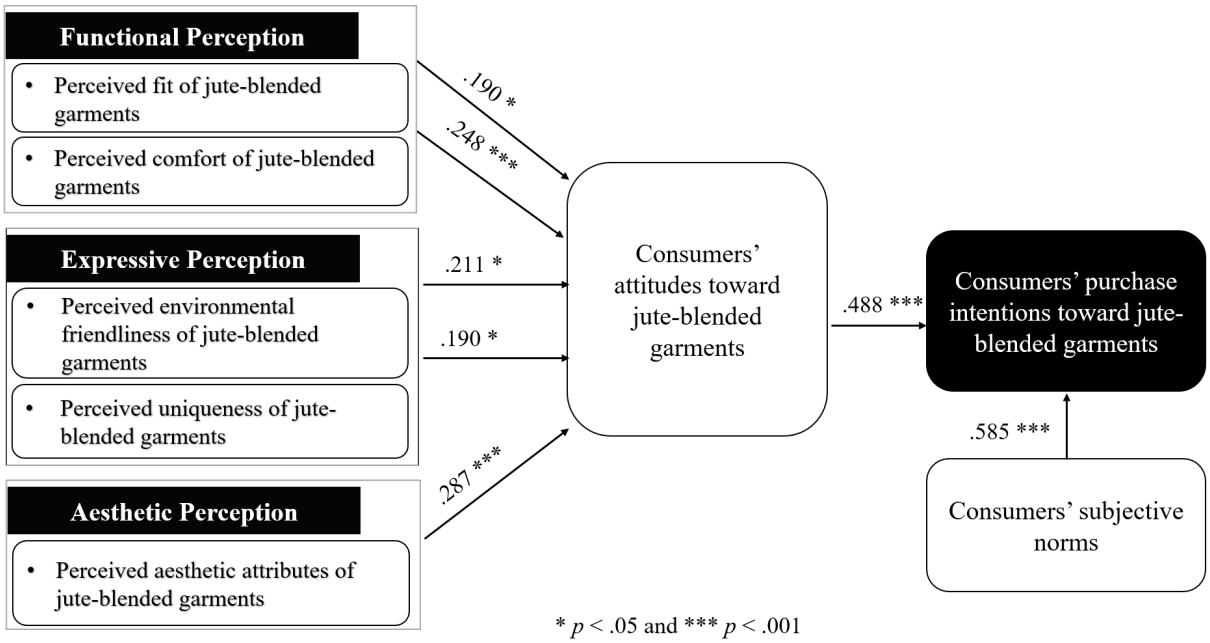
HP #	Hypothesis Statement	Result
H2a	Consumers perceived expressive attributes of jute-blended garments, in terms of environmental friendliness of jute-blended garments, positively influences attitudes toward jute-blended garments. (ß = .156, p = 0.025)	Supported
H2b	Consumers' perceived expressive attributes of jute-blended garments, in terms of the perceived uniqueness of jute-blended garments, positively influence attitudes toward jute-blended garments. (ß = .159, p = 0.027)	Supported
H3	Consumers' perceived aesthetic attributes of jute-blended garments positively influence their attitudes toward jute-blended garments (ß = .293, p < .001)	Supported
H4	Consumers' attitude toward jute-blended garments positively influences their purchase intention towards jute-blended garments. (ß = .291, p < .001)	Supported
H5	Consumers' subjective norms positively influence their purchase intention toward jute-blended garments. (ß = .436, p < .001)	Supported

CHAPTER 5: DISCUSSION

In this chapter, the results of this study are discussed in light of extant literature followed by managerial and theoretical implications, and limitations and recommendations for future research.

Figure 6

Summary of the Results



Discussion of Findings

This research offers novel, unique, and valuable insights that contribute to the existing body of knowledge by offering the consumer perspective on jute-blended garments. These findings will benefit both the researchers and apparel industry practitioners in many ways. Below, we have discussed the results of each hypothesis reflecting on the extant literature in this field.

Influence of FEA on Consumers' Attitude Toward Jute-blended Garments

This study employed the Functional, Expressive, Attitude (FEA) model and the Theory of Reasoned Action (TRA) to develop the conceptual framework to investigate how consumers' FEA perception forms their attitudes that influences their purchase intention toward jute-blended garments along with consumers' subjective norms. The first three hypotheses (i.e., H1-H3) predicted that consumers' FEA perception has a positive influence on consumers' attitudes toward jute-blended garments. Based on the results, these three hypotheses were supported. This reveals that attitudes towards jute-blended garments can be predicted by 1) consumers' functional perception in terms of perceived fit and perceived comfort, 2) consumers' expressive perception in terms of perceived environmental friendliness and perceived uniqueness, and 3) consumers' aesthetic perception in terms of the aesthetic quality of jute-blended garments. Therefore, these five variables (perceived fit, perceived comfort, perceived environmental friendliness, perceived uniqueness, and perceived aesthetic quality of jute-blended garments) were found to be significant predictors of the consumers' attitudes toward jute-blended garments.

