

Conditional Ethics in Sportswear: A Quantitative Analysis of Sustainability, Comfort, and Value Trade-offs in the Indian Market

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Abstract - The Indian sportswear market is experiencing rapid expansion, yet there remains a critical knowledge gap regarding the complex trade-offs urban consumers make between intrinsic garment attributes and extrinsic ethical drivers. Multi-faceted components of consumer buying behavior have been quantitatively investigated in this study with specific evaluation on how the product sustainability interacts with baseline expectations of comfort and value.

A descriptive quantitative research design was employed, utilizing a structured Likert-scale questionnaire. Following rigorous data cleaning, a sample of 691 respondents from five major Indian metropolitan areas was analyzed using descriptive statistics, Pearson correlation, and One-way ANOVA. The results reveal that physical comfort is a non-negotiable prerequisite for purchase (Mean = 4.63) rather than a unique differentiator. Conversely, sustainability demonstrated a strong positive correlation with purchase behavior with $r = 0.708$, accounting for 50.1% of the behavioral variance. Significant demographic variances were observed, with older consumers (45-55 years) placing a higher premium on sustainability compared to younger demographics. The study introduces the concept of "conditional ethics" within the Indian sportswear market, proving that while consumers exhibit a strong preference for sustainable sportswear, this preference is strictly conditional upon the garment first meeting baseline ergonomic and pricing thresholds.

Keywords: Sportswear, Consumer Behavior, Sustainability, Comfort, Conditional Ethics, Indian Retail Market.

I. INTRODUCTION

Right now, the market for sportswear in India is growing quickly. The sportswear market in India is growing quickly because more people are joining gyms, running marathons, playing sports, and getting into sports and fitness. This is because people are becoming more health conscious. As per the reports,

The Indian sports apparel market has been projected to grow from USD 705.85 million in 2024 to USD 1592.58 million by 2030, with a CAGR of 14.52% (Research and Markets, 2021).

Because of India's fast economic growth, buying habits of the consumers have changed a lot. People are spending more money and are more willing to spend it, which has changed the way they live. Now, it's normal to buy a lot of high-quality branded goods. People today have a lot of different tastes and preferences, but people between the ages of 18 and 25 are often the first to buy new things and start new trends in the market. Lastly, young people today care more about quality than price when they buy something.

Numerous factors affect a customer's decision to make a purchase. Quality, Fit, Physical appearance and style, Features, Comfort, Product Sustainability, Celebrity endorser, Value for Money, Brand Image, Country of origin, Gender, Income Level, Social status, etc., are the crucial factors that ultimately influence the purchase of sportswear by the customer and gives customers satisfaction (Gaurav et al., 2020). All of these factors affect a customer's mindset and determine whether they are brand loyal or brand switchers.

There is a notable lack of study on the complexities of consumer buying behaviour in the sportswear apparel market, despite its fast growth and popularity in Indian metros. Current research often ignores particular behavioural patterns pertinent to the ever-changing sportswear segment by including it in more general fashion or textile categories. Understanding the multi-faceted components of consumer buying behaviour in relation to sportswear in Indian metro cities is the main focus of this research.

II. LITERATURE REVIEW

India is one of the top countries in the world for the production of apparel, ranking as the second largest ecosystem for helping international businesses increase their productivity, following China (IBEF, 2025). The textile and apparel industry of India is considered the backbone of the country's industrial production, job creation, and export growth and currently made up about 2.3% of the country's GDP, 13% of industrial production, and 12% of export revenues, directly employing about 45 million people (Wazir Advisors, 2025). India's domestic textile market has been helped by the ongoing digital revolution, urbanization, rising disposable incomes, and demographic trends. The apparel industry was projected to be worth about \$108 billion in 2025 and to be continuing to grow (Statista, 2025).

Being both stylish and functional, the sportswear segment includes clothes and gear for sports, fitness, and everyday casual wear, sportswear industry has taken the lead globally in the apparel industry. Historically, most people in India wore traditional clothes for everything, and sportswear was not highly demanded but as sports like cricket, football, and tennis became popular globally, the need for comfortable, mobile clothing increased. Today, the Indian sportswear market is growing very quickly, driven by younger people interested in sports and fitness, rising incomes in cities, and the sportswear trend (Custom Market Insights, 2025).

Consumer behaviour in sportswear apparel involves a variety of functional, emotional, and social factors that affect how people buy. The decision-making process is influenced by intrinsic factors like quality, fit, aesthetics, design, and comfort and the extrinsic factors like sustainability, celebrity endorsement, brand image, country of origin, and perceived value (Gaurav et al., 2020). While making a purchase decision for a sportswear apparel product, perceived quality has been one of the most important considerations. The quality of the sportswear product depends on various factors related to the fabric used for making the apparel which includes moisture management, stretch, recovery, breathability, texture, and hand feel. It also depends upon the factors like stitching quality and durability (Aakko & Niinimäki, 2022). The fit of the apparel is also equally important while making a purchase decision for a sportswear apparel product, as both style and function must work

together. The apparel must fit well, provide comfort, and allow free body movement (Wilfling et al., 2022). One of the most important factors that impacts consumer satisfaction and the performance of the sports person is comfort. To achieve comfort in the sportswear apparel, technical properties like breathability and moisture management alongside an ergonomic fit are necessary.

