



**RESEARCH PAPER**

**An Empirical Analysis of Demand Determinants for Women's Apparel in Emerging Markets**

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**ABSTRACT**

With an eye toward economic, psychological, and cultural impacts especially in Karachi, this study seeks to pinpoint and examine main elements driving demand in Pakistan's women's apparel sector. Although the women's clothing market of Pakistan is growing, it is still difficult to forecast because of changing customer behavior impacted by cultural changes, economic variance, and changing digital trends. Strategic decisions and inventory control suffer inaccurate demand predictions. Survey data gathered from Karachi female consumers was a quantitative one. Examined in relation to income levels, brand loyalty, price sensitivity, and product preferences was regression analysis. Results show that main economic drivers are pricing policy and discretionary income. Purchasing behavior is greatly shaped by cultural inclination for simple and classic designs as well as by digital marketing and social media. High expenses prevent the acceptance of sustainable fashion even if environmental awareness is growing. Advice for clothing companies should be to use flexible pricing policies, stress distinctive brand identities, and improve online interaction. In the garment business, knowledge of demand elements helps to improve forecasting, competitiveness, and sustainable development.

**KEYWORDS** Women's Apparel, Demand Determinants, Consumer Behaviour, Economic Factors, Cultural Influences

**Introduction**

Valued at more than \$1.5 trillion in 2023, the worldwide garment sector is pillar of economic activity in both rich and underdeveloped countries. Projected to bring in \$2.44 billion by 2024, the women's clothing market is a major player in Pakistan's national economy. Driven by inflationary pressures, supply chain interruptions, and changing customer tastes, the sector nevertheless confronts major hurdles including a projected compound annual growth rate (CAGR) of -2.24% from 2024 to 2029. The biggest metropolis and economic center in Pakistan, Karachi provides a microcosm of these dynamics that helps one understand the complexity of demand determinants in developing nations.

Pakistan's women's garment sector lacks strong demand function models despite its economic importance, which results in pricing, inventory control, and market response inefficiencies. Previous research has concentrated on macroeconomic developments, therefore excluding the psychological and sociocultural aspects particular to Pakistani consumers. This discrepancy makes it difficult for stakeholders to match output to consumer expectations, which causes overproduction, stockouts, and lost development prospects.

**Literature Review**

**Theoretical Frameworks**

The study draws on two foundational theories:

Ajzen's (1991) theory of planned behavior (TPB) holds that attitudes, subjective standards, and perceived behavioral control all help to shape consumer behavior. Regarding the demand for clothing, TPB clarifies how economic restrictions (e.g., income levels) and cultural expectations (e.g., modesty standards) affect buying choices. Howard, and Sheth (1969) Theory of buyer behavior. Wiley J. This paradigm stresses in decision-making the influence of psychological, social, and marketing factors. It places the demand in competitive markets driven by brand loyalty and digital interaction in context.

### **Economic Determinants**

Previous studies mostly point to price sensitivity and income elasticity as main causes of clothing demand. With upper-middle-class consumers dedicating 11–15% of their income on clothes, household income in Pakistan greatly correlates with expenditure on apparel (Farooqui et al., 2021). But rising price sensitivity brought on by inflationary pressures has caused customers to give affordability top priority over brand loyalty (Du & Nguyen, 2021).

### **Cultural Religious Influence**

Cultural norms, particularly modesty requirements rooted in Islamic values, shape apparel preferences. Studies by Sethi and Shen (2021) reveal that Pakistani women seek clothing that balances traditional modesty with contemporary aesthetics, driving demand for fusion wear (e.g., embroidered kurtas with modern silhouettes). Religiosity moderates fashion consciousness, as observed by Hayat et al. (2022), with devout consumers favoring loose-fitting, opaque fabrics.

### **Brand Loyalty and Digital Influence**

Brand reputation and perceived quality are critical in Pakistan's ethnic clothing sector. Ali and Shahzad (2022) found that 68% of consumers in Karachi prioritize brand consistency when purchasing women's apparel. Concurrently, digital platforms like Instagram and TikTok have emerged as key influencers, particularly among younger demographics (Naeem & Ozuem, 2021). Emphasizing the need of cotton availability and price in the performance of the downstream textile industry, Zaheer et al. (2015) investigate the export potential of cotton in Pakistan. Although their research mostly tackles the export component, it offers important new perspective on how changes in cotton supply and international trade dynamics may indirectly influence domestic garment prices, design availability, and product variety—qualities which finally determine consumer demand. These upstream factors are fundamental in deciding the product offers accessible to end customers in emerging countries like Pakistan, where a large amount of women's clothing is cotton-based. Conversely, especially in the wake of the COVID-19 epidemic, technical and societal changes have clearly affected consumer behavior and demand dynamics. Nizami (2024) looks at how the epidemic affects Pakistani internet usage and exposes notable behavioral changes in digital interaction. This change affects the garment industry since rising e-commerce, digital marketing, and virtual fashion trends match more internet usage. Online platforms have especially impacted brand perception, accessibility to various clothing lines, and response to seasonal trends—all of which are fundamental factors in the changing demand function for women's apparel—particularly women in urban growing markets like Karachi.