The first hypothesis (i.e., H1a and H1b) predicted that consumers perceived functional attributes of jute-blended garments, in terms of perceived fit and perceived comfort, positively influence their attitudes toward jute-blended garments. This is because garments that fulfill the functional needs of consumers are more likely to be liked, used, and valued. The functional perception of the FEA model is the extent to which a consumer perceives a product as fulfilling their functional needs particularly fit, comfort, mobility, protection, donning, and doffing of the garments (Lamb & Kallal, 1992). Extant literature has found that consumers consider fit and comfort as crucial aspects of clothing and use the information on these two aspects together to

shape their attitudes (Chen et al., 2010; Eckman et al., 1990; Jin & Hye, 2011). Thus, these two aspects were examined in the present study to understand consumers' functional perception of jute-blended garments. If people perceive the fit and comfort of a garment positively, it can positively influence their attitude toward the garment and ultimately impact their decision to buy them (Alexander et al., 2005). Similar to prior studies, the present study supported the idea that functional attributes in terms of perceived fit and perceived comfort are strong predictors of attitudes but in the context of jute-blended garments. This indicates that consumers perceived the jute-blended garments as comfortable and considered that the garments would fit their bodies resulting in a positive attitude toward them.

The second hypothesis (i.e., H2a and H2b) proposed that consumers perceived expressive attributes, in terms of perceived environment-friendliness and perceived uniqueness of jute-blended garments, positively influence attitudes toward them because the garments that express the values and identity of consumers are more likely to be preferred by consumers. This expressive dimension of clothing deals with how garments express the wearer's identity or personality by reflecting their values, beliefs, and attitudes through the symbolic meanings attached to the garments. Consumers are looking for environmentally friendly products to show their environmental consciousness (Sheikh et al., 2014), and they choose unique clothing to show their personality and express their individuality. Our findings supported that the expressive attributes of jute-blended garments play a crucial role in shaping consumers' attitudes in terms of environmental friendliness and the perceived uniqueness of jute-blended garments similar to previous research work in other product categories (Bakhshian & Lee, 2022). The present study also reveals that consumers considered jute-blended garments to be sustainable and that the eco-

friendly attributes of these garments aligned with their environmental awareness and concerns. In addition, we found that jute-blended garments offer a distinctive and novel appearance which was good for consumers' self-expression and enabled them to show their individuality.

The third hypothesis (i.e., H3) predicted that the consumers' perceived aesthetic attributes of jute-blended garments positively influence their attitudes toward jute-blended garments. The aesthetic attributes are visual and sensory features of a product that consumer perceives which influences their choice and consumption behavior (Eckman, 1997; Na et al., 2008). According to a study by Morganosky (1984), consumers' assessments of the aesthetic attributes of a product were sometimes more important than other attributes, in shaping their overall attitudes toward the product which led them to pay even more for high-aesthetic items regardless of utility. The findings of the present study corroborate previous studies that found aesthetic attributes were the predictor of attitudes (Gilal et al., 2018; Yu & Lee, 2019) but in the context of jute-blended garments. Moreover, these findings show that consumers perceived jute-blended garments as aesthetically appealing in terms of appearance, design, and overall style.

With this study, the uncertainty that may have existed regarding wearing jute-blended garments (Chandwani, 2015), can be mitigated since consumers perceived that jute-blended garments could fulfill their functional, expressive, and aesthetic needs. Consequently, experiencing jute-blended garments firsthand evoked positive emotions in the consumers, leading to a positive attitude toward jute-blended garments, which was empirically confirmed in the present study.

Relationships Between Attitude, Subjective Norms, and Purchase Intention toward Jute-blended Garments

As per the theory of reasoned action (TRA), attitude and subjective norms are the key predictors of the purchase intention of any product. TRA proposes that people's behavior is determined by their intentions, which in turn are influenced by their attitudes toward the behavior and their subjective norms (Ajzen & Fishbein, 1980). The initial three hypotheses (i.e., H1-H3) delved deeper into the process of how attitudes towards jute-blended garments have been shaped by utilizing information about the functional, expressive, and aesthetic aspects of jute-blended garments. Building upon this foundation, the subsequent two hypotheses aimed to examine the profound impact of attitudes and subjective norms on the purchase intention towards jute-blended garments.