On the other hand, extrinsic factor of sustainability has been gaining importance. Consumers want clothing made from eco-friendly materials through fair labour practices. Studies have shown that perceived sustainability positively impacts purchase intention. Although, skepticism may be exhibited by the consumers if claims about the product are not backed by performance or transparency (Kim & Oh, 2020).

III. METHODOLOGY

A descriptive quantitative research design was employed for this study. The sampling types for the consumer survey used were the Judgmental Sampling and Quota Sampling methods. Individuals in the age group of 18-50 years were chosen. The primary data was collected through a structured Likert-scale questionnaire from selected metro cities of India including National capital region of India, i.e. Delhi NCR, Mumbai, Chennai, Bengaluru, and Hyderabad. Quota sampling was used for the same Following rigorous data cleaning, the final sample size utilized for this analysis was $n=691$, which exceeded the minimum requirements for a 95% confidence level and a 5% margin of error.

IV. DATA ANALYSIS & RESULTS

4.1. Descriptive Statistics: The Baseline of Comfort and Pricing

The descriptive statistics revealed that respondents placed an extremely high importance on Comfort, with the highest mean score observed among all variables tested with Mean = 4.63 and the Standard Deviation = 0.61. Since almost all consumers rated comfort highly, it did not vary enough to strongly predict differences in purchase behaviour between individuals. Everyone expects comfort and therefore, while its absence might prevent purchase, its presence is a standard requirement rather than a unique driver of preference. Furthermore, the descriptive statistics reveal that respondents place a

relatively high importance on pricing with Mean = 4.15 and the Standard Deviation = 0.76. By contrast, the descriptive statistics reveal that sustainability is a

significant concern for the respondents with Mean = 3.91.

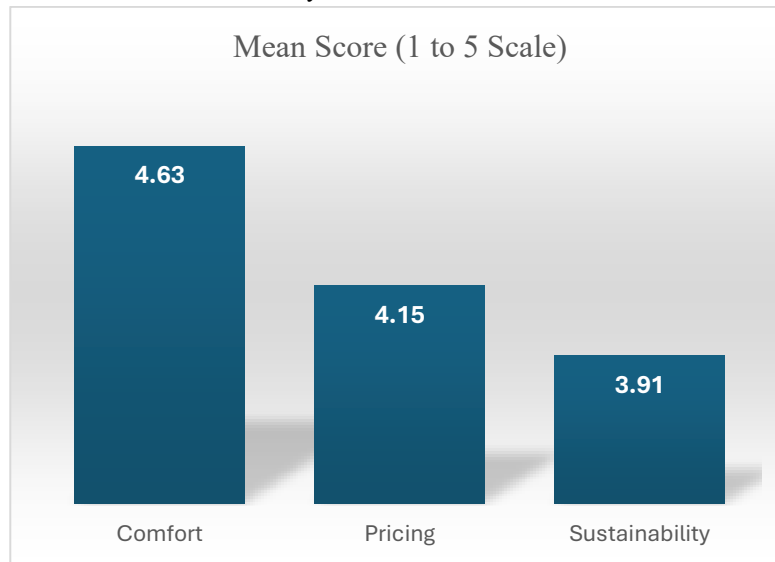


Figure 1: Mean Scores of Consumer Expectations of sportswear product attributes

4.2. Correlation and Regression Analysis: The Sustainability Differentiator

A Pearson coefficient of correlation was computed to assess the relationship between Sustainability and Purchase Behaviour. The results indicated a strong positive correlation with $r = .708$. The correlation of .708 came out to be the strongest among the variables tested. This suggested that for the modern consumer, sustainability could be a powerful differentiator that closely aligned the attitude with action. With an R^2 value of 0.501, it could be understood that sustainability accounted for 50.1% of the variation in consumer behaviour.

On the other hand, Pearson coefficient of correlation was computed to assess the relationship between Comfort and Purchase Behaviour, and the results indicated a moderate positive correlation with $r = 0.48$. Similarly, a Pearson coefficient of correlation was computed to assess the relationship between Pricing and Purchase Behaviour, and the results indicated a weak to moderate positive correlation with $r = 0.344$. The weak to moderate correlation suggested that the modern sportswear consumer is value-driven rather than price-sensitive.