### **Sustainability Trends**

While global markets prioritize eco-friendly fashion, Pakistani consumers face a tension between sustainability and affordability. Saeed et al. (2023) note that only 22% of

Karachi’s consumers are willing to pay a premium for sustainable apparel, citing limited disposable income as a barrier.

**Material and Methods**

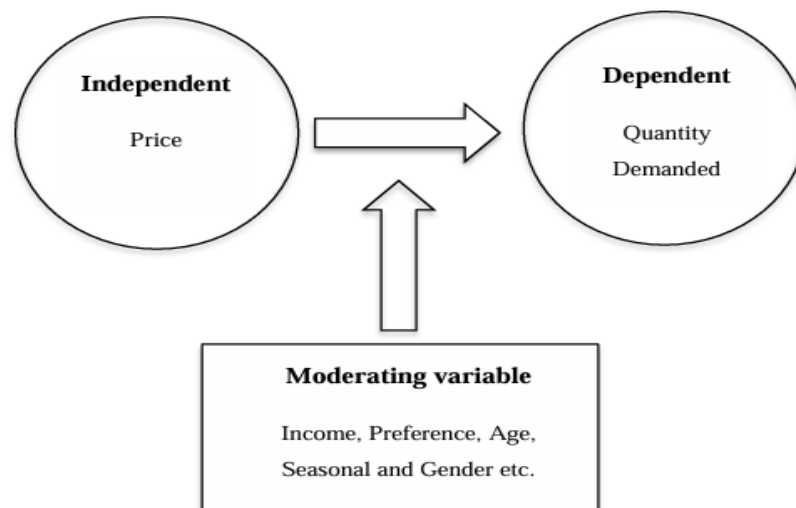
This study explores demand determinants for women’s apparel in Karachi using a mixed-methods approach. It outlines the study design, data collection, sample, and analysis to gain insights into consumer behaviour and market trends. The study adopts Pragmatism, blending positivism and interpretivism to analyze both measurable factors (e.g. price sensitivity) and subjective influences (e.g. cultural preferences). A deductive approach is used, guided by established demand theory. The research captures broad demand trends and deeper psychological insights, ensuring result triangulation. The mixed-method approach was chosen over mono or multi methods, enabling integration of quantitative and qualitative data for a deeper understanding of consumer behavior. Structured questionnaires used to gather data that offers both qualitative understanding of consumer preferences and quantitative price information. Among female consumers throughout Karachi, a stratified random selection technique guaranteed representation across age, income, and educational level. To assess demand factors, the study included qualitative and quantitative instruments, therefore providing thorough understanding of buying behavior.

**Mathematical Framework**

The model

$$Qd\kappa = \beta_0 + \beta_{1\rho\kappa} + \beta_2A_1 + \beta_A A_n + \mu$$

includes price and variables like income/preferences, based on the Theory of Planned Behavior and the Buyer Behavior Model to explain purchase decisions.



**Figure1: model**

**Results and Discussions**

The results of the empirical research of demand factors for women's clothing in developing countries are presented in this part. It pays particular attention to customer behavior, market developments, and economic elements. We tested hypotheses using a quantitative survey. Main demand drivers were assessed using linear regression analysis.

**Descriptive Analysis**

SPSS descriptive analysis turned up important trends in women's clothing demand. Most of the participants who ranged in age from 18 to 35 lived in the Gulshan-e-Iqbal district of Karachi Central. Most said their household income exceeded Rs. 150,000, with many self-employed or unemployed. Purchases were mostly monthly, focused on local markets, with Rs. 5,000–Rs. 20,000 spent on apparel and over Rs. 10,000 on complementary goods. Price sensitivity, income level, comfort, fabric quality, and brand reputation influenced buying decisions, while social media and peers were major influencers. Seasonal impact was minimal, and discounts had moderate influence, but credit options had little to no effect.

**Regression Analysis**

Linear regression was used to analyze the impact of pricing, income, and preferences on the demand for women’s apparel. The dependent variable was purchasing frequency (Q1), with key independent variables identified through Pearson and Spearman correlation. The demand model follows the equation

$$Qdx = \beta_0 + \beta_1\rho x + \beta_2A_1 + \beta_A A_n + \mu$$

The regression showed a strong relationship (R = 0.833), with R<sup>2</sup> = 0.69 indicating that 69% of variation in demand is explained by the predictors.