The fourth hypothesis (i.e., H4) proposed that consumers' attitude toward jute-blended garments positively influences their purchase intention towards jute-blended garments. Attitude is formed after consumers' evaluation with the integration of their emotions towards a particular product and influences subsequent behavior towards that product. Notably, the relationship between attitudes and purchase intention has been extensively studied in academic literature and found that attitudes have a significant impact on purchase intention (Ajzen & Fishbein, 1980) in various contexts including apparel consumption (Abrar et al., 2021; Negara et al., 2020; Seo & Kim, 2019) and even for sustainable apparel consumption (Su et al., 2023). As expected, this hypothesis was also supported in the context of jute-blended garments and indicated that consumers who exhibit favorable attitudes towards jute-blended garments, tend to have high intentions to purchase them.

Purchase intention is influenced by subjective norms in addition to attitudes. Subjective norm is a fundamental component of TRA that pertains to an individual's perception of social pressure to engage in a particular behavior that reflects an individual's subjective evaluation of the social norms surrounding the consumer (Ajzen & Fishbein, 1980). The last hypothesis (i.e., H5) of this study predicted that consumers' subjective norms positively influence their purchase intention toward jute-blended garments. The findings confirmed that consumers' subjective norms are a strong predictor of purchase intentions toward jute-blended garments. This is consistent with the previous research on the influence of subjective norms on purchase intention toward sustainable apparel (Brandão & Costa, 2021; Chang & Watchravesringkan, 2018; Weiner, 2017). Participants in the present study perceived that their social circle including their family and friends have positive attitudes toward jute-blended garments. Furthermore, participants believed that if their social circle thinks they should use this type of jute-blended garments, then they may be more likely to purchase these garments themselves. This is because people tend to conform to social norms and feel pressured to behave in certain ways that are consistent with the expectations of others in their social circle.

The findings of the present study provide support for Ajzen and Fishbein's (1980) TRA which posits that behavioral intention is influenced by their attitude toward the behavior as well as their subjective norms. The findings suggest that the TRA can be successfully used as a theoretical framework to understand and predict consumer behavior in the context of jute-blended garments. This is consistent with the prior research that was conducted on other non-jute products. Overall, empirically testing the relationships among research variables stated in H1-H5

in the context of jute-blended garments is the unique and novel contribution of the present study.

Implications

Jute is a natural, environmentally friendly fiber that has been used as a textile material, especially as a packaging material for a long time. However, jute-blended garments are relatively new to most consumers and are still in the development stages. Researchers and manufacturers are working on jute-blended fabric to make it wearable by combining the benefits of jute with the softness and other advantages of other materials as jute has great potential to make apparel products. Theoretically, this study contributed to the growing body of research on the development of jute-blended garments with an aim to tap into the potential of jute as a wearable fabric material and to create a sustainable and eco-friendly alternative to traditional textiles by focusing on consumers' perspective as no prior study paid attention to this.

Theoretical Implications

To achieve the aim of this study, the functional, expressive, and aesthetic (FEA) model and theory of reasoned action (TRA) both have been employed as theoretical frameworks to support the proposed relationships predicted via H1-H5. The functional, expressive, and aesthetic (FEA) model offers insights into how consumers perceive and respond to the functional, expressive, and aesthetic aspects of jute-blended garments, while the TRA helps to understand how consumers' attitudes and subjective norms influence their purchase intentions toward these garments.

The FEA model is a consumer-centric approach that considers the functional, expressive, and aesthetic dimensions of the product. This study contributes to the knowledge of how consumers perceive and evaluate jute-blended garments from functional, expressive, and

aesthetic aspects with the help of the FEA model. The findings of this study indicated that consumers found jute-blended garments functional in terms of fit and comfort of the garments, expressive in terms of environmental friendliness and uniqueness, and overall, aesthetically appealing. As a result, they formed positive attitudes towards jute-blended garments. So, this indicates that consumers will have a positive attitude toward jute-blended garments when they perceive the jute-blended garments as functional, expressive, and aesthetically appealing. As the first study investigating consumer behavior towards jute-blended garments, these results significantly contribute to the academic literature on jute-blended garments. These findings will enable researchers to work on these FEA properties which are mostly sought by consumers. Moreover, consumers' valuable evaluation from the FEA perspective will be helpful to identify the strengths and weaknesses of jute-blended garments and future research can be conducted to improve these garments accordingly.

The theory of reasoned action (TRA) was used to investigate how consumers' attitude that was formed after evaluating the FEA attributes of the jute-blended garments influence their purchase intention as well as the influence of consumers' subjective norms on their willingness to buy jute-blended garments. The results revealed that consumers form the intention to buy jute-blended garments as a result of a positive attitude developed toward them as well as perceiving that their social circle (i.e., friends and family) would appreciate them for wearing jute-blended garments. Since no prior research exists in this context for jute-blended garments, these findings have a unique contribution to the growing body of literature on jute-blended garments. Additionally, the present study contributes to the existing literature by extending the applicability of the TRA in the domain of jute-blended garments.