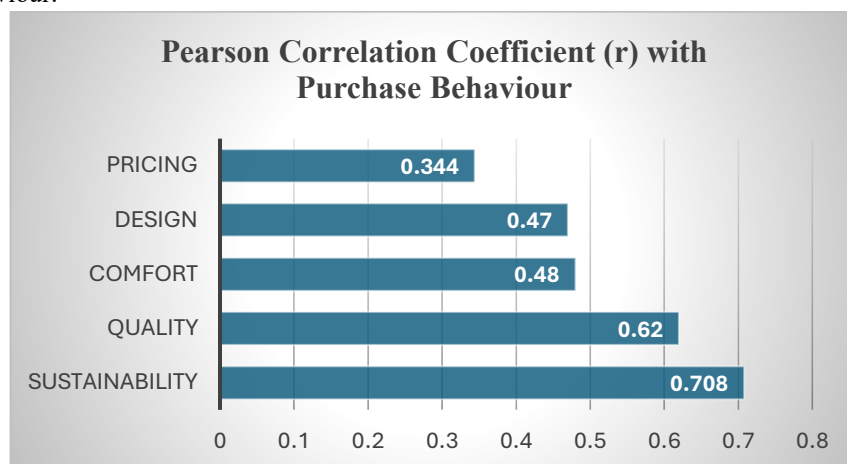


Figure 2: Pearson Correlation Coefficients demonstrating the predictive strength of Product Attributes on Purchase Behaviour

4.3. Demographic Variances in Ethical Consumption

One-way ANOVA was used to study the effect of age on consumers' purchase behaviour. Two primary

drivers where consumer priorities shifted significantly based on age were Comfort and Sustainability. While comfort is an important

attribute to everyone, the demand for comfort peaked in the 25–35 age group (Mean = 4.49). Sustainable practices and environmental concerns varied significantly by age with a p-value of 0.033. The importance of sustainability came out to be the highest for the 45–55 age group (Mean = 4.11) and lowest for the 15–25 group (Mean = 3.87).

V. DISCUSSION

Through the analysis of the data collected, it becomes evident that while sustainability has become an increasingly important factor in the decision-making process for buying sportswear, it operates within a strict hierarchy of consumer needs. As illustrated in Figure 1, quality and comfort emerged as the absolute baseline attributes for sportswear apparel (Mean = 4.63). These factors are non-negotiable for the consumers and are "must-haves" for the product. Theoretically, comfort has been considered the base of perceived utility as per the theories of behavioural reinforcement and ergonomics. Wilfling et al. (2022) explored consumers' expectations and perception of comfort in sports garments, finding that fit and comfort were closely linked, and the haptics of fabrics were identified as a crucial parameter. Consumers will not sacrifice this tactile experience for eco-friendly claims.

However, as demonstrated in Figure 2, product sustainability exhibits the strongest predictive relationship with actual purchase behavior ($r = .708$). This paradox reveals the core mechanism of "conditional ethics" in Indian metros: the study revealed that sustainability factors did not outweigh key criteria like price, comfort, and quality, although most people showed a favourable tendency toward them. As consumers need sustainable items that fundamentally satisfy their performance and cost requirements first implies that the ethical consumption is still conditional in Indian metros.

The consumers decision making process considering sustainability and practicality aligns with recent research by Lee, Son, and Lim (2025), who explored the connection between customer attitudes towards sustainable sportswear and their functionality. Also, the study by Kim and Oh (2020) investigated the impact of consumers' perceptions of sports companies' product sustainability levels on their purchasing intentions, finding a positive relationship between perceived sustainability and purchase intent,

while identifying a negative relationship between perceived skepticism and sustainability. From this study, it was evident that the perceived value of the sportswear apparel was more important to customers than other extrinsic factors like brand reputation or origin, as seen by the spending trend below ₹3,000 in most cities. The study showed that the customers were still concerned about the price-performance trade-offs. Ting Chi and Kilduff (2011) evaluated the consumer-perceived value (CPV) of casual sportswear, highlighting that price had the most significant influence on CPV compared to social and emotional values, though quality was also seen as of utmost importance. Ultimately, while urban Indian consumers aspire to consume ethically, their purchasing behavior remains bounded by rigid financial and ergonomic realities.

VI. CONCLUSION & LIMITATIONS

6.1 Conclusion

The research provides theoretically robust insights into the evaluation and adoption of performance-oriented apparel among urban consumers in the dynamic Indian retail market. Crucially, this study introduces and empirically confirms the concept of "conditional ethics" within sportswear consumption. While the data indicates a strong positive attitude toward environmental consciousness, it proves that ethical consumption remains highly conditional upon intrinsic functional trade-offs.

Consumers in Indian metros exhibit a strong preference for sustainable sportswear accounting for 50.1% of behavioral variance, but this preference is strictly secondary to non-negotiable baseline expectations. The mean for physical comfort came out to be 4.63 and fundamental pricing thresholds served as primary gateways i.e. if a garment fails to meet these ergonomic and financial baselines, the sustainable attributes are rendered irrelevant. To successfully bridge the attitude-behavior gap, apparel manufacturers must position eco-friendly materials as a powerful tie-breaking differentiator, ensuring they are integrated without compromising the foundational requirements of stretch, recovery, and value.

6.2 Limitations of Research

The study is limited only to select metro cities and hence, the perception of customers in tier II and tier III cities has not been studied. Furthermore, only a

few aspects of intrinsic and extrinsic attributes have been covered as the scope was restricted to 5 intrinsic and 5 extrinsic attributes. Future research may focus on tier two and tier three cities to determine if comparable patterns of conditional ethics and sustainable behavior exist outside major urban centers.

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