**Table 1  
Multiple linear regression model summary**

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.833 <sup>a</sup>	.694	.676	.57230

**Table 2  
The ANOVA**

ANOVA						
	Model	Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	29.779	9	3.309	10.102	.000 <sup>b</sup>
	Residual	13.101	40	.328		
	Total	42.880	49			

The ANOVA and Coefficients tables show a p-value of 0, confirming statistical significance at the 0.05 level. This indicates a strong relationship between the dependent and independent variables. The model evaluates how factors like purchase location, spending, substitutes, and income affect apparel demand. The model is statistically significant, confirming the strong impact of demand determinants on women’s apparel purchases. With 69.4% of the variation in demand explained by the predictors, the results highlight their strong influence. The high F-statistic and low residual variance indicate the model’s reliability in predicting demand. These insights can help retailers optimize pricing, marketing, and product placement strategies effectively. The ANOVA table confirms that the regression model is statistically robust and effectively explains demand variations in women’s apparel. Businesses can use these insights for data-driven decision-making, improving sales forecasting and consumer engagement strategies.

**Table3  
Coefficients**

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	.740	.604		1.225	.228

Q2 Where do you primarily purchase your women's apparel? (Select all that apply)	.311	.094	.343	3.299	.002
Q3 How much do you typically spend on purchasing women's apparel per month?	-.362	.137	-.483	-2.648	.012
Q5 Do you consider purchasing other brands or substitute products when the price of your preferred apparel increases?	.095	.151	.077	.630	.532
Q6 Which substitute product would you consider?	.231	.095	.303	2.442	.019
Q7 Do you consider the price of complementary goods (e.g., shoes, bags, accessories) when purchasing women's apparel?	.242	.152	.190	1.591	.119
Q8 How much do you typically spend on complementary goods (e.g., shoes, bags, accessories) in a month?	.138	.118	.212	1.167	.250
Q9 How does your income level affect your purchasing decisions for women's apparel?	.092	.135	.078	.681	.050
Q16 How does the season (summer/winter) influence your purchase of women's apparel?	-.178	.102	-.218	-1.737	.090
Q19 How does availability of credit or instalment payment options affect your apparel purchasing decisions?	.135	.109	.140	1.236	.224

### Understanding the Co-efficient Table

The coefficients table shows a Beta value of 0.74, indicating a strong positive impact of independent variables on demand. Key influencers include purchase location (highest positive effect) and monthly spending (highest negative effect). The results support the hypothesis that demand is influenced by price, income, and preferences. The normal P-P plot confirms a positive linear correlation in the model.

### Understanding the Coefficients (B and Beta)

The unstandardized coefficient (B) shows how much the dependent variable changes with a one-unit change in the independent variable. A positive B means demand increases, while a negative B suggests a decrease. The standardized coefficient (Beta) indicates the relative importance of each variable. Higher Beta means a stronger influence on apparel buying decisions.

### Primary Purchase Location

$B = 0.311$ ,  $Beta = 0.343$ ,  $Sig. = 0.002$  shows a strong and significant impact on apparel purchases. Consumers' choice of store (online or offline) greatly affects buying behavior. Preferences are shaped by convenience, discounts, or customer experience. Retailers should enhance both physical and digital platforms to attract buyers.

### Monthly Spending on Apparel

$B = -0.362$ ,  $Beta = -0.483$ ,  $Sig. = 0.012$  reveals a strong negative relationship. Higher spending reduces likelihood of future purchases within the month. Budget-conscious behavior is common in emerging markets like Karachi. Price-sensitive strategies and instalments can help sustain demand.

### Consideration of Substitute Products Due to Price Increases

$B = 0.095$ ,  $Beta = 0.077$ ,  $Sig. = 0.532$  indicates an insignificant impact. Most buyers remain loyal to their preferred brands despite price hikes. Brand perception and quality

outweigh cheaper alternatives. Businesses should focus on strengthening brand loyalty rather than undercutting prices.

### **Preferred Substitute Products**

$B = 0.231$ ,  $Beta = 0.303$ ,  $Sig. = 0.019$  shows a moderate and significant impact. Consumers who switch brands typically have preferred alternatives. Familiarity and trust drive substitution decisions. Brands should position themselves as reliable alternatives through marketing and quality.

### **Price Consideration of Complementary Goods (Shoes, Bags, Accessories)**

$B = 0.242$ ,  $Beta = 0.190$ ,  $Sig. = 0.119$  is not statistically significant. Consumers rarely link apparel decisions with accessory pricing. Clothing and accessory purchases are mostly independent. Cross-selling strategies should focus on style rather than price bundling.