In this study, the FEA model combined with TRA provides a better explanation of this topic. The results revealed that the incorporation of the FEA model with TRA presented a deeper understanding of the consumers' attitudes and purchase intentions toward newly developed jute-blended garments. By combining this model and theory, researchers can achieve a nuanced and comprehensive understanding of the complex factors that influence consumer behavior including their attitude and purchase intentions toward such garments.

This study also highlighted the potential of combining two theoretical frameworks (i.e., FEA and TRA). Therefore, this combination provides a useful foundation for studying consumer behavior toward newly developed products and can be used as a research framework in future studies.

Managerial Implications

This study offers several managerial implications that are valuable not only to researchers but also to practitioners in the textile and apparel industry. Since there is no existing study on jute-blended garments that explores consumers' perceptions and attitudes towards it, the findings of this study can be used for the development of more effective marketing strategies, product design, and manufacturing practices in the context of jute-blended garments.

The worldwide textile industry is looking for sustainable materials to make the industry more sustainable. Jute is one of the most sustainable materials in terms of environmental friendliness and cost-effectiveness. The findings of the present study highlight that consumers perceive jute-blended garments as sustainable products. These findings will help manufacturers and retailers to better understand consumer preferences and tailor their product development, manufacturing process, and marketing strategies to meet their customers' needs and preferences,

thus contributing to the potential growth of the jute-blended garment market. Also, retailers and brands can develop marketing strategies based on this study by dispelling prior negative associations of jute products and making jute-blended garments more popular among the masses.

Since there is no existing study on jute-blended garments exploring consumers' perceptions, this study will assist the designers and product developers to develop jute-blended garments according to the consumer's FEA perception. By identifying consumers' preferences and their FEA evaluation criteria, the present study informs and suggests ways for the design and production team of jute-blended garments to ultimately fulfill the needs and expectations of consumers. Fashion designers and manufacturers can use the knowledge of consumers' preferences about jute-blended garments' FEA attributes to create designs that cater to these preferences. The present study suggests that by emphasizing the functional, expressive, and aesthetic attributes of jute-blended garments, a positive FEA perception can be created among consumers, which will lead to a positive attitude towards them.

The combination of the FEA model and TRA demonstrated a comprehensive understanding of the factors that influence consumer behavior and decision-making in the context of jute-blended garments, which can be useful in designing marketing strategies and driving product development. Industry can emphasize the section on what consumers value most about jute-blended garments to garner attention from the consumers.

The findings of this study will extend the growing body of research on consumer behavior and shed light on the factors that influence consumers' attitudes and purchasing decisions regarding sustainable and unique fashion products such as jute-blended garments. This

study also suggests that marketers and product developers must focus on shaping positive attitudes towards jute-blended garments to enhance consumer behavior towards these products.

Limitations and Recommendations for Future Research

This study has some limitations which open opportunities for future researchers.

Methodological Limitations

A quantitative survey method was undertaken for studying the relationships among the research variables, FEA aspects, and consumers' attitudes, their subjective norms as well as their purchase intentions toward jute-blended garments. Data was collected in a numerical form that was analyzed statistically to test hypotheses. In this study, only close-ended questions were used which might limit the responses and failed to fully capture the complexity and nuances of the participants' true thoughts, feelings, or experiences. Sometimes survey methods produce less reliable and less valid data when participants have limited knowledge and understanding about that particular topic. For a more in-depth understanding of the reasoning behind consumers' FEA perceptions of jute-blended garments, a qualitative study can be conducted in the future since jute-blended garments do not have a wide presence in the US apparel retail market at present. Qualitative research methods can involve conducting interviews or focus groups with consumers to explore their perceptions of jute-blended garments and to find the reasons behind their opinions. This will enable researchers to identify potential areas for improvement in the design, marketing, or production of jute-blended garments based on consumers' valuable and detailed feedback.

Another limitation is the convenience sample used in the present study. Convenience sampling is a non-probability sampling method that may impact the generalizability of the study.

Future research can consider using probability sampling methods, such as stratified random sampling or cluster sampling, to obtain a representative sample of the larger population to enhance the generalizability of the study.

In addition, this study sought responses from undergraduate students in a particular setting at one public university located in a specific geographic location in the United States. Furthermore, most of the participants were females under the age of 25 years. Therefore, to obtain a better understanding, heterogeneous groups of consumers in terms of geographic location and social-economic background should be considered in future studies. A diversified sample of participants in terms of geographic location, age, gender, social-economic background, and other relevant demographic variables can provide a wide range of views, opinions, and perceptions which can be helpful to enhance the generalizability.

Conceptual Limitations

Some of the FEA constructs such as mobility and protection under functional perception, self-esteem, and other values of the consumers under expressiveness, and any of the art and design elements under aesthetic perceptions were deliberately not included in the present study due to their non-suitability in the context of jute-blended garments in the given research design. As this is the first study to explore consumer purchase intention toward jute-blended garments, it was more important to focus on the issues consumers give the most importance during selecting their garments. Thus, only the major suitable FEA factors have been considered in this study. Future studies can include other FEA attributes to achieve insights into how consumers evaluate the overall FEA aspects and will promote the expansion of the model.

This study incorporated consumers' attitudes, subjective norms, and intention constructs from the TRA. However, the present study did not capture the actual behavior. Researchers are recommended to conduct future studies by including an actual behavior construct, which means researching consumers' actual consumption (either using or buying) of jute-blended garments. Furthermore, including an actual behavior or consumption construct will help to identify the discrepancies between consumers' intentions and actual behavior as well as will offer a better understanding of consumers' decision-making process. Willingness to pay for the jute-blended garments on the basis of the price has not been captured in this study. Future study can study this also.

Conclusion

As the first study investigating consumer behavior in the context of jute-blended garments, this research fills the literature gap by empirically testing consumers' functional, expressive, and aesthetic perceptions of jute-blended garments. In addition, this study provides a better understanding of the factors that play a role in influencing consumers' purchase intentions toward jute-blended garments. The findings of this study have notable theoretical and managerial implications that will assist both researchers and apparel industry professionals in developing better jute-blended garments to meet or exceed consumers' expectations.

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APPENDIX A

AUBURN UNIVERSITY

COLLEGE OF
HUMAN SCIENCES

(NOTE: DO NOT AGREE TO PARTICIPATE UNLESS IRB APPROVAL INFORMATION WITH CURRENT DATES HAS BEEN ADDED TO THIS DOCUMENT.)

INFORMATION LETTER

for a Research Study entitled
"Consumers' Purchase Intention Towards Jute Blended Garments"

You are invited to participate in a research study to investigate consumers' purchase intention towards jute blended garments. The study is being conducted by Ms. Ummey Hani Barsha (M.S. Student) under the supervision of Dr. Amrut Sadachar, Associate Professor from the Department of Consumer and Design Sciences in the College of Human Sciences, Auburn University. You are invited to participate because you are a U.S. consumer, 19 years of age or older, and a student at Auburn University.

What will be involved if you participate? Your participation is completely voluntary. If you decide to participate in this research study, you will be asked to complete an online survey. The entire study will last for a duration of around 10-15 minutes.

Are there any risks or discomforts? There are no known risks in participating in the current study, apart from the minimal risk of exposure to COVID-19 in the classroom. We will follow AU and classroom COVID-19 protocols and no COVID-19 risks are increased due to the research.

Risks and Precautions for COVID-19

Due to the need for your physical presence at the research site (i.e., AU classroom, face-to-face interaction with the researcher or others, etc.), there is a risk that you may be exposed to COVID-19 and the possibility that you may contact the virus. For most people, COVID-19 causes only mild or moderate symptoms. For some, especially older adults and people with existing health problems, it can cause more severe illness. Current information suggests that about 2% of people who are infected with COVID-19 might die as a result. To minimize your risk of exposure we will take the following precautions:

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Appendix A

a) General Precautions: The research activities will take place on campus in AU classrooms. Hand sanitizers will also be available at multiple locations in the classroom. The graduate student who is responsible for in-person distant interactions with participants will follow the Auburn University COVID-19 Guidance on Self-Screening prior to coming to the campus and interacting with students in the classroom.

(b) Personal Protective Equipment (PPE): A KN-95 mask and disposable gloves will be worn by the graduate student.

(c) Surface Decontamination: Participants will make contact with physical items (e.g., desk surfaces, chair, their own iPad and laptop, fabric swatch, etc.) while present for research activities in the classroom. The graduate student will decontaminate physical items by cleaning them with disinfectant spray and disinfecting wipes for the items which were circulated among students.

Are there any benefits to yourself or others? Participants will not directly benefit from participating in this research. However, your participation may help in advancing research on consumers' purchase intention towards jute blended garments.

Will you receive compensation for participating? As you take part in this study, 2 extra credit points will be offered by the course instructors to the students as compensation.

Are there any costs? Apart from your time commitment, there are no costs involved in participating in this study.

If you change your mind about participating, you can withdraw at any time by closing the browser of your online survey and letting the graduate student know of your intent to withdraw. However, because the online survey is anonymous, once you have submitted anonymous data, it cannot be withdrawn since it will be unidentifiable. Your decision about whether or not to participate or stop participating will not jeopardize your future relations with Auburn University, the College of Human Sciences, Ms. Ummey Hani Barsha, or Dr. Amrut Sadachar.

Your Privacy will be protected. Any data obtained in connection with this study will remain anonymous. We will protect your privacy and the data you provide by not collecting any personally identifiable information from you that is attached to your responses. Additionally, only the researchers will have access to the data. Information collected through your participation may be used for academic journal publications and/or professional presentations or conference.

If you have questions about this study, please contact Ms. Ummey Hani Barsha at uzb0003@auburn.edu or Dr. Amrut Sadachar at 334-844-1316 and amrut@auburn.edu

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Appendix A

If you have questions about your rights as a research participant, you may contact the Auburn University Office of Research Compliance or the Institutional Review Board by phone (334) 844-5966 or e-mail at IRBadmin@auburn.edu or IRBChair@auburn.edu.

HAVING READ THE INFORMATION ABOVE, YOU MUST DECIDE IF YOU WANT TO PARTICIPATE IN THIS RESEARCH PROJECT. IF YOU DECIDE TO PARTICIPATE, PLEASE CLICK ON THE LINK BELOW.
YOU MAY PRINT A COPY OF THIS LETTER TO KEEP.

Ummey Hani Barsha	1/18/2023
Principal Investigator	**Date:**
Amrut Sadachar	1/18/2023
Co-Investigator	**Date:**

The Auburn University Institutional Review Board has approved this document for use from _____ to _____. Protocol #_____

The Auburn University Institutional Review Board has approved this Document for use from
01/09/2023 to ----------
Protocol # 23-011 EX 2301

Version Date (date document created): 1/18/2023

APPENDIX B

Consumer Survey Questionnaire

Here is the description provided for Jute fiber and Jute-blended garments.
Carefully read this description before answering the survey questions.

Jute is a **natural low-cost cellulosic bast fiber** that is **biodegradable** and **renewable**. It can be **blended with other fibers** like cotton, polyester, and rayon to improve its physical properties and overcome its shortcomings. Blended fabrics produced this way can be referred to as **jute-blended fabric**.

Woven fabric composed of cotton jute blend has similar physical characteristics as cotton fabric. Furthermore, it also shows **sufficient breathability and comfortability** in practice with **superior tensile strength, better dimensional stability, and excellent abrasion resistance and pilling**.

Chemically finished jute-blended fabric shows cotton-like softness, handling characteristics, and drapeability.

Garments made of jute-blended fabric are called **jute-blended garments**. Many different types of garments such as dresses, blazers, and jeans can be made from this fabric.

Please Respond -

☐ I have read the description of the jute fiber, jute-blended fabric, and jute-blended garments.

Here is a 31-second video on the jute fiber, yarn, and fabric manufacturing process.
Carefully watch the video before answering the survey questions.

Click the video -
This video will show you the jute fiber, yarn, and fabric manufacturing process briefly

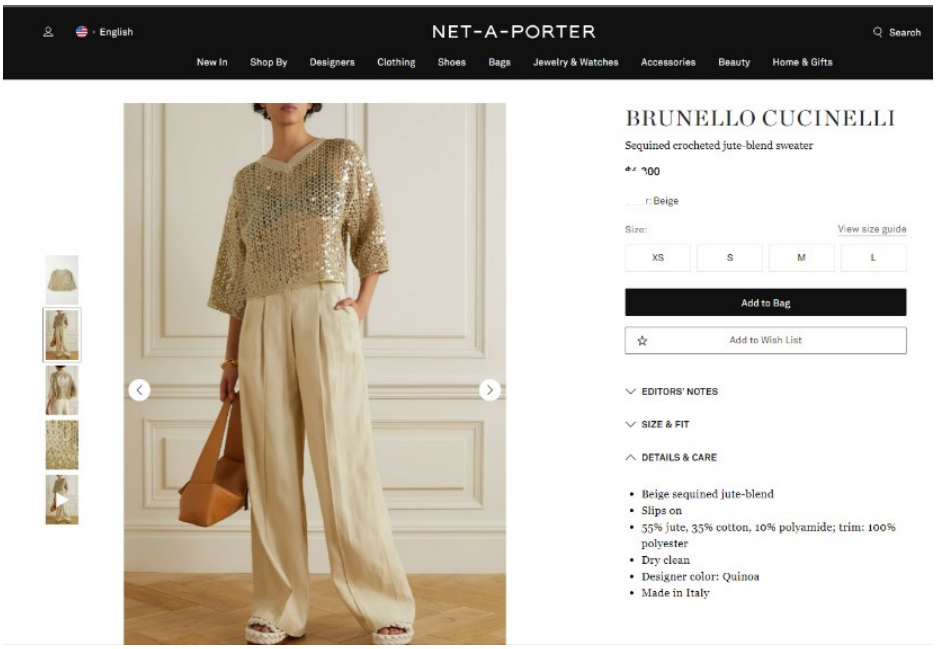
Once the video is completed, a continue arrow will appear.

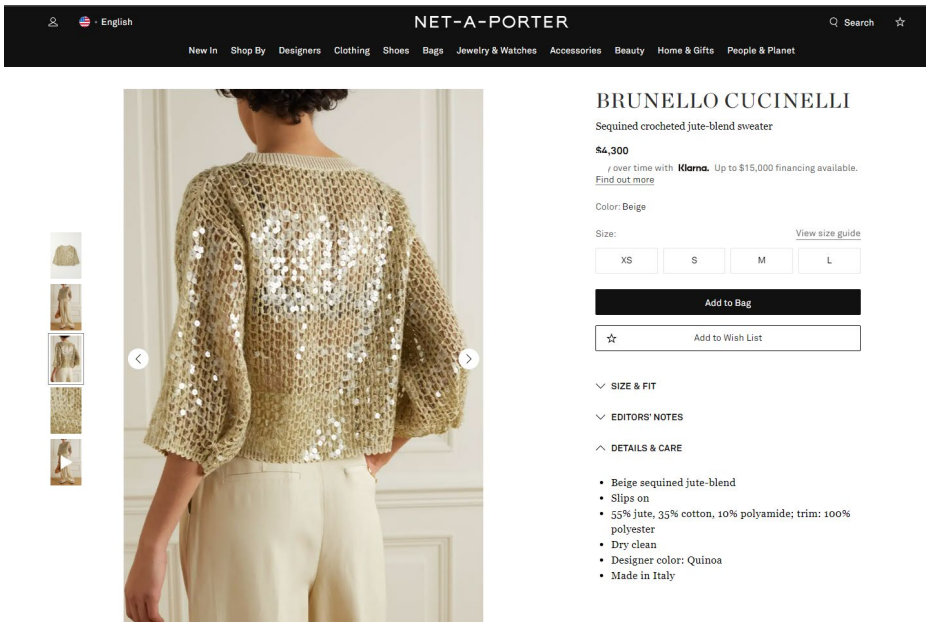
Please Respond -

☐ I have watched the video of the jute fiber, yarn, and fabric manufacturing process.

Here are the images of Jute-blended garments.

Carefully view the images before answering the survey questions.


English
NET-A-PORTER
Search
New In
Shop By
Designers
Clothing
Shoes
Bags
Jewelry & Watches
Accessories
Beauty
Home & Gifts
BRUNELLO CUCINELLI
Sequined crocheted jute-blend sweater
Beige
Size:
View size guide
XS
S
M
L
Add to Bag
Add to Wish List
EDITORS' NOTES
SIZE & FIT
DETAILS & CARE
Beige sequined jute-blend
Slips on
55% jute, 35% cotton, 10% polyamide; trim: 100% polyester
Dry clean
Designer color: Quinoa
Made in Italy


English
NET-A-PORTER
Search
New In
Shop By
Designers
Clothing
Shoes
Bags
Jewelry & Watches
Accessories
Beauty
Home & Gifts
People & Planet
BRUNELLO CUCINELLI
Sequined crocheted jute-blend sweater
$4,300
Klarna.
Up to $15,000 financing available.
Find out more
Color: Beige
Size:
View size guide
XS
S
M
L
Add to Bag
Add to Wish List
SIZE & FIT
EDITORS' NOTES
DETAILS & CARE
Beige sequined jute-blend
Slips on
55% jute, 35% cotton, 10% polyamide; trim: 100% polyester
Dry clean
Designer color: Quinoa
Made in Italy

Please Respond -

☐ I have seen the images of the jute-blended garments.

Reminder: Before answering the next set of questions, **ensure that you have touched and felt the jute-blended fabric swatch** provided by the graduate student and **visually looked at the jute-blended garments** on the dress forms in the classroom.

Please Respond -

☐ I have touched and felt the jute-blended fabric swatch.

☐ I have looked at the jute-blended garments.

After reading the description of the jute-blended garments, their characteristics, and seeing the images with the brief video, touching fabric swatches, and looking at the garments, think about "jute-blended garments" as you answer the following questions.

DIRECTION: Please indicate your level of agreement with each of the following statements.

	Strongly Disagree	**Disagree**	**Neutral**	**Agree**	**Strongly Agree**
I perceive the jute-blended garment will fit my body perfectly.	1	2	3	4	5
I perceive the jute-blended garment will look best on me.	1	2	3	4	5
I perceive the jute-blended garment will comfortably fit my body.	1	2	3	4	5
I perceive the jute-blended garment will fit (tight/loose) my hips.	1	2	3	4	5
I perceive the jute-blended garment will be prickly.	1	2	3	4	5
I perceive the jute-blended garment will be stiff.	1	2	3	4	5
I perceive the jute-blended garment will be rough next to my skin.	1	2	3	4	5
I perceive the jute-blended garment will be uncomfortable to wear.	1	2	3	4	5

DIRECTION: Please indicate your level of agreement with each of the following statements.

	Strongly Disagree	**Disagree**	**Neutral**	**Agree**	**Strongly Agree**

I perceive the jute-blended garment is highly unique.	1	2	3	4	5
I perceive the jute-blended garment is one of a kind.	1	2	3	4	5
I perceive the jute-blended garment is really special.	1	2	3	4	5
I perceive the jute-blended garment is less harmful to the environment.	1	2	3	4	5
I perceive the production of the jute-blended garment uses less energy than a comparable traditional blended garment.	1	2	3	4	5
I perceive the production of the jute-blended garment is harmless for humans.	1	2	3	4	5

DIRECTION: Please indicate your level of agreement with each of the following statements.

	Strongly Disagree	**Disagree**	**Neutral**	**Agree**	**Strongly Agree**
The appearance of the jute-blended garment is aesthetically appealing to me.	1	2	3	4	5
The design of the jute-blended garment is aesthetically appealing to me.	1	2	3	4	5
The overall style of the jute-blended garment is appealing to me.	1	2	3	4	5

DIRECTION: Please indicate your level of agreement with each of the following statements.

I think the jute-blended garment is _____

Bad	1	2	3	4	5	Good
Unpleasant	1	2	3	4	5	Pleasant
Unsatisfying	1	2	3	4	5	Satisfying
Unfavorable	1	2	3	4	5	Favorable

DIRECTION: Please indicate your level of agreement with each of the following statements.

	Strongly Disagree	**Disagree**	**Neutral**	**Agree**	**Strongly Agree**
Most people who are important to me would think that I should use jute-blended garments.	1	2	3	4	5

People whose opinions I value may prefer that I use jute-blended garments.	1	2	3	4	5
My friends (my peer group) may think that it is a good idea to use jute-blended garments.	1	2	3	4	5

DIRECTION: Please indicate your level of agreement with each of the following statements.

	Strongly Disagree	**Disagree**	**Neutral**	**Agree**	**Strongly Agree**
I would consider buying a jute-blended garment.	1	2	3	4	5
I will purchase a jute-blended garment.	1	2	3	4	5
There is a strong likelihood that I will buy a jute-blended garment.	1	2	3	4	5

DEMOGRAPHIC INFORMATION

DIRECTION: Please answer the following questions by checking the appropriate selection, filling in the blanks, or writing up your answer.

1. What is your **gender?**

   _____Male
   _____female
   _____prefer not to say
2. What is your **age?** _____ YEARS OLD

3. What is **your class standing**?

   _____Freshmen
   _____Sophomore
   _____Junior
   _____Senior

4. Which of the following **ethnic group** do you consider yourself to be a member of?

_____American Indian/Alaskan Native
_____Asian/Pacific Islander
_____Latino/Hispanic
_____Non-Hispanic Black
_____Non-Hispanic White
_____Other (Please Specify: _____)

5. What is your **annual household (i.e., family) income**?

_____LESS THAN $ 30,000
_____$ 30,000 TO $ 60,000
_____$ 60,001 TO $ 90,000
_____$ 90,001 TO $ 120,000
_____$ 120,001 TO $ 150,000
_____$ 150,001 OR MORE
_____ **Prefer not to say**

Thank you for your participation!

To **receive extra credits** for participating in this survey, please click on the right arrow. After clicking the right arrow, **you will be redirected to another page asking for some information needed to give you the extra credits.** Please remember your response to the survey will not be linked to the personal information that you will share for receiving extra credits.

STUDENT INFORMATION

DIRECTION: Please indicate the course or courses for which you wish to get extra credit points.

- [ ] CADS - 1700 - Giving and Sharing
- [ ] HDFS-2000 - Marriage and Family in a Global Context
- [ ] CADS-2000 - Global Consumer Culture
- [ ] CADS - 2300 - History of Interior Design
- [ ] CADS - 2750 - Product Development: Technical Design
- [ ] CADS - 2760 - Visual Merchandising
- [ ] CADS -3300 - Innovation in Retail and Consumer Experiences for Apparel
- [ ] CADS - 3780 - Grant Making for Philanthropists
- [ ] CADS - 3800 - Consumer Decision Making for apparel and Fashion Products
- [ ] CADS - 3850 - Merchandise Planning and Control
- [ ] CADS - 4700 - Portfolio Development for Philanthropy and Nonprofit Studies
- [ ] CADS - 5510/6510 - Digital Retailing for Apparel
- [ ] CADS - 5600 - Global sourcing in Textile and Apparel
- [ ] CADS - 5760/6760 - Fashion Analysis and Forecasting
- [ ] Q4 Others (Please correctly mention the name of the course)
- [ ] _____

DIRECTION: Please mention your full name

☐ _____