### **Monthly Expenditure on Complementary Products**

$B = 0.138$ ,  $Beta = 0.212$ ,  $Sig. = 0.250$  indicates no significant effect. Spending more on accessories doesn't affect clothing demand. Apparel and accessory budgets are treated separately by consumers. Retailers should target category-specific offers for better results.

### **Impact of Income Level on Apparel Buying Decisions**

$B = 0.092$ ,  $Beta = 0.078$ ,  $Sig. = 0.500$  shows income does not significantly affect apparel demand. Shopping habits are similar across income levels. Personal style, preferences, and trends matter more than earnings. Marketing should focus on value and lifestyle, not income tiers.

### **Seasonal Impact (Summer/Winter) on Clothing Purchases**

$B = -0.178$ ,  $Beta = -0.218$ ,  $Sig. = 0.090$  suggests a weak negative influence. Seasonal changes shift product type, not overall demand. Budget constraints reduce seasonal shopping frequency. Retailers should align seasonal promotions with real customer needs and trends.

### **Credit or Instalment Payment Availability**

$B = 0.135$ ,  $Beta = 0.140$ ,  $Sig. = 0.224$  shows this factor is not significant. Most consumers prefer paying for clothing upfront. Credit use is limited to high-value items or luxury fashion. Retailers should focus on discounts, not instalment options, to boost regular sales.

This analysis reveals that the primary factors influencing women's apparel purchases are the place of purchase, monthly spending, and the consideration of substitutes when prices rise. Income level, complementary goods, seasonal fluctuations, and credit availability have minimal or no significant effect on buying behavior. Consumer habits and brand loyalty are more critical drivers of purchasing decisions than financial constraints or external factors. Retailers should focus on enhancing shopping experiences and brand engagement to influence consumer choices.

## **Discussions**

### **Economic Determinants & Price Sensitivity**

Price sensitivity and household income significantly impact apparel purchases in Karachi. Consumers are price-responsive, opting for affordable clothes and turning to

imports or custom-made items as prices rise. Limited budgets drive local brand purchases, with higher discretionary income leading to more spending on fashion-related items.

### **Cultural & Religious Influences**

Cultural and religious factors strongly influence fashion choices in Karachi. Women want a mix of trendy and classic styles that satisfy modesty criteria. With the Theory of Planned Behavior stressing subjective norms and attitudes in decision-making, fashion choices fit personal and religious views.

### **Brand Loyalty & Preferences**

Product quality and brand reputation rather than price define brand loyalty in the clothing scene of Karachi. Consumers give trusted brands first priority, hence price increases or replacements could compromise loyalty. Maintaining customer trust in competitive markets depends on constant brand differentiation.

### **Fashion Trends & Digital Influence**

Consumer behavior is heavily influenced by internet channels and fashion trends. Particularly for younger consumers, social media, influencers, and internet platforms are quite important in determining fashion decisions. Engaging and increasing brand demand in developing areas depends on digital marketing.

### **Sustainability & Ethical Consumption**

Though sustainability is becoming more and more important, customers still first consider cost. Although environmental issues affect choices of purchase, pricing still stands as the biggest obstacle to acceptance of sustainable fashion. Companies should cut expenses and spread knowledge of the advantages of sustainable design.

### **Seasonal Impact & Credit in Purchases**

Seasonal factors slightly affect apparel choices, with winter garments preferred. However, credit facilities have minimal impact on purchasing decisions, as most Pakistani consumers pay upfront. Promotions and discounts influence consumer behavior, but they alone do not drive sales. Economic factors like price sensitivity and income, alongside cultural and religious influences, shape apparel demand in Karachi. Brand loyalty, digital marketing, and sustainability are key to consumer preferences. To meet market needs, brands should focus on targeted pricing, branding, and affordable sustainable practices.

### **Conclusions**

This study analyzed the demand determinants for women's apparel in Karachi, focusing on economic, cultural, psychological, and digital factors. Price sensitivity and income levels significantly influence purchasing decisions, with higher-income consumers spending more on fashion. Cultural and religious values also shape preferences, with modest fashion being a priority. Brand loyalty is strong, but price increases and substitute products can lead to brand switching. Digital marketing impacts younger consumers, and there is growing interest in sustainable fashion, though affordability remains a barrier. The findings provide insights for improving market strategies in Pakistan's apparel industry.

### **Recommendations**

Apparel brands should adopt tiered pricing to cater to different income groups and retain both budget-conscious and premium consumers. Strengthening brand loyalty

through consistent quality, customer engagement, and digital marketing is crucial, especially targeting younger audiences on social media. Fashion designs should balance modern trends with cultural and religious preferences. Sustainability should be made more affordable through technology and government incentives. Retailers could introduce flexible payment plans to make high-quality clothing more accessible. Future research should explore regional variations in consumer behavior and further investigate trends in men's and children's fashion.